The background of the entire page is a dynamic splash of clear water against a light blue gradient. At the top, a dark blue curved shape frames the upper edge. The water splash is captured in mid-air, with numerous bubbles and droplets visible. The Yuba City logo is superimposed on the water splash, featuring the city name in a stylized, outlined font with a silhouette of a bird in flight above it.

YUBACITY

WATER AND WASTEWATER RATE STUDY

Final Report

April 2016

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SECTION 1. PURPOSE AND OVERVIEW OF THE STUDY

A. Purpose

The City of Yuba City ("City") retained NBS in September 2014 to re-evaluate its water and wastewater rates for a number of reasons, including meeting long-term revenue requirements, encouraging water conservation related to potential future supply constraints, and providing adequate funding for capital improvements. The rates developed in this Study meet basic Proposition 218 (Prop 218) requirements and were developed in a manner that is consistent with industry standards, including recent court rulings. This Study is provided with the intent of assisting the City in meeting its priority of maintaining transparent communications between the City and its residents and businesses.

In developing proposed new water and wastewater rates, NBS and City staff worked cooperatively in developing study results and rate alternatives. Review of study results and recommendations meetings wherein the Council reviewed recommendations and provided NBS and City staff with direction and feedback. According to this input, NBS recommends the water and wastewater rates summarized in this report.

B. Overview of the Study

Key Issues Addressed – In addition to confirming that water and wastewater rates collect sufficient revenue to meet the annual operating and capital improvement plans, several other key issues that were specifically addressed in this study include:

- **Financial Planning** – The longer-range financial plans of the water and wastewater utilities were closely examined and adjusted to best meet annual operating and broader capital improvement costs. Capital improvement funding alternatives were evaluated, including funding at minimal levels, funding current levels with various contributions to the Capitalization Fund and funding at current levels with all future projects included.
- **Timing of Rate Increases** – Ultimately, the recommended rates only apply to the last month of Fiscal Year (FY) 2015/16, with implementation of rate increases applying to the full 12 months in FY 2016/17 and thereafter.
- **Water Conservation Rates** – Conservation rates that could be implemented if the City is required to reduce overall water consumption due to the continuing drought were studied and developed, including four drought scenarios covering 20 percent reductions in consumption (Base Level) up to 60 percent reductions (Scenario 4). The City is currently in Scenario 1: city-wide water conservation at a rate of approximately 30 percent.

C. Rate Study Methodology

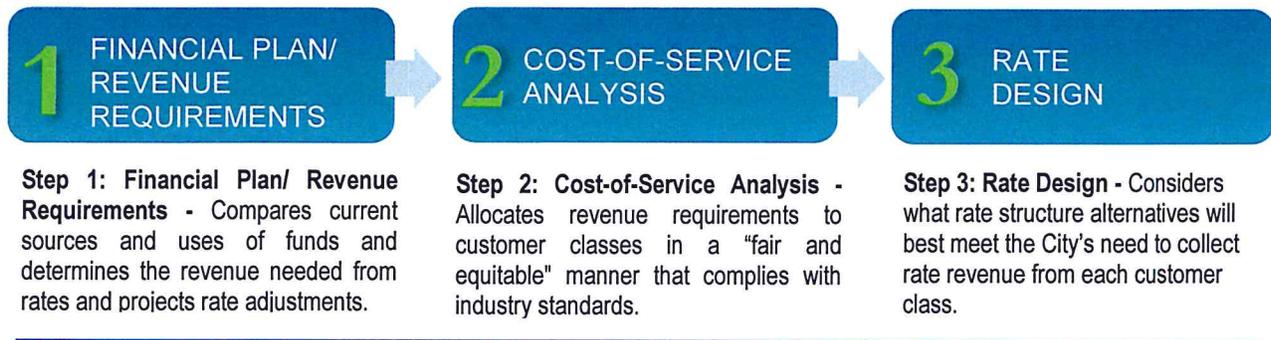
Components of the Rate Study Methodology – Comprehensive rate studies typically include three components: (1) preparation of a financial plan which identifies the net revenue requirements for the utility; (2) analysis of the cost to serve each customer class, and; (3) the rate structure design. These steps are shown in Figure 1 and are intended to follow industry standards and reflect the fundamental principles of cost-of-service rate making embodied in the American Water Works Association (AWWA) Principles of Water Rates, Fees, and Charges¹, also referred to as Manual M1. They also address requirements under Proposition 218 that rates not exceed the cost of providing the service and be

¹ *Principles of Water Rates, Fees, and Charges, Manual of Water Supply Practices, M1, AWWA, sixth edition, 2012.*

proportionate to the cost of providing service for all customers. In terms of the chronology of the study, these three steps represent the order they are typically performed.

While NBS completed all three components of the Study, the City has chosen to maintain the existing water and sewer rate structures, and proceed with an across-the-board increase to existing rates based on the percent increases in total revenue needed as determined in the financial plans.

Figure 1. PRIMARY COMPONENTS OF A RATE STUDY



As a part of this rate study, NBS projected revenues, expenditures, and net revenue requirements, performed cost-of-service rate analyses, and recommended new water and wastewater rates. Significant rate increases—or more accurately, increases in the total revenue collected from water and wastewater rates—are recommended. The following sections present an overview of the methodologies, assumptions, and data used along with the financial plans and rates developed during this Study.

Rate Design Criteria – Several criteria are typically considered in setting rates and developing sound rate structures. The fundamentals of this process have been documented in a number of rate-setting manuals. For example, the foundation for evaluating rate structures is generally credited to James C. Bonbright in *Principles of Public Utility Rates*,² which outlines pricing policies, theories, and economic concepts along with various rate designs. The other common industry standard is AWWA Manual M1. The following is a simplified list of some of the key attributes of a sound rate structure:

- Rates should be easy to understand from the customer's perspective.
- Rates should be easy to administer from the utility's perspective.
- Rates should promote the efficient allocation of the resource.
- Rates should be equitable and non-discriminating (that is, cost based).
- There should be continuity in the rate making philosophy over time.
- Other utility policies should be considered (for example, encouraging conservation and economic development).
- Rates should provide month-to-month and year-to-year revenue stability.

This section covers the basic rate setting design criteria that NBS and City staff considered as a part of their review of the rate structure alternatives.

Rate Structure Issues – The starting point in considering rate structures is the relationship between fixed costs and variable costs. Fixed costs typically do not vary with the amount of water consumed. Debt service and City personnel are examples of a fixed cost. In contrast, variable costs such as the cost of purchased water, chemicals and electricity tend to change with the quantity of water sold. In the City's case, purchased water is treated as a fixed cost, because the price for water is not based on volume

² James C. Bonbright; Albert L. Danielsen and David R. Kamerschen, *Principles of Public Utility Rates*, (Arlington, VA: Public Utilities Report, Inc., Second Edition, 1988), p. 383-384.

purchased and the City pays the same regardless of the quantity used. The vast majority of rate structures contain a fixed or minimum charge in combination with a volumetric charge.

Key Financial Assumptions

The following key assumptions were used in the water and wastewater rate analyses:

- **Funding of Capital Projects** – After the City’s extensive review of the planned capital improvement projects (CIP) and funding requirements, the City has decided that the water and wastewater utilities should fund the capital improvements categorized as Priority 1 and Priority 2 projects (all CIP was categorized from Priority 1 through 4). All Priority 3, Priority 4, and other future CIP projects for both utilities are excluded from this analysis.
- **Reserve Targets** – Target reserves for both Water and Wastewater Utilities operations and maintenance (O&M) and capital rehabilitation and replacement (R&R) needs follow industry standards for utility reserve fund management and are set at the following levels:
 - ✓ O&M Reserve target levels – 90 days of O&M expenses.
 - ✓ Capital Rehabilitation and Replacement Reserve levels – approximately 3.0 percent of net assets.
 - ✓ Debt Reserve levels – consistent with bond covenants for outstanding debt obligations.
- **Inflation and Growth Projections:**
 - ✓ Customer growth is based on 50 units per year, for each utility. This translates to 0.27 percent annually for the water utility and 0.34 percent annual growth for the wastewater utility (the difference in growth rate is due to varying number of customers between each system).
 - ✓ General costs (such as professional and contractual services, fuel, vehicle maintenance, and electricity) are inflated at 3 percent annually.
 - ✓ Operating expenses are inflated at a rate of approximately 4 to 6 percent annually, and include chemicals purchased, energy, raw water purchases, and internal transfers.
 - ✓ Labor costs are inflated at 3 percent annually, with the exception of FY 2015/16 (set at 10 percent to overcome recent City-wide furloughs). Health benefits for both utilities are inflated at 10 percent annually, and retirement benefits are inflated between 3 to 16 percent per year.
 - ✓ No inflation is added to other budget items, such as late fee revenue, lease income, and availability fees.

