

City of Warrenton



Water and Sewer Rate Study

John Ghilarducci, Principal
Doug Gabbard, Project Manager

April 27, 2016





Agenda

- ◆ **Rate Study Basics**
- ◆ **Common Assumptions**
- ◆ **Water Rate Scenarios**
 - Pay as You Go (PAYGO)
 - Debt
 - PAYGO Adjusted Capital
 - Debt Adjusted Capital
- ◆ **Sewer Rate Scenarios**
 - PAYGO
 - Debt
- ◆ **Comparisons**

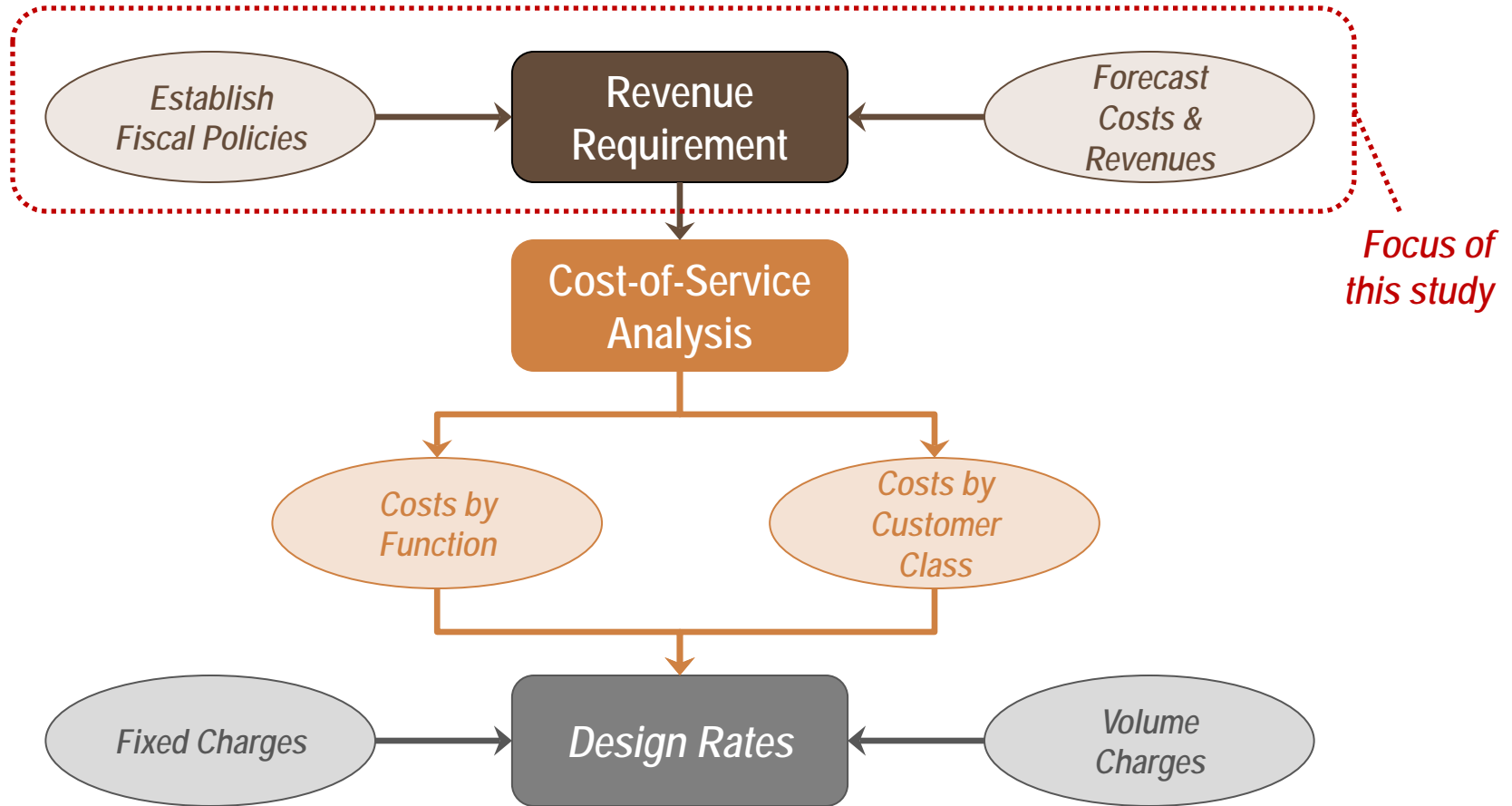


Utility Rate Basics

- ◆ Generate sufficient revenues to sustain the utility system.
- ◆ Charge for services provided.
- ◆ Recover costs equitably.
- ◆ Achieve City objectives.
 - Revenue stability
 - Maintain minimum fund balances and meet other fiscal policies



Utility Financial Planning Process Overview





Revenue Requirement Overview

- ◆ **Determines the amount of revenue necessary to meet all utility financial obligations.**
 - Operation costs
 - Debt service
 - Capital costs
 - Financial policies and targets
- ◆ **Evaluates existing revenue levels for sufficiency.**
- ◆ **Develops rate implementation strategy.**



Key Common Assumptions

Annual Cost Inflation

- General: 2.36% (*Based on CPI 10 yr avg*)
- Construction: 2.65% (*Based on ENR 5 yr avg*)
- Labor: 3%
- Benefits: 5%

Operating Forecast

- Based on 2015-2016 proposed budget; escalated based on factors above
- Franchise fee: 3% of in-city revenue

Annual Growth Rates

- Customer Accounts: 1.00%
 - \approx 45 new resident equivalents per year
- Water Demand: 0.50%
 - Assumes water consumption per capita declining

Revenue Bond Assumptions

- 20 year term
- 4.5% interest rate, 1% issuance cost
- 1.5 coverage ratio



Reserve Policies

- ◆ Reserves protect the utility from unforeseen financial impacts.
 - Low sales year(s)
 - Economic cycles
 - Regulatory changes
 - Changes in contract costs (e.g. plant operations)
- ◆ This analysis assumes the following reserve structure.

Reserve	Purpose	Minimum Balance (first year shown)
Operating Fund	<ul style="list-style-type: none"> ▪ Accommodate difference in revenue / expense cycles 	<ul style="list-style-type: none"> ▪ 60-90 days of operating expenses <ul style="list-style-type: none"> - Water: \$293k - \$441k - Sewer: \$302k - \$454k
Construction Fund	<ul style="list-style-type: none"> ▪ Segregate funds restricted for capital ▪ Protect against capital cost overruns ▪ Provide for emergency asset replacement 	<ul style="list-style-type: none"> ▪ No required reserve
Bond Reserve	<ul style="list-style-type: none"> ▪ Comply with bond covenants <ul style="list-style-type: none"> – Protects bondholders against default risk 	<ul style="list-style-type: none"> ▪ Average annual debt service



Existing Water Rates

- ◆ Rates charged by meter size include 2,000 gallons of use per month.
- ◆ Volume rate based on customer class.

Water Rate Schedule	Inside City	Outside City
Base Rates - Meter Size in Inches (includes 2,000 gallons of use)		
3/4"	\$24.41	\$36.60
1"	28.29	42.42
1 1/2"	37.87	56.81
2"	49.42	74.12
3"	80.26	120.37
4"	114.90	172.33
6"	211.07	316.63
8"	326.55	489.82
10"	461.32	691.98
Volume Rate - Beyond 2,000 gallons per kgal		
Residential	\$3.46	\$5.22
Multi Family Residential	2.82	4.20
Commercial	5.18	7.74
Industrial	6.15	9.25
School	4.21	6.35
Government	6.51	9.78
City of Gearhart	6.51	n/a
Non-Peak Industrial	3.46	n/a



Water Rate Scenarios

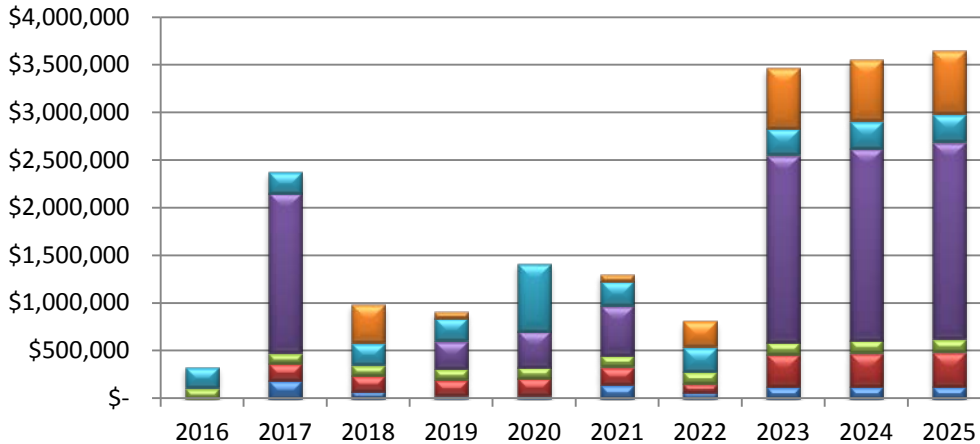
◆ Four water rate scenarios

- **Pay as You Go (PAYGO):** Rates fund all capital projects per the timeline dictated by staff. All projects beyond CIP timeframe (FY 2021-2022) completed by FY 2024-25.
- **Debt:** A combination of rates and debt fund all capital projects per the timeline dictated by staff. Assumes all projects in long term completed within 10 years. All projects beyond CIP timeframe (FY 2021-2022) completed by FY 2024-25.
- **PAYGO Adjusted Capital:** Similar to the PAYGO scenario, except capital expenditures between FY 2022-2023 and 2024-25 are spread out across additional years.
- **Debt Adjusted Capital:** Similar to the debt scenario, except capital expenditures between FY 2022-2023 and 2024-25 are spread out across additional years.

