



JUNEAU RATE STUDY

Water/Sewer Revenue Requirements *Preliminary Results*

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*December 9 , 2013 Assembly presentation
December 11, 2013 Public presentation*

Agenda

- Financial Performance Summary
- Proposed Financial Policies
- Revenue Requirement Results
 - Capital Program and Funding
 - Utility Revenue Needs Assessment
- Input & policy direction
- Next steps

Financial Performance Summary

	Financial/Accounting Reporting Perspective	
	WATER	WASTEWATER
Operating Revenue	\$ 4,269,637	\$ 9,524,807
Operating Expenses		
Operating & Maintenance	\$ (3,017,987)	\$ (8,198,514)
Depreciation Expense	<u>(2,742,498)</u>	<u>(2,739,718)</u>
Total	\$ (5,750,485)	\$ (10,938,232)
 Operating Loss	 \$ (1,480,848)	 \$ (1,413,425)
Non-Operating Income(Expense)	\$ 92,595	\$ 325,888
Capital Contributions	\$ 111,531	\$ 270,184
 Net Loss	 \$ (1,276,722)	 \$ (817,352)

	Cash Perspective	
	WATER	WASTEWATER
Operating Revenue	\$ 4,269,637	\$ 9,524,807
Operating & Maintenance	\$ (3,017,987)	\$ (8,198,514)
Debt Service	<u>(176,993)</u>	<u>(637,712)</u>
Available for Capital	\$ 1,074,657	\$ 688,581
 Annual 10-Yr Capital Spending Plan	 \$ (2,650,000)	 \$ (6,490,000)
 Annual Funding Shortfall	 \$ (1,575,343)	 \$ (5,801,419)

NOTE: Based on Unaudited 2013 Financial Statements

System Assets Divided by Useful Life in Years equals Annual Depreciation Expense (non-cash expense)

Water \$95,784,429 / 35 = \$2,732,498 per year

Wastewater \$83,266,172 / 30 = \$2,739,718 per year

Amount Available for Capital Divided by Depreciation determines Percent of Depreciation Funded by Rates

Water \$1,074,657 / \$2,732,498 = 39%

Wastewater \$688,581 / \$2,739,718 = 25%

Proposed Financial Policies

Description	Recommendation	Comments
Operating Reserve Provide adequate working capital to accommodate fluctuations in the timing of revenues and expenditures	Maintain minimum balance equal to 30 - 45 days of operating & maintenance (O&M) expense for each utility	May use available reserves above minimum thresholds to help smooth rate increases
Capital Reserve Provide a source of funding for emergency repairs and unanticipated capital expenditures	Maintain a minimum balance equal to 1% of system fixed assets for each utility	Sustained from capital revenues including system reinvestment funding, and operating cash above targets
System Reinvestment Funding Provide a predictable cash resource to fund system replacement and offset annual decline in asset value Maintain rate stability and enhance intergenerational customer equity	Fund an amount annually from rates using depreciation expense as the benchmark Alternative revenue requirement scenarios developed with varying levels of depreciation funding from rates	Depreciation is a non-cash expense representing the cost of the annual decline in asset value Funding a greater portion of depreciation from rates would improve the financial position and provide additional cash to help fund the capital program

Solutions-Oriented Consulting

Revenue Requirement Scenario Descriptions

Water Utility	Baseline	Low	Middle	Top
Current O&M and Debt	Fully Funded			
Capital Program	50%	100% Funding of Identified Capital Needs		
Current \$	\$11.0 million	\$22.0 million		
Escalated \$	\$13.2 million	\$26.5 million		
System Reinvestment Funding	35% constant	35% Constant	Phase-In 68%	Phase-In 100%

Wastewater Utility	Baseline	Low	Middle	Top
Current O&M and Debt	Fully Funded			
Capital Program	50%	100% Funding of Identified Capital Needs		
Current \$	\$25.5 million	\$51.1 million		
Escalated \$	\$32.4 million	\$64.9 million		
System Reinvestment Funding	25% constant	25% Constant	Phase-In 63%	Phase-In 100%

Capital Program Funding

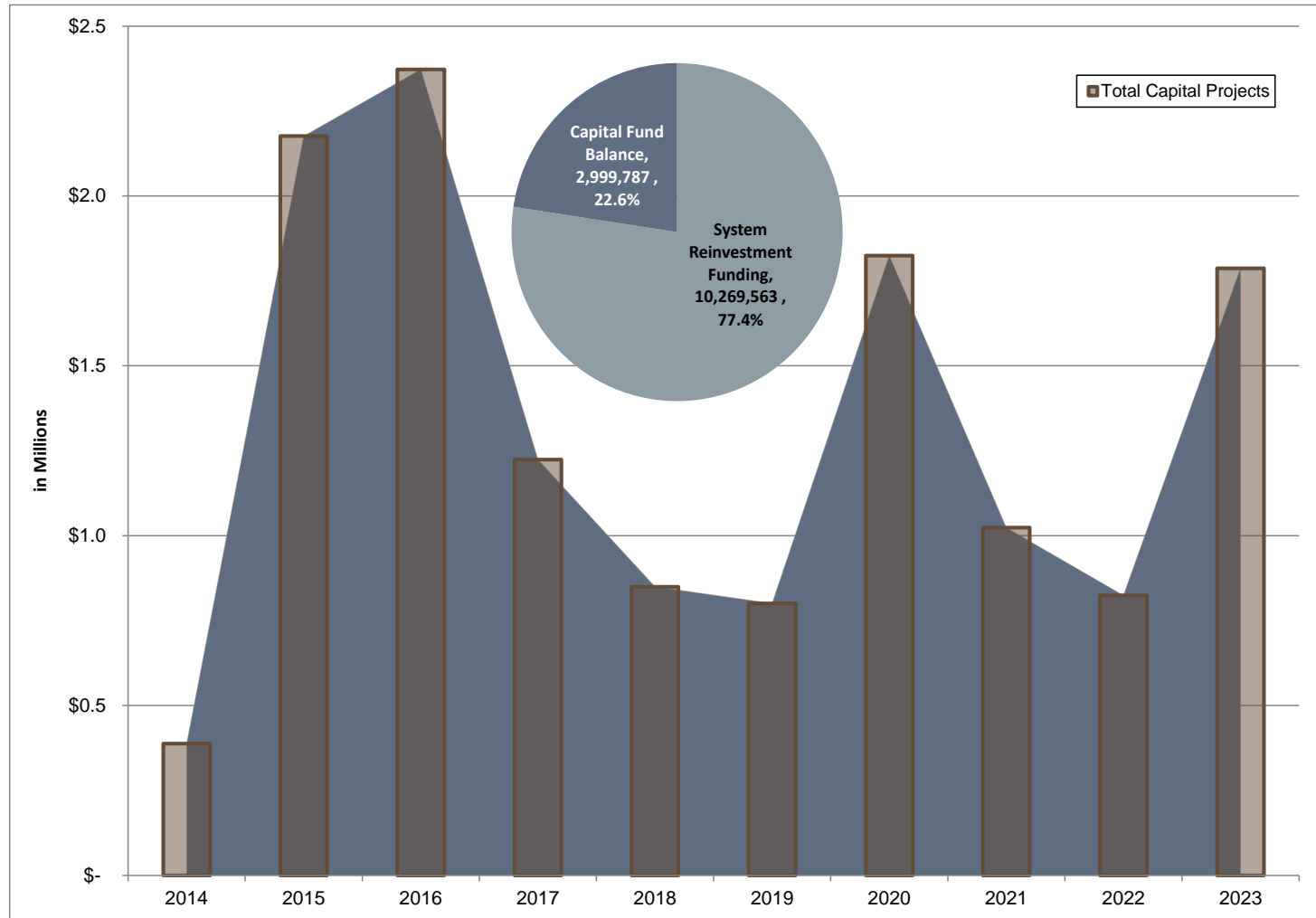
- Priority of applying capital funding resources (level of funding varies by scenarios)
 1. Available capital cash reserves
 2. System reinvestment funding from rates (depreciation funding)
 3. Outside sources: Passenger fees and 1% sales tax
 - Total of \$8 million in passenger fees available for water/wastewater - \$1.3 m / year FY 2017/18 – FY 2022/23
 - Total of \$21.2 million in 1% sales tax available for water/wastewater - \$4.25 m / year FY 2019/20 – FY 2022/23
 4. Revenue bond debt (repaid over 20 years; 4.5% interest)
- CBJ will pursue grants / low-cost loans; due to limited availability, not assumed in rate analysis