The next two sections discuss the water and wastewater rate studies.

SECTION 2. WATER RATE STUDY

A. Key Water Rate Study Issues

The water rate analysis was undertaken with a few specific objectives, including:

- Generating sufficient revenue to meet projected funding requirements.
- Adjusting the baseline hcf per month quantity currently included in the fixed charge (baseline quantities vary by meter size³) to reflect state-wide conservation mandates.

NBS developed a number of water rate alternatives over the course of this study. After reviewing these alternatives, City staff determined that the current water rate structure should be maintained.

B. Water Utility Revenue Requirements

It is important for municipal utilities to maintain reasonable reserves in order to handle minor emergencies, fund working capital, maintain a good credit rating, and generally follow sound financial management practices. Rate increases are governed by the need to meet operating and capital costs, maintain adequate debt coverage, and maintain sufficient reserve funds. The current state of the City's water utility, with regard to these objectives, follows:

- **Meeting Net Revenue Requirements:** The City's water utility is currently running a structural deficit in FY 2015/16, which would increase significantly in FY 2019/20 if no rate increases are implemented. For FY 2015/16 through 2019/20, the projected net revenue requirement (that is, total annual expenses plus rate-funded capital costs, less non-rate revenues) is approximately \$10.5 million to \$15.1million. Recommended annual rate increases for the next 5 years of 32.00 percent, 19.00 percent, 16.45 percent, 3.85 percent, and 3.85 percent are needed to fund all O&M costs, debt service, and priority 1 and priority 2 capital projects. In addition, the City is currently in jeopardy of not meeting its debt coverage requirement of 1.2 for the outstanding State Revolving Fund (SRF) loans and the 2013 Refunding Bonds. Without these rate increases, the utility may not meet this requirement.
- **Building and Maintaining Reserve Funds:** The City should maintain sufficient reserves. NBS recommends that the City adopt and maintain the following reserve fund target balances:
 - ✓ **Operating Reserve** should normally be equal to 90 days of the Utility's budgeted annual operating expenses, which is equal to a 25 percent cash cushion for normal operations. An Operating Reserve is intended to promote financial viability in the event of any short-term fluctuation in revenues and/or expenditures. Fluctuations might be caused by weather patterns, the natural inflow and outflow of cash during billing cycles, natural variability in demand-based revenue streams (for example, variable charges), and—particularly in periods of economic distress—changes or trends in age of receivables.
 - ✓ **Capital Rehabilitation and Replacement (R&R) Reserve** should typically be equal to a minimum of 3 percent of net depreciable capital assets, which equates to a 33-year replacement cycle for capital assets. This target serves simply as a starting point for addressing long-term capital repair and replacement needs.
 - ✓ **Debt Reserve** is equal to the reserve requirement for the outstanding SRF loans and 2013 Refunding Bonds, which is approximately \$1.53 million⁴.

³ For example, a 1-inch meter has a baseline quantity of 15 hcf while the baseline quantity for an 8-inch meter is 2,100 hcf.

Figure 2 summarizes the sources and uses of funds, net revenue requirements, and the recommended annual percent increases in total rate revenue for the next 5 years. As this figure shows, even with the rate increases the water utility runs at a deficit through FY 2016/17, with surpluses in subsequent years. These surpluses are used to build up reserves, with the intent of meeting target reserve-fund balances at some point in the future.

Figure 2. Summary of Water Revenue Requirements

Summary of Sources and Uses of Funds and Net Revenue Requirements	Budget		Projected			
	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
Sources of Water Funds						
Rate Revenue Under Prevailing Rates ^{1, 2}	\$ 9,381,644	\$ 8,085,804	\$ 8,107,680	\$ 8,129,556	\$ 8,151,432	\$ 8,173,308
Other Operating Revenue	1,516,484	367,131	367,786	368,440	369,095	369,750
Region 1 Water Customer SRF Surcharge	151,105	150,000	150,000	150,000	150,000	150,000
Region 2/3 Water Customer SRF Surcharge	502,312	500,000	500,000	500,000	500,000	500,000
Interest Earnings ³	43,246	53,400	23,981	26,533	37,424	51,032
Total Sources of Funds	\$ 11,594,791	\$ 9,156,335	\$ 9,149,447	\$ 9,174,529	\$ 9,207,951	\$ 9,244,090
Uses of Water Funds						
Operating Expenses	\$ 7,274,128	\$ 8,304,536	\$ 8,605,872	\$ 8,984,132	\$ 9,380,812	\$ 9,772,920
Debt Service	2,919,853	2,920,023	2,918,543	2,919,578	2,918,441	2,920,081
Rate-Funded Capital Expenses	-	370,075	1,855,249	1,910,906	3,392,002	3,493,762
Total Use of Funds	\$ 10,193,981	\$ 11,594,634	\$ 13,379,664	\$ 13,814,617	\$ 15,691,255	\$ 16,186,763
Surplus (Deficiency) before Rate Increase	\$ 1,400,810	\$ (2,438,299)	\$ (4,230,218)	\$ (4,640,087)	\$ (6,483,303)	\$ (6,942,673)
Additional Revenue from Rate Increases	-	215,621	2,763,908	4,815,405	6,806,978	7,402,690
Surplus (Deficiency) after Rate Increase	\$ 1,400,810	\$ (2,222,678)	\$ (1,466,310)	\$ 175,317	\$ 323,674	\$ 460,017
Projected Annual Rate Increase	0.00%	32.00%	19.00%	16.45%	3.85%	3.85%
Net Revenue Requirement ⁴	\$ 7,980,834	\$ 10,524,103	\$ 12,337,898	\$ 12,769,643	\$ 14,634,735	\$ 15,115,981

(1) Revenues for FY 2014/15 -2015/16 are from the City's Projected FY 2014/15 and Proposed FY 2015/16 Pro Forma Analysis.

(2) Per the City's direction, growth is based on 50 new water connections, or 0.27% per year (meeting with City staff on 03/19/2015).

(3) Interest earnings are per the City's budget in FY 2014/15, and calculated in the Financial Plan for all future years.

(4) Total Use of Funds less non-rate revenues and in interest earnings. This is the annual amount needed from water rates.

Figure 3 summarizes the projected reserve fund balances and reserve targets, for the next 5 years. A summary of the water utility's proposed 10-year financial plan is included in Appendix A – Water Rate Study Summary Tables. These tables include revenue requirements, reserve funds, revenue source, and proposed rate increases for the 10-year period.

Figure 3. Summary of Water Reserve Funds

Beginning Reserve Fund Balances and Recommended Reserve Targets	Budget		Projected			
	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
Operating Reserve						
Ending Balance	\$ 1,819,000	\$ 3,138,642	\$ 1,880,144	\$ 2,084,877	\$ 2,361,466	\$ 2,452,231
<i>Recommended Minimum Target</i>	<i>1,819,000</i>	<i>2,076,000</i>	<i>2,151,000</i>	<i>2,246,000</i>	<i>2,345,000</i>	<i>2,443,000</i>
Capital Rehabilitation & Replacement Reserve						
Ending Balance	\$ 7,187,224	\$ 1,657,558	\$ 1,657,558	\$ 1,657,558	\$ 1,721,109	\$ 2,099,593
<i>Recommended Minimum Target</i>	<i>4,027,500</i>	<i>4,144,100</i>	<i>4,164,800</i>	<i>4,202,100</i>	<i>4,272,800</i>	<i>4,347,400</i>
Debt Reserve						
Ending Balance	\$ 433,452	\$ 548,548	\$ 706,291	\$ 866,588	\$ 1,025,254	\$ 1,188,070
<i>Recommended Minimum Target</i>	<i>458,561</i>	<i>611,414</i>	<i>764,268</i>	<i>917,121</i>	<i>1,069,975</i>	<i>1,222,829</i>
Total Ending Balance	\$ 9,439,676	\$ 5,344,748	\$ 4,243,993	\$ 4,609,023	\$ 5,107,830	\$ 5,739,894
Total Recommended Minimum Target	\$ 6,305,061	\$ 6,831,514	\$ 7,080,068	\$ 7,365,221	\$ 7,687,775	\$ 8,013,229

⁴ The State Revolving Fund loan allow reserve requirements to accumulate during the first 10 years of the loan repayment term and maintained at that level thereafter. The Debt Reserve of \$1,528,536 represents the full reserve target, achieved in FY 2021/22.