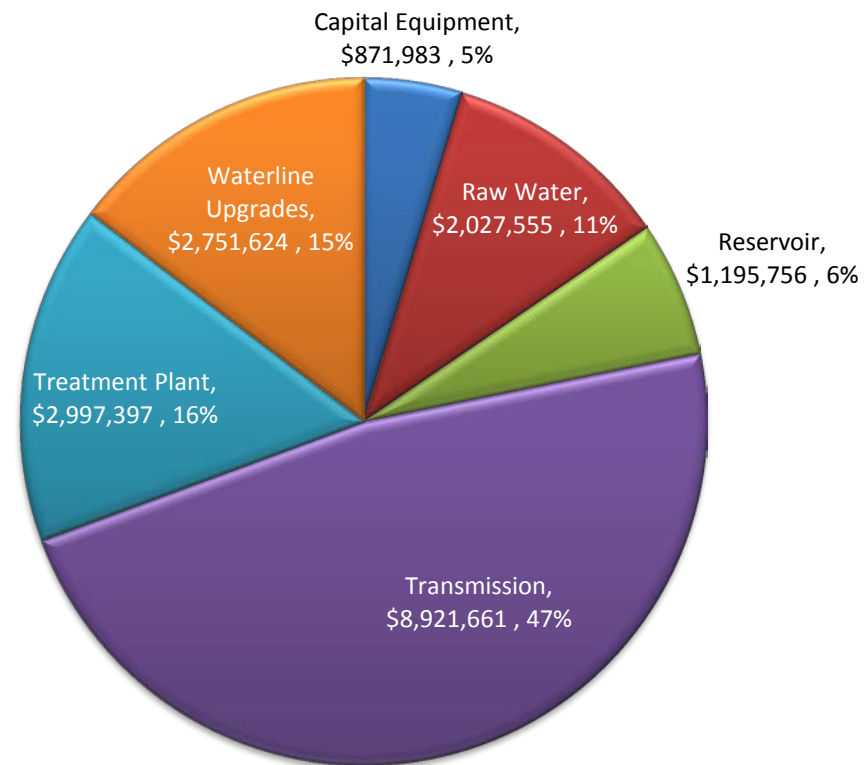


Water CIP Summary

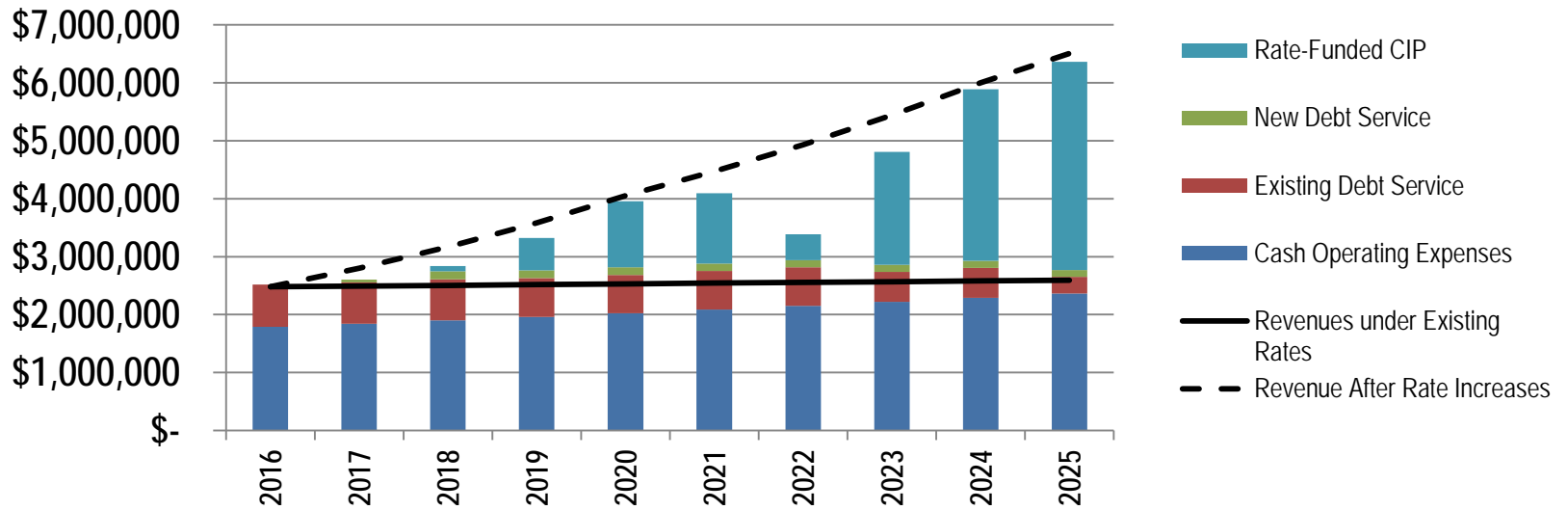
CIP Timing



- ◆ 2017 transmission project funded with IFA loan (\$1.63M).
- ◆ Large capital expenditures in final years (\$3.5M/yr average).
- ◆ Almost half of total project costs are transmission upgrades (transmission and waterline upgrades).



Water – PAYGO

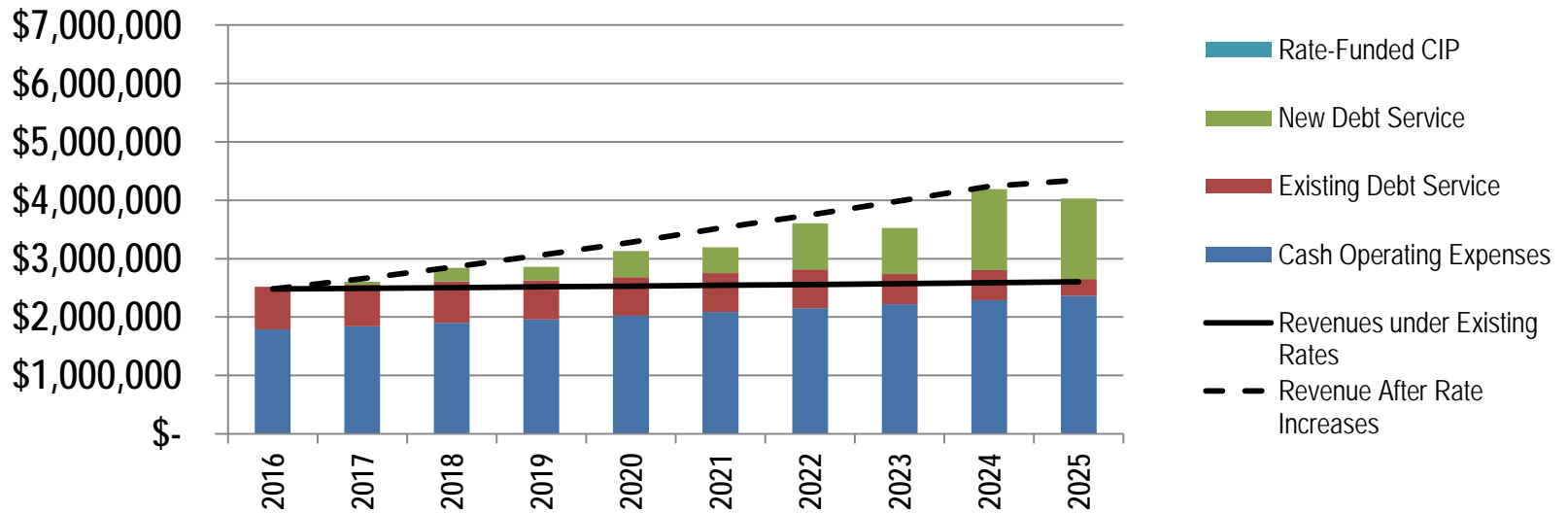


Fiscal Year Ending 6/30:	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual Rate Increase	0.00%	13.00%	13.00%	13.00%	13.00%	10.00%	10.00%	10.00%	10.00%	8.00%

- ◆ Current rates insufficient to cover operating expenses and existing debt.
- ◆ Annual CIP, including large capital expenditures in final years, contribute to rate increases.



Water – Debt



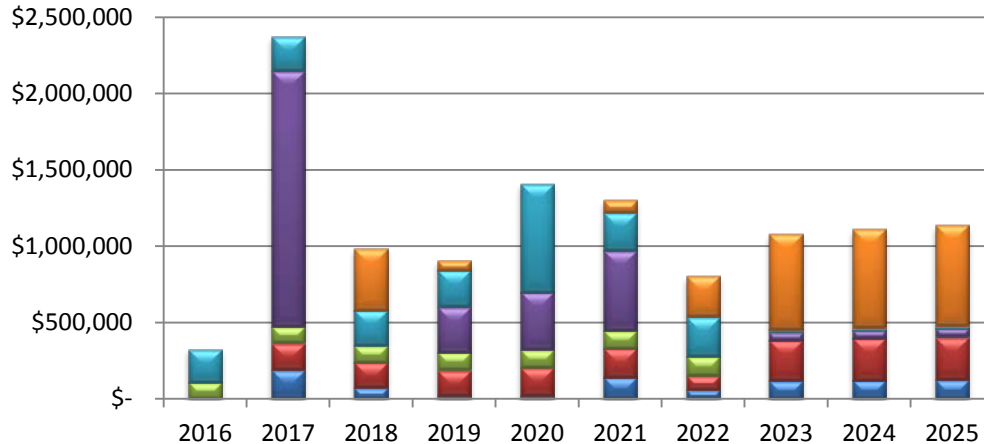
Fiscal Year Ending 6/30:	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual Rate Increase	0.00%	7.00%	7.00%	7.00%	7.00%	7.00%	6.00%	6.00%	6.00%	2.00%

- ◆ Debt service in FY 2024-25 is approx. 40% of total expenditures.
- ◆ Current rates insufficient to cover operating expenses and existing debt.
- ◆ Annual CIP, including large capital expenditures in final years (\$3.5M/yr), contribute to rate increases.