Revenue Requirement Assumptions

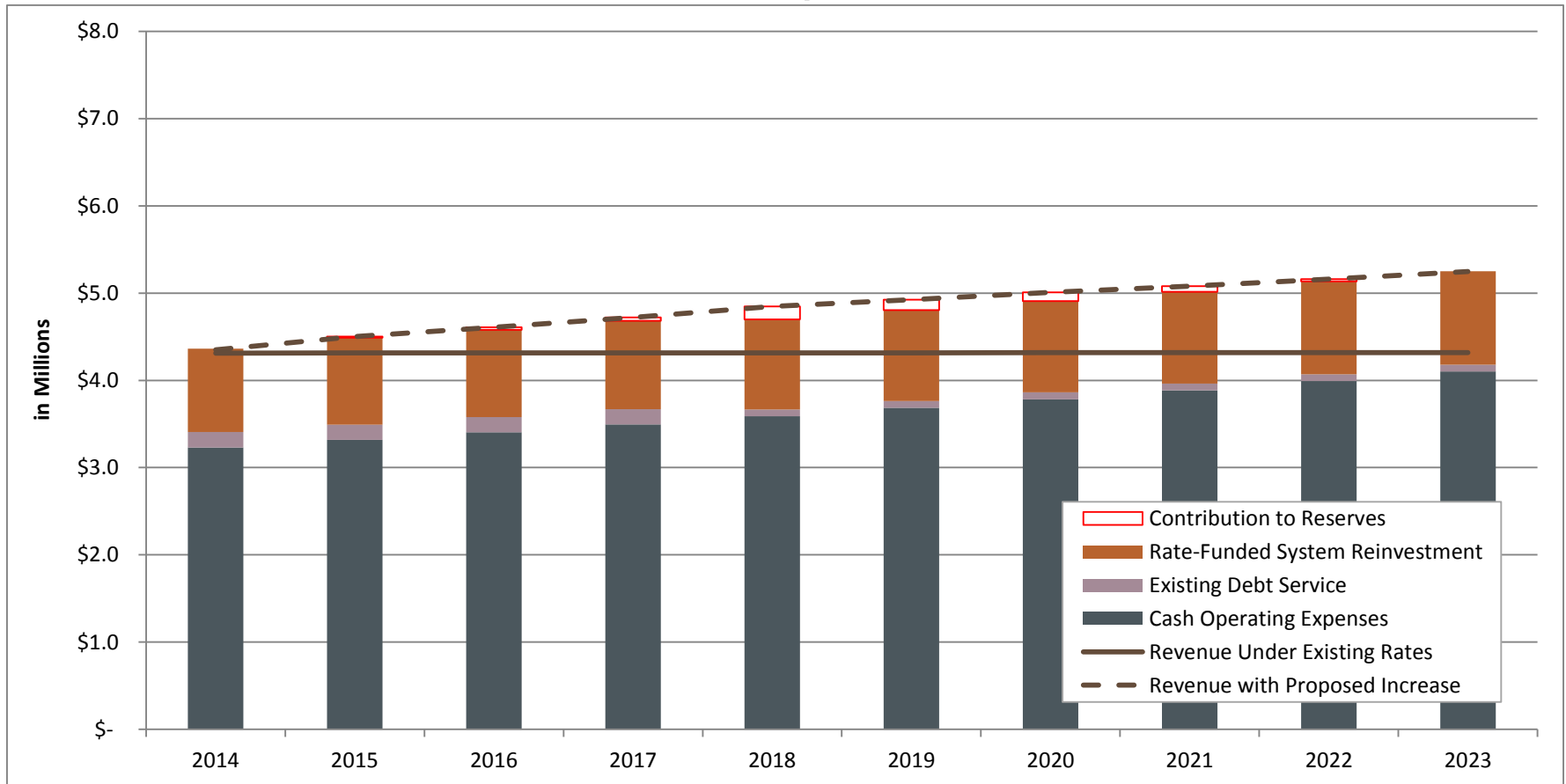
- ☐ No customer growth over study period
- ☐ O&M costs adjusted for annual inflation of 2.0%
- ☐ 10-year capital program stated in current day dollars, adjusted for annual escalation of 4.5% to date of construction
- ☐ Proposed rate increases reflect utility-wide rate revenue increases; subsequent cost of service analysis will determine recovery by customer class

WATER UTILITY

Baseline Scenario: Capital Financing Plan

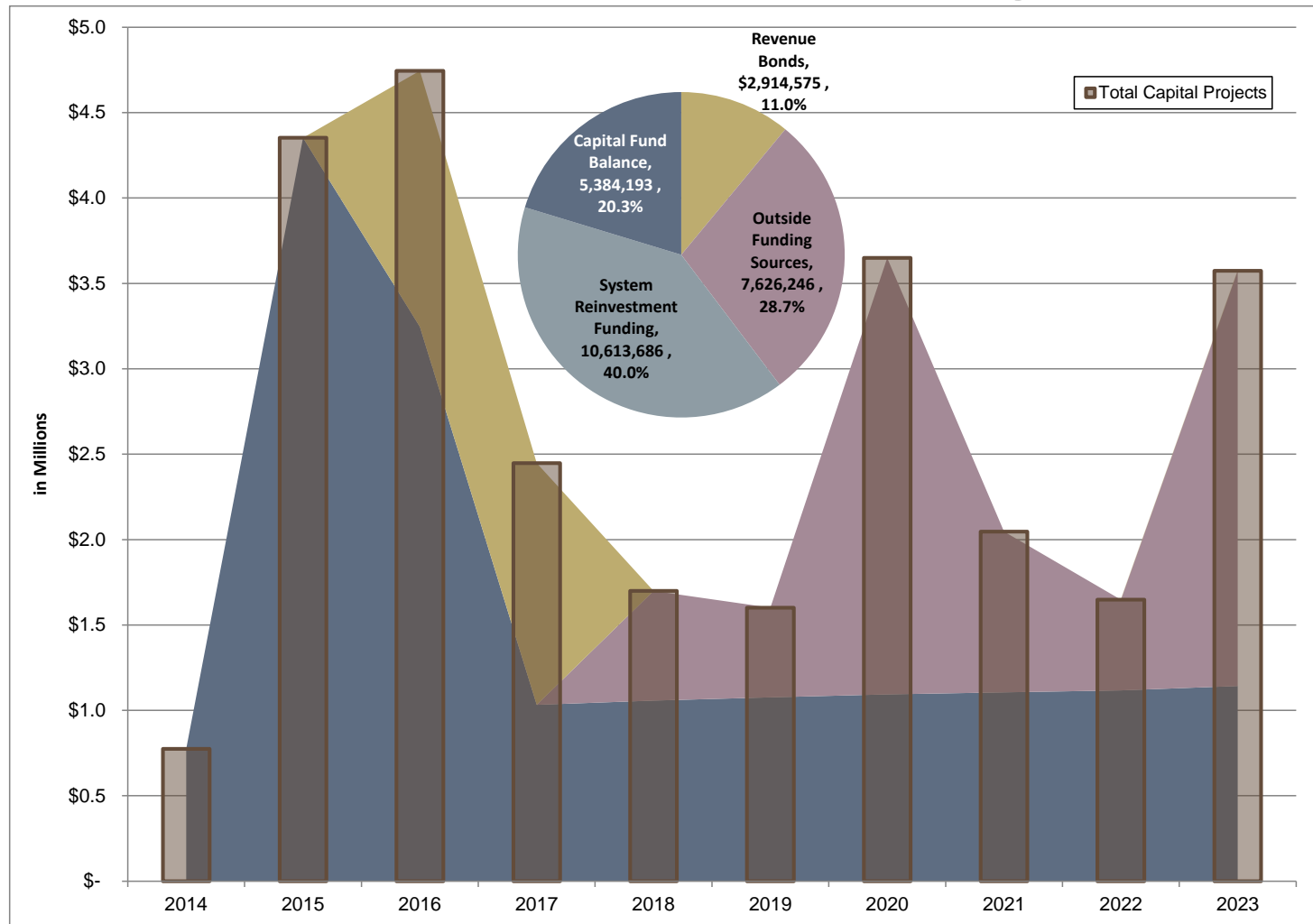


Baseline Revenue Requirements

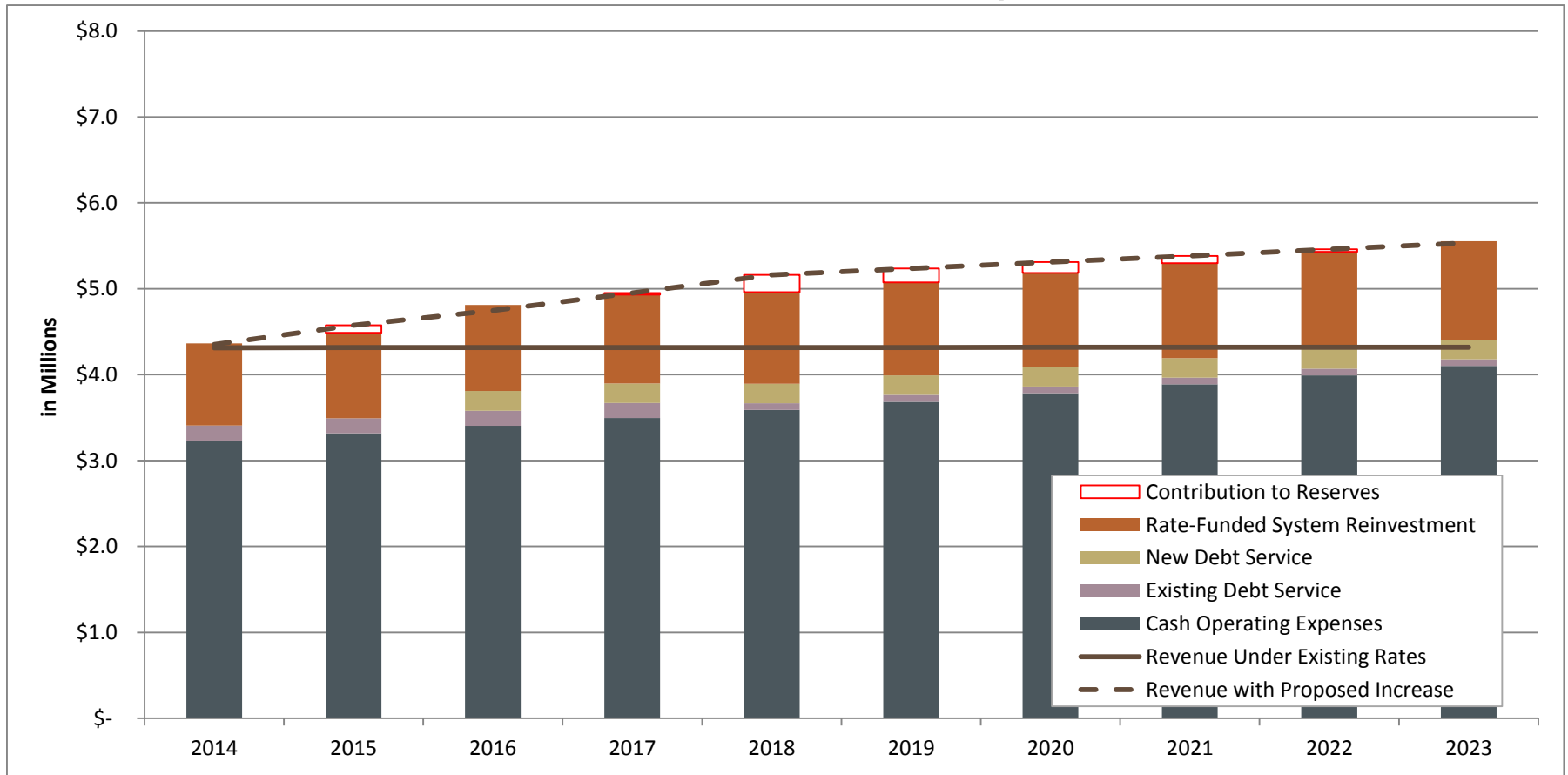


Rate Forecast	Existing	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Monthly Residential Rate	\$ 26.40	\$ 26.40	\$ 27.19	\$ 28.01	\$ 28.85	\$ 29.71	\$ 30.23	\$ 30.76	\$ 31.30	\$ 31.85	\$ 32.41
Monthly Dollar Impact		\$ -	\$ 0.79	\$ 0.82	\$ 0.84	\$ 0.87	\$ 0.52	\$ 0.53	\$ 0.54	\$ 0.55	\$ 0.56
Annual Rate Adjustments		0.00%	3.00%	3.00%	3.00%	3.00%	1.75%	1.75%	1.75%	1.75%	1.75%
Cumulative Rate Adjustment		0.00%	3.00%	6.09%	9.27%	12.55%	14.52%	16.52%	18.56%	20.64%	22.75%

