

# FY17 Water and Sewer Enterprise Budgets CIP FY2018-FY2022

Board of Selectmen

March 15, 2017





# Water and Sewer Enterprise Budgets and CIP Meeting

- Enterprise Funds
  - Water Enterprise Budgets
  - Water Enterprise Capital
  - Water Rates Recommendation
  - Sewer Enterprise Budget
  - Sewer Enterprise Capital
  - Sewer Rate Recommendation
- Capital Improvement Plan FY2018-FY2022

# Water Enterprise Fund





# Water Enterprise Fund Budget

## Water Distribution Budget

	<u>FY16 Expended</u>	<u>FY17 Approved</u>	<u>FY18 Recommended</u>	<u>Inc(Dec)</u>
Salaries	477,587	582,511	557,006	(25,505)
Expenses	266,429	316,052	339,803	23,751
Capital Outlay	-	-	15,000	15,000
<b>Total</b>	<b>744,016</b>	<b>898,563</b>	<b>911,809</b>	<b>13,246</b>

### Major Budget Changes:

**Salaries:** Include 2.5% salary increases, step increases and longevity changes. Overall salaries have decreased 25,505 due to staff changes resulting in new employees' salaries being less than the previous employee. Other areas that changed as a 2,000 increase in overtime because of the increased number of water breaks each year but there was a decrease in sick leave and vacation buyback totaling 9,782 that is not needed in FY18.

**Operating:** Repairs and Maintenance increased 20,000 based upon the number of water breaks, leases and contracts increased due to Beacon software annual fees and Professional Services decreased 3,000 in the area of bill printing.

**Capital Outlay:** Increased 15,000 to hire a consultant to negotiate with cellular Carriers to pay costs associated with relocating antennas on Astle Street Water Tank off the catwalk and onto the top of the tank.



# Water Enterprise Fund Budget

## Water Filtration Budget

	<u>FY16 Expended</u>	<u>FY17 Approved</u>	<u>FY18 Recommended</u>	<u>Inc(Dec)</u>
Salaries	804,342	856,330	940,042	83,712
Expenses	1,213,391	1,214,780	1,224,209	9,429
Capital Outlay	-	-	-	-
<b>Total</b>	<b>2,017,733</b>	<b>2,071,110</b>	<b>2,164,251</b>	<b>93,141</b>

### Major Budget Changes:

**Salaries:** Include 2.5% salary increases, step increases, longevity changes and sick leave buy back for the Chief Operator of the Plant who is retiring. Salaries increased \$83,712 of which \$44,570 is for sick leave buy back and \$3,600 for a car allowance for the Assistant DPW Superintendent for Water and Sewer Utilities and \$3,450 for increased overtime.

**Operating:** Utilities increased \$6,000 to operate the new plant that will be online by the end of this fiscal year which includes a new aeration facility, light and heat, laboratory addition and new equalizing tank. Repairs and Maintenance increased \$4,539. Even though the Plant is newly renovated we need to maintain all of the systems. Lease and Contracts increased \$7,300 to maintain a new SCADA system, Fire Alarm Testing and HVAC system. Communications increased \$1,200 for mailing the Consumer Confidence Reports and video monitoring cameras at the plant. Residual Disposal decreased \$9,910 since the tipping fee for disposal was reduced from \$33.10 per ton to \$20 per ton.

**Capital Outlay:** No change



# Water Enterprise Fund Budget

## Combined Water Enterprise Budgets

	<u>FY16 Expended</u>	<u>FY17 Approved</u>	<u>FY18 Recommended</u>	<u>Inc(Dec)</u>
Salaries	1,281,929	1,438,841	1,497,048	58,207
Expenses	1,479,820	1,505,832	1,539,012	33,180
Capital Outlay	-	-	15,000	15,000
Reserve Fund	-	25,000	25,000	-
Debt	2,106,816	2,846,639	2,867,276	20,637
Indirect Expenses	962,507	1,054,508	1,080,260	25,752
Capital Expenditures	<u>235,300</u>	<u>-</u>	<u>357,500</u>	<u>357,500</u>
<b>Grand Total Water Enterprise</b>	<b>6,066,373</b>	<b>6,870,820</b>	<b>7,381,096</b>	<b>510,276</b>

# Water Enterprise Fund Budget



- Future Capital Improvements

Fiscal Year 2018 – Fiscal Year 2022: 8,255,000

- **6,300,000** - Water Distribution Design and Improvement
- **975,000** - Water Tanks Maintenance/Upgrades
- **625,000** - Hydrants Replacement
- **355,000** - Vehicle Replacement

*Over the next Five Years the Plan is to spend retained earnings and borrow funds to pay for Capital Projects.*

*Current Balance Retained Earnings: 2,502,346*

# Water Enterprise Fund Budget



- Capital Improvements Fiscal Year 2018: 2,432,500
  - **2,100,000** - Water Distribution Improvement (2 million Retained Earnings and 100,000 Raise and Appropriate within the Water Rates)
  - **125,000** - Hydrants Replacement (Raise and Appropriate within the Water Rates)
  - **75,000** - Water Tanks Maintenance/Upgrades (Raise and Appropriate within the Water Rates)
  - **132,500** - Vehicle Replacement (Raise and Appropriate within the Water Rates)

*Use of Retained Earnings: FY17 710,000; FY18 2,075,000; Difference 1,365,000*

*Current Balance Retained Earnings: 2,502,346*



# Water Enterprise Fund Budget

## Debt Service as percent of Water Budget:

• FY2017	2,846,740	44%
• FY2018 (Proj.)	2,867,276	39%
• FY2019 (Proj.)	3,067,265	42%
• FY2020 (Proj.)	2,710,196	38%
• FY2021 (Proj.)	2,832,146	38%
• FY2022 (Proj.)	2,651,557	36%
• FY2023 (Proj.)	2,471,725	34%
• FY2024 (Proj.)	2,230,475	31%
• FY2025 (Proj.)	2,025,475	28%
• FY2026 (Proj.)	1,794,080	25%