C. Current vs. Proposed Water Rates

Currently, the City charges all customer classes a monthly fixed charge based on meter size; each meter size includes a baseline allowance of water (in hundred cubic feet [hcf]). For example, a 1-inch meter is charged \$21.59 per month, which includes 15 hcf of water. In addition to a fixed monthly charge, all customers pay a uniform commodity charge of \$1.43 per hcf for water consumed beyond the baseline quantity (hcf) included for their meter size.

The State of California has already implemented drought-related cutbacks.⁵ Because of this, NBS recommends adjusting the “baseline” consumption included in fixed charges downwards to reflect state-mandated conservation requirements⁶. **Figure 4** lists the current and proposed baseline amounts (in hcf) by meter size. For a number of reasons, which are outlined below, NBS also recommends using a uniform volumetric rate rather than a multi-tiered rate design.

Figure 4. Current and Proposed Baseline Amounts

Meter Size	Current Baseline (hcf)	New Baseline (hcf)
1"	15	11
1 1/2"	30	22
2"	60	44
3"	240	176
4"	480	352
6"	900	660
8"	2,100	1,540

The recommended uniform commodity charge for residential customers was the result of evaluating several potential configurations for tiered volumetric rates along with the City’s specific sources of water supply. Because of the significant differences in typical water use of commercial customers (for example, laundromat vs. restaurants vs. office space), uniform commodity charges will continue to be applied to their consumption. This is a common approach for these types of customers, and the primary reason why tiered rates aren’t used for commercial customers. **Figure 5** provides a comparison of the current and proposed rates for FY 2015/16 through 2019/20. **Figures 6** and **7** show a comparison of monthly bills for residential and commercial customers under current and proposed rates at varying levels of water consumption.

⁵ State Water Resources Control Board, Resolution 2015-0032.

⁶ While this study was being conducted, state conservation requirements for the City were 32 percent. The State is likely to adjust these requirements over time based on changing water supply conditions. For example, changes to conservation requirements were announced April 7, 2016; effective March 1, 2016 the City’s new conservation requirement is 28%.

Figure 5. Current and Proposed Water Rates for FY 2015/16 through 2019/20

Water Rate Schedule	Current Rate Structure		Proposed Water Rates					
	Baseline HCF's per month	Current Rates	Baseline HCF's per month	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
<i>Projected Increase in Rate Rev. (Financial Plan)</i>				32.00%	19.00%	16.45%	3.85%	3.85%
Fixed Service Charge								
Monthly Service charge								
5/8 inch	15	\$21.59	11	\$28.50	\$33.91	\$39.49	\$41.01	\$42.59
3/4 inch	15	\$21.59	11	\$28.50	\$33.91	\$39.49	\$41.01	\$42.59
1 inch	15	\$21.59	11	\$28.50	\$33.91	\$39.49	\$41.01	\$42.59
1.5 inch	30	\$43.18	22	\$57.00	\$67.83	\$78.98	\$82.03	\$85.18
2 inch	60	\$86.37	44	\$114.01	\$135.67	\$157.99	\$164.07	\$170.39
2 inch Turbo	60	\$86.37	44	\$114.01	\$135.67	\$157.99	\$164.07	\$170.39
3 inch	240	\$345.47	176	\$456.02	\$542.66	\$631.93	\$656.26	\$681.53
3 inch Compound	240	\$345.47	176	\$456.02	\$542.66	\$631.93	\$656.26	\$681.53
3 inch Turbo	240	\$345.47	176	\$456.02	\$542.66	\$631.93	\$656.26	\$681.53
4 inch	480	\$690.95	352	\$912.05	\$1,085.34	\$1,263.88	\$1,312.54	\$1,363.08
4 inch Compound	480	\$690.95	352	\$912.05	\$1,085.34	\$1,263.88	\$1,312.54	\$1,363.08
4 inch Turbo	480	\$690.95	352	\$912.05	\$1,085.34	\$1,263.88	\$1,312.54	\$1,363.08
6 inch	900	\$1,295.52	660	\$1,710.09	\$2,035.00	\$2,369.76	\$2,461.00	\$2,555.74
8 inch	2,100	\$3,022.89	1,540	\$3,990.21	\$4,748.36	\$5,529.46	\$5,742.34	\$5,963.42
Commodity Charges for All Water Consumed								
Rate Per HCF of Water Consumed ¹	—	\$1.43	—	\$1.430	\$1.701	\$1.981	\$2.057	\$2.137
Conservation Level Volumetric (Uniform) Rates²								
Base Level (20% Conservation)	—	—	—	\$1.337	\$1.591	\$1.852	\$1.924	\$1.998
Scenario 1 (30% Conservation) ³	—	—	—	\$1.430	\$1.701	\$1.981	\$2.057	\$2.137
Scenario 2 (40% Conservation)	—	—	—	\$1.543	\$1.836	\$2.139	\$2.221	\$2.306
Scenario 3 (50% Conservation)	—	—	—	\$1.685	\$2.006	\$2.335	\$2.425	\$2.519
Scenario 4 (60% Conservation)	—	—	—	\$1.868	\$2.223	\$2.589	\$2.688	\$2.792

1. Consumption above baseline hcf/month, as listed above.
 2. These conservation levels reflect consumption compared to base-line (2013) consumption levels.
 3. Current level, which includes assumed conservation of approximately 30%.

Figure 6. Comparison of Monthly Water Bills for Single-Family Residential Customers