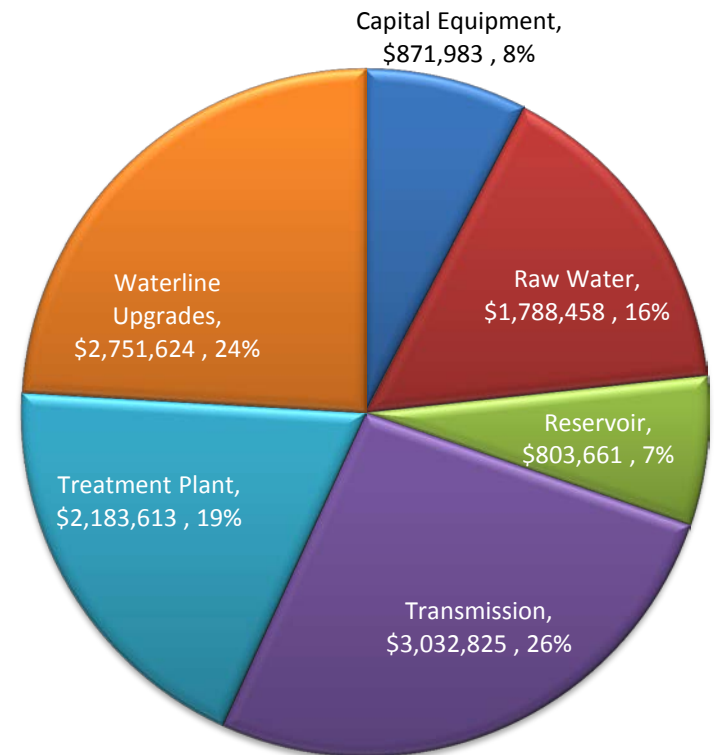


Water Adjusted CIP Summary

CIP Timing

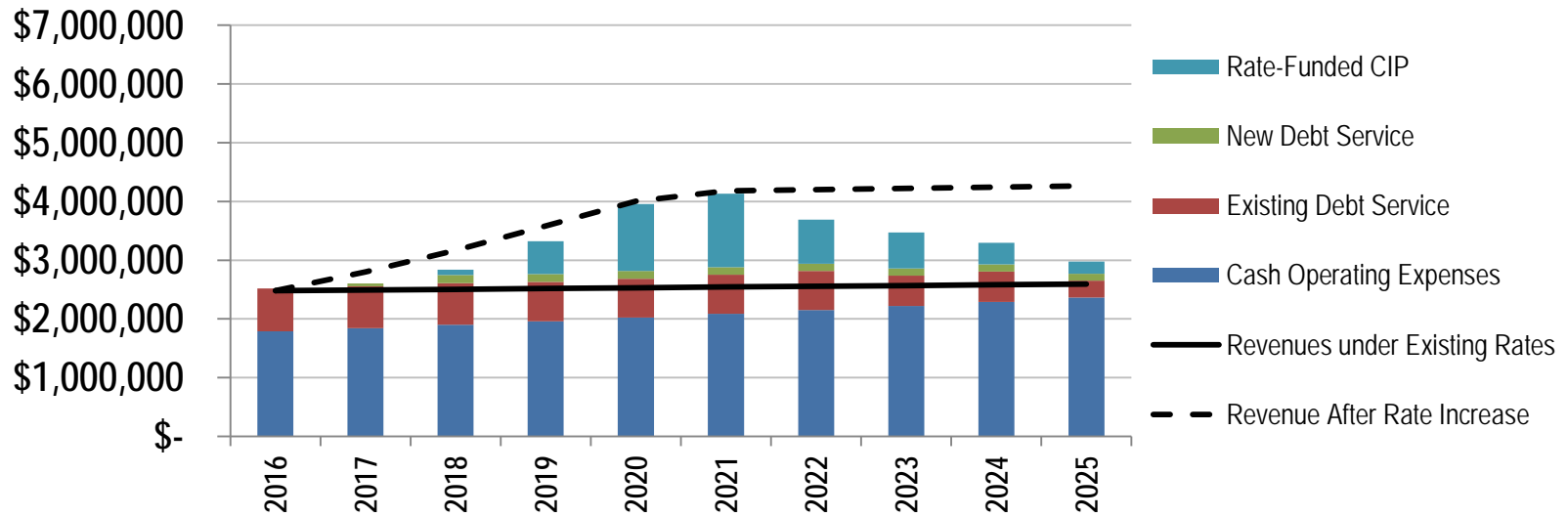


- ◆ Lowered capital expenditures in final years (\$1.1M/yr average).
- ◆ Half of all projects are transmission upgrades (transmission and waterline upgrades).
- ◆ 2017 transmission project funded with IFA loan (\$1.63M)





Water – PAYGO Adjusted Capital

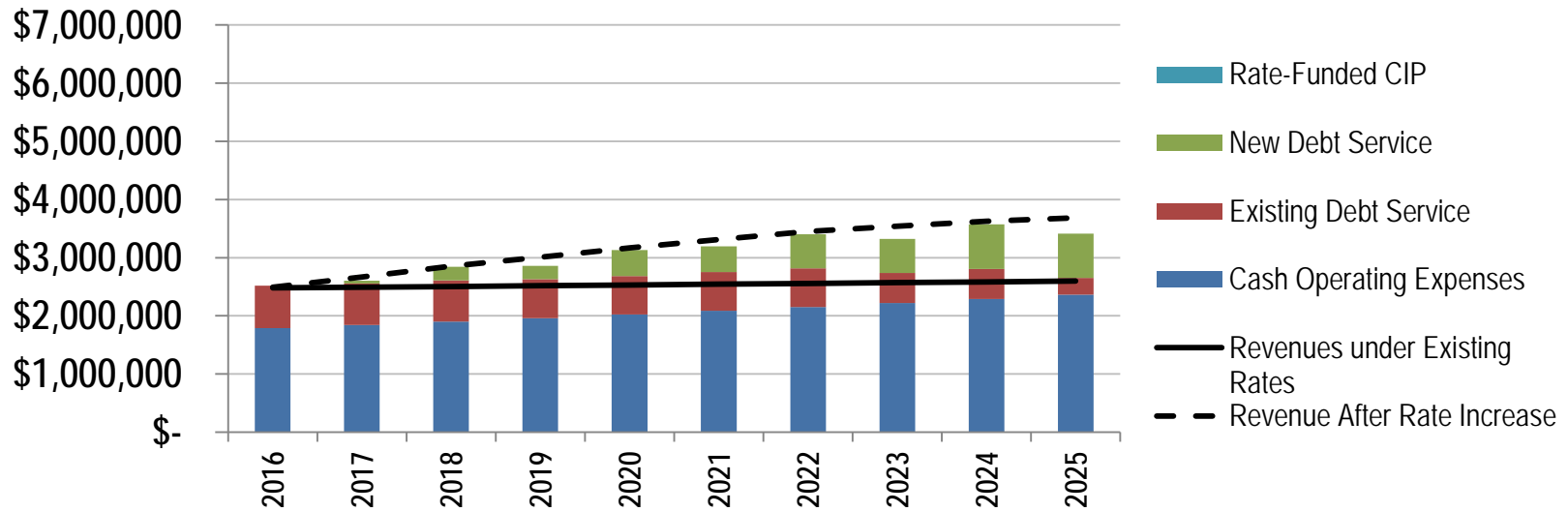


Fiscal Year Ending 6/30:	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual Rate Increase	0.00%	13.00%	13.00%	13.00%	11.50%	4.00%	0.00%	0.00%	0.00%	0.00%

- ◆ Early year rate increases similar to PAYGO, beginning FY 2020 rate increases are reduced.
- ◆ Current rates insufficient to cover operating expenses and existing debt.
- ◆ Capital expenditures still drive early year rate increases.



Water –Debt Adjusted Capital



Fiscal Year Ending 6/30:	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual Rate Increase	0.00%	7.00%	7.00%	5.00%	5.00%	4.00%	4.00%	2.00%	2.00%	1.00%

- ◆ Early year rate increases similar to debt, beginning FY 2020 rate increases are reduced.
- ◆ Current rates insufficient to cover operating expenses and existing debt.
- ◆ Capital expenditures still drive early year rate increases.