Low Scenario: Capital Financing Plan

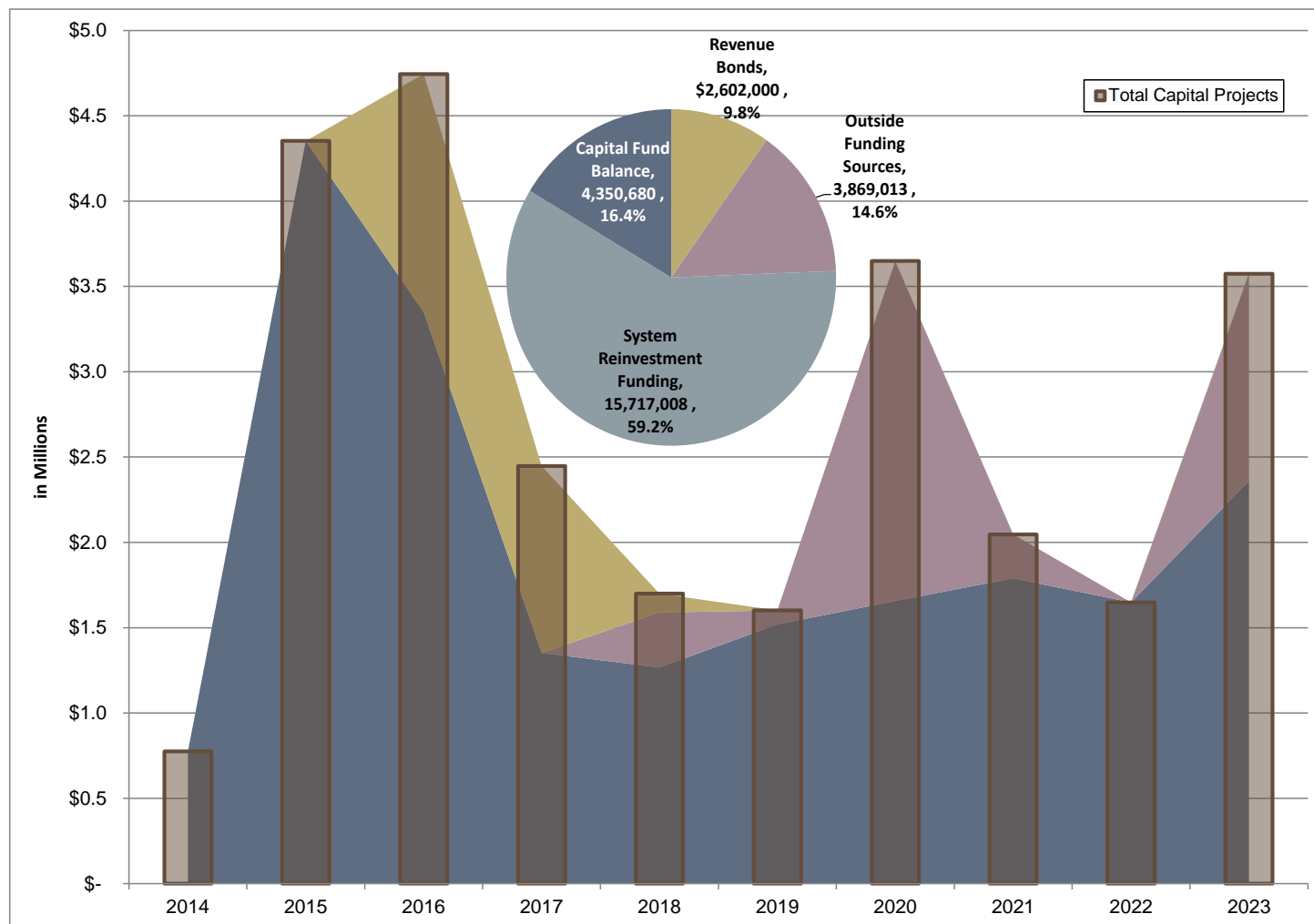


Low Scenario: Revenue Requirements

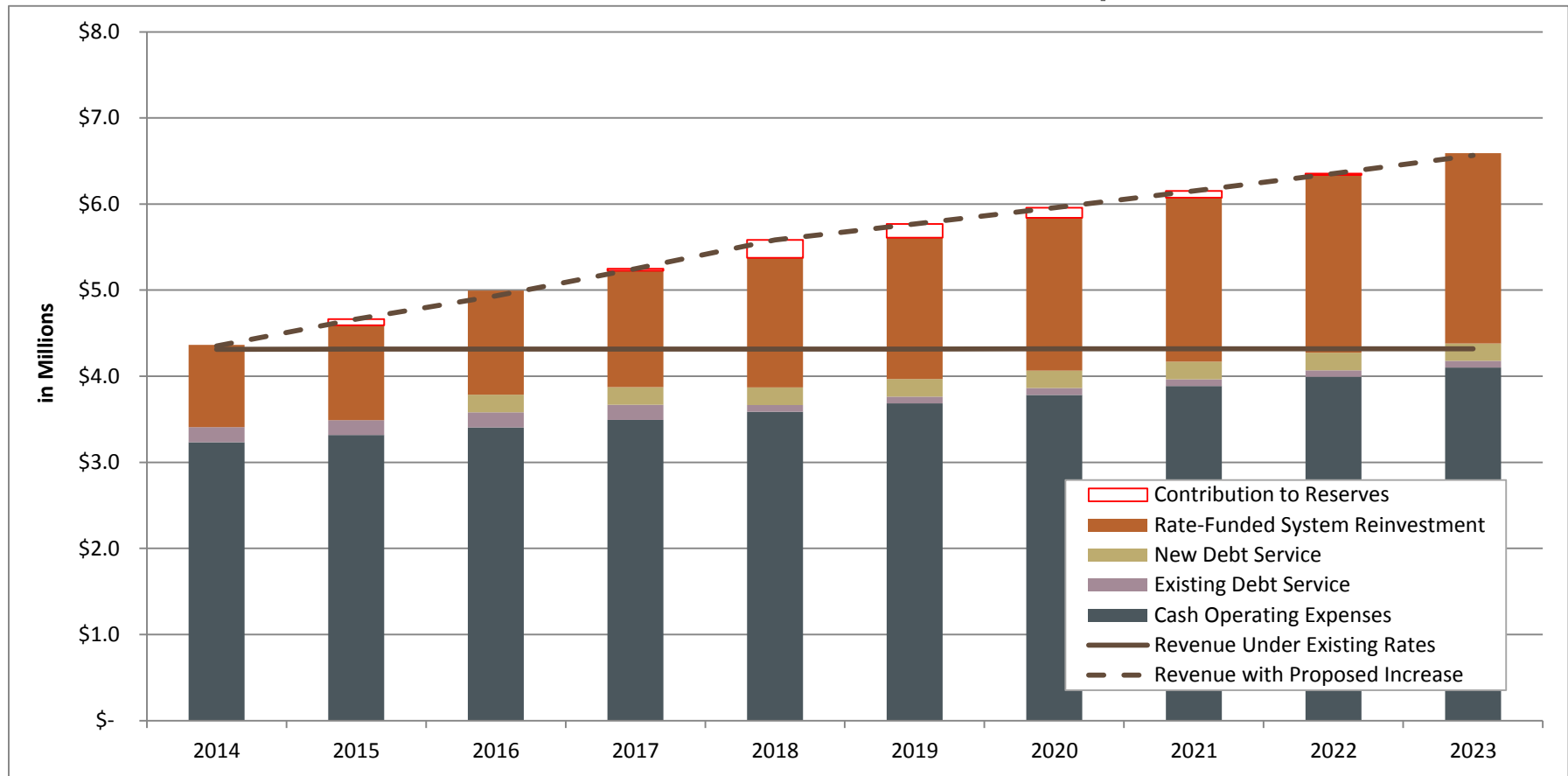


Rate Forecast	Existing	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Monthly Residential Rate	\$ 26.40	\$ 26.40	\$ 27.72	\$ 29.11	\$ 30.56	\$ 32.09	\$ 32.57	\$ 33.06	\$ 33.56	\$ 34.06	\$ 34.57
Monthly Dollar Impact		\$ -	\$ 1.32	\$ 1.39	\$ 1.46	\$ 1.53	\$ 0.48	\$ 0.49	\$ 0.50	\$ 0.50	\$ 0.51
Annual Rate Adjustments		0.00%	5.00%	5.00%	5.00%	5.00%	1.50%	1.50%	1.50%	1.50%	1.50%
Cumulative Rate Adjustment		0.00%	5.00%	10.25%	15.76%	21.55%	23.37%	25.22%	27.10%	29.01%	30.94%