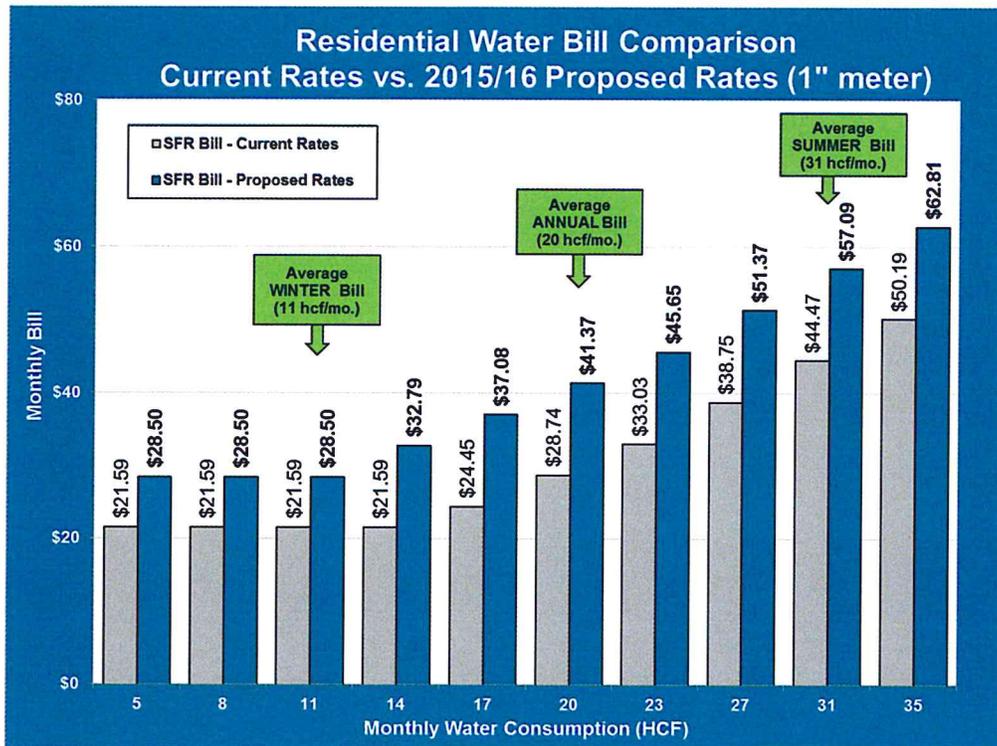
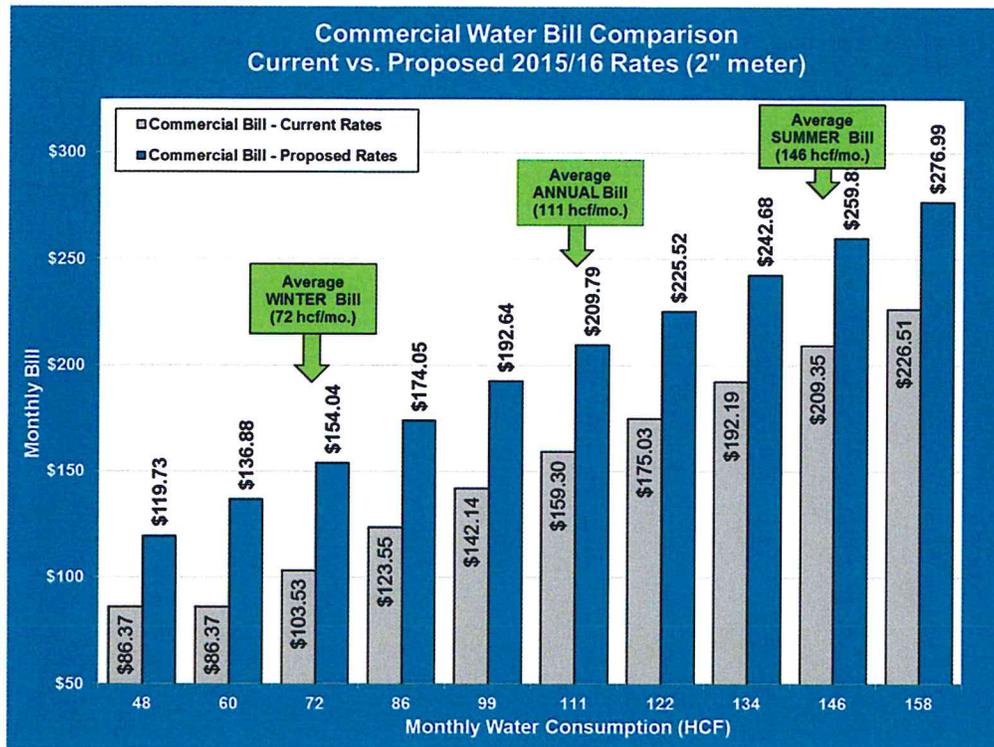


Figure 7. Comparison of Monthly Water Bills for Commercial Customers



D. Conservation Rates

The City recognizes the need to consider adopting conservation rates in response to the City’s mandated reductions. Conservation rates can be used to offset potential lost revenue and to encourage customers to reduce consumption levels. While these types of rates can be fixed charges, volumetric rates, or a combination of fixed and volumetric charges, NBS recommends using a strictly volumetric rate, because they do not penalize those who may be conserving (which can be the case with fixed conservation rates). Volumetric conservation rates more appropriately focus on those using the most water.

Assuming consumption reductions are required beyond 2016, the City’s water utility would experience a net loss of revenue that, in the long run, would be financially unsustainable. **Figure 8** shows the conservation rates developed to offset these drought-related reductions.

Figure 8. Conservation Rates

Proposed Uniform Volumetric Rates by Conservation Level					
Conservation Scenario	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
Projected Rate Revenue Increases (per Financial Plan) :	32.00%	19.00%	16.45%	3.85%	3.85%
Base Level (20% Conservation)	\$1.337	\$1.591	\$1.852	\$1.924	\$1.998
Scenario 1 ^a (30% Conservation)	\$1.430	\$1.701	\$1.981	\$2.057	\$2.137
Scenario 2 (40% Conservation)	\$1.543	\$1.836	\$2.139	\$2.221	\$2.306
Scenario 3 (50% Conservation)	\$1.685	\$2.006	\$2.335	\$2.425	\$2.519
Scenario 4 (60% Conservation)	\$1.868	\$2.223	\$2.589	\$2.688	\$2.792

a. Current level, which includes assumed conservation of approximately 30%.

SECTION 3. WASTEWATER RATE STUDY

A. Key Wastewater Rate Issues

The specific objectives addressed in the wastewater rate analysis include:

- Generating additional revenue needed to meet projected funding requirements, particularly capital improvement costs.
- Updating the fixed charges for all customers.
- Updating the volumetric-based charges for all customers.

During the course of this study, NBS developed several wastewater rate alternatives for the City to consider. As with the water rates, rate structure alternatives were developed reflecting industry standards and cost-of-service principles, although City staff determined that the current wastewater rate structure should be maintained.

The proposed rate structure for residential customers keeps single family residential customers in one class and multi-family residential in another class. This is equitable because it best reflects the actual effluent generation for each type of residential customer. The rate structure for commercial customers consist of a fixed monthly charge per account, plus a variable rate based on monthly water consumption. The rate structure for schools is based on average daily attendance for each school and the rate is based on the number of students. Reports are submitted by the school district to the City on an annual basis, and bills for the next fiscal year are calculated based on the prior year's attendance information.

The City is the largest regional processor for septage; rates were developed based on a per-gallon charge. Septage loads anticipate trucks with up to 1,500 gallon tanks. The City also has several large industrial customers; the proposed rates maintain the City's current rate structure with charges per million gallons of effluent and additional loading charges based on the strength of effluent received at the treatment plant.

The updated rates were calculated based on the net revenue requirements, and the percentage increase in total rate revenue needed for the next 5 years. Basic components of this analysis include the following:

- **Customer Classes:** Customer classes are typically determined by grouping customers with similar flow and strength characteristics into different categories, in order to reflect the cost differences in servicing each type of customer. The City's existing customer classes have been maintained in the rates developed and proposed in this Study, and are as follows:
 - ✓ **Residential** – Consists of single-family and duplexes that are charged on a per-unit basis.
 - ✓ **Multi-Family** – Multi-family residential accounts are assessed fixed charges based on the number of household equivalent units (HEUs).
 - ✓ **Commercial** – Includes all commercial users (C1, C2, and C3 classes).
 - ✓ **Industrial** – Includes several large industrial customers.
 - ✓ **Schools** – Rates are based per student, per year and charged on an annual basis.
 - ✓ **Septage Haulers** – These customers discharge directly at the wastewater treatment plant.

B. Wastewater Utility Revenue Requirements

It is important for municipal utilities to maintain reasonable reserves in order to handle emergencies, fund working capital, maintain a good credit rating, and generally follow sound financial management practices. Rate increases are governed by the need to meet operating and capital costs, and maintain and build reserve funds. The current state of the City's wastewater utility is as follows:

- **Meeting Net Revenue Requirements:** The City's wastewater utility is currently running a structural deficit in FY 2015/16, which would increase significantly by FY 2019/20 if no rate increases are implemented. Projected net revenue requirement (that is, total annual expenses plus debt service and

rate-funded capital costs, less non-rate revenues) increases from approximately \$11 million to \$18.6 million in FYs 2015/16 through 2019/20. Recommended annual rate increases of 10 percent annually for the next 5 years are needed to fund all operations and maintenance expenses, debt service payments and priority 1 and priority 2 capital projects. Similar to the water utility, if rate increases aren't implemented, the wastewater utility will not meet its debt coverage requirements for its outstanding debt obligations⁷, and will begin running annual deficits, which will require larger rate adjustments in later years.