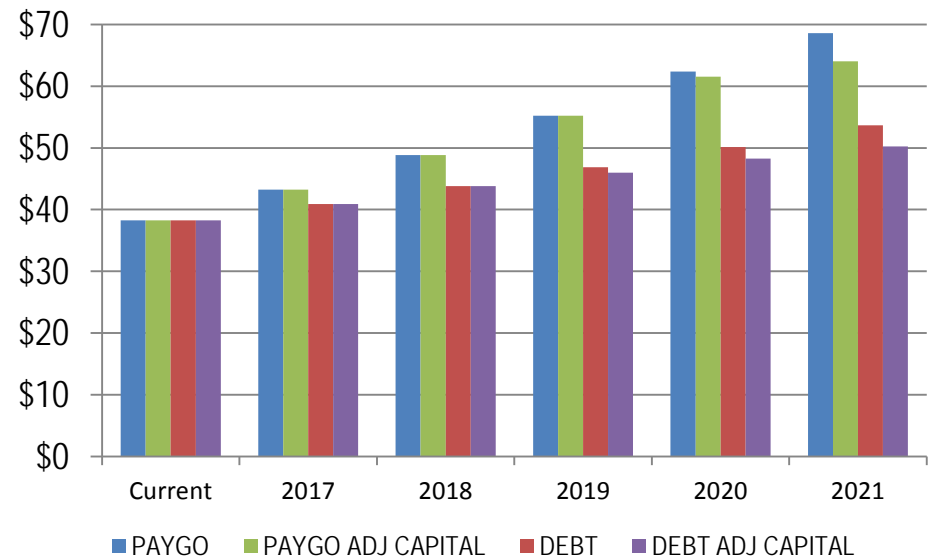


Water Summary

Increases to Avg. Monthly Residential Bill (a)	Current	2017		2018		2019		2020		2021	
		\$ Δ	% Δ	\$ Δ	% Δ	\$ Δ	% Δ	\$ Δ	% Δ	\$ Δ	% Δ
PAYGO	\$ 38.25	\$ 4.97	13.00%	\$ 5.62	13.00%	\$ 6.35	13.00%	\$ 7.17	13.00%	\$ 6.24	10.00%
PAYGO ADJ CAPITAL	\$ 38.25	\$ 4.97	13.00%	\$ 5.62	13.00%	\$ 6.35	13.00%	\$ 6.35	11.50%	\$ 2.46	4.00%
DEBT	\$ 38.25	\$ 2.68	7.00%	\$ 2.86	7.00%	\$ 3.07	7.00%	\$ 3.28	7.00%	\$ 3.51	7.00%
DEBT ADJ CAPITAL	\$ 38.25	\$ 2.68	7.00%	\$ 2.86	7.00%	\$ 2.19	5.00%	\$ 2.30	5.00%	\$ 1.93	4.00%

- ◆ Initial year rate increases for regular and adjusted capital programs are similar.
 - Current rate revenues are insufficient to cover operating expenses, new debt, and the CIP.
- ◆ Starting in FY 2018-19, adjusted capital program reduces required rate increases.

Avg. Monthly Residential Water Bill (6kgal)





Existing Sewer Rates

- ◆ Base rates vary by customer type.
 - Single unit charged flat rate regardless of volume.
- ◆ Volume rate charged after first 5,000 gallons per month.

Sewer Rate Schedule	
	Current Rates
Base Rates	
Single Unit	\$49.88
Metered	49.88
Bio-Oregon	144.04
Warrenton Deep Sea	54.36
Fort Stevens	4099.93
Pacific Coast Seafoods	181.70
Point Adams	294.72
Warrenton Boat Yard - Industrial Waste Permitted Use	75.90
Volume Rate	
0-5,000 gallons	\$0.00
5,001 gallons and over (per ccf)	7.01



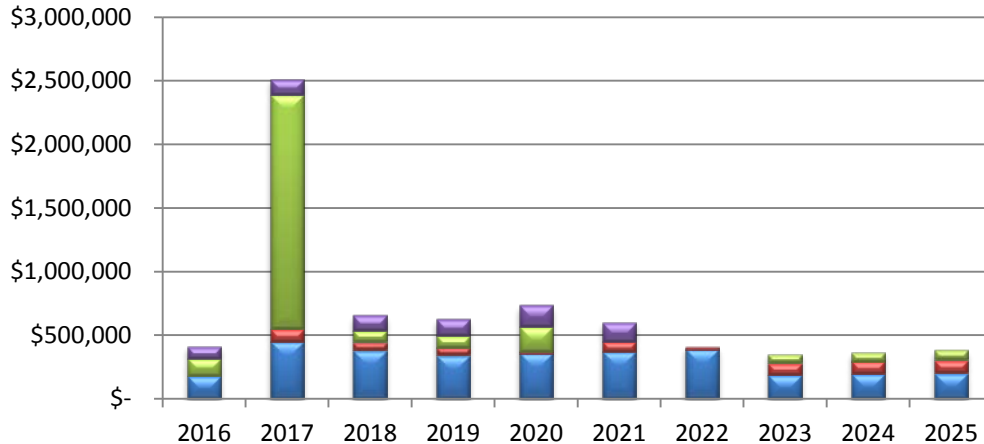
Sewer Rate Scenarios

- ◆ **Two sewer rate scenarios**
 - **PAYGO:** Rates fund all capital projects per the timeline dictated by staff.
 - **Debt:** A combination of cash and debt fund all capital projects per the timeline dictated by staff.

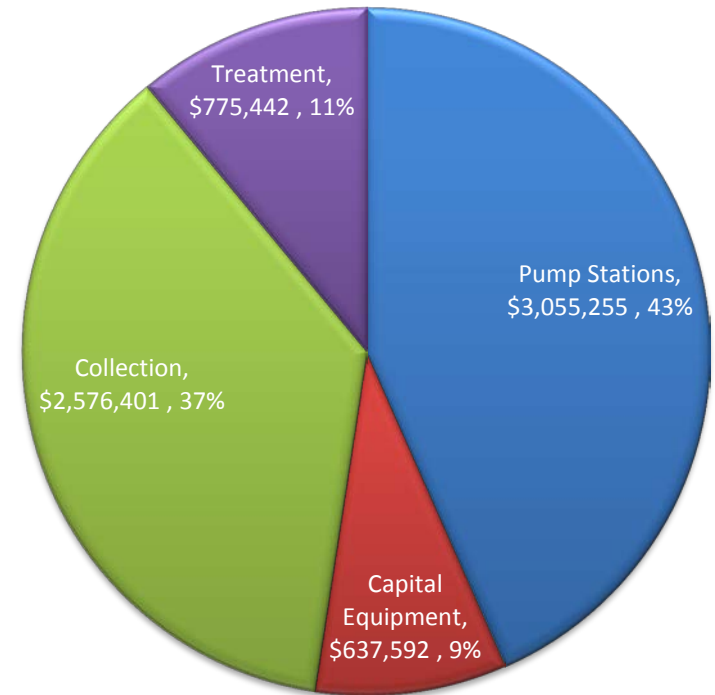


Sewer CIP Summary

CIP Timing

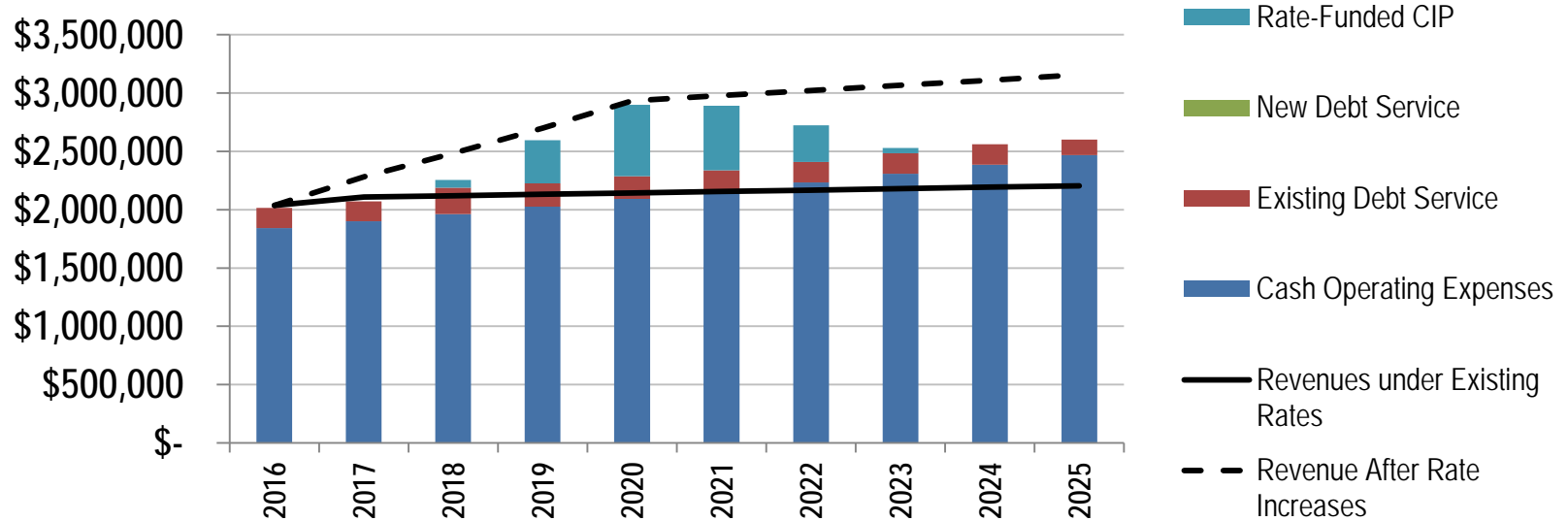


- ◆ FY 2016-17 CIP costs mitigated by CWSRF loans (\$1.92M).
- ◆ Pump stations and collection a large portion of projects.