# Water Enterprise Fund Budget

## Projected Revenues

	<u>FY16 Collected</u>	<u>FY17 Projected</u>	<u>FY18 Projected</u>	<u>Inc(Dec)</u>
User Fees	7,314,318	6,159,030	6,693,715	534,685
Water Liens	565,554	650,000	650,000	-
All Other Fees	<u>282,558</u>	<u>200,000</u>	<u>200,000</u>	-
<b>Total</b>	<b>8,162,431</b>	<b>7,009,030</b>	<b>7,543,715</b>	<b>534,685</b>
				-
<i>Deficit/Surplus</i>	<i>2,096,058</i>	<i>138,210</i>	<i>162,619</i>	<i>24,409</i>

*Footnote: All Other Fees includes Connection Fees, Water Meter Fees, Demand Fees and Application Fees.*



# Water Enterprise Fund Budget

## Water Budget/Revenue:

	Budget	Revenue
FY09	5,384,337	5,343,224
FY10	5,711,691	4,686,966
FY11	6,058,981	7,366,234
FY12	5,805,016	7,079,266
FY13	5,961,130	7,033,685
FY14	5,913,590	7,429,011
FY15	6,386,848	7,485,872
FY16	6,111,090	8,162,431
FY17 (Projected)	6,870,820	7,009,030
FY18 (Projected)	7,381,096	7,543,715



# Water Enterprise Fund Budget

## Proposed Rate Structure Change:

Current Tier	Proposed New Tiers
0-34 gals	0-12 gals
35-70	13-24
71-140	25-46
140+	47+

- Usage will reset to zero each billing cycle and will not be cumulative annually.
- Residents and Businesses will not be penalized for high usage persisting into the next billing cycle.
- Lower usage bills should see no increase.
- Residents and Commercial Summer usage will be higher than normal but Fall and Winter bills will be less.
- New structure will allow for better revenue projections.



## Water Enterprise Fund Budget

### Proposed Water Rates:

Current Tier	Current Rate (\$)
0-34 gals	7.29 per 1000
35-70	10.31 per 1000
71-140	13.71 per 1000
140+	17.13 per 100

  

Proposed Tier	Proposed Rate (\$)
0-12 gals	7.29 per 1000
13-24	10.31 per 1000
25-46	13.71 per 1000
47+	17.13 per 1000

# Water Enterprise

## Sample Water Billing Comparison

<u>Billing Cycle 1 August</u>			<u>Billing Cycle 2 December</u>			<u>Billing Cycle 3 April</u>			<u>Current</u>	<u>New Tiers</u>	
<u>Usage</u>	<u>Current Billing</u>	<u>Billing New Tiers</u>	<u>Usage</u>	<u>Current Billing</u>	<u>Billing New Tiers</u>	<u>Usage</u>	<u>Current Billing</u>	<u>Billing New Tiers</u>	<u>Annual Total</u>	<u>Annual Total</u>	<u>Difference</u>
8,000	58.32	58.32	9,000	\$ 65.61	65.61	10,000	\$ 72.90	72.90	196.83	196.83	-
14,000	102.06	108.10	11,000	\$ 80.19	77.17	15,000	\$ 127.47	118.41	309.72	303.68	(6.04)
16,000	116.64	128.72	17,000	\$ 123.93	139.03	17,000	\$ 172.25	139.03	412.82	406.78	(6.04)
24,000	174.76	211.20	38,000	\$ 361.58	399.36	19,000	\$ 230.32	159.65	766.66	770.21	3.55
25,000	182.25	224.64	35,000	\$ 333.67	359.04	15,000	\$ 170.30	118.41	686.22	702.09	15.87
25,000	182.25	224.64	19,000	\$ 168.71	159.65	21,000	\$ 216.51	180.27	567.47	564.56	(2.91)
26,000	189.54	238.08	24,000	\$ 223.28	211.20	26,000	\$ 286.84	238.08	699.66	687.36	(12.30)
36,000	268.48	372.48	40,000	\$ 431.18	376.16	43,000	\$ 577.92	407.09	1,277.58	1,155.73	(121.85)
75,000	686.22	966.09	76,000	\$ 1,056.53	981.72	9,000	\$ 149.67	65.61	1,892.42	2,013.42	121.00
218,000	2,856.96	3,201.18	245,000	\$ 4,047.35	3,623.19	131,000	\$ 2,178.53	1,841.37	9,082.84	8,665.74	(417.10)



# Water Enterprise Fund Budget

Usage	Current Rate	Proposed Rate	\$ Increase	% Increase
10,000	72.90	72.90	-	0.00%
15,000	109.35	109.35	-	0.000%
20,000	145.80	145.80	-	0.000%
25,000	182.25	182.25	-	0.000%
35,000	258.17	255.15	(3.02)	-1.170%
45,000	361.27	355.23	(6.04)	-1.672%
50,000	412.82	406.78	(6.04)	-1.463%
55,000	464.37	458.33	(6.04)	-1.301%
60,000	515.92	509.88	(6.04)	-1.171%
70,000	619.02	612.98	(6.04)	-0.976%
75,000	687.57	674.73	(12.84)	-1.867%
80,000	756.12	743.28	(12.84)	-1.698%
90,000	893.22	880.38	(12.84)	-1.437%
100,000	1,030.32	1,017.48	(12.84)	-1.246%
140,000	1,578.72	1,572.72	(6.00)	-0.380%
150,000	1,750.02	1,744.02	(6.00)	-0.343%
200,000	2,606.52	2,600.52	(6.00)	-0.230%
300,000	4,319.52	4,313.52	(6.00)	-0.139%
400,000	6,032.52	6,026.52	(6.00)	-0.099%
500,000	7,745.52	7,739.52	(6.00)	-0.077%
700,000	11,171.52	11,165.52	(6.00)	-0.054%
1,000,000	16,310.52	16,304.52	(6.00)	-0.037%
1,500,000	24,875.52	24,869.52	(6.00)	-0.024%
2,000,000	33,440.52	33,434.52	(6.00)	-0.018%
3,000,000	50,570.52	50,564.52	(6.00)	-0.012%
4,000,000	67,700.52	67,694.52	(6.00)	-0.009%
5,000,000	84,830.52	84,824.52	(6.00)	-0.007%
6,000,000	101,960.52	101,954.52	(6.00)	-0.006%
7,100,000	120,803.52	120,797.52	(6.00)	-0.005%
7,500,000	127,655.52	127,649.52	(6.00)	-0.005%