- **Building and Maintaining Reserve Funds:** The City should maintain sufficient reserves for the Utility. NBS recommends that the City adopt and maintain the following reserve fund targets:
 - ✓ **Operating Reserve** equal to 90 days of the Utility's budgeted annual operating expenses. This reserve target is equal to a 3-month (or 25 percent) cash cushion for normal operations. An Operating Reserve is intended to promote financial viability in the event of any short-term fluctuation in revenues and/or expenditures.
 - ✓ **Capital Rehabilitation and Replacement Reserve** equal to a minimum of 3 percent of net depreciable capital assets (or approximately \$2,738,900 based on a total system asset value of approximately \$84.8 million). This reserve provides for capital repair and replacement needs.
 - ✓ **Debt Reserve** equal to the reserve requirements for the existing and planned debt, which is approximately \$3.4 million by FY2019/20.
 - ✓ **Other Reserves** equal to approximately \$110,000. The wastewater utility has reserves held for the Stonegate system, which will be maintained at a minimal level (around \$110,000). The River Highland reserve funds will be absorbed into the Operating Reserve. The Stonegate system was annexed by Yuba City and separate records were kept for it. Per City staff, this will not continue in the long-run. The River Highland system has already been incorporated into the City's records and a separate fund is no longer needed.

Figure 9 summarizes the sources and uses of funds, including net revenue requirements, and the recommended annual percent increases in total rate revenue for the next 5 years. Any surpluses are used to build up reserves, with the intent of meeting future target reserve-fund balances.

Figure 9. Summary of Wastewater Revenue Requirements

Summary of Sources and Uses of Funds and Net Revenue Requirements	Budget		Projected			
	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
Sources of Water Funds						
Rate Revenue Under Prevailing Rates ^{1,2}	\$ 11,721,439	\$ 11,081,850	\$ 11,119,770	\$ 11,157,690	\$ 11,195,611	\$ 11,233,531
Other Operating Revenue	311,630	300,603	301,563	302,523	303,483	304,442
Interest Earnings (in Operating & Capital Reserves) ³	54,792	95,700	53,696	76,971	83,052	101,257
Total Sources of Funds	\$ 12,087,861	\$ 11,478,153	\$ 11,475,029	\$ 11,537,184	\$ 11,582,145	\$ 11,639,231
Uses of Water Funds						
Operating Expenses	\$ 7,649,478	\$ 9,440,956	\$ 9,809,314	\$ 10,233,111	\$ 10,677,649	\$ 11,110,946
Debt Service	1,445,998	2,043,193	2,104,558	2,272,319	2,531,897	3,070,048
Rate-Funded Capital Expenses	1,035,525	-	-	2,995,808	1,785,733	4,817,777
Total Use of Funds	\$ 10,131,001	\$ 11,484,149	\$ 11,913,872	\$ 15,501,238	\$ 14,995,279	\$ 18,998,771
Surplus (Deficiency) before Rate Increase	\$ 1,956,860	\$ (5,996)	\$ (438,843)	\$ (3,964,054)	\$ (3,413,134)	\$ (7,359,541)
Additional Revenue from Rate Increases	-	92,349	1,213,908	2,455,622	3,829,925	5,350,540
Surplus (Deficiency) after Rate Increase	\$ 1,956,860	\$ 86,353	\$ 775,066	\$ (1,508,432)	\$ 416,791	\$ (2,009,001)
Projected Annual Rate Increase	0.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Net Revenue Requirement ⁴	\$ 9,764,579	\$ 11,087,846	\$ 11,558,613	\$ 15,121,744	\$ 14,608,745	\$ 18,593,072

(1) FY 2014/15 Revenues are from the City's Fiscal Year 2014-15 Budget (files: 14-15 WW Rev Bond Bgts.pdf and 14-15 WW Rev Op&Conn Bgts).

(2) Per the City's direction, growth is based on 50 new sewer connections, or 0.34% per year (meeting with City staff on 03/19/2015).

(3) Interest earnings are per the City's budget in FY 2014/15, and calculated in the Financial Plan for all future years.

(4) Total Use of Funds less non-rate revenues and in interest earnings. This is the annual amount needed from wastewater rates.

Figure 10 summarizes the projected reserve fund balances and reserve targets, for the next 5 years. A summary of the wastewater utility's proposed 10-year financial plan is included in Appendix B –

⁷ The wastewater utility currently has five debt obligations: 2011 and 2014 revenue refunding bonds, a wastewater treatment plant SRF loan, a collection system SRF loan, and a small Interfund loan from the City for solar.

Wastewater Rate Study Summary Tables. These tables include revenue requirements, reserve funds, revenue source, and proposed rate increases for the 10-year period.

Figure 10. Summary of Wastewater Reserve Funds

Beginning Reserve Fund Balances and Recommended Reserve Targets	Budget		Projected			
	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
Operating Reserve						
Ending Balance	\$ 4,413,431	\$ 5,607,734	\$ 6,951,082	\$ 4,498,552	\$ 3,803,570	\$ 1,811,606
Recommended Minimum Target	1,912,000	2,360,000	2,452,000	2,558,000	2,669,000	2,778,000
Stonegate Reserve						
Ending Balance	\$ 105,776	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000
Recommended Minimum Target	110,000	110,000	110,000	110,000	110,000	110,000
Capital Rehabilitation & Replacement Reserve						
Ending Balance	\$ 2,543,600	\$ 5,131,534	\$ 3,311,702	\$ 3,806,625	\$ 4,297,000	\$ 4,298,375
Recommended Minimum Target	2,543,600	2,738,900	3,288,400	3,805,800	4,295,900	6,044,400
Debt Reserves						
Ending Balance	\$ 390,430	\$ 989,329	\$ 1,308,791	\$ 1,929,893	\$ 2,840,501	\$ 3,396,592
Recommended Minimum Target	1,710,295	2,364,358	2,428,873	2,590,160	2,858,970	3,396,592
Total Ending Balance	\$ 7,453,237	\$ 11,838,597	\$ 11,681,575	\$ 10,345,070	\$ 11,051,071	\$ 9,616,573
Total Recommended Minimum Target	\$ 6,275,895	\$ 7,573,258	\$ 8,279,273	\$ 9,063,960	\$ 9,933,870	\$ 12,328,992

C. Current vs. Proposed Wastewater Rates

Per input provided by City staff, the proposed rates maintain the City's current rate structure. Annual rate increases will reflect the percent increases in rate revenue needed to meet annual net revenue requirements, as shown in Figure 9. Single family and duplex residential customers will pay a fixed monthly service charge and multiple family residential customers pay 80 percent of the single family rate, for each housing unit. Commercial users will pay a fixed monthly service charge, in addition to a volumetric rate depending on the class (C1, C2, or C3), according to their monthly water use. Industrial, school, and septage customers have the same rate structure as described in Section 3A of this Study.

Figure 11 shows current and proposed wastewater rates for FY 2015/16 through FY 2019/20. More detailed tables documenting the development of the proposed wastewater rates are included in Appendix B.

Figure 11. Current vs. Proposed Wastewater Rates

Current vs. Proposed Sewer Rates (Monthly)

Sewer Rate Schedule	Current Rates	Recommended Sewer Rates				
		FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
<i>Projected Increase in Rate Revenue per Financial Plan</i>		10.00%	10.00%	10.00%	10.00%	10.00%
Monthly Fixed Service Charge (\$/mo.)						
Single-Family/Duplex Residential (per unit)	\$40.53	\$44.58	\$49.04	\$53.95	\$59.34	\$65.27
Multi Family Residential (per unit)	\$32.43	\$35.67	\$39.24	\$43.16	\$47.48	\$52.23
Commercial - C1	\$40.53	\$44.58	\$49.04	\$53.95	\$59.34	\$65.27
Commercial - C2	\$45.60	\$50.16	\$55.18	\$60.69	\$66.76	\$73.44
Commercial - C3	\$55.23	\$60.75	\$66.83	\$73.51	\$80.86	\$88.95
Commercial Volumetric Charge (\$/HCF) (Applied to Monthly Water Use)						
Commercial - C1	\$1.60	\$1.76	\$1.93	\$2.13	\$2.34	\$2.57
Commercial - C2	\$1.60	\$1.76	\$1.93	\$2.13	\$2.34	\$2.57
Commercial - C3	\$1.60	\$1.76	\$1.93	\$2.13	\$2.34	\$2.57
Large Industrial User Charges						
Waste water (\$/million gallons)	\$2,336.92	\$2,570.61	\$2,827.67	\$3,110.44	\$3,421.48	\$3,763.63
Total Suspended solids (TSS - in \$/lb.)	\$0.180	\$0.198	\$0.218	\$0.240	\$0.264	\$0.290
Biochemical Oxygen Demand (BOD in \$/lb.)	\$0.239	\$0.263	\$0.290	\$0.319	\$0.350	\$0.385
Schools (Average Daily Attendance)						
Schools, per student, per year	\$18.61	\$20.47	\$22.52	\$24.77	\$27.25	\$29.97
Septage Hauler Charges¹						
<i>Projected Increase in Rate Revenue per Financial Plan:</i>		10.00%	10.00%	10.00%	10.00%	10.00%
Charge per Gallon	\$0.312	\$0.343	\$0.378	\$0.415	\$0.457	\$0.502
Minimum Charge: 400 gallons per dump	\$124.80	\$137.28	\$151.01	\$166.11	\$182.72	\$200.99
Minimum Charge: 1,000 gallon truck	\$312.00	\$343.20	\$377.52	\$415.27	\$456.80	\$502.48
Minimum Charge: 1,500 gallon truck	\$468.00	\$514.80	\$566.28	\$622.91	\$685.20	\$753.72

(1) Septage Haulers will be charged for a full tank each occurrence.