Sewer – PAYGO

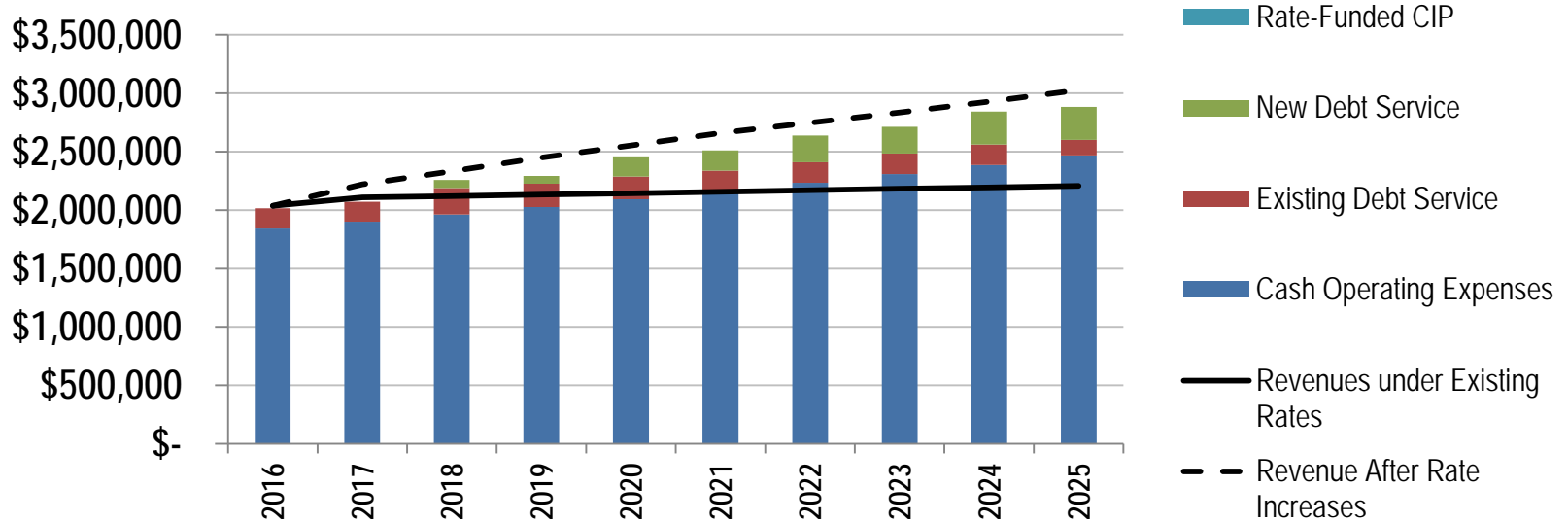


Fiscal Year Ending 6/30:	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual Rate Increase	0.00%	9.25%	9.25%	9.00%	9.00%	1.00%	1.00%	1.00%	1.00%	1.00%

- ◆ Similar to water, current rates are insufficient to cover operating expenses and existing debt.
- ◆ CWSRF loan coverage (1.05) impacts rate increases.



Sewer – Debt



Fiscal Year Ending 6/30:	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual Rate Increase	0.00%	6.00%	5.00%	5.00%	4.00%	4.00%	3.00%	3.00%	3.00%	3.00%

- ◆ Similar to water, current rates are insufficient to cover operating expenses and existing debt.
- ◆ CWSRF loan coverage (1.05) impacts rate increases.

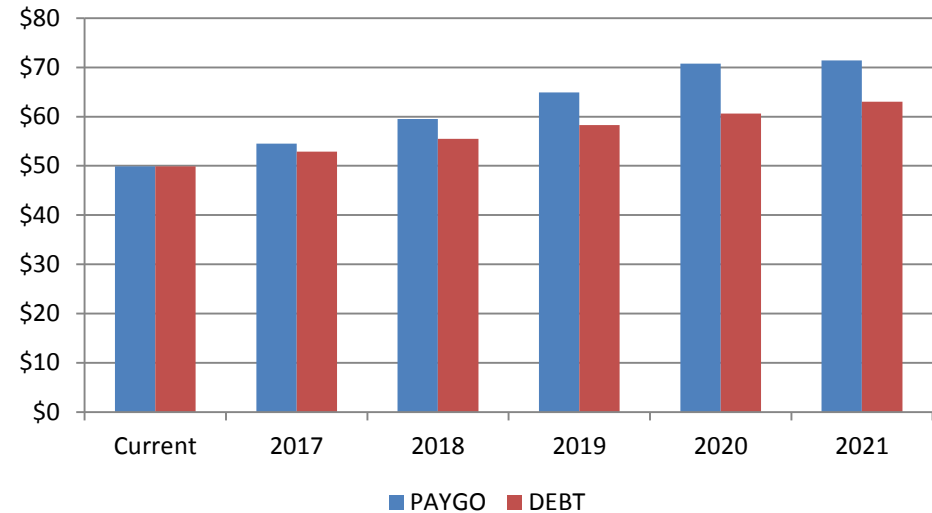


Sewer Summary

Increases to Avg. Monthly Residential Bill (b)	Current	2017		2018		2019		2020		2021	
		\$ Δ	% Δ	\$ Δ	% Δ	\$ Δ	% Δ	\$ Δ	% Δ	\$ Δ	% Δ
PAYGO	\$49.88	\$4.61	9.25%	\$5.04	9.25%	\$5.36	9.00%	\$5.84	9.00%	\$0.71	1.00%
DEBT	\$49.88	\$2.99	6.00%	\$2.64	5.00%	\$2.78	5.00%	\$2.33	4.00%	\$2.42	4.00%

- ◆ Initial year rate increases the result of O&M expenses and existing debt.
- ◆ Later year rate increases influenced by CWSRF coverage.

Avg. Monthly Residential Sewer Bill (one unit)





Overall Summary

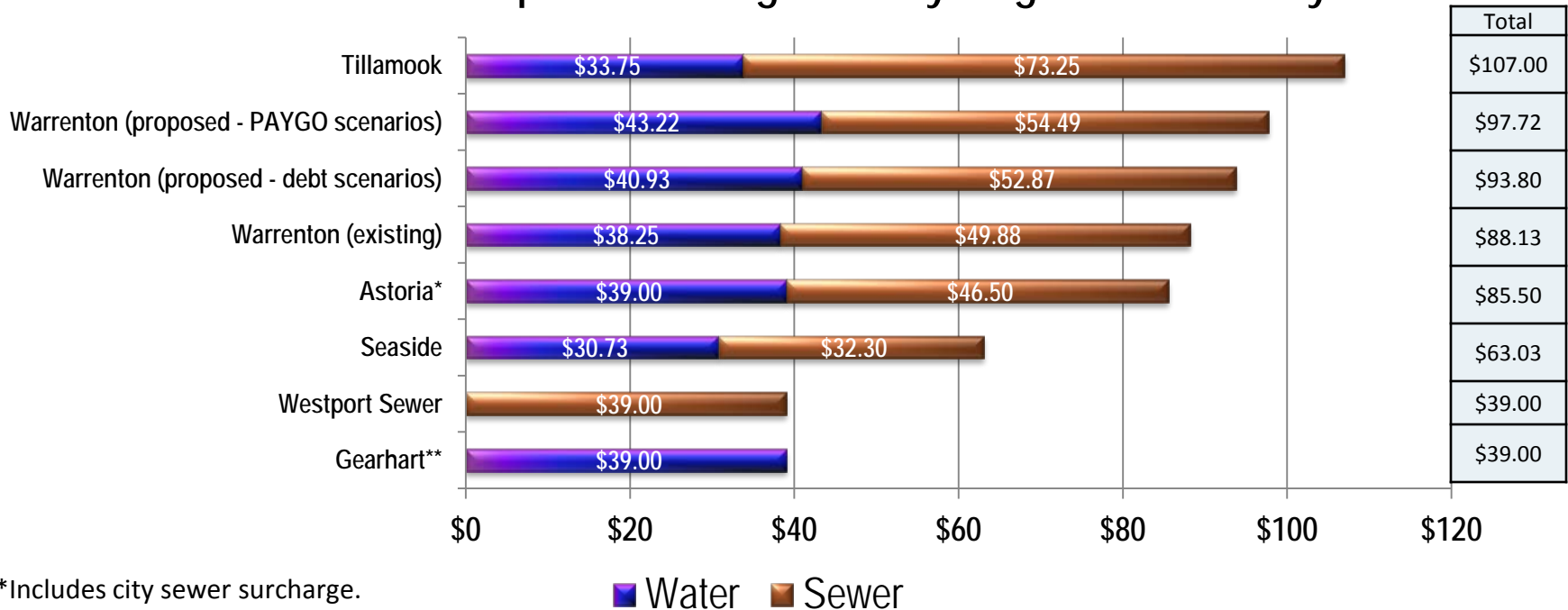
Total Rate Impact						
	Current	2017	2018	2019	2020	2021
WATER						
PAYGO	\$38.25	\$43.22	\$48.84	\$55.19	\$62.37	\$68.60
PAYGO ADJ CAPITAL	\$38.25	\$43.22	\$48.84	\$55.19	\$61.54	\$64.00
DEBT	\$38.25	\$40.93	\$43.79	\$46.86	\$50.14	\$53.65
DEBT ADJ CAPITAL	\$38.25	\$40.93	\$43.79	\$45.98	\$48.28	\$50.21
SEWER						
PAYGO	\$49.88	\$54.49	\$59.53	\$64.89	\$70.73	\$71.44
DEBT	\$49.88	\$52.87	\$55.52	\$58.29	\$60.62	\$63.05
Minimum Bill	\$88.13	\$93.80	\$99.31	\$104.27	\$108.91	\$113.26
Maximum Bill	\$88.13	\$97.72	\$108.38	\$120.08	\$133.10	\$140.04

- ◆ Total bill increases by \$5 to \$9 in first year to cover revenue requirements.