*Approximately 50,000-55,000 gallons is the Town average use and approximately 90,000 gallons per year is the State average use.*



# Water Enterprise Fund Budget

## Rate Comparison

- Based on 90,000 Gallons per year
- State Average 532 (2014)
- State Range 112-1,556 (2014)
- State Median 503 (2014)
- MWRA Average 585 (2016)
- Tewksbury (current) 893 (2017)
- Tewksbury (proposed) 880 (2018)



## Comments Water Rates

- Impact of Water Treatment Plant
- Impact of the new Tiers
- Projection of future years
- Improving Rate Projections
- Retained Earnings
- Capital Projects

# Sewer Enterprise Fund



# Sewer Enterprise Fund Budget



## Sewer Enterprise Budget

	<u>FY16 Expended</u>	<u>FY17 Approved</u>	<u>FY18 Recommended</u>	<u>Inc(Dec)</u>
Salaries	238,657	333,726	358,248	24,522
Expenses	327,152	344,400	356,775	12,375
Capital Outlay	-	-	-	-
Lowell Sewer	1,818,130	1,572,000	1,472,000	(100,000)
Reserve Fund	-	60,000	60,000	-
Debt	3,201,958	2,935,658	2,794,140	(141,518)
Indirect Expenses	505,739	554,534	573,111	18,577
Capital Expenditures	-	-	-	-
<b>Total</b>	<b>6,091,636</b>	<b>5,800,318</b>	<b>5,614,274</b>	<b>(186,044)</b>

### Major Budget Changes:

**Salaries:** Salaries increased 24,552 with the normal cost of living increase, steps and other contractual benefits.

**Operating:** Operating increased 12,375 mainly in the areas of: Utilities- 2,000; Professional Services for bill printing- 9,500 and Staff Development- 2,000. There were areas of Operating that decreased and funds were shifted from one line-item to another with no net change. Lowell Sewer is decreasing 100,000 since we are not sending as much flow to the Lowell Wastewater Plant as previously projected. Debt Service has decreased 141,518 due to the refinancing of debt this past July.

**Capital Outlay:** No change



# Sewer Enterprise Fund Budget

- Future Capital Improvements  
Fiscal Year 2018 – Fiscal Year 2022: **3,650,000**
  - **1,750,000** - Collections System Upgrades
  - **1,800,000** - Inflow and Infiltration I/I control
  - **290,000** - Fleet and Equipment Replacement Program
  - **100,000** - Sewer Pump Station Improvements
- Capital Improvements Fiscal Year 2018: **1,817,500**
  - **1,750,000** - Collections System Upgrades(Retained Earnings)
  - **67,500** – Fleet/Equipment Replacement (Retained Earnings)

*All Capital is Projected to be funded by Sewer Retained Earnings. Sewer Retained Earnings Balance is 3,661,108 and will be utilized over the next five years to implement Sewer Capital.*



# Sewer Enterprise Fund Budget

## Debt Service as percent of Sewer Budget:

● FY2015	3,016,318	52%
● FY2016	2,948,233	52%
● FY2017 (Proj.)	2,935,658	51%
● FY2018 (Proj.)	2,794,140	50%
● FY2019 (Proj.)	3,047,364	51%
● FY2020 (Proj.)	3,120,931	51%
● FY2021 (Proj.)	2,914,579	48%
● FY2022 (Proj.)	2,849,959	47%
● FY2023 (Proj.)	2,819,244	46%
● FY2024 (Proj.)	2,840,194	45%
● FY2025 (Proj.)	2,810,506	44%



# Sewer Enterprise Fund Budget

<u>Projected Sewer Revenue</u>	<u>FY16 Collected</u>	<u>FY17 Projected</u>	<u>FY18 Projected</u>	<u>Inc(Dec)</u>
User Fees	6,520,331	5,018,135	5,219,848	201,713
All Sewer Liens/Interest/Fees	335,412	450,000	450,000	-
Connection Fees	204,536	108,557	71,023	(37,534)
All Other	113,615	25,000	25,000	-
Prior Year Surplus	-	-	-	-
Transfer From General Fund	<u>253,724</u>	<u>248,775</u>	<u>48,429</u>	<u>(200,346)</u>
<b>Total</b>	<b>7,427,619</b>	<b>5,850,467</b>	<b>5,814,300</b>	<b>(36,166)</b>
				-
<i>Operating Deficit/Surplus</i>	<i>1,335,982</i>	<i>50,148</i>	<i>200,026</i>	<i>149,878</i>

*Footnote: All Other Fees includes Demand Fees and Application Fees.*



# Sewer Enterprise Fund Budget

## Sewer Budget/Revenue:

	Budget	Revenue
FY09	6,552,728	7,548,167
FY10	8,036,304	7,182,548
FY11	8,123,336	8,808,391
FY12	5,801,543	8,197,199
FY13	6,086,796	6,760,895
FY14	6,103,578	7,294,650
FY15	5,541,476	6,921,874
FY16	5,937,648	7,427,619
FY17 (Projected)	5,800,318	5,850,467
FY18 (Projected)	5,614,274	5,814,300

*In FY11 1,437,375 was used from Sewer Retained Earnings to balance the budget*



# Sewer Enterprise Fund Budget

## Proposed Rate Structure Change:

Current Tier	Proposed New Tiers
0-34 gals	0-12 gals
35-70	13-24
71-140	25-46
140+	47+

- Usage will reset to zero each billing cycle and will not be cumulative annually.
- Residents and Businesses will not be penalized for high usage persisting into the next billing cycle.
- Lower usage bills should see no increase.
- Residents and Commercial Summer usage will be higher than normal but Fall and Winter bills will be less.
- New structure will allow for better revenue projections.