Middle Scenario: Capital Financing Plan

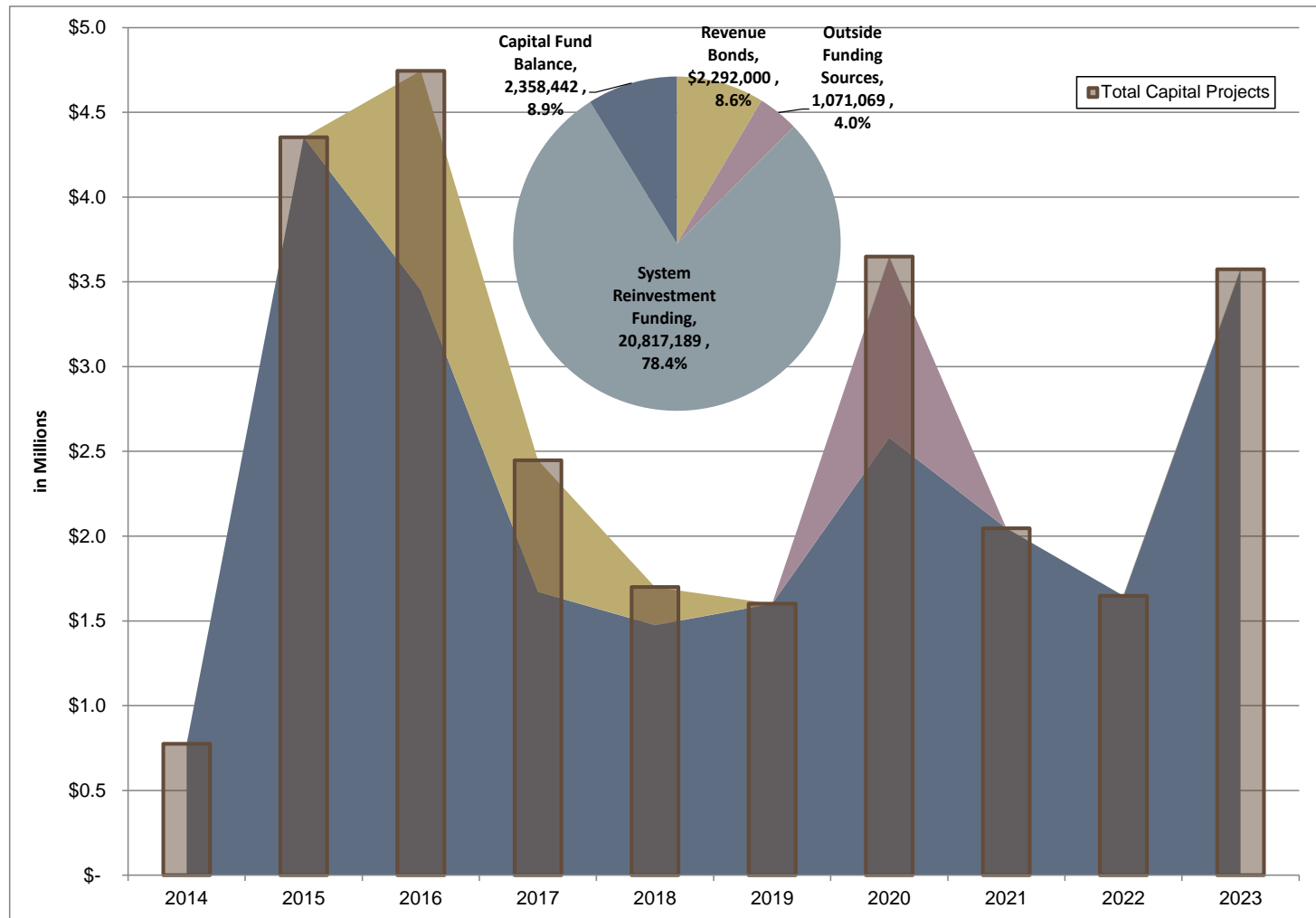


Middle Scenario: Revenue Requirements

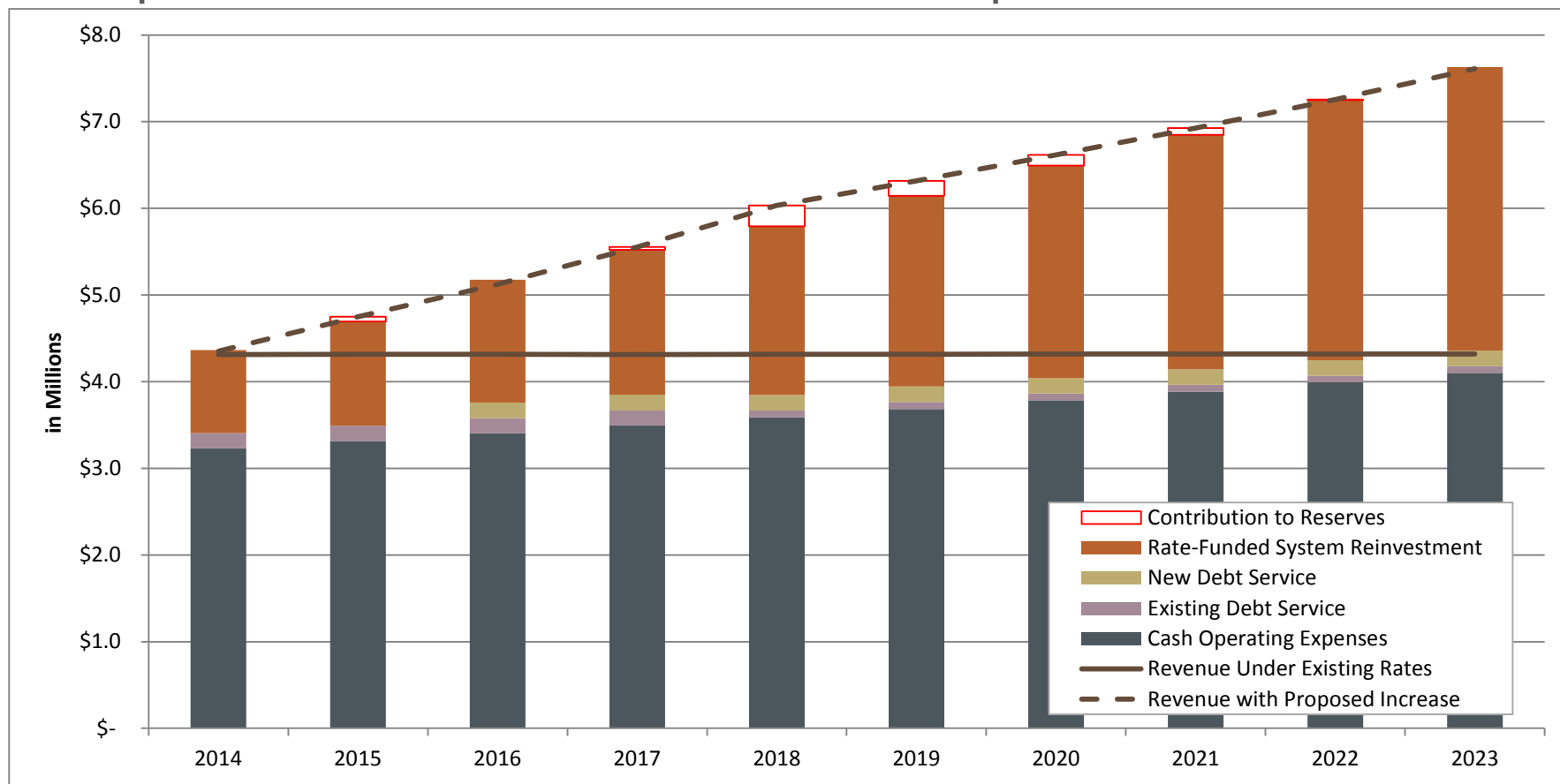


Rate Forecast	Existing	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Monthly Residential Rate	\$ 26.40	\$ 26.40	\$ 28.31	\$ 30.37	\$ 32.57	\$ 34.93	\$ 36.15	\$ 37.42	\$ 38.73	\$ 40.08	\$ 41.49
Monthly Dollar Impact		\$ -	\$ 1.91	\$ 2.05	\$ 2.20	\$ 2.36	\$ 1.22	\$ 1.27	\$ 1.31	\$ 1.36	\$ 1.40
Annual Rate Adjustments		0.00%	7.25%	7.25%	7.25%	7.25%	3.50%	3.50%	3.50%	3.50%	3.50%
Cumulative Rate Adjustment		0.00%	7.25%	15.03%	23.36%	32.31%	36.94%	41.73%	46.69%	51.83%	57.14%

Top Scenario: Capital Financing Plan



Top Scenario: Revenue Requirements



Rate Forecast	Existing	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Monthly Residential Rate	\$ 26.40	\$ 26.40	\$ 28.91	\$ 31.65	\$ 34.66	\$ 37.95	\$ 39.85	\$ 41.84	\$ 43.94	\$ 46.13	\$ 48.44
Monthly Dollar Impact		\$ -	\$ 2.51	\$ 2.75	\$ 3.01	\$ 3.29	\$ 1.90	\$ 1.99	\$ 2.09	\$ 2.20	\$ 2.31
Annual Rate Adjustments		0.00%	9.50%	9.50%	9.50%	9.50%	5.00%	5.00%	5.00%	5.00%	5.00%
Cumulative Rate Adjustment		0.00%	9.50%	19.90%	31.29%	43.77%	50.95%	58.50%	66.43%	74.75%	83.49%

Water Capital Funding Summary

Water Baseline Scenario			
Item No.	Description	Amount	Percent
1	Capital Fund Balance	\$ 2,999,787	22.6%
2	System Reinvestment Funding	10,269,563	77.4%
3	Outside Funding Sources	-	0.0%
4	Revenue Bonds	-	0.0%
5	Total Inflow	\$ 13,269,350	100.0%

Water Low Scenario			
Item No.	Description	Amount	Percent
6	Capital Fund Balance	\$ 5,384,193	20.3%
7	System Reinvestment Funding	10,613,686	40.0%
8	Outside Funding Sources	7,626,246	28.7%
9	Revenue Bonds	2,914,575	11.0%
10	Total Inflow	\$ 26,538,700	100.0%

Water Middle Scenario			
Item No.	Description	Amount	Percent
11	Capital Fund Balance	\$ 4,350,680	16.4%
12	System Reinvestment Funding	15,717,008	59.2%
13	Outside Funding Sources	3,869,013	14.6%
14	Revenue Bonds	2,602,000	9.8%
15	Total Inflow	\$ 26,538,700	100.0%