Figure 12 compares the average monthly wastewater bills for residential customers under current and proposed rates. Figure 13 compares commercial bills under current vs. proposed rates. Figure 14 compares industrial bills under current vs. proposed rates, on an annual basis.

Figure 12. Residential Wastewater Bill Comparison – Current vs. Proposed Rates

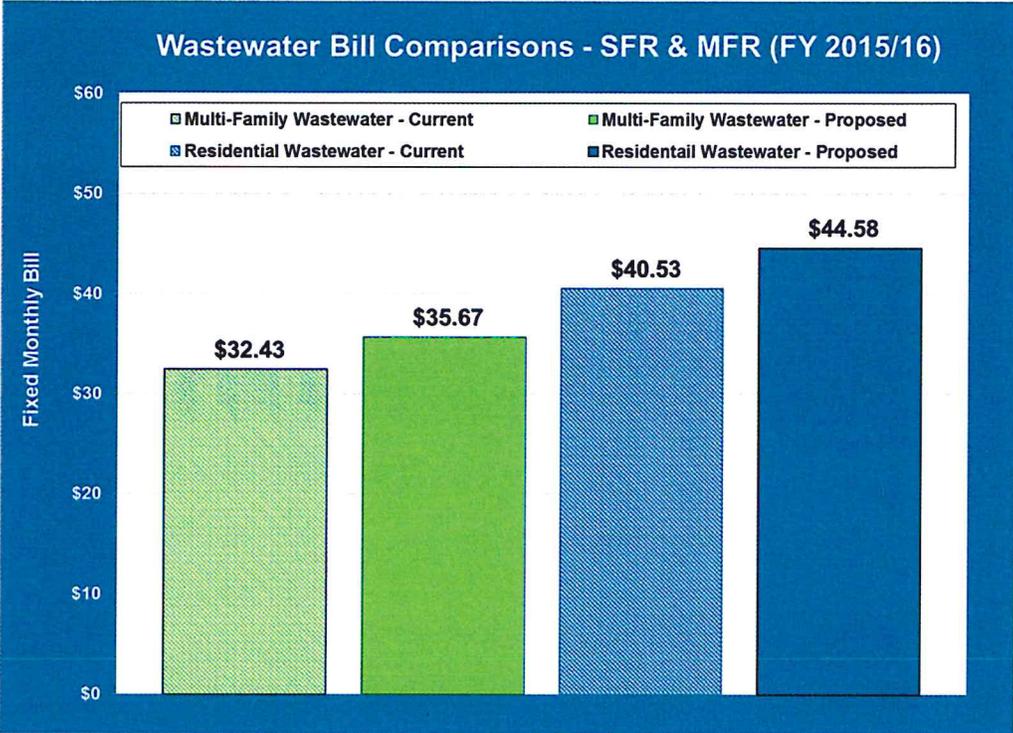


Figure 13. Commercial Wastewater Bill Comparison – Current vs. Proposed Rates

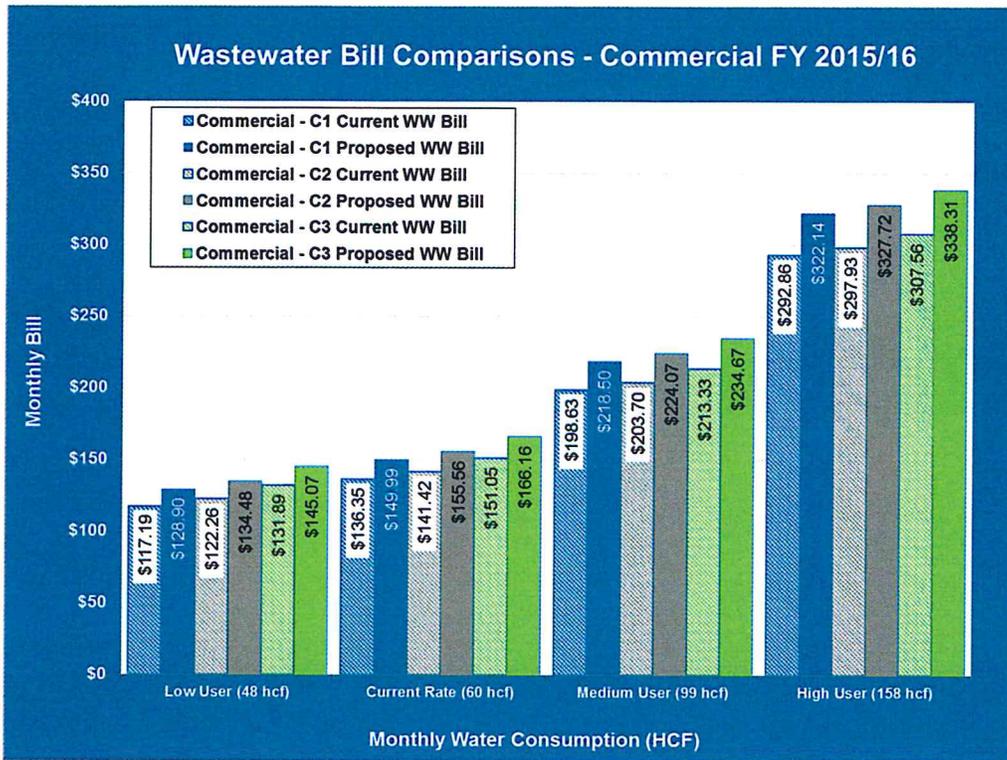
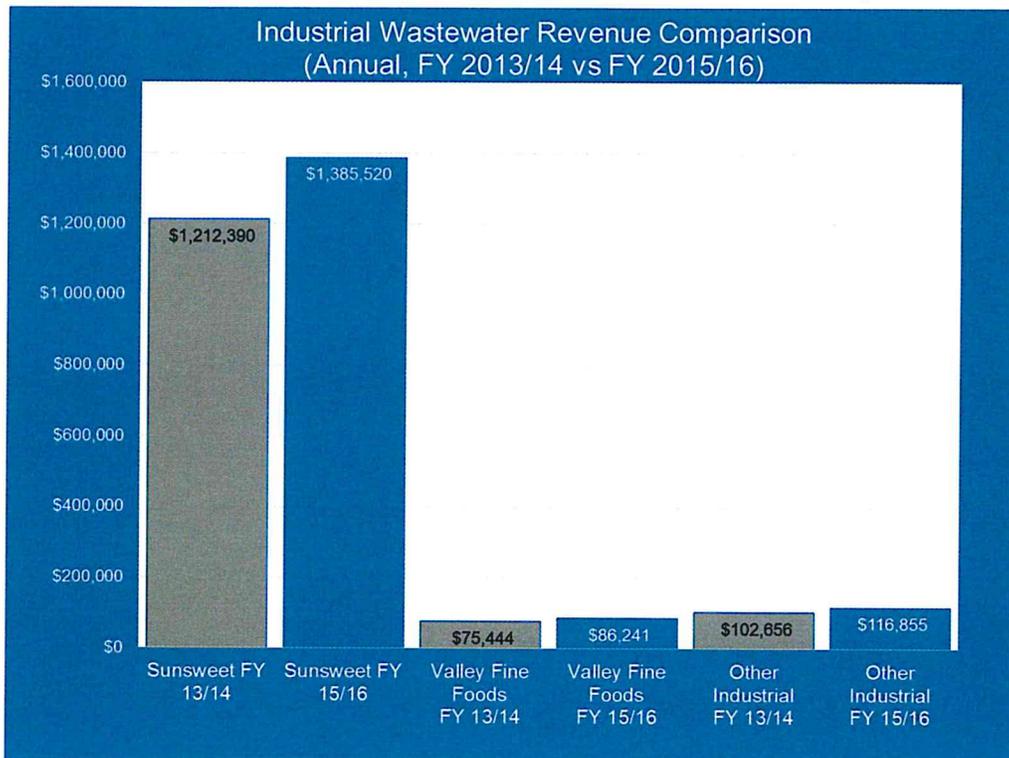


