

# Town of Saugus FY 2018 Water Rate Update

The Abrahams Group

May 2017

# Background

- 9,400 water and 8,500 sewer connections
- The Town has increased rates in recent years. The use of retained earnings has mitigated larger rate increases over past several years.
- The Town has begun addressing additional capital infrastructure or equipment, but more needs will be addressed in the near future.

# Objectives

The Town would like to develop a rate plan that would:

- Eliminate shortfalls.
- Eliminate using retained earnings to supplement the operating budget.
- Fund new capital infrastructure and equipment over the next five years.
- Project resulting retained earnings balance to be a generally accepted benchmark (10 – 25% of the operating budget).

# Methodology

- Present baseline or the “Do Nothing” scenario that contains projections with no rate increases.
- Present multiple rate scenarios with targeted projected retained earnings balance:
  - 10%
  - 15%
- Focus on an FY18 water and sewer rate increase based upon a five-year analysis.

# Last Year's Analysis

- While targeting similar retained earning balances as has been done with this year's study, water rates were increased by 9.5% and sewer rates were increased by 7.5% for FY 2017.
- Each increase was part of a multi-year plan to achieve the Town's rates-setting objectives. The plans were:

	Water Rate Increases		Sewer Rate Increases	
	Recommended	Adopted	Recommended	Adopted
<b>FY 2017</b>	9.5%	9.5%	10.8%	7.5%
<b>FY 2018</b>	9.5%	9.5%	10.8%	12.9%
<b>FY 2019</b>	9.5%	9.5%	10.8%	12.9%
<b>FY 2020</b>	4.8%	4.8%	10.8%	12.9%
<b>FY 2021</b>	4.8%	4.8%	7.7%	4.1%

# Changes from Last Year's Analysis

- Water projections are more positive than they were in last year's analysis. The main reasons are due to recent dry summers, especially the summer of 2016, and a better handle on timing of expected debt from upcoming capital projects.
- Sewer projections are similar to what they were in last year's analysis. Dry summers do not impact sewer revenues nearly as much as they do water revenues. Sewer's capital plan shows substantial capital improvements planned for the near future, which will incur additional debt.

# Water FY 2017 Review

<b>FISCAL YEAR 2017</b>	<b>May 2016</b>	<b>May 2016</b>	<b>May 2017</b>
<b>WATER ENTERPRISE</b>	<b>Recommended 9.5%</b>	<b>Voted 9.5%</b>	<b>Projected 9.5%</b>
<b>FUND REVIEW</b>	<b>FY 2017</b>	<b>FY 2017</b>	<b>FY 2017 to date</b>
Revenues	\$ 6,029,066	\$ 6,029,066	\$ 6,532,764
Retained Earnings Planned	\$ 391,381	\$ 391,381	\$ 391,381
<b>Total Revenues and Available Funds</b>	<b>\$ 6,420,447</b>	<b>\$ 6,420,447</b>	<b>\$ 6,924,145</b>
<b>Expenditures</b>	<b>\$ 6,420,447</b>	<b>\$ 6,420,447</b>	<b>\$ 6,313,338</b>
<b>Surplus/(Deficit)</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 610,807</b>
<b>Retained Earnings Projections</b>			
Retained Earnings at Start of FY 2017	\$ 551,873	\$ 551,873	\$ 726,649
Retained Earnings Planned for FY 2017	\$ (391,381)	\$ (391,381)	\$ (391,381)
Surplus/(Deficit) Current FY 2017	\$ 0	\$ 0	\$ 610,807
<b>Projected Retained Earnings at End of FY</b>	<b>\$ 160,492</b>	<b>\$ 160,492</b>	<b>\$ 946,075</b>
<b>Retained Earnings as % of Oper. Budget</b>	<b>2.50%</b>	<b>2.50%</b>	<b>14.99%</b>
Retained Earnings at the start of FY 2017 projected in May 2016; certified amount known in May 2017.			

# Water Baseline

	Budgeted	Projected	Projected	Projected	Projected
Description	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Total Revenues and OFS	\$ 6,472,805	\$ 6,472,805	\$ 6,472,805	\$ 6,472,805	\$ 6,472,805
Total Expenditures and OFU	\$ 6,504,844	\$ 6,639,170	\$ 6,997,872	\$ 7,075,507	\$ 7,650,216
<b>Excess (Deficiency)</b>	<b>\$ (32,040)</b>	<b>\$ (166,366)</b>	<b>\$ (525,068)</b>	<b>\$ (602,702)</b>	<b>\$ (1,177,412)</b>
<b>Retained Earnings Summary FY18-FY22</b>					
RE at start of FY	\$ 946,075	\$ 914,035	\$ 747,669	\$ 222,602	\$ (380,101)
Current Year Surplus (Deficit)	\$ (32,040)	\$ (166,366)	\$ (525,068)	\$ (602,702)	\$ (1,177,412)
Projected Retained Earnings Balance	\$ 914,035	\$ 747,669	\$ 222,602	\$ (380,101)	\$ (1,557,512)
Retained Earnings % of Expenditures	14.1%	11.3%	3.2%	-5.4%	-20.4%
<b>Retained Earnings FY16/FY17</b>					
Certified Retained Earnings June 30, 2016	\$ 726,649				
Retained Earnings Used FY2017	\$ (391,381)				
Projected FY17 Surplus (Deficit)	\$ 610,807				
Projected Retained Earnings June 30, 2017	\$ 946,075				

- Water planned expenditures exceed planned revenues, resulting in a shortfall in each of the five fiscal years.
- Projections show that retained earnings can cover shortfalls through FY 2020, but not beyond.
- A water rate increase is needed to eliminate the shortfalls and provide a reasonable retained earnings balance.