# Sewer Enterprise Fund Budget

- Proposed Sewer Rate

In-Town :

Current Tier	Current Rate (\$)	Proposed New Tiers	Proposed Rate (\$)
0-35 gals	7.23 per 1000	0-12 gals	7.23 per 1000
35-70	9.31 per 1000	13-24	9.31 per 1000
70-140	13.20 per 1000	25-46	13.20 per 1000
140+	15.44 per 1000	47+	15.44 per 1000

- Proposed Sewer Rate

Out of Town and Exempt Property:

Current Tier	Current Rate (\$)	Proposed New Tiers	Proposed Rate (\$)
0-35 gals	15.58 per 1000	0-12 gals	15.65 per 1000
35-70	20.07 per 1000	13-24	18.87 per 1000
70-140	27.46 per 1000	25-46	25.81 per 1000
140+	32.12 per 1000	47+	30.19 per 1000



# Sewer Enterprise Fund Budget

## Sample Sewer Bill Comparison

<u>Billing Cycle 1 August</u>			<u>Billing Cycle 2 December</u>			<u>Billing Cycle 3 April</u>			<u>Current</u>	<u>New Tiers</u>	
<u>Usage</u>	<u>Current Billing</u>	<u>Billing New Tiers</u>	<u>Usage</u>	<u>Current Billing</u>	<u>Billing New Tiers</u>	<u>Usage</u>	<u>Current Billing</u>	<u>Billing New Tiers</u>	<u>Annual Total</u>	<u>Annual Total</u>	<u>Difference</u>
8,000	57.84	57.84	9,000	\$ 65.07	65.07	10,000	\$ 72.30	72.30	195.21	195.21	-
14,000	101.22	105.38	11,000	\$ 79.53	79.53	15,000	\$ 120.93	108.45	301.68	293.36	(8.32)
16,000	115.68	124.00	17,000	\$ 133.31	133.31	17,000	\$ 156.19	122.91	405.18	380.22	(24.96)
24,000	173.52	198.48	38,000	\$ 383.28	383.28	19,000	\$ 219.68	137.37	776.48	719.13	(57.35)
25,000	180.75	224.64	35,000	\$ 343.68	343.68	15,000	\$ 159.10	108.45	683.53	676.77	(6.76)
25,000	180.75	224.64	19,000	\$ 151.93	151.93	21,000	\$ 195.51	151.83	528.19	528.40	0.21
26,000	187.98	238.08	24,000	\$ 198.48	198.48	26,000	\$ 265.40	224.88	651.86	661.44	9.58
36,000	264.44	372.48	40,000	\$ 409.68	409.68	43,000	\$ 567.60	449.28	1,241.72	1,231.44	(10.28)
75,000	646.98	936.64	76,000	\$ 952.08	952.08	9,000	\$ 138.96	65.07	1,738.02	1,953.79	215.77
218,000	2,709.30	3,144.56	245,000	\$ 3,561.44	3,561.44	131,000	\$ 2,022.64	1,801.28	8,293.38	8,507.28	213.90

# Sewer Enterprise Fund Budget



Usage	Current Rate	Proposed Rate	\$ Increase	% Increase
10,000	72.30	72.30	-	0.00%
15,000	108.45	108.45	-	0.00%
20,000	144.60	144.60	-	0.00%
25,000	180.75	180.75	-	0.00%
35,000	255.13	253.05	(2.08)	-0.82%
45,000	348.23	344.07	(4.16)	-1.19%
50,000	394.78	390.62	(4.16)	-1.05%
<b>55,000</b>	<b>441.33</b>	<b>437.17</b>	<b>(4.16)</b>	<b>-0.94%</b>
60,000	487.88	483.72	(4.16)	-0.85%
70,000	580.98	576.82	(4.16)	-0.72%
75,000	646.98	635.04	(11.94)	-1.85%
80,000	712.98	701.04	(11.94)	-1.67%
<b>90,000</b>	<b>844.98</b>	<b>833.04</b>	<b>(11.94)</b>	<b>-1.41%</b>
100,000	976.98	965.04	(11.94)	-1.22%
140,000	1,504.98	1,497.52	(7.46)	-0.50%
150,000	1,659.38	1,651.92	(7.46)	-0.45%
200,000	2,431.38	2,423.92	(7.46)	-0.31%
300,000	3,975.38	3,967.92	(7.46)	-0.19%
400,000	5,519.38	5,511.92	(7.46)	-0.14%
500,000	7,063.38	7,055.92	(7.46)	-0.11%
700,000	10,151.38	10,143.92	(7.46)	-0.07%
1,000,000	14,783.38	14,775.92	(7.46)	-0.05%
1,500,000	22,503.38	22,495.92	(7.46)	-0.03%
2,000,000	30,223.38	30,215.92	(7.46)	-0.02%
3,000,000	45,663.38	45,655.92	(7.46)	-0.02%
4,000,000	61,103.38	61,095.92	(7.46)	-0.01%
5,000,000	76,543.38	76,535.92	(7.46)	-0.01%
6,000,000	91,983.38	91,975.92	(7.46)	-0.01%
7,100,000	108,967.38	108,959.92	(7.46)	-0.01%
7,500,000	115,143.38	115,135.92	(7.46)	-0.01%

*Approximately 50,000 -55,000 gallons is the Town average use and approximately 90,000 gallons per year is the State average use.*



# Sewer Enterprise Fund Budget

- Comparison Other Communities
  - Based on 90,000 Gallons per year
  - State Average 756 (2014)
  - State Range 221-1,874 (2014)
  - State Median 729 (2014)
  - MWRA Average 983 (2016)
  - Tewksbury (current) 844 (2017)
  - Tewksbury (proposed) 833 (2018)

## Comments Sewer Rates

- Impact of the new Tiers
- Projection of future years
- Improving Rate Projections
- Retained Earnings