Figure 14. Industrial Wastewater Bill Comparison – Current vs. Proposed Rates



SECTION 4. RECOMMENDATIONS AND NEXT STEPS

A. Consultant Recommendations

NBS recommends the City take the following actions for the water and wastewater rates:

- **Approve and Accept This Study:** NBS recommends the City Council formally approve and adopt this Study and its recommendations. This will provide documentation of the rate study analyses and the basis for analyzing potential changes to future rates.
- **Complete a Review by a Qualified Attorney:** This rate study outlines proposed new rates. Prior to adoption, these rates should be reviewed by competent legal counsel with respect to compliance with Proposition 218 and related State laws, as well as legal assistance developing acceptable language for new resolutions to implement these rates.
- **Implement Recommended Levels of Rate Increases and Proposed Rates:** According to the analysis presented in this report, the City Council should implement the proposed rates recommended in this report for the next 5 years, as shown in Figures 5, 8, and 11. These rate adjustments are necessary to ensure the following objectives are met:
 - Updated water and wastewater rates promote revenue stability.
 - Maintaining the financial health of the City's water and wastewater utilities.
- **Adopt Reserve Fund Targets:** NBS recommends the City Council adopt the consultant-proposed reserve fund targets described in Sections 2 and 3 of this report for the water and wastewater utilities. The City should periodically evaluate reserve fund levels and make it a long-term goal to achieve these levels for the Operating, Capital, and Debt Reserves.

B. Next Steps

NBS recommends the following:

Annually Review Rates and Revenue – Any time an Agency adopts new utility rates or rate structures, those new rates should be closely monitored over the next several years to ensure the revenue generated is sufficient to meet the annual revenue requirements. Changing economic and drought-related water consumption patterns underscore the need for this review, as well as potential and unseen changing revenue requirements, particularly those related to environmental regulations that can significantly affect capital improvements and repair and replacement costs.

Note: The attached Technical Appendices provide more detailed information on the analysis of the water and wastewater revenue requirements that have been summarized in this report.

C. Principal Assumptions and Considerations

In preparing this report and the recommendations included herein, NBS has relied on a number of principal assumptions and considerations with regard to financial matters, number of customer accounts, conditions and events that may occur in the future. This information and assumptions, including the City's budgets and customer account information from City staff, were provided by sources we believe to be reliable, although NBS has not independently verified this data.

While we believe NBS' use of such information and assumptions is reasonable for the purpose of this report and its recommendations, some assumptions will invariably not materialize as stated herein or may vary significantly due to unanticipated events and circumstances. Therefore, the actual results can be expected to vary from those projected to the extent that actual future conditions differ from those assumed by us or provided to us by others.

APPENDIX A – WATER RATE ANALYSIS

Detailed tables in Appendix A include:

- Ten-year Financial Plan Summary
- Graphical representation of 10-year Financial Plans
- Exhibit 1, Operating Expenses
- Exhibit 2, Capital Improvement Plan Expenditures
- Exhibit 3, Existing Debt Obligations
- Current Rates
- Proposed Volumetric Charges Calculations
- Conservation Rate Calculations
- Current and Proposed Rates
- Various Bill Comparison Graphs
- FY 2013-2014 Customer Data
- Water Production Data
- Single Family Residential Distribution Curve for Consumption

TABLE 1
FINANCIAL PLAN AND SUMMARY OF REVENUE REQUIREMENTS

RATE REVENUE REQUIREMENTS SUMMARY	Projected										
	Budget FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Sources of Water Funds											
Rate Revenue Under Prevailing Rates (1)	\$ 9,381,644	\$ 8,085,804	\$ 8,107,680	\$ 8,129,556	\$ 8,151,432	\$ 8,173,308	\$ 8,195,184	\$ 8,217,060	\$ 8,238,936	\$ 8,260,812	\$ 8,282,688
Other Operating Revenue	1,516,484	367,131	367,786	368,440	369,095	369,750	370,405	371,059	371,714	372,369	373,024
Region 1 Water Customer SRF Surcharge	151,105	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
Region 2/3 Water Customer SRF Surcharge	502,312	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
Interest Earnings (2)	43,246	53,400	23,981	26,533	37,424	51,032	68,277	94,977	129,817	158,631	191,021
Total Sources of Funds	\$ 11,594,791	\$ 9,156,335	\$ 9,149,447	\$ 9,174,529	\$ 9,207,951	\$ 9,244,090	\$ 9,283,866	\$ 9,333,097	\$ 9,390,467	\$ 9,441,812	\$ 9,496,733
Uses of Water Funds											
Operating Expenses (3):											
Division 7110 Water Distribution	\$ 1,280,779	\$ 1,436,412	\$ 1,497,968	\$ 1,562,124	\$ 1,629,598	\$ 1,693,151	\$ 1,759,446	\$ 1,825,281	\$ 1,902,915	\$ 1,980,634	\$ 2,062,748
Division 7120 Water Treatment Plant	4,811,843	5,111,199	5,282,807	5,526,072	5,781,668	6,033,731	6,309,217	6,586,781	6,878,709	7,185,885	7,509,260
Division 7341 - HWS Region 1	1,125	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313
Division 7342 - HWS Region 2	1,125	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313
Operational Transfers	1,716,500	1,754,300	1,822,472	1,893,311	1,966,922	2,043,413	2,122,898	2,205,496	2,291,328	2,380,521	2,473,208
<i>Adjustment for FY 14/15 Actuals</i>	<i>(517,244)</i>	-	-	-	-	-	-	-	-	-	-
Subtotal: Operating Expenses	\$ 7,274,128	\$ 8,304,536	\$ 8,605,872	\$ 8,984,132	\$ 9,380,812	\$ 9,772,920	\$ 10,194,186	\$ 10,624,183	\$ 11,075,576	\$ 11,549,665	\$ 12,047,841
Other Expenditures:											
Existing Debt Service	\$ 2,919,853	\$ 2,920,023	\$ 2,918,543	\$ 2,919,578	\$ 2,918,441	\$ 2,920,081	\$ 2,919,356	\$ 2,916,191	\$ 2,915,511	\$ 2,917,111	\$ 2,916,211
New Debt Service	-	-	1,855,249	-	-	-	-	-	-	-	-
Rate-Funded Capital Expenses	-	370,075	-	1,910,906	3,392,002	3,493,762	3,170,676	3,278,032	3,388,613	3,502,514	3,619,835
Subtotal: Other Expenditures	\$ 2,919,853	\$ 3,290,098	\$ 4,773,792	\$ 4,830,485	\$ 6,310,443	\$ 6,413,843	\$ 6,080,032	\$ 6,194,223	\$ 6,304,124	\$ 6,419,625	\$ 6,536,046
Total Uses of Water Funds	\$ 10,193,981	\$ 11,594,634	\$ 13,379,664	\$ 13,814,617	\$ 15,691,255	\$ 16,186,763	\$ 16,284,218	\$ 16,818,406	\$ 17,379,700	\$ 17,969,290	\$ 18,583,887
plus: Revenue from Rate Increases (4)	-	215,621	2,763,908	4,815,405	6,806,978	7,402,690	8,025,805	8,697,801	9,399,352	10,116,438	10,696,005
Increase/Decrease to Reserves	\$ 1,400,810	\$ (2,222,676)	\$ (1,466,310)	\$ 175,317	\$ 323,674	\$ 460,017	\$ 1,025,453	\$ 1,212,491	\$ 1,410,119	\$ 1,588,960	\$ 1,608,852
Net Revenue Red. (Total Uses less Non-Rate Revenue)	\$ 7,980,834	\$ 10,524,103	\$ 12,337,898	\$ 12,769,643	\$ 14,534,735	\$ 15,115,961	\$ 15,199,536	\$ 15,702,369	\$ 16,228,169	\$ 16,788,290	\$ 17,369,842
Total Rate Revenue After Rate Increases	\$ 9,381,644	\$ 8,301,425	\$ 10,871,588	\$ 12,944,951	\$ 14,958,410	\$ 15,575,998	\$ 16,220,989	\$ 16,914,861	\$ 17,638,288	\$ 18,377,250	\$ 18,978,693
Projected Annual Rate Revenue Increase	0.00%	32.00%	19.00%	16.45%	3.85%	3.85%	4.00%	4.00%	4.00%	3.00%	3.00%
<i>Debt Coverage After Rate Increase (includes connection fee revenue) (5)</i>	<i>1.64</i>	<i>1.08</i>	<i>1.27</i>	<i>1.86</i>	<i>2.41</i>	<i>2.49</i>	<i>2.58</i>	<i>2.68</i>	<i>2.79</i>	<i>2.89</i>	<i>2.93</i>