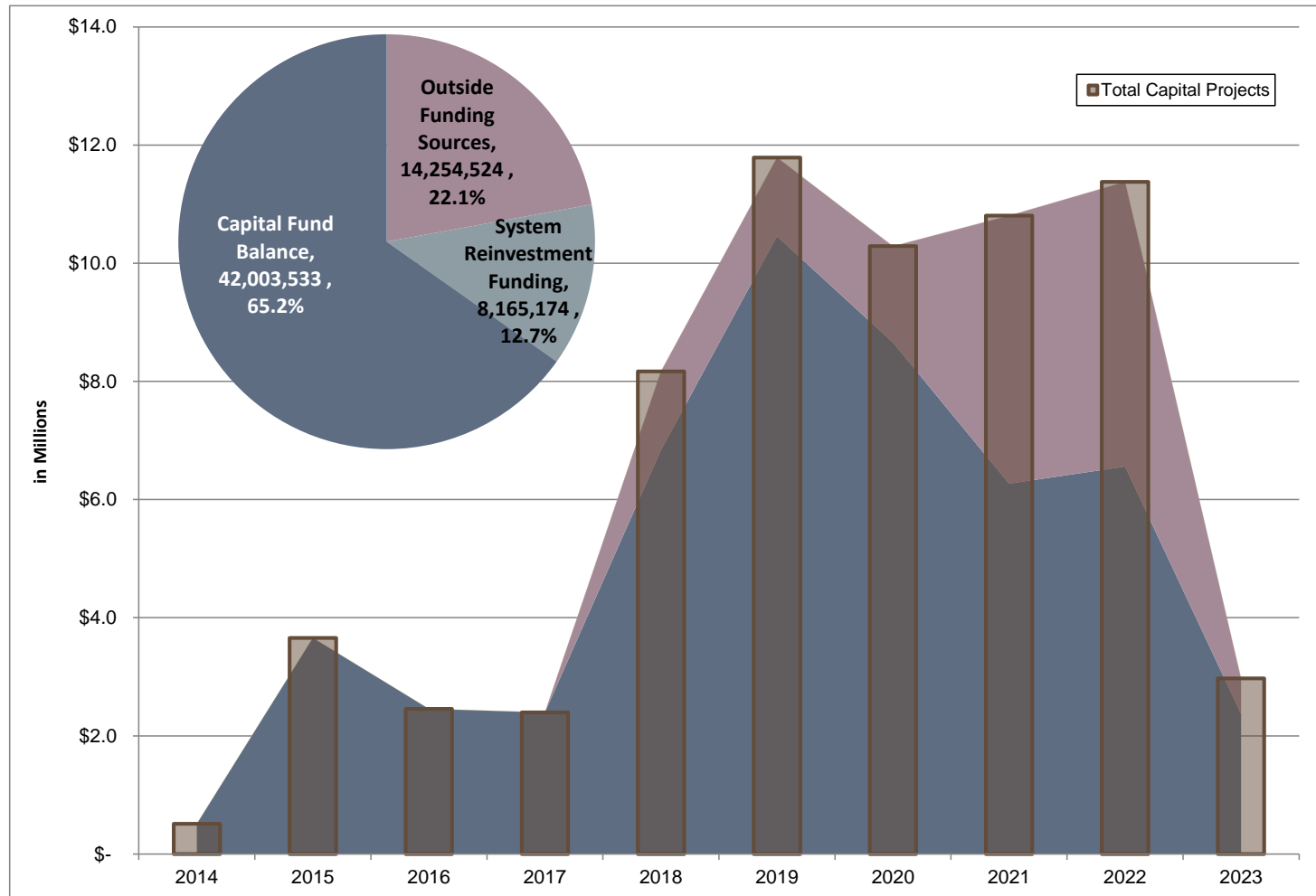
Water Top Scenario			
Item No.	Description	Amount	Percent
16	Capital Fund Balance	\$ 2,358,442	8.9%
17	System Reinvestment Funding	20,817,189	78.4%
18	Outside Funding Sources	1,071,069	4.0%
19	Revenue Bonds	2,292,000	8.6%
20	Total Inflow	\$ 26,538,700	100.0%

Water Revenue Requirement Summary

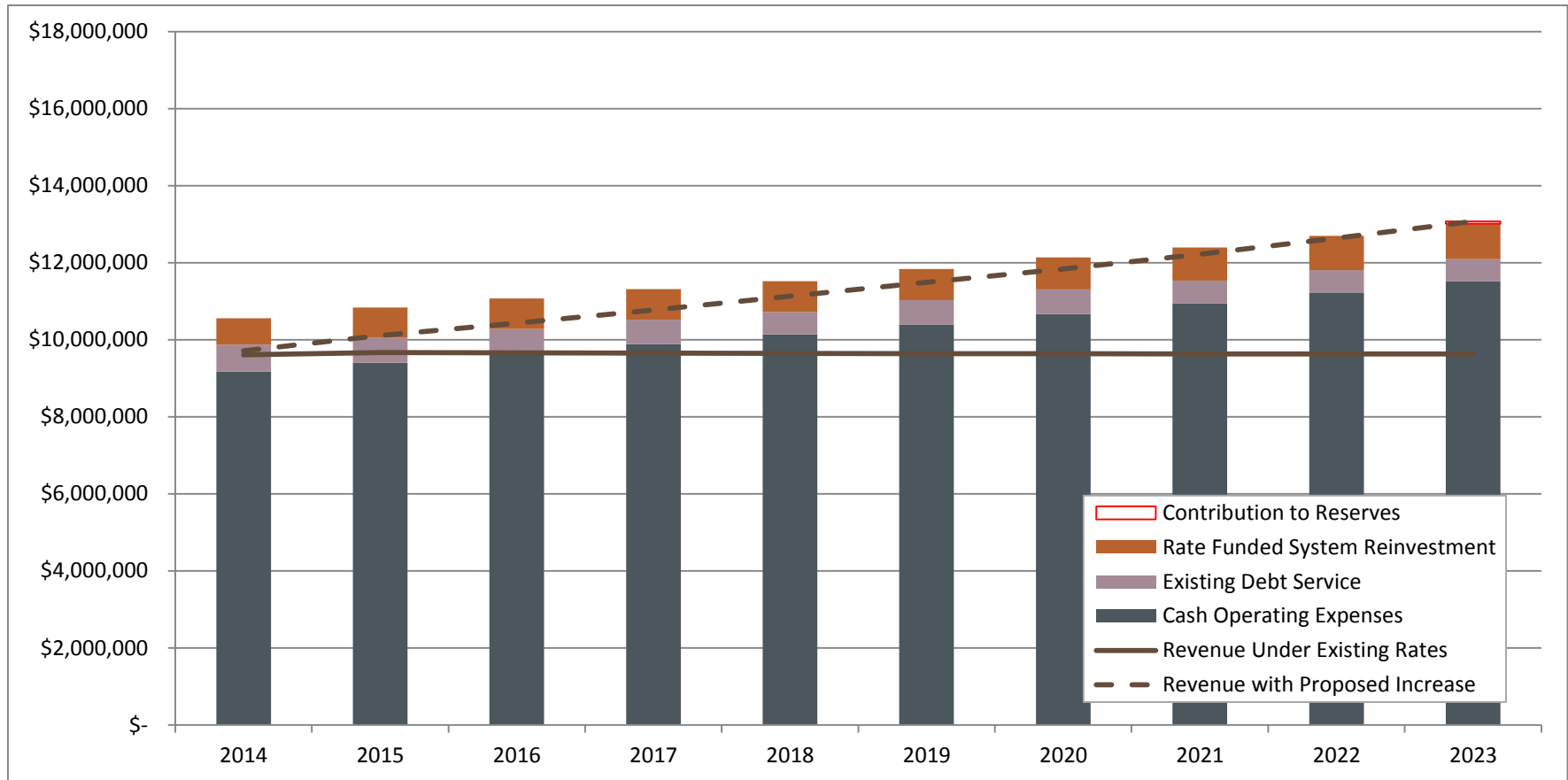
Water Utility	Baseline	Low	Middle	Top
	Results			
Annual Rate Increase	3.00% / 1.75%	5.00% / 1.50%	7.25% / 3.50%	9.50% / 5.00%
Average Annual Rate Increase	2.5%	3.4%	6.3%	9.3%
Cumulative Rate Increase	22.8%	30.9%	57.1%	83.5%
% of CIP Debt Financed	0.0%	11.0%	9.8%	8.6%
Ending Capital Fund Balance	\$3.8 million	\$1.5 million	\$2.5 million	\$4.5 million
Ending Operating Fund Balance	\$0.5 million	\$0.5 million	\$0.5 million	\$0.5 million
Ending Total Balance	\$4.3 million	\$2.0 million	\$3.0 million	\$5.0 million