# Capital Improvement Plan FY2018-FY2022



**TOWN OF TEWKSBURY  
CAPITAL PLANNING PROGRAM  
FISCAL YEARS 2018-2022  
SUMMARY**

PROJECT/PROGRAM	FUNDING SOURCE	FY2018	FY2019	FY2020	FY2021	FY2022	Total
<b>All Departments</b>							
Facility and Equipment Upgrades and Improvement	R&A/Stab. Fund/Free Cash	-	-	-	-	-	-
<b>Fire Department</b>							
New Ambulance and Equipment	R&A/Stab. Fund/Free Cash	165,000	-	240,000	-	240,000	645,000
New Engine	R&A/Stab. Fund/Free Cash	650,000	-	-	-	-	650,000
Pickup Truck with Utility Body	R&A/Stab. Fund/Free Cash	55,000	-	-	-	-	55,000
New Center Fire Station	Borrowing	15,000,000	-	-	-	-	15,000,000
<b>Total Fire Department</b>		<b>15,870,000</b>	<b>-</b>	<b>240,000</b>	<b>-</b>	<b>240,000</b>	<b>16,350,000</b>
<b>Public Works Department</b>							
<b>Stormwater and Drainage</b>							
Stormwater and Drainage Repair and Maintenance	R&A/Stab. Fund/FC/Borrowing/CH90	25,000	185,000	200,000	120,000	20,000	550,000
Stormwater Compliance	R&A/Stab. Fund/FC/Borrowing/CH90	-	350,000	350,000	350,000	350,000	1,400,000
Stormwater and Drainage Improvement Projects	R&A/Stab. Fund/FC/Borrowing/CH90	852,152	-	-	-	-	852,152
Stormwater and Drainage Project Development	R&A/Stab. Fund/FC/Borrowing/CH90	25,000	60,000	20,000	35,000	-	140,000
		<b>902,152</b>	<b>595,000</b>	<b>570,000</b>	<b>505,000</b>	<b>370,000</b>	<b>2,942,152</b>
<b>Public Works Department</b>							
<b>Transportation</b>							
Pavement Management Preventative Maintenance	R&A/Stab. Fund/FC/Borrowing/CH90	25,000	50,000	250,000	350,000	350,000	1,025,000
Pavement Management Reconstruction/Resurfacing	R&A/Stab. Fund/FC/Borrowing/CH90	500,000	950,000	300,000	445,000	445,000	2,640,000
Sidewalks	R&A/Stab. Fund/FC/Borrowing/CH90	400,000	650,000	400,000	650,000	400,000	2,500,000
Improvement Projects	R&A/Stab. Fund/FC/Borrowing/CH90	75,000	135,000	300,000	135,000	-	645,000
Project Development	R&A/Stab. Fund/FC/Borrowing/CH90	-	25,000	-	-	-	25,000
<b>Total Transportation</b>		<b>1,000,000</b>	<b>1,810,000</b>	<b>1,250,000</b>	<b>1,580,000</b>	<b>1,195,000</b>	<b>6,835,000</b>
<b>Town Wide Departments</b>							
<b>Facilities/Misc.</b>							
Parks Vehicles	R&A/Stab. Fund/Free Cash	137,770	-	-	-	-	137,770
DPW	Borrowing	11,400,000	-	-	-	-	11,400,000
Town Center	Borrowing	5,000,000	-	-	-	-	5,000,000
<b>Total Facilities/Misc.</b>		<b>16,537,770</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>16,537,770</b>
<b>Public Works Department</b>							
<b>Fleet and Equipment</b>							
Vehicles and Equipment	R&A/Stab. Fund/Free Cash	356,000	230,000	280,000	155,000	150,000	1,171,000
<b>Total Fleet and Equipment</b>		<b>356,000</b>	<b>230,000</b>	<b>280,000</b>	<b>155,000</b>	<b>150,000</b>	<b>1,171,000</b>
<b>Grand Total DPW</b>		<b>18,795,922</b>	<b>2,635,000</b>	<b>2,100,000</b>	<b>2,240,000</b>	<b>1,715,000</b>	<b>27,485,922</b>
<b>Grand Total General Fund</b>		<b>34,665,922</b>	<b>2,635,000</b>	<b>2,340,000</b>	<b>2,240,000</b>	<b>1,955,000</b>	<b>43,835,922</b>

**TOWN OF TEWKSBURY  
CAPITAL PLANNING PROGRAM  
FISCAL YEARS 2018-2022**

**SUMMARY**

<b>PROJECT/PROGRAM</b>	<b>FUNDING SOURCE</b>	<b>FY2018</b>	<b>FY2019</b>	<b>FY2020</b>	<b>FY2021</b>	<b>FY2022</b>	<b>Total</b>
<b>Sewer Enterprise Fund</b>							
Inflow and Infiltration I/I control	Borrowing/R&A/Retained Earnings	-	350,000	350,000	550,000	550,000	<b>1,800,000</b>
Sewer Pump Station Improvements	Borrowing/R&A/Retained Earnings	-	-	-	50,000	50,000	<b>100,000</b>
Collections System Upgrades	Borrowing/R&A/Retained Earnings	1,750,000	-	-	-	-	<b>1,750,000</b>
Fleet and Equipment Replacement Program	R&A/Ent. Fund	-	-	-	-	-	-
<b>Total Sewer Enterprise Fund</b>		<b>1,750,000</b>	<b>350,000</b>	<b>350,000</b>	<b>600,000</b>	<b>600,000</b>	<b>3,650,000</b>
<b>Water Enterprise Fund</b>							
Hydrant Replacement Program	R&A Ent. Fund/Retained Earnings	125,000	125,000	125,000	125,000	125,000	<b>625,000</b>
Water Distribution System Improvements	Borrowing/R&A/Retained Earnings	2,100,000	2,000,000	100,000	2,000,000	100,000	<b>6,300,000</b>
Water Tank Maint. And Upgrades	Borrowing/R&A/Retained Earnings	75,000	900,000	-	-	-	<b>975,000</b>
Fleet and Equipment Replacement Program	R&A Ent. Fund/Retained Earnings	65,000	-	-	-	-	<b>65,000</b>
<b>Total Water Enterprise Fund</b>		<b>2,365,000</b>	<b>3,025,000</b>	<b>225,000</b>	<b>2,125,000</b>	<b>225,000</b>	<b>7,965,000</b>
Fleet and Equipment Replacement Program	<b>R&amp;A/Ent. Fund</b>	<b>135,000</b>	<b>170,000</b>	-	<b>175,000</b>	<b>100,000</b>	<b>580,000</b>
<b>Grand Total All Capital Projects Per Year</b>		<b>38,915,922</b>	<b>6,180,000</b>	<b>2,915,000</b>	<b>5,140,000</b>	<b>2,880,000</b>	
<b>Grand Total All Projects All Years</b>							<b>56,030,922</b>