Comparisons

FY 2017 Rate Comparison - Single Family 6 kgal/month in-city



*Includes city sewer surcharge.

**Gearhart does not provide sewer service.

- ◆ Warrenton comparable to surrounding cities.
- ◆ PAYGO and debt differ in first year by ~\$4

John Ghilarducci

Principal

(425) 867-1802 ext. 225

Doug Gabbard

Project Manager

(503) 374-1707

Contact FCS GROUP:

(425) 867-1802

www.fcsgroup.com

City of Warrenton

Background Slides



Water – PAYGO Summary

Capital Funding	Fiscal Year Ending 6/30:									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Total Capital Projects	\$ 326,000	\$ 2,374,252	\$ 985,714	\$ 909,361	\$ 1,407,352	\$ 1,301,996	\$ 801,490	\$ 3,460,756	\$ 3,552,460	\$ 3,646,595
IFA Loan Proceeds	-	1,630,000	-	-	-	-	-	-	-	-
Revenue Bond Proceeds	-	-	-	-	-	-	-	-	-	-
Use of Capital Fund Balance	326,000	744,252	895,294	351,197	265,314	87,498	354,954	1,511,334	590,625	55,473
Direct Rate Funding	-	-	90,420	558,165	1,142,038	1,214,497	446,535	1,949,422	2,961,836	3,591,122
Total Funding Sources	\$ 326,000	\$ 2,374,252	\$ 985,714	\$ 909,361	\$ 1,407,352	\$ 1,301,996	\$ 801,490	\$ 3,460,756	\$ 3,552,460	\$ 3,646,595

Fiscal Year Ending 6/30:	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Revenues										
Rate Revenues Under Existing Rates	\$ 2,369,000	\$ 2,380,845	\$ 2,392,749	\$ 2,404,713	\$ 2,416,737	\$ 2,428,820	\$ 2,440,964	\$ 2,453,169	\$ 2,465,435	\$ 2,477,762
Non-Rate Revenues	114,093	111,731	112,404	113,085	113,775	114,475	115,183	115,901	116,629	117,331
Total Revenues	\$ 2,483,093	\$ 2,492,576	\$ 2,505,153	\$ 2,517,798	\$ 2,530,512	\$ 2,543,295	\$ 2,556,148	\$ 2,569,071	\$ 2,582,064	\$ 2,595,093
Expenses										
Cash Operating Expenses	\$ 1,789,612	\$ 1,854,212	\$ 1,922,042	\$ 1,993,353	\$ 2,068,425	\$ 2,144,003	\$ 2,223,135	\$ 2,306,048	\$ 2,392,988	\$ 2,480,671
Existing Debt Service	731,210	710,124	709,544	670,810	663,084	665,479	662,342	515,473	516,548	289,211
New Debt Service	-	48,900	134,689	132,116	129,542	126,968	124,395	121,821	119,247	116,674
Rate Funded CIP	-	-	90,420	558,165	1,142,038	1,214,497	446,535	1,949,422	2,961,836	3,591,122
Rate Funded System Reinvestment	-	-	-	-	-	-	-	-	-	-
Total Expenses	\$ 2,520,822	\$ 2,613,236	\$ 2,856,695	\$ 3,354,444	\$ 4,003,089	\$ 4,150,948	\$ 3,456,406	\$ 4,892,765	\$ 5,990,620	\$ 6,477,678
Annual Surplus / (Deficiency)	\$ (37,729)	\$ (120,660)	\$ (351,543)	\$ (836,646)	\$ (1,472,577)	\$ (1,607,653)	\$ (900,259)	\$ (2,323,694)	\$ (3,408,555)	\$ (3,882,584)
Net Revenue from Rate Increases	-	300,225	642,676	1,033,089	1,477,978	1,869,500	2,303,506	2,784,483	3,317,393	3,792,973
Net Surplus / (Deficiency)	\$ (37,729)	\$ 179,564	\$ 291,133	\$ 196,443	\$ 5,401	\$ 261,847	\$ 1,403,247	\$ 460,789	\$ (91,162)	\$ (89,611)
Annual Rate Adjustment	0.00%	13.00%	13.00%	13.00%	13.00%	10.00%	10.00%	10.00%	10.00%	8.00%
Cumulative Rate Adjustment	0.00%	13.00%	27.69%	44.29%	63.05%	79.35%	97.29%	117.02%	138.72%	157.82%
Rates for Average In-City Single-Family Residence										
Base rate (2,000 gallons included)	\$ 24.41	\$ 27.58	\$ 31.17	\$ 35.22	\$ 39.80	\$ 43.78	\$ 48.16	\$ 52.97	\$ 58.27	\$ 62.93
Consumption of 6,000 gallons total	13.84	15.64	17.67	19.97	22.57	24.82	27.30	30.04	33.04	35.68
Total	\$ 38.25	\$ 43.22	\$ 48.84	\$ 55.19	\$ 62.37	\$ 68.60	\$ 75.46	\$ 83.01	\$ 91.31	\$ 98.61
Rate Revenues After Rate Increase	\$ 2,369,000	\$ 2,690,355	\$ 3,055,301	\$ 3,469,753	\$ 3,940,425	\$ 4,356,140	\$ 4,815,713	\$ 5,323,770	\$ 5,885,428	\$ 6,388,044
Net Cash Flow After Rate Increase	(37,729)	188,850	311,010	228,395	51,112	319,667	1,474,490	546,907	11,438	27,697
Coverage After Rate Increases	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a



Water – Debt Summary

Capital Funding	Fiscal Year Ending 6/30:										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Total Capital Projects	\$ 326,000	\$ 2,374,252	\$ 985,714	\$ 909,361	\$ 1,407,352	\$ 1,301,996	\$ 801,490	\$ 3,460,756	\$ 3,552,460	\$ 3,646,595	
IFA Loan Proceeds	-	1,630,000	-	-	-	-	-	-	-	-	
Revenue Bond Proceeds	-	-	228,985	-	1,152,127	-	135,256	-	2,353,874	-	
Use of Capital Fund Balance	326,000	744,252	756,729	909,361	255,225	1,301,996	666,233	3,460,756	1,198,587	3,646,595	
Direct Rate Funding	-	-	-	-	-	-	-	-	-	-	
Total Funding Sources	\$ 326,000	\$ 2,374,252	\$ 985,714	\$ 909,361	\$ 1,407,352	\$ 1,301,996	\$ 801,490	\$ 3,460,756	\$ 3,552,460	\$ 3,646,595	

Fiscal Year Ending 6/30:	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Revenues										
Rate Revenues Under Existing Rates	\$ 2,369,000	\$ 2,380,845	\$ 2,392,749	\$ 2,404,713	\$ 2,416,737	\$ 2,428,820	\$ 2,440,964	\$ 2,453,169	\$ 2,465,435	\$ 2,477,762
Non-Rate Revenues	114,093	111,731	112,404	113,571	114,346	116,364	117,073	119,897	120,625	124,842
Total Revenues	\$ 2,483,093	\$ 2,492,576	\$ 2,505,153	\$ 2,518,284	\$ 2,531,083	\$ 2,545,184	\$ 2,558,037	\$ 2,573,066	\$ 2,586,060	\$ 2,602,604
Expenses										
Cash Operating Expenses	\$ 1,789,612	\$ 1,849,927	\$ 1,912,567	\$ 1,977,637	\$ 2,045,248	\$ 2,115,515	\$ 2,187,533	\$ 2,262,314	\$ 2,339,978	\$ 2,415,683
Existing Debt Service	731,210	710,124	709,544	670,810	663,084	665,479	662,342	515,473	516,548	289,211
New Debt Service	-	48,900	229,824	227,251	444,414	441,840	790,340	787,766	1,382,943	1,380,370
Rate Funded CIP	-	-	-	-	-	-	-	-	-	-
Rate Funded System Reinvestment	-	-	-	-	-	-	-	-	-	-
Total Expenses	\$ 2,520,822	\$ 2,608,950	\$ 2,851,935	\$ 2,875,698	\$ 3,152,745	\$ 3,222,834	\$ 3,640,215	\$ 3,565,553	\$ 4,239,469	\$ 4,085,264
Annual Surplus / (Deficiency)	\$ (37,729)	\$ (116,375)	\$ (346,782)	\$ (357,414)	\$ (621,663)	\$ (677,650)	\$ (1,082,178)	\$ (992,487)	\$ (1,653,409)	\$ (1,482,660)
Net Revenue from Rate Increases	-	161,659	336,308	524,929	728,579	948,394	1,152,388	1,370,414	1,603,390	1,691,704
Net Surplus / (Deficiency)	\$ (37,729)	\$ 45,285	\$ (10,474)	\$ 167,515	\$ 106,916	\$ 270,744	\$ 70,210	\$ 377,926	\$ (50,020)	\$ 209,044
Annual Rate Adjustment	0.00%	7.00%	7.00%	7.00%	7.00%	7.00%	6.00%	6.00%	6.00%	2.00%
Cumulative Rate Adjustment	0.00%	7.00%	14.49%	22.50%	31.08%	40.26%	48.67%	57.59%	67.05%	70.39%
Rates for Average In-City Single-Family Residence										
Base rate (2,000 gallons included)	\$ 24.41	\$ 26.12	\$ 27.95	\$ 29.90	\$ 32.00	\$ 34.24	\$ 36.29	\$ 38.47	\$ 40.78	\$ 41.59
Consumption of 6,000 gallons total	13.84	14.81	15.85	16.95	18.14	19.41	20.58	21.81	23.12	23.58
Total	\$ 38.25	\$ 40.93	\$ 43.79	\$ 46.86	\$ 50.14	\$ 53.65	\$ 56.87	\$ 60.28	\$ 63.90	\$ 65.17
Rate Revenues After Rate Increase	\$ 2,369,000	\$ 2,547,504	\$ 2,739,459	\$ 2,945,877	\$ 3,167,849	\$ 3,406,546	\$ 3,628,993	\$ 3,865,967	\$ 4,118,414	\$ 4,221,787
Net Cash Flow After Rate Increase	(37,729)	50,285	(73)	183,750	129,449	300,076	105,851	420,310	(430)	261,365
Coverage After Rate Increases	n/a	n/a	9.92	11.43	3.93	4.50	2.35	2.63	1.51	1.55