WASTEWATER UTILITY

Baseline Scenario: Capital Financing Plan

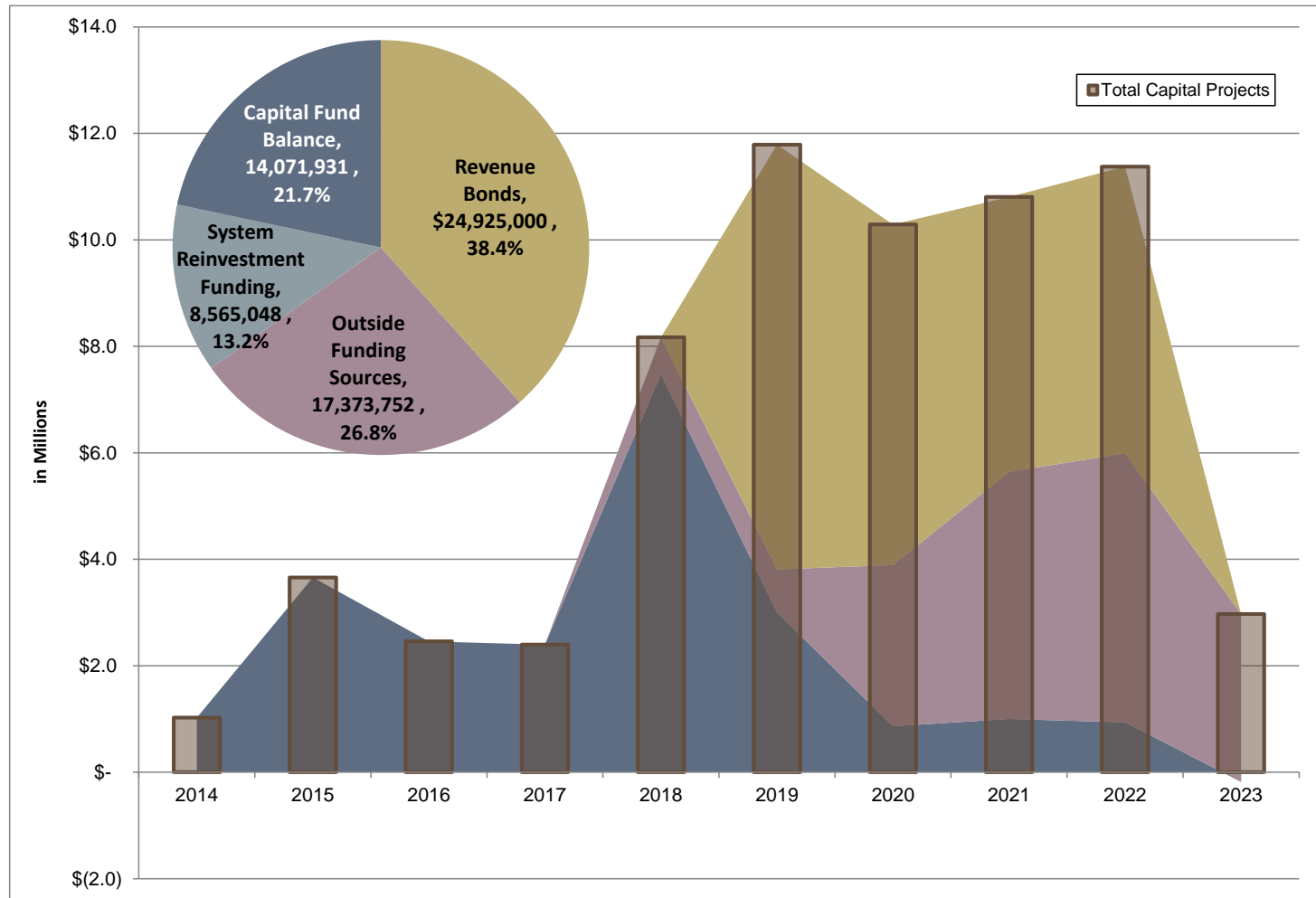


Baseline Scenario: Revenue Requirements

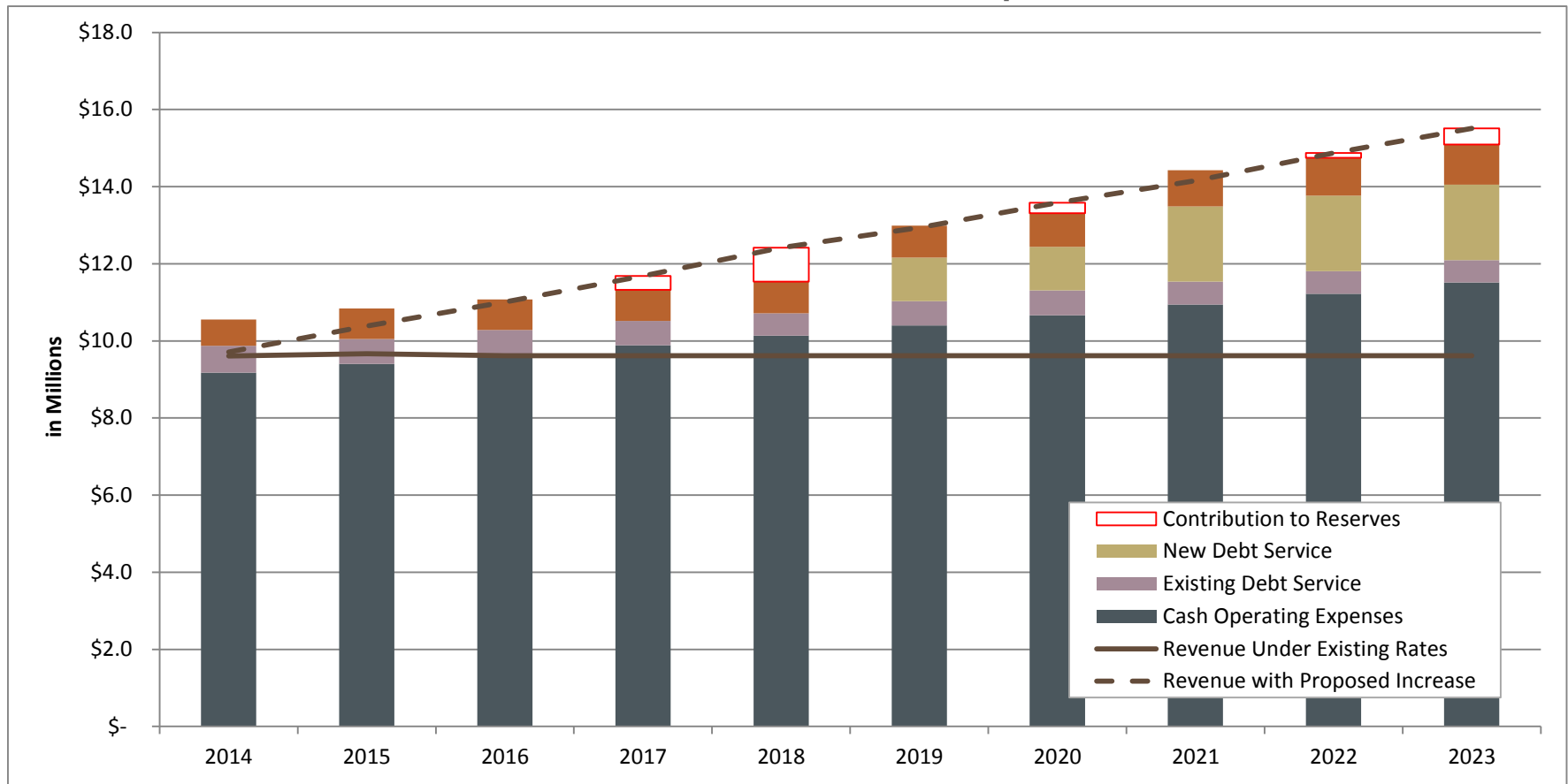


Rate Forecast	Existing	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Monthly Residential Rate	\$ 64.13	\$ 64.13	\$ 66.37	\$ 68.70	\$ 71.10	\$ 73.59	\$ 76.17	\$ 78.83	\$ 81.59	\$ 84.45	\$ 87.40
Monthly Dollar Impact		\$ -	\$ 2.24	\$ 2.32	\$ 2.40	\$ 2.49	\$ 2.58	\$ 2.67	\$ 2.76	\$ 2.86	\$ 2.96
Annual Rate Adjustments		0.00%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Cumulative Rate Adjustment		0.00%	3.50%	7.12%	10.87%	14.75%	18.77%	22.93%	27.23%	31.68%	36.29%