**CAPITAL PLANNING PROGRAM**

**FISCAL YEARS 2018-2022**

**GENERAL FUND PROJECTS THAT WILL BE FUNDED BY RAISE AND APPROPRIATE, TRANSFER FROM STABILIZATION FUND OR FREE CASH**

<b>PROJECT/PROGRAM</b>	<b>FY2018</b>	<b>FY2019</b>	<b>FY2020</b>	<b>FY2021</b>	<b>FY2022</b>	<b>Total</b>
<b>All Departments</b>						
Facility and Equipment Upgrades and Improvements	-	-	-	-	-	-
<b>Total All Departments</b>	-	-	-	-	-	-
<b>Fire Department</b>						
New Ambulance and Equipment	165,000	-	240,000	-	240,000	<b>645,000</b>
New Engine	650,000	-	-	-	-	<b>650,000</b>
Pickup Truck with Utility Body	55,000	-	-	-	-	
<b>Total Fire Department</b>	<b>870,000</b>	-	<b>240,000</b>	-	<b>240,000</b>	<b>1,350,000</b>
<b>Public Works Department</b>						
<b>Stormwater and Drainage</b>						
Stormwater and Drainage Repair and Maintenance	-	-	-	-	-	-
Stormwater Compliance	-	350,000	350,000	350,000	350,000	<b>1,400,000</b>
Stormwater and Drainage Improvement Projects	-	-	-	-	-	-
Stormwater and Drainage Project Development	-	-	-	-	-	-
<b>Total Stormwater and Drainage</b>	-	<b>350,000</b>	<b>350,000</b>	<b>350,000</b>	<b>350,000</b>	<b>1,400,000</b>
<b>Public Works Department</b>						
<b>Transportation</b>						
Pavement Management Preventative Maintenance	-	-	-	-	-	-
Pavement Management Reconstruction/Resurfacing	-	450,000	-	-	-	<b>450,000</b>
Sidewalks	-	250,000	-	250,000	-	<b>500,000</b>
Improvement Projects	35,000	35,000	-	35,000	-	<b>105,000</b>
Project Development	-	-	-	-	-	-
<b>Total Transportation</b>	<b>35,000</b>	<b>735,000</b>	-	<b>285,000</b>	-	<b>1,055,000</b>
<b>Town Wide Departments</b>						
<b>Facilities/Misc.</b>						
Parks Vehicles	137,770	-	-	-	-	<b>137,770</b>
DPW	-	-	-	-	-	-
Town-Wide	-	-	-	-	-	-
	<b>137,770</b>	-	-	-	-	<b>137,770</b>
<b>Public Works Department</b>						
<b>Fleet and Equipment</b>						
Vehicles and Equipment	356,000	230,000	280,000	155,000	150,000	<b>1,171,000</b>
<b>Total Fleet and Equipment</b>	<b>356,000</b>	<b>230,000</b>	<b>280,000</b>	<b>155,000</b>	<b>150,000</b>	<b>1,171,000</b>
<b>Total DPW</b>	<b>528,770</b>	<b>1,315,000</b>	<b>630,000</b>	<b>790,000</b>	<b>500,000</b>	<b>3,763,770</b>
<b>Grand Total General Fund</b>	<b>1,398,770</b>	<b>1,315,000</b>	<b>870,000</b>	<b>790,000</b>	<b>740,000</b>	<b>5,113,770</b>

**TOWN OF TEWKSBURY  
CAPITAL PLANNING PROGRAM  
FISCAL YEARS 2018-2022**

**PROJECTS FUNDED BY CHAPTER 90, OTHER MA HIGHWAY PROGRAMS AND GRANTS**

<b>PROJECT/PROGRAM</b>	<b>FY2018</b>	<b>FY2019</b>	<b>FY2020</b>	<b>FY2021</b>	<b>FY2022</b>	<b>Total</b>
<b>Public Works Department General Fund</b>						
<b>Stormwater and Drainage</b>						
Stormwater and Drainage Repair and Maintenance	25,000	185,000	200,000	120,000	20,000	<b>550,000</b>
Stormwater Compliance	-	-	-	-	-	-
Stormwater and Drainage Improvement Projects	852,152	-	-	-	-	<b>852,152</b>
Stormwater and Drainage Project Development	25,000	60,000	20,000	35,000	-	<b>140,000</b>
<b>Total Stormwater and Drainage</b>	<b>902,152</b>	<b>245,000</b>	<b>220,000</b>	<b>155,000</b>	<b>20,000</b>	<b>1,542,152</b>
<b>Public Works Department General Fund</b>						
<b>Transportation</b>						
Pavement Management Preventative Maintenance	25,000	50,000	250,000	350,000	350,000	<b>1,025,000</b>
Pavement Management Reconstruction/Resurfacing	500,000	500,000	300,000	445,000	445,000	<b>2,190,000</b>
Sidewalks	400,000	400,000	400,000	400,000	400,000	<b>2,000,000</b>
Improvement Projects	40,000	100,000	300,000	100,000	-	<b>540,000</b>
Project Development	-	25,000	-	-	-	<b>25,000</b>
<b>Total Transportation</b>	<b>965,000</b>	<b>1,075,000</b>	<b>1,250,000</b>	<b>1,295,000</b>	<b>1,195,000</b>	<b>5,780,000</b>
<b>Total DPW</b>	<b>1,867,152</b>	<b>1,320,000</b>	<b>1,470,000</b>	<b>1,450,000</b>	<b>1,215,000</b>	<b>7,322,152</b>