Water – PAGYO Adjusted Capital Summary

Capital Funding	Fiscal Year Ending 6/30:									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Total Capital Projects	\$ 326,000	\$ 2,374,252	\$ 985,714	\$ 909,361	\$ 1,407,352	\$ 1,301,996	\$ 801,490	\$ 1,079,801	\$ 1,108,414	\$ 1,137,785
IFA Loan Proceeds	-	1,630,000	-	-	-	-	-	-	-	-
Revenue Bond Proceeds	-	-	-	-	-	-	-	-	-	-
Use of Capital Fund Balance	326,000	744,252	895,294	351,197	265,314	51,495	50,711	465,189	736,565	932,917
Direct Rate Funding	-	-	90,420	558,165	1,142,038	1,250,501	750,779	614,612	371,849	204,868
Total Funding Sources	\$ 326,000	\$ 2,374,252	\$ 985,714	\$ 909,361	\$ 1,407,352	\$ 1,301,996	\$ 801,490	\$ 1,079,801	\$ 1,108,414	\$ 1,137,785

Fiscal Year Ending 6/30:	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Revenues										
Rate Revenues Under Existing Rates	\$ 2,369,000	\$ 2,380,845	\$ 2,392,749	\$ 2,404,713	\$ 2,416,737	\$ 2,428,820	\$ 2,440,964	\$ 2,453,169	\$ 2,465,435	\$ 2,477,762
Non-Rate Revenues	114,093	111,731	112,404	113,085	113,775	114,386	115,001	115,901	116,629	117,367
Total Revenues	\$ 2,483,093	\$ 2,492,576	\$ 2,505,153	\$ 2,517,798	\$ 2,530,512	\$ 2,543,206	\$ 2,555,966	\$ 2,569,071	\$ 2,582,064	\$ 2,595,129
Expenses										
Cash Operating Expenses	\$ 1,789,612	\$ 1,854,212	\$ 1,922,042	\$ 1,993,353	\$ 2,066,856	\$ 2,135,234	\$ 2,201,189	\$ 2,269,473	\$ 2,340,179	\$ 2,413,402
Existing Debt Service	731,210	710,124	709,544	670,810	663,084	665,479	662,342	515,473	516,548	289,211
New Debt Service	-	48,900	134,689	132,116	129,542	126,968	124,395	121,821	119,247	116,674
Rate Funded CIP	-	-	90,420	558,165	1,142,038	1,250,501	750,779	614,612	371,849	204,868
Rate Funded System Reinvestment	-	-	-	-	-	-	-	-	-	-
Total Expenses	\$ 2,520,822	\$ 2,613,236	\$ 2,856,695	\$ 3,354,444	\$ 4,001,520	\$ 4,178,183	\$ 3,738,704	\$ 3,521,379	\$ 3,347,824	\$ 3,024,155
Annual Surplus / (Deficiency)	\$ (37,729)	\$ (120,660)	\$ (351,543)	\$ (836,646)	\$ (1,471,008)	\$ (1,634,976)	\$ (1,182,738)	\$ (952,309)	\$ (765,759)	\$ (429,026)
Net Revenue from Rate Increases	-	300,225	642,676	1,033,089	1,427,241	1,585,990	1,593,920	1,601,890	1,609,899	1,617,949
Net Surplus / (Deficiency)	\$ (37,729)	\$ 179,564	\$ 291,133	\$ 196,443	\$ (43,767)	\$ (48,986)	\$ 411,182	\$ 649,581	\$ 844,140	\$ 1,188,923
Annual Rate Adjustment	0.00%	13.00%	13.00%	13.00%	11.50%	4.00%	0.00%	0.00%	0.00%	0.00%
Cumulative Rate Adjustment	0.00%	13.00%	27.69%	44.29%	60.88%	67.32%	67.32%	67.32%	67.32%	67.32%
Rates for Average In-City Single-Family Residence										
Base rate (2,000 gallons included)	\$ 24.41	\$ 27.58	\$ 31.17	\$ 35.22	\$ 39.27	\$ 40.84	\$ 40.84	\$ 40.84	\$ 40.84	\$ 40.84
Consumption of 6,000 gallons total	13.84	15.64	17.67	19.97	22.27	23.16	23.16	23.16	23.16	23.16
Total	\$ 38.25	\$ 43.22	\$ 48.84	\$ 55.19	\$ 61.54	\$ 64.00	\$ 64.00	\$ 64.00	\$ 64.00	\$ 64.00
Rate Revenues After Rate Increase	\$ 2,369,000	\$ 2,690,355	\$ 3,055,301	\$ 3,469,753	\$ 3,888,119	\$ 4,063,862	\$ 4,084,181	\$ 4,104,602	\$ 4,125,125	\$ 4,145,750
Net Cash Flow After Rate Increase	(37,729)	188,850	311,010	228,395	374	65	460,478	699,124	893,930	1,238,963
Coverage After Rate Increases	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a



Water – Debt Adjusted Capital Summary

Capital Funding	Fiscal Year Ending 6/30:									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Total Capital Projects	\$ 326,000	\$ 2,374,252	\$ 985,714	\$ 909,361	\$ 1,407,352	\$ 1,301,996	\$ 801,490	\$ 1,079,801	\$ 1,108,414	\$ 1,137,785
IFA Loan Proceeds	-	1,630,000	-	-	-	-	-	-	-	-
Revenue Bond Proceeds	-	-	228,985	-	1,205,538	-	515,378	-	641,067	-
Use of Capital Fund Balance	326,000	744,252	756,729	909,361	201,814	1,301,996	286,112	1,079,801	467,346	1,137,785
Direct Rate Funding	-	-	-	-	-	-	-	-	-	-
Total Funding Sources	\$ 326,000	\$ 2,374,252	\$ 985,714	\$ 909,361	\$ 1,407,352	\$ 1,301,996	\$ 801,490	\$ 1,079,801	\$ 1,108,414	\$ 1,137,785

Fiscal Year Ending 6/30:	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Revenues										
Rate Revenues Under Existing Rates	\$ 2,369,000	\$ 2,380,845	\$ 2,392,749	\$ 2,404,713	\$ 2,416,737	\$ 2,428,820	\$ 2,440,964	\$ 2,453,169	\$ 2,465,435	\$ 2,477,762
Non-Rate Revenues	114,093	111,731	112,404	113,571	114,346	116,364	117,073	118,690	119,418	121,241
Total Revenues	\$ 2,483,093	\$ 2,492,576	\$ 2,505,153	\$ 2,518,284	\$ 2,531,083	\$ 2,545,184	\$ 2,558,037	\$ 2,571,859	\$ 2,584,853	\$ 2,599,003
Expenses										
Cash Operating Expenses	\$ 1,789,612	\$ 1,849,927	\$ 1,912,567	\$ 1,975,985	\$ 2,041,728	\$ 2,108,971	\$ 2,178,639	\$ 2,248,820	\$ 2,321,483	\$ 2,395,668
Existing Debt Service	731,210	710,124	709,544	670,810	663,084	665,479	662,342	515,473	516,548	289,211
New Debt Service	-	48,900	229,824	227,251	444,414	441,840	589,125	586,551	764,987	762,413
Rate Funded CIP	-	-	-	-	-	-	-	-	-	-
Rate Funded System Reinvestment	-	-	-	-	-	-	-	-	-	-
Total Expenses	\$ 2,520,822	\$ 2,608,950	\$ 2,851,935	\$ 2,874,046	\$ 3,149,226	\$ 3,216,290	\$ 3,430,106	\$ 3,350,845	\$ 3,603,018	\$ 3,447,293
Annual Surplus / (Deficiency)	\$ (37,729)	\$ (116,375)	\$ (346,782)	\$ (355,762)	\$ (618,143)	\$ (671,106)	\$ (872,069)	\$ (778,986)	\$ (1,018,165)	\$ (848,289)
Net Revenue from Rate Increases	-	161,659	336,308	471,518	614,781	736,807	864,820	934,119	1,005,394	1,044,560
Net Surplus / (Deficiency)	\$ (37,729)	\$ 45,285	\$ (10,474)	\$ 115,756	\$ (3,363)	\$ 65,701	\$ (7,249)	\$ 155,133	\$ (12,771)	\$ 196,271
Annual Rate Adjustment	0.00%	7.00%	7.00%	5.00%	5.00%	4.00%	4.00%	2.00%	2.00%	1.00%
Cumulative Rate Adjustment	0.00%	7.00%	14.49%	20.21%	26.23%	31.27%	36.53%	39.26%	42.04%	43.46%
Rates for Average In-City Single-Family Residence										
Base rate (2,000 gallons included)	\$ 24.41	\$ 26.12	\$ 27.95	\$ 29.34	\$ 30.81	\$ 32.04	\$ 33.33	\$ 33.99	\$ 34.67	\$ 35.02
Consumption of 6,000 gallons total	13.84	14.81	15.85	16.64	17.47	18.17	18.90	19.27	19.66	19.86
Total	\$ 38.25	\$ 40.93	\$ 43.79	\$ 45.98	\$ 48.28	\$ 50.21	\$ 52.22	\$ 53.27	\$ 54.33	\$ 54.87
Rate Revenues After Rate Increase	\$ 2,369,000	\$ 2,547,504	\$ 2,739,459	\$ 2,890,814	\$ 3,050,531	\$ 3,188,415	\$ 3,332,532	\$ 3,416,178	\$ 3,501,924	\$ 3,554,628
Net Cash Flow After Rate Increase	(37,729)	50,285	(73)	130,339	15,651	88,489	19,498	184,023	18,324	228,577
Coverage After Rate Increases	n/a	n/a	9.92	10.87	3.57	3.83	2.74	2.78	2.02	2.00