Low Scenario: Capital Financing Plan

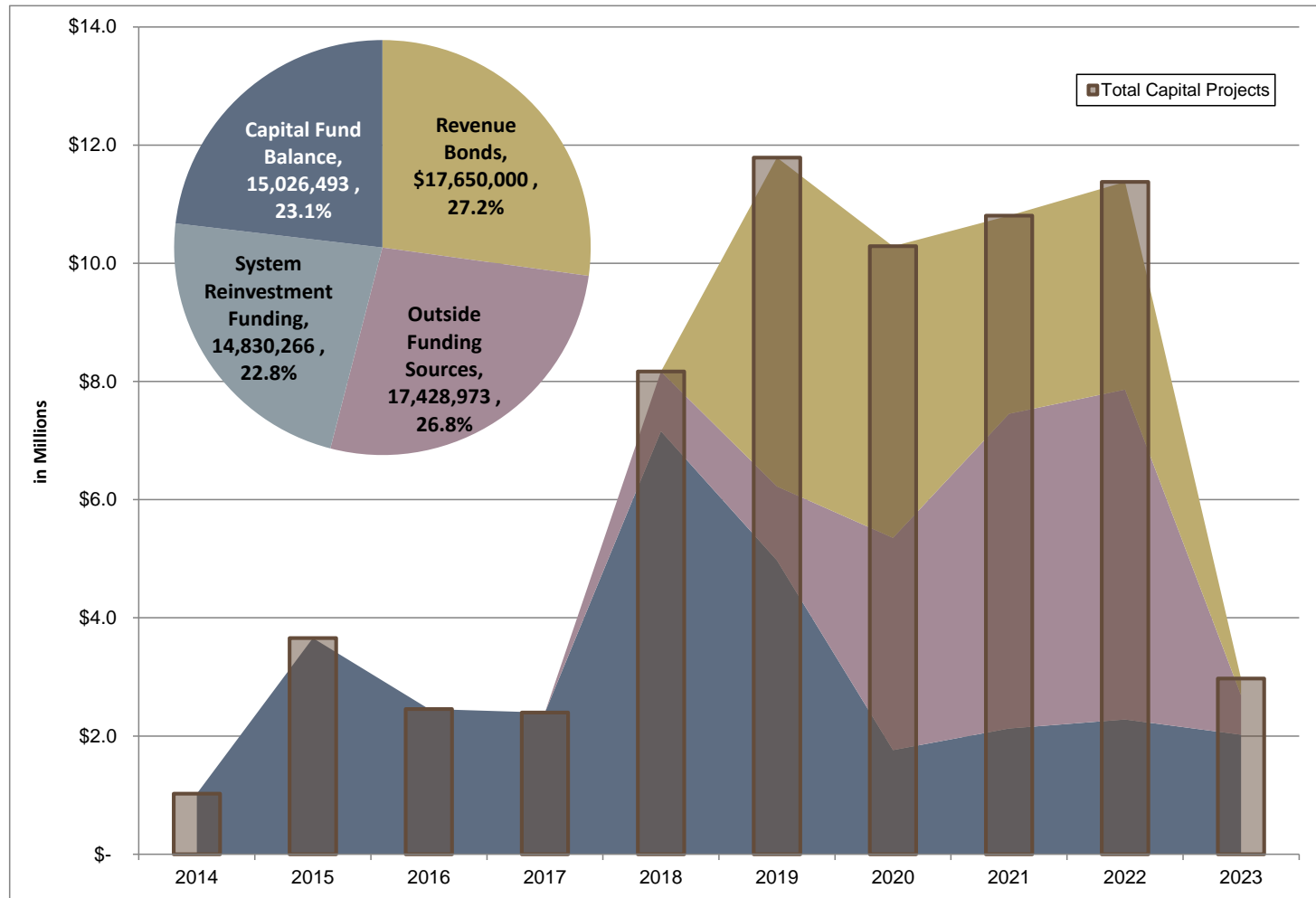


Low Scenario: Revenue Requirements

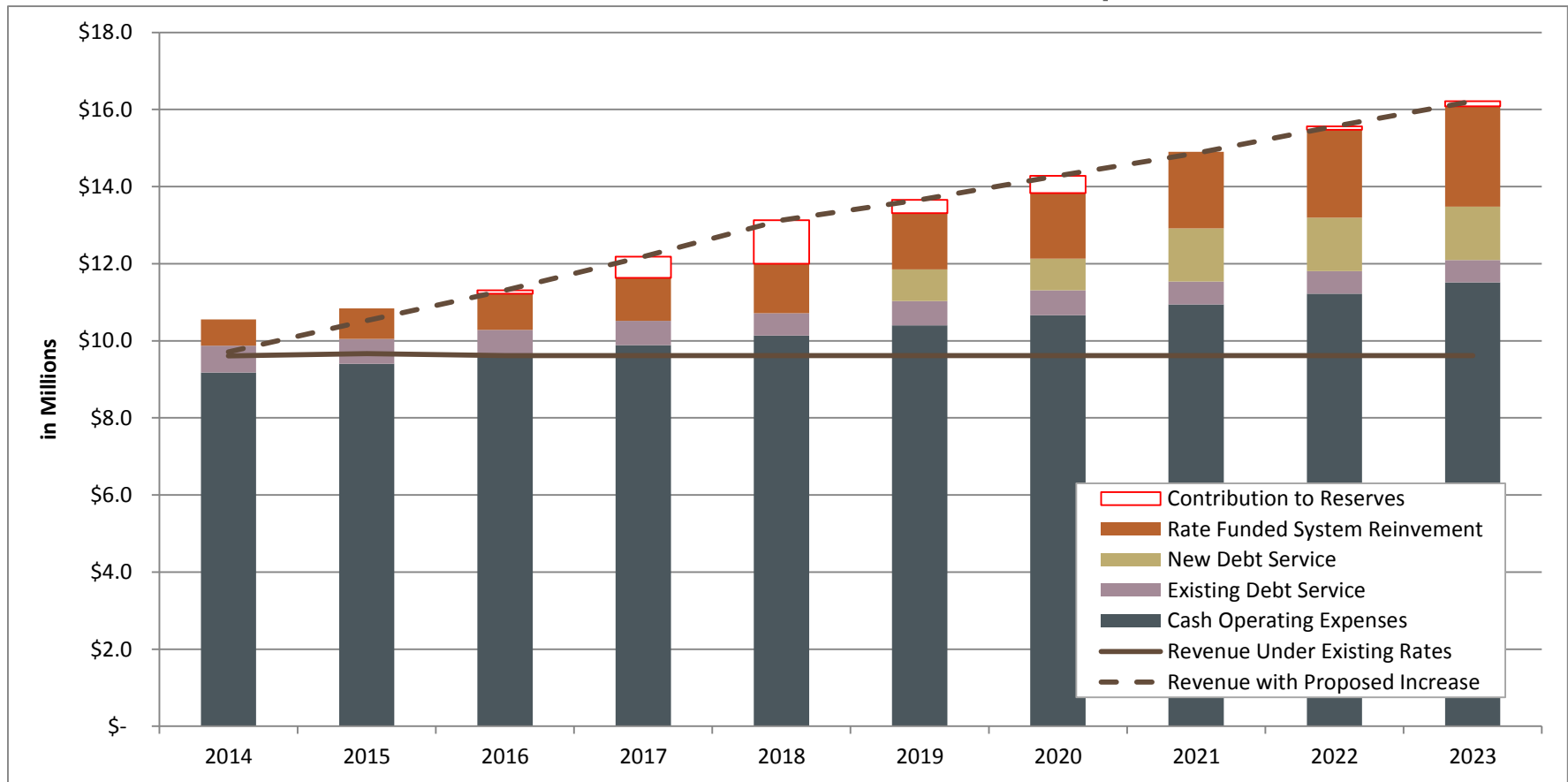


Rate Forecast	Existing	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Monthly Residential Rate	\$ 64.13	\$ 64.13	\$ 68.30	\$ 72.74	\$ 77.47	\$ 82.50	\$ 86.42	\$ 90.52	\$ 94.82	\$ 99.33	\$ 104.05
Monthly Dollar Impact		\$ -	\$ 4.17	\$ 4.44	\$ 4.73	\$ 5.04	\$ 3.92	\$ 4.10	\$ 4.30	\$ 4.50	\$ 4.72
Annual Rate Adjustments		0.00%	6.50%	6.50%	6.50%	6.50%	4.75%	4.75%	4.75%	4.75%	4.75%
Cumulative Rate Adjustment		0.00%	6.50%	13.42%	20.79%	28.65%	34.76%	41.16%	47.86%	54.89%	62.24%