# Water Option 1 – Variable Rate Increases

## Target 15% Retained Earnings

Option 1 would increase rates annually as shown on the right. It would eliminate all shortfalls, result in positive retained earnings balance in each year of the five years, 15% retained earnings in FY22, and would impact users as shown below.

Updated Rates	
Year	Rate Incr %
FY2018	3.00%
FY2019	3.00%
FY2020	3.00%
FY2021	2.00%
FY2022	2.00%

User Impact	Usage / Bill	FY17 Bill	FY18		FY19		FY20	
User Example			Bill	Diff \$	Bill	Diff \$	Bill	Diff \$
Tier 1 User	2,000	\$ 87	\$ 89	\$ 3	\$ 92	\$ 3	\$ 95	\$ 3
Tier 2 User	3,000	\$ 133	\$ 137	\$ 4	\$ 141	\$ 4	\$ 145	\$ 4
Avg. Residential User	4,362	\$ 217	\$ 223	\$ 6	\$ 230	\$ 7	\$ 237	\$ 7
Avg. Commercial User	24,527	\$1,922	\$ 1,979	\$ 58	\$ 2,039	\$ 59	\$ 2,100	\$ 61

  

User Impact	Usage / Bill	FY17 Bill	FY21		FY22		FY22/FY17	
User Example			Bill	Diff \$	Bill	Diff \$	Bill	Diff \$
Tier 1 User	2,000	\$ 87	\$ 96	\$ 2	\$ 98	\$ 2	\$ 98	\$ 12
Tier 2 User	3,000	\$ 133	\$ 148	\$ 3	\$ 151	\$ 3	\$ 151	\$ 18
Avg. Residential User	4,362	\$ 217	\$ 241	\$ 5	\$ 246	\$ 5	\$ 246	\$ 30
Avg. Commercial User	24,527	\$1,922	\$ 2,142	\$ 42	\$ 2,185	\$ 43	\$ 2,185	\$ 263

# Water Option 2 – Variable Rate Increases

## Target 10% Retained Earnings

Option 2 would increase rates annually as shown on the right. It would eliminate all shortfalls, result in positive retained earnings balance in each year of the five years, 10% retained earnings in FY22, and would impact users as shown below.

Updated Rates	
Year	Rate Incr %
FY2018	3.00%
FY2019	2.00%
FY2020	2.00%
FY2021	2.00%
FY2022	3.00%

User Impact	Usage / Bill	FY17 Bill	FY18		FY19		FY20	
User Example			Bill	Diff \$	Bill	Diff \$	Bill	Diff \$
Tier 1 User	2,000	\$ 87	\$ 89	\$ 3	\$ 91	\$ 2	\$ 93	\$ 2
Tier 2 User	3,000	\$ 133	\$ 137	\$ 4	\$ 139	\$ 3	\$ 142	\$ 3
Avg. Residential User	4,362	\$ 217	\$ 223	\$ 6	\$ 228	\$ 4	\$ 232	\$ 5
Avg. Commercial User	24,527	\$1,922	\$ 1,979	\$ 58	\$ 2,019	\$ 40	\$ 2,059	\$ 40

  

User Impact	Usage / Bill	FY17 Bill	FY21		FY22		FY22/FY17	
User Example			Bill	Diff \$	Bill	Diff \$	Bill	Diff \$
Tier 1 User	2,000	\$ 87	\$ 95	\$ 2	\$ 97	\$ 3	\$ 97	\$ 11
Tier 2 User	3,000	\$ 133	\$ 145	\$ 3	\$ 149	\$ 4	\$ 149	\$ 17
Avg. Residential User	4,362	\$ 217	\$ 237	\$ 5	\$ 244	\$ 7	\$ 244	\$ 27
Avg. Commercial User	24,527	\$1,922	\$ 2,100	\$ 41	\$ 2,164	\$ 63	\$ 2,164	\$ 242

# Water Option 3 – Level Rate Increases

## Target 10% Retained Earnings

Option 3 would increase rates annually as shown on the right. It would eliminate all shortfalls, result in positive retained earnings balance in each year of the five years, 10% retained earnings in FY22, and would impact users as shown below.

Updated Rates	
Year	Rate Incr %
FY2018	2.50%
FY2019	2.50%
FY2020	2.50%
FY2021	2.50%
FY2022	2.50%

User Impact	Usage / Bill	FY17 Bill	FY18		FY19		FY20	
User Example			Bill	Diff \$	Bill	Diff \$	Bill	Diff \$
Tier 1 User	2,000	\$ 87	\$ 89	\$ 2	\$ 91	\$ 2	\$ 93	\$ 2
Tier 2 User	3,000	\$ 133	\$ 136	\$ 3	\$ 139	\$ 3	\$ 143	\$ 3
Avg. Residential User	4,362	\$ 217	\$ 222	\$ 5	\$ 228	\$ 6	\$ 233	\$ 6
Avg. Commercial User	24,527	\$1,922	\$ 1,970	\$ 48	\$ 2,019	\$ 49	\$ 2,069	\$ 50

  

User Impact	Usage / Bill	FY17 Bill	FY21		FY22		FY22/FY17	
User Example			Bill	Diff \$	Bill	Diff \$	Bill	Diff \$
Tier 1 User	2,000	\$ 87	\$ 95	\$ 2	\$ 98	\$ 2	\$ 98	\$ 11
Tier 2 User	3,000	\$ 133	\$ 146	\$ 4	\$ 150	\$ 4	\$ 150	\$ 17
Avg. Residential User	4,362	\$ 217	\$ 239	\$ 6	\$ 245	\$ 6	\$ 245	\$ 28
Avg. Commercial User	24,527	\$1,922	\$ 2,121	\$ 52	\$ 2,174	\$ 53	\$ 2,174	\$ 253