Sewer – PAYGO Summary

Capital Funding	Fiscal Year Ending 6/30:									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Total Capital Projects	\$ 410,666	\$ 2,513,538	\$ 653,458	\$ 623,640	\$ 734,901	\$ 602,365	\$ 405,165	\$ 352,690	\$ 366,798	\$ 381,470
CWSRF Loan Proceeds	-	1,920,304	-	-	-	-	-	-	-	-
Revenue Bond Proceeds	-	-	-	-	-	-	-	-	-	-
Use of Capital Fund Balance	410,666	593,234	587,741	254,254	122,114	50,636	92,383	307,307	366,798	381,470
Direct Rate Funding	-	-	65,717	369,386	612,787	551,730	312,782	45,383	-	-
Total Funding Sources	\$ 410,666	\$ 2,513,538	\$ 653,458	\$ 623,640	\$ 734,901	\$ 602,365	\$ 405,165	\$ 352,690	\$ 366,798	\$ 381,470

Fiscal Year Ending 6/30:	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Revenues										
Rate Revenues Under Existing Rates	\$ 1,798,615	\$ 1,863,443	\$ 1,872,760	\$ 1,882,124	\$ 1,891,534	\$ 1,900,992	\$ 1,910,497	\$ 1,920,049	\$ 1,929,649	\$ 1,939,298
Non-Rate Revenues	237,252	244,734	247,239	249,773	252,335	254,900	257,545	260,193	262,870	265,577
Total Revenues	\$ 2,035,867	\$ 2,108,176	\$ 2,119,998	\$ 2,131,897	\$ 2,143,870	\$ 2,155,891	\$ 2,168,042	\$ 2,180,242	\$ 2,192,520	\$ 2,204,875
Expenses										
Cash Operating Expenses	\$ 1,841,020	\$ 1,904,778	\$ 1,972,692	\$ 2,043,303	\$ 2,116,898	\$ 2,187,160	\$ 2,260,006	\$ 2,335,542	\$ 2,413,876	\$ 2,495,121
Existing Debt Service	174,377	172,505	226,936	198,611	192,864	175,561	174,854	174,335	173,803	133,952
New Debt Service	-	-	-	-	-	-	-	-	-	-
Rate Funded CIP	-	-	65,717	369,386	612,787	551,730	312,782	45,383	-	-
Rate Funded System Reinvestment	-	-	-	-	-	-	-	-	-	-
Total Expenses	\$ 2,015,397	\$ 2,077,283	\$ 2,265,345	\$ 2,611,300	\$ 2,922,549	\$ 2,914,450	\$ 2,747,642	\$ 2,555,260	\$ 2,587,679	\$ 2,629,073
Annual Surplus / (Deficiency)	\$ 20,470	\$ 30,893	\$ (145,347)	\$ (479,403)	\$ (778,679)	\$ (758,559)	\$ (579,600)	\$ (375,018)	\$ (395,159)	\$ (424,197)
Net Revenue from Rate Increases	-	167,197	351,610	549,480	767,059	797,043	827,570	858,650	890,290	922,500
Net Surplus / (Deficiency)	\$ 20,470	\$ 198,090	\$ 206,263	\$ 70,077	\$ (11,620)	\$ 38,485	\$ 247,970	\$ 483,632	\$ 495,131	\$ 498,303
Annual Rate Adjustment	0.00%	9.25%	9.25%	9.00%	9.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Cumulative Rate Adjustment	0.00%	9.25%	19.36%	30.10%	41.81%	43.22%	44.66%	46.10%	47.56%	49.04%
Rates for Average Single-Family Residence										
Single Unit Rate	\$ 49.88	\$ 54.49	\$ 59.53	\$ 64.89	\$ 70.73	\$ 71.44	\$ 72.15	\$ 72.88	\$ 73.61	\$ 74.34
Rate Revenues After Rate Increase	\$ 1,798,615	\$ 2,035,811	\$ 2,235,244	\$ 2,448,598	\$ 2,682,317	\$ 2,722,686	\$ 2,763,662	\$ 2,805,255	\$ 2,847,474	\$ 2,890,329
Net Cash Flow After Rate Increase	20,470	203,261	217,138	87,071	12,103	63,135	273,565	510,188	522,666	526,834
Coverage After Rate Increases	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a



Sewer – Debt Summary

Capital Funding	Fiscal Year Ending 6/30:									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Total Capital Projects	\$ 410,666	\$ 2,513,538	\$ 653,458	\$ 623,640	\$ 734,901	\$ 602,365	\$ 405,165	\$ 352,690	\$ 366,798	\$ 381,470
CWSRF Loan Proceeds	-	1,920,304	-	-	-	-	-	-	-	-
Revenue Bond Proceeds	-	-	124,462	-	382,565	-	-	-	-	-
Use of Capital Fund Balance	410,666	593,234	528,996	623,640	352,336	602,365	405,165	352,690	366,798	381,470
Direct Rate Funding	-	-	-	-	-	-	-	-	-	-
Total Funding Sources	\$ 410,666	\$ 2,513,538	\$ 653,458	\$ 623,640	\$ 734,901	\$ 602,365	\$ 405,165	\$ 352,690	\$ 366,798	\$ 381,470

Fiscal Year Ending 6/30:	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Revenues										
Rate Revenues Under Existing Rates	\$ 1,798,615	\$ 1,863,443	\$ 1,872,760	\$ 1,882,124	\$ 1,891,534	\$ 1,900,992	\$ 1,910,497	\$ 1,920,049	\$ 1,929,649	\$ 1,939,298
Non-Rate Revenues	237,252	244,734	247,239	250,182	252,745	255,961	258,580	261,562	264,239	267,275
Total Revenues	\$ 2,035,867	\$ 2,108,176	\$ 2,119,998	\$ 2,132,306	\$ 2,144,279	\$ 2,156,953	\$ 2,169,077	\$ 2,181,611	\$ 2,193,889	\$ 2,206,572
Expenses										
Cash Operating Expenses	\$ 1,841,020	\$ 1,902,961	\$ 1,968,166	\$ 2,035,832	\$ 2,105,397	\$ 2,177,565	\$ 2,251,717	\$ 2,328,628	\$ 2,408,410	\$ 2,491,179
Existing Debt Service	174,377	172,505	226,936	198,611	192,864	175,561	174,854	174,335	173,803	133,952
New Debt Service	-	-	68,194	68,194	172,590	172,590	228,156	228,156	282,879	282,879
Rate Funded CIP	-	-	-	-	-	-	-	-	-	-
Rate Funded System Reinvestment	-	-	-	-	-	-	-	-	-	-
Total Expenses	\$ 2,015,397	\$ 2,075,467	\$ 2,263,296	\$ 2,302,637	\$ 2,470,851	\$ 2,525,716	\$ 2,654,726	\$ 2,731,118	\$ 2,865,092	\$ 2,908,011
Annual Surplus / (Deficiency)	\$ 20,470	\$ 32,710	\$ (143,298)	\$ (170,331)	\$ (326,572)	\$ (368,763)	\$ (485,649)	\$ (549,507)	\$ (671,203)	\$ (701,438)
Net Revenue from Rate Increases	-	108,452	205,273	307,898	395,206	486,828	559,535	635,076	713,552	795,067
Net Surplus / (Deficiency)	\$ 20,470	\$ 141,162	\$ 61,976	\$ 137,567	\$ 68,634	\$ 118,065	\$ 73,886	\$ 85,569	\$ 42,349	\$ 93,629
Annual Rate Adjustment	0.00%	6.00%	5.00%	5.00%	4.00%	4.00%	3.00%	3.00%	3.00%	3.00%
Cumulative Rate Adjustment	0.00%	6.00%	11.30%	16.87%	21.54%	26.40%	30.19%	34.10%	38.12%	42.27%
Rates for Average Single-Family Residence										
Single Unit Rate	\$ 49.88	\$ 52.87	\$ 55.52	\$ 58.29	\$ 60.62	\$ 63.05	\$ 64.94	\$ 66.89	\$ 68.90	\$ 70.96
Rate Revenues After Rate Increase	\$ 1,798,615	\$ 1,975,249	\$ 2,084,382	\$ 2,199,544	\$ 2,298,963	\$ 2,402,876	\$ 2,487,337	\$ 2,574,767	\$ 2,665,270	\$ 2,758,954
Net Cash Flow After Rate Increase	20,470	144,516	68,324	147,089	80,856	133,121	91,192	105,211	64,417	118,218
Coverage After Rate Increases	n/a	n/a	5.38	6.14	2.60	2.82	2.18	2.25	1.86	1.91