Middle Scenario: Capital Financing Plan

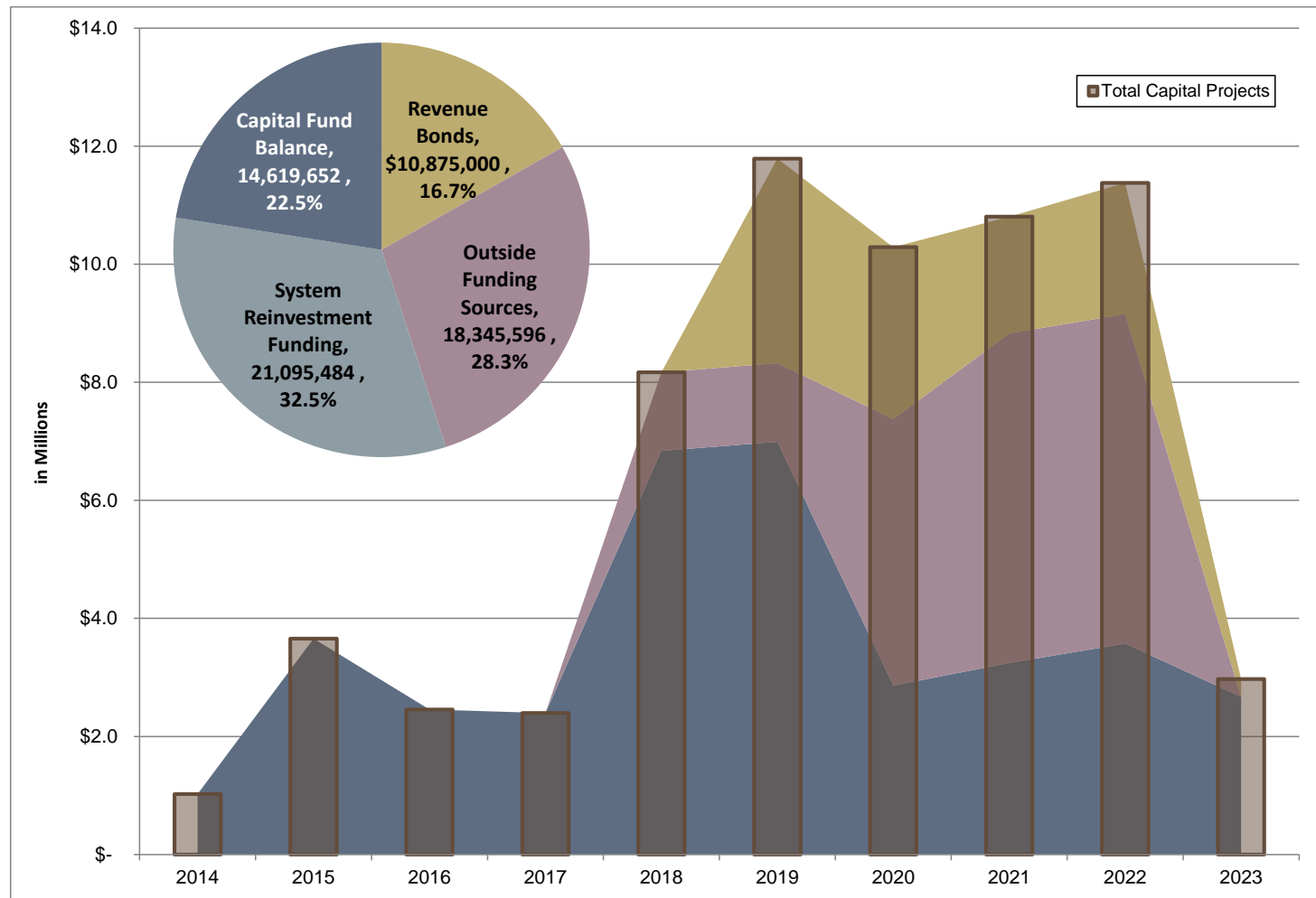


Middle Scenario: Revenue Requirements

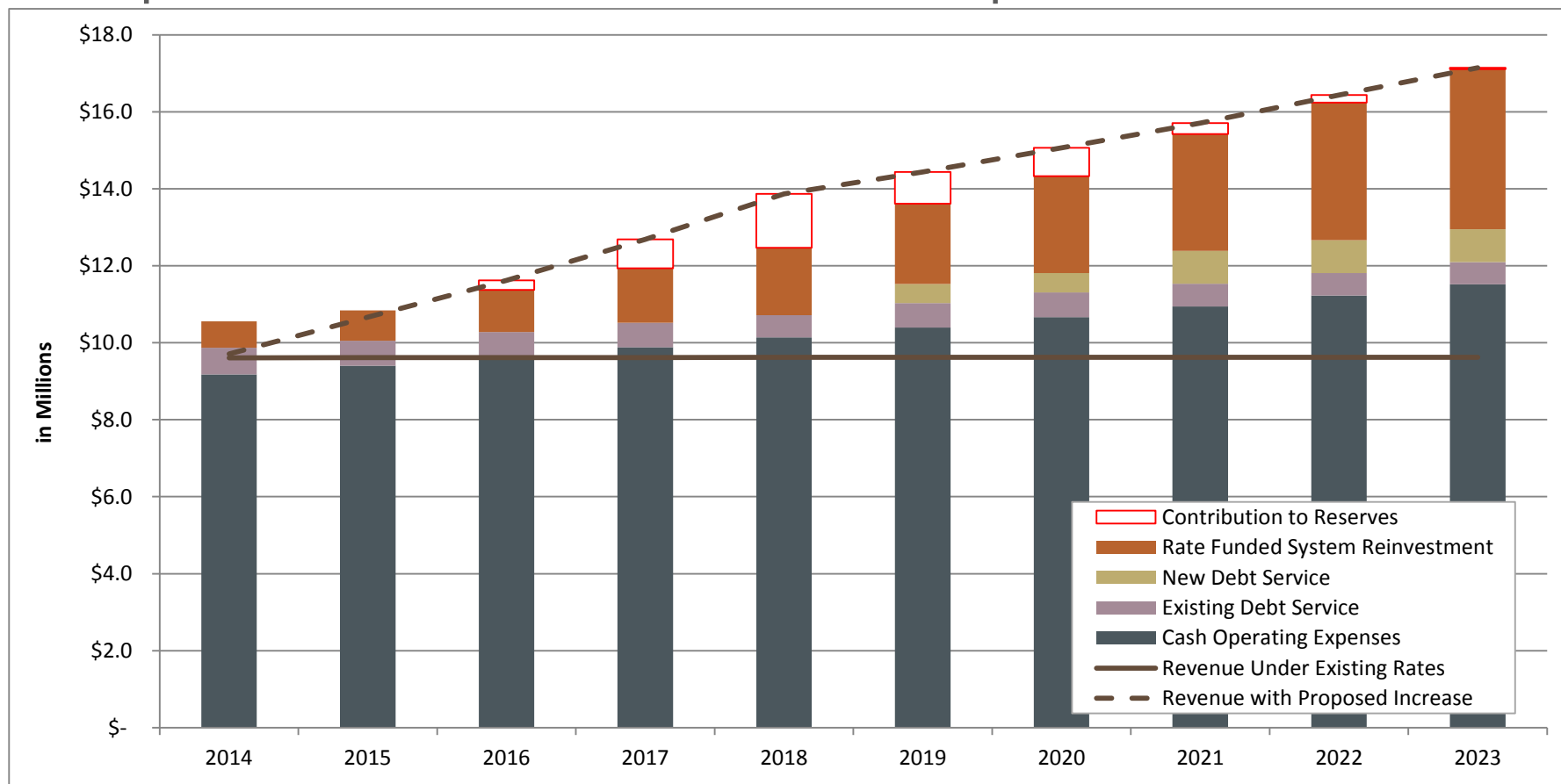


Rate Forecast	Existing	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Monthly Residential Rate	\$ 64.13	\$ 67.18	\$ 70.37	\$ 73.71	\$ 77.21	\$ 80.88	\$ 84.72	\$ 88.74	\$ 92.96	\$ 97.38	\$ 102.00
Monthly Dollar Impact		\$ 3.05	\$ 3.19	\$ 3.34	\$ 3.50	\$ 3.67	\$ 3.84	\$ 4.02	\$ 4.22	\$ 4.42	\$ 4.63
Annual Rate Adjustments		0.00%	8.00%	8.00%	8.00%	8.00%	4.50%	4.50%	4.50%	4.50%	4.50%
Cumulative Rate Adjustment		0.00%	8.00%	16.64%	25.97%	36.05%	42.17%	48.57%	55.25%	62.24%	69.54%

Top Scenario: Capital Financing Plan



Top Scenario: Revenue Requirements



Rate Forecast	Existing	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Monthly Residential Rate	\$ 64.13	\$ 64.13	\$ 70.22	\$ 76.89	\$ 84.20	\$ 92.20	\$ 96.35	\$ 100.68	\$ 105.21	\$ 109.95	\$ 114.89
Monthly Dollar Impact		\$ -	\$ 6.09	\$ 6.67	\$ 7.30	\$ 8.00	\$ 4.15	\$ 4.34	\$ 4.53	\$ 4.73	\$ 4.95
Annual Rate Adjustments		0.00%	9.50%	9.50%	9.50%	9.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Cumulative Rate Adjustment		0.00%	9.50%	19.90%	31.29%	43.77%	50.24%	57.00%	64.06%	71.44%	79.16%

Wastewater Capital Funding Summary

Wastewater Baseline Scenario

Item No.	Description	Amount	Percent
1	Capital Fund Balance	\$ 42,003,533	65.2%
2	System Reinvestment Funding	8,165,174	12.7%
3	Outside Funding Sources	14,254,524	22.1%
4	Revenue Bonds	0	0.0%
5	Total Inflow	\$ 64,423,232	100.0%

Wastewater Low Scenario

Item No.	Description	Amount	Percent
6	Capital Fund Balance	\$ 14,071,931	21.7%
7	System Reinvestment Funding	8,565,048	13.2%
8	Outside Funding Sources	17,373,752	26.8%
9	Revenue Bonds	24,925,000	38.4%
10	Total Inflow	\$ 64,935,732	100.0%

Wastewater Middle Scenario

Item No.	Description	Amount	Percent
11	Capital Fund Balance	\$ 15,026,493	23.1%
12	System Reinvestment Funding	14,830,266	22.8%
13	Outside Funding Sources	17,428,973	26.8%
14	Revenue Bonds	17,650,000	27.2%
15	Total Inflow	\$ 64,935,732	100.0%

Wastewater Top Scenario

Item No.	Description	Amount	Percent
16	Capital Fund Balance	\$ 14,619,652	22.5%
17	System Reinvestment Funding	21,095,484	32.5%
18	Outside Funding Sources	18,345,596	28.3%
19	Revenue Bonds	10,875,000	16.7%
20	Total Inflow	\$ 64,935,732	100.0%

Wastewater: Revenue Requirement Summary

Wastewater Utility	Baseline	Low	Middle	Top
	Results			
Annual Rate Increase	3.50% / 3.50%	6.5% / 4.75%	8.00% / 4.50%	9.50% / 4.50%
Average Annual Rate Increase	4.0%	6.9%	7.7%	8.8%
Cumulative Rate Increase	36.3%	62.2%	69.5%	79.2%
% of CIP Debt Financed	0.0%	38.4%	27.2%	16.7%
Ending Capital Fund Balance	\$2.0 million	\$2.4 million	\$2.6 million	\$5.0 million
Ending Operating Fund Balance	\$1.4 million	\$1.4 million	\$1.4 million	\$1.3 million
Ending Total Balance	\$3.4 million	\$3.8 million	\$4.0 million	\$6.3 million

Baseline Scenario: Combined Rate Impact

Rate Adjustment	Existing FYE	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Monthly Residential Rate											
Water	\$ 26.40	\$ 26.40	\$ 27.19	\$ 28.01	\$ 28.85	\$ 29.71	\$ 30.23	\$ 30.76	\$ 31.30	\$ 31.85	\$ 32.41
Sewer	64.13	64.13	66.05	68.04	70.08	72.18	73.98	75.83	77.73	79.67	81.66
Total	\$ 90.53	\$ 90.53	\$ 93.25	\$ 96.04	\$ 98.92	\$ 101.89	\$ 104.22	\$ 106.60	\$ 109.03	\$ 111.52	\$ 114.07
Total Annual Rate Adjustment		\$0.00	\$2.72	\$2.80	\$2.88	\$2.97	\$2.32	\$2.38	\$2.43	\$2.49	\$2.55
Total Annual Rate Adjustment		0.00%	3.00%	3.00%	3.00%	3.00%	2.28%	2.28%	2.28%	2.28%	2.29%
Total Cumulative Rate Increase		0.00%	3.00%	6.09%	9.27%	12.55%	15.12%	17.75%	20.43%	23.19%	26.00%

Low Scenario: Combined Rate Impact

Rate Adjustment	Existing FYE	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Monthly Residential Rate											
Water	\$ 26.40	\$ 26.40	\$ 27.72	\$ 29.11	\$ 30.56	\$ 32.09	\$ 32.57	\$ 33.06	\$ 33.56	\$ 34.06	\$ 34.57
Sewer	<u>64.13</u>	<u>64.13</u>	<u>68.30</u>	<u>72.74</u>	<u>77.47</u>	<u>82.50</u>	<u>86.42</u>	<u>90.52</u>	<u>94.82</u>	<u>99.33</u>	<u>104.05</u>
Total	\$ 90.53	\$ 90.53	\$ 96.02	\$ 101.84	\$ 108.03	\$ 114.59	\$ 118.99	\$ 123.58	\$ 128.38	\$ 133.39	\$ 138.62
Total Annual Rate Adjustment		\$0.00	\$5.49	\$5.83	\$6.18	\$6.56	\$4.40	\$4.59	\$4.80	\$5.01	\$5.23
Total Annual Rate Adjustment		0.00%	6.06%	6.07%	6.07%	6.08%	3.84%	3.86%	3.88%	3.90%	3.92%
Total Cumulative Rate Increase		0.00%	6.06%	12.50%	19.33%	26.58%	31.44%	36.51%	41.81%	47.34%	53.12%

Middle Scenario: Combined Rate Impact

Rate Adjustment	Existing FYE	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Monthly Residential Rate											
Water	\$ 26.40	\$ 26.40	\$ 28.31	\$ 30.37	\$ 32.57	\$ 34.93	\$ 36.15	\$ 37.42	\$ 38.73	\$ 40.08	\$ 41.49
Sewer	<u>64.13</u>	<u>64.13</u>	<u>69.26</u>	<u>74.80</u>	<u>80.79</u>	<u>87.25</u>	<u>91.17</u>	<u>95.28</u>	<u>99.56</u>	<u>104.05</u>	<u>108.73</u>
Total	\$ 90.53	\$ 90.53	\$ 97.57	\$ 105.17	\$ 113.35	\$ 122.18	\$ 127.33	\$ 132.69	\$ 138.29	\$ 144.13	\$ 150.21
Total Annual Rate Adjustment		\$0.00	\$7.04	\$7.59	\$8.19	\$8.82	\$5.15	\$5.37	\$5.60	\$5.84	\$6.08
Total Annual Rate Adjustment		0.00%	7.78%	7.78%	7.78%	7.78%	4.21%	4.22%	4.22%	4.22%	4.22%
Total Cumulative Rate Increase		0.00%	7.78%	16.17%	25.21%	34.96%	40.65%	46.58%	52.76%	59.20%	65.93%

Top Scenario: Combined Rate Impact

Rate Adjustment	Existing FYE	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Monthly Residential Rate											
Water	\$ 26.40	\$ 26.40	\$ 28.91	\$ 31.65	\$ 34.66	\$ 37.95	\$ 39.85	\$ 41.84	\$ 43.94	\$ 46.13	\$ 48.44
Sewer	<u>64.13</u>	<u>64.13</u>	<u>70.22</u>	<u>76.89</u>	<u>84.20</u>	<u>92.20</u>	<u>96.35</u>	<u>100.68</u>	<u>105.21</u>	<u>109.95</u>	<u>114.89</u>
Total	\$ 90.53	\$ 90.53	\$ 99.13	\$ 108.55	\$ 118.86	\$ 130.15	\$ 136.20	\$ 142.53	\$ 149.15	\$ 156.08	\$ 163.33
Total Annual Rate Adjustment		\$0.00	\$8.60	\$9.42	\$10.31	\$11.29	\$6.05	\$6.33	\$6.62	\$6.93	\$7.25
Total Annual Rate Adjustment		0.00%	9.50%	9.50%	9.50%	9.50%	4.65%	4.65%	4.65%	4.65%	4.65%
Total Cumulative Rate Increase		0.00%	9.50%	19.90%	31.29%	43.77%	50.45%	57.44%	64.75%	72.41%	80.42%

Next Steps

- ☐ Incorporate policy direction
- ☐ Finalize revenue requirements
- ☐ Complete cost of service analysis using selected revenue requirement scenario