**TOWN OF TEWKSBURY  
CAPITAL PLANNING PROGRAM  
FISCAL YEAR 2018-2022**

**ENTERPRISE FUND PROJECTS THAT WILL BE FUNDED BY RAISE AND APPROPRIATE OR TRANSFER FROM RETAINED EARNINGS**

<b>PROJECT/PROGRAM</b>	<b>FY2018</b>	<b>FY2019</b>	<b>FY2020</b>	<b>FY2021</b>	<b>FY2022</b>	<b>Total</b>
<b>Public Works Department Sewer</b>						
Inflow and Infiltration I/I control	-	350,000	350,000	550,000	550,000	<b>1,800,000</b>
Sewer Pump Station Improvements	-	-	-	50,000	50,000	<b>100,000</b>
Collections System Upgrades	1,750,000	-	-	-	-	<b>1,750,000</b>
Fleet and Equipment Replacement Program	-	-	-	-	-	-
<b>Total Sewer Enterprise Fund</b>	<b>1,750,000</b>	<b>350,000</b>	<b>350,000</b>	<b>600,000</b>	<b>600,000</b>	<b>3,650,000</b>
<b>Public Works Department Water</b>						
Hydrant Replacement Program	125,000	125,000	125,000	125,000	125,000	<b>625,000</b>
Water Distribution System Improvements	2,100,000	-	100,000	-	100,000	<b>2,300,000</b>
Water Tank Maint. And Upgrades	75,000	-	-	-	-	<b>75,000</b>
Fleet and Equipment Replacement Program	65,000	-	-	-	-	<b>65,000</b>
<b>Total Water Enterprise Fund</b>	<b>2,365,000</b>	<b>125,000</b>	<b>225,000</b>	<b>125,000</b>	<b>225,000</b>	<b>3,065,000</b>
<b>Public Works Water/Sewer</b>						
Fleet and Equipment Replacement Program	<b>135,000</b>	<b>170,000</b>	-	<b>175,000</b>	<b>100,000</b>	<b>580,000</b>
<b>Grand Total Per Year</b>	<b>4,250,000</b>	<b>645,000</b>	<b>575,000</b>	<b>900,000</b>	<b>925,000</b>	
<b>Grand Total All Projects All Years</b>						<b>7,295,000</b>

**TOWN OF TEWKSBURY  
CAPITAL PLANNING PROGRAM  
FISCAL YEARS 2018-2022**

**SUMMARY**

<b>Capital Plan Summary</b>	<b>FY2018</b>	<b>FY2019</b>	<b>FY2020</b>	<b>FY2021</b>	<b>FY2022</b>	<b>Total</b>
General Fund	34,665,922	2,635,000	2,340,000	2,240,000	1,955,000	43,835,922
Sewer Enterprise Fund	1,750,000	350,000	350,000	600,000	600,000	3,650,000
Water Enterprise Fund	2,365,000	3,025,000	225,000	2,125,000	225,000	7,965,000
Water/Sewer Enterprise Fund	135,000	170,000	-	175,000	100,000	580,000
<b>Total Capital Plan Funded</b>	<b>38,915,922</b>	<b>6,180,000</b>	<b>2,915,000</b>	<b>5,140,000</b>	<b>2,880,000</b>	<b>56,030,922</b>
<b>Annual Capital Improvement Plan Cost</b>						
R&A or Transfer from Stabilization Fund or Free Cash	1,398,770	1,315,000	870,000	790,000	740,000	5,113,770
Chapter 90	1,867,152	1,320,000	1,470,000	1,450,000	1,215,000	7,322,152
General Fund Debt Service	869,063	3,083,750	3,006,563	2,934,562	2,862,563	12,756,499
R&A or Transfer from Sewer Enterprise Fund	1,750,000	350,000	350,000	600,000	600,000	3,650,000
R&A or Transfer from Water Enterprise Fund	2,365,000	125,000	225,000	125,000	225,000	3,065,000
R&A or Transfer Sewer/Water Enterprise Fund	135,000	170,000	-	175,000	100,000	580,000
Water Enterprise Funds Debt Service	-	488,750	474,500	735,250	713,500	2,412,000
<b>Total Fiscal Year Cost</b>	<b>8,384,985</b>	<b>6,852,500</b>	<b>6,396,063</b>	<b>6,809,812</b>	<b>6,456,063</b>	<b>34,899,421</b>



# Capital Plan FY18: Proposed Expenditures

<b>Stabilization Fund Balance</b>	<b>3,773,133</b>		
<b>To Be Transfer from Stabilization Fund</b>	<b>1,965,470</b>		
<b>Balance</b>	<b>1,807,663</b>		
<b>Schools</b>			
B&M 1.) Dewing Room B-9 Abatement and Air Monitoring	15,000		
B&M 2.) Elementary Parking Lot Repairs	35,000		
B&M 3.) Roof Repairs - Maintenance Garage	10,000		
B&M 4.) Districtwide Utility Vehicles	39,100		
B&M 5.) Landscape Trailer	6,500		
B&M 6.) Refrigerated Vehicle	35,100		
T 1.) Districtwide Security	50,000		
T 2.) Elementary Visitor Security System	25,000		
North Street School Boiler	160,000		
North Street School Electric	13,500		
Doucette Field Bleachers, Site Work and Demolition	850,000		
<b>Total Schools</b>	<b>1,239,200</b>		
<b>Town</b>			
<b>DPW</b>			
F-550 4x4 Chip Dump	100,000		
Calcium Tank and spreader	16,000		
Modify Body (uni-body)	15,000		
6-Yard sander (slide-in)	15,000		
5-ton Dump w/snow package	200,000		
Articulating Asphalt Roller	10,000		
Traffic Sign/Signal Updates	35,000		
<b>Total DPW</b>	<b>391,000</b>		
<b>Fire</b>			
New Ambulance and Equipment	165,000		
New Engine		650,000	Fall STM
Pickup Truck with Utility Body	55,000		
<b>Total Fire</b>	<b>220,000</b>		
<b>Parks</b>			
Ford F-450	79,008		
Tractor	36,262		
<b>Total Parks</b>	<b>115,270</b>		



# Capital Plan FY18: Proposed Expenditures

<b>Water Retained Earning Balance</b>	<b>2,502,346</b>		
<b>Transfer Retained Earnings</b>			
Water Distribution Upgrades	2,000,000	Fall STM	
Astle Street Tank Renovations	75,000	Fall STM	
<b>Total</b>	<b>2,075,000</b>		
<b>Balance Retained Earnings</b>	<b>427,346</b>		
<b>Water Enterprise R&amp;A Rates</b>			
Hydrant Replacement/Install	125,000		
Water Distribution Upgrades Design	100,000		
Ford 550 Rack Service	55,000		
Articulating Asphalt Roller	10,000		
Ford 550 Utility w/crane and box	<u>67,500</u>	Split 50% with Sewer	
<b>Total R&amp;A</b>	<b>357,500</b>		
<b>Sewer Retained Earning Balance</b>	<b>3,661,108</b>		
<b>Sewer Retained Earnings</b>			
Sewer main repair and replacement:	1,750,000		
Ford 550 Utility w/crane and box	<u>67,500</u>	Split 50% with Water	
<b>Total</b>	<b>1,817,500</b>		
<b>Balance Retained Earnings</b>	<b>1,843,608</b>		

## Comments on Capital Plan

- General Fund Projects Under Funded
- Pavement Management
- Stormwater Permit
- Facilities
- Sidewalks

# Capital Plan FY18

Debt Exclusion Borrowing: Center Fire Station Presentation

# Capital Plan FY18

Debt Exclusion Borrowing DPW Facility Presentation

# Capital Plan FY18

Debt Exclusion Borrowing Town Center Presentation

# Capital Plan FY18

## Debt Exclusion Borrowing: Tax Impact Scenarios

Tax Impact Scenarios: Using FY17 Avg. Home Value of 358,079 and Avg. FY17 Commercial Value of 747,964 and each increasing 2.5% per year.

Fiscal Year	Residential	Commercial/Industrial	Residential	Commercial/Industrial	Residential	Commercial/Industrial	Residential	Commercial/Industrial
	Tax Project All Projects	Tax Impact All Projects	Tax Impact Fire & DPW	Tax Impact Fire & DPW	Tax Impact Fire & Center	Tax Impact Fire & Center	Tax Impact DPW & Center	Tax Impact DPW & Center
2018	70	238	59	199	44	153	37	123
2019	245	864	184	660	166	582	139	487
2020	243	878	185	669	162	588	139	499
2021	245	875	186	669	166	586	138	495
2022	243	872	186	669	162	584	138	491
2023	245	867	187	668	166	581	137	486
2024	243	871	187	667	162	587	136	489
2025	244	875	188	674	161	583	140	492
2026	241	869	188	673	161	579	134	486
2027	243	862	188	670	160	574	138	479
2028	188	658	188	658	108	373	80	285
2029	188	654	188	654	106	372	82	282
2030	188	670	188	670	109	381	79	289
2031	187	655	187	655	106	370	81	285
2032	182	650	182	650	104	368	78	282
2033	181	644	181	644	101	366	80	278
2034	180	637	180	637	104	364	76	273
2035	179	642	179	642	101	362	78	280
2036	177	634	177	634	103	359	74	275
2037	176	625	176	625	100	355	76	270
Average Tax Bill	204	727	178	634	128	453	103	366

# Trend Exempt Debt

## Exempt Debt Change w/o Debt Exclusion Borrowing

<u>Fiscal Year</u>	<u>Exempt Debt</u>	<u>FY Change</u>
FY 2017	7,412,852	-
FY 2018	6,981,843	(431,009)
FY 2019	7,089,809	107,966
FY 2020	6,929,981	(159,828)
FY 2021	6,584,837	(345,144)
FY 2022	6,428,447	(156,390)
FY 2023	6,082,144	(346,303)
FY2024	6,038,694	(43,450)
FY2025	5,942,631	(96,063)
FY2026	5,556,875	(385,756)
FY 2027	5,364,663	(192,213)
FY 2028	4,425,288	(939,375)
FY 2029	3,484,938	(940,350)
FY 2030	2,758,613	(726,325)
FY 2031	2,029,066	(729,547)
FY 2032	360,528	(1,668,538)
FY 2033	348,028	(12,500)
FY 2034	332,919	(15,109)
FY 2035	320,263	(12,656)

# Annual Reduction Exempt Debt:

<u>FY18</u>	
Water Shift	344,109
Exempt Sewer and Sewer 50% Shift	<u>260,845</u>
Total	604,954
<u>FY19</u>	
Library	40,600
Sewer 50% Shift	<u>33,150</u>
Total	33,150
<u>FY20</u>	
Ryan School	126,953
Exempt Sewer and Sewer 50% Shift	<u>121,684</u>
Total	121,684
<u>FY21</u>	
South Fire Station	55,085
Exempt Sewer and Sewer 50% Shift	<u>15,976</u>
Total	71,061
<u>FY23</u>	
Wynn Middle School	233,738
Sewer 50% Shift	<u>7,640</u>
Total	241,378
<u>FY25</u>	
Sewer 50% Shift	<u>26,990</u>
Total	26,990
<u>FY26</u>	
Senior Center	119,600
Sewer 50% Shift	<u>87,019</u>
Total	206,619

<u>FY27</u>	
Senior Center	<u>77,250</u>
Total	77,250
<u>FY28</u>	
Sewer 50% Shift	<u>901,250</u>
Total	901,250
<u>FY29</u>	
Sewer 50% Shift	<u>874,650</u>
Total	874,650
<u>FY30</u>	
Sewer 50% Shift	<u>637,500</u>
Total	637,500
<u>FY31</u>	
Sewer 50% Shift	<u>651,047</u>
Total	651,047
<u>FY32</u>	
High School	1,643,200
Sewer 50% Shift	<u>10,400</u>
Total	1,653,600
<u>FY36</u>	
High School	155,063
Sewer 50% Shift	<u>330,400</u>
Total	330,400
<b>Grand Total</b>	<b>6,431,532</b>

# Capital Plan FY18

Questions