(1) FY 2014/15 Revenues are proposed revenues for 2014/15, per the City's Adopted Annual Operating Budget. Water Sales were reduced in FY 2015/16 to account for State mandated conservation.
Variable rate revenues (estimated at 46% of total revenues) were reduced by 32%.
(2) Interest earnings are per the City's budget in FY 2014/15, and calculated in the Financial Plan for all future years.
(3) The FY 2014/15 operating expenses are from the City's Proposed Budget. Inflationary factors are applied to these expenses to project costs in 2015/16 and beyond.
(4) Rate increases are anticipated to be effective 04/01/2016; therefore FY 2015/16 represents three (3) months of revenue from new rates.
(5) Debt coverage requirement is 1.20 or greater (Water Revenue Refunding Bonds, Official Statement). Per City staff, Debt Coverage is calculated including connection fee revenue.
Conditional formatting has been applied to highlight years where coverage is not met.

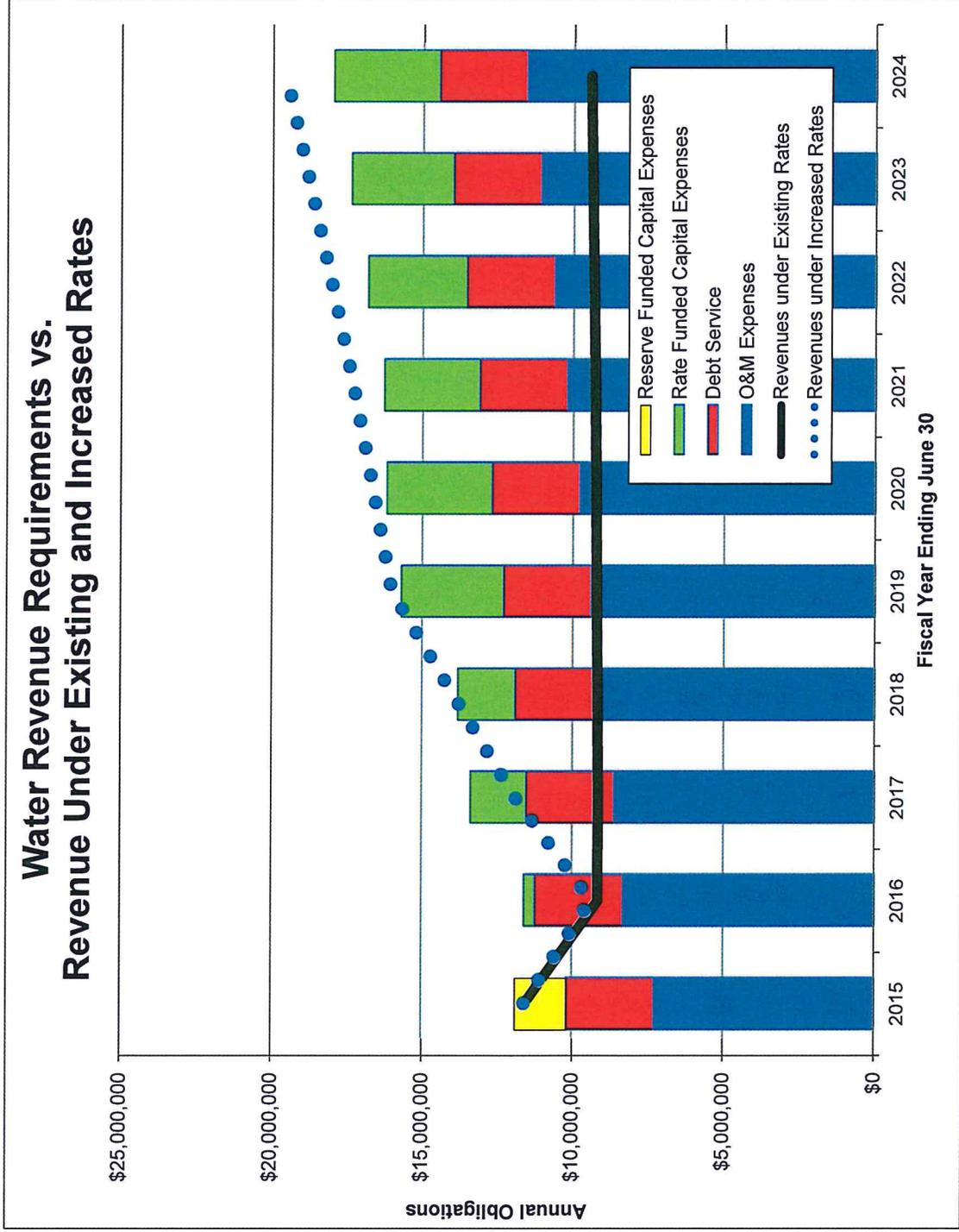
TABLE 2
RESERVE FUND SUMMARY

	Projected											
	Budget	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
SUMMARY OF CASH ACTIVITY												
Total Beginning Cash (1)	\$ 11,177,932	\$ 6,330,656										
Operating Reserve												
Beginning Reserve Balance (2)	\$ 1,582,257	\$ 4,017,200	\$ 3,138,642	\$ 1,880,144	\$ 2,084,877	\$ 2,361,466	\$ 2,361,466	\$ 2,452,231	\$ 2,399,000	\$ 2,506,000	\$ 2,769,000	\$ 2,887,000
Plus: Net Cash Flow (After Rate Increases)	1,400,810	(2,222,678)	(1,466,310)	175,317	323,674	-	460,017	1,025,453	1,212,491	1,410,119	1,588,860	1,608,852
Plus: Transfer of Debt Reserve Surplus	-	-	-	-	-	(63,551)	(378,484)	(928,684)	1,083	30,571	30,571	30,571
Less: Reserve Funding for Existing Debt Obligations (3)	(1,164,067)	(155,000)	(155,000)	(155,000)	(150,000)	(150,000)	(150,000)	(150,000)	(956,575)	(1,177,690)	(1,501,531)	(1,514,422)
Less: Reserve Funding for Debt Service (4)	-	-	-	184,416	-	166,466	159,231	-	(150,000)	-	-	-
Plus: Transfer in from Connection Fee Reserve for Debt Service (4)	-	1,499,119	362,812	-	-	-	-	-	-	-	-	-
Ending Operating Reserve Balance	\$ 1,819,000	\$ 3,738,642	\$ 1,880,144	\$ 2,084,877	\$ 2,361,466	\$ 2,452,231	\$ 2,452,231	\$ 2,549,000	\$ 2,656,000	\$ 2,769,000	\$ 2,887,000	\$ 3,012,000
Target Ending Balance (90-days of O&M)	\$ 1,819,000	\$ 2,076,000	\$ 2,151,000	\$ 2,246,000	\$ 2,345,000	\$ 2,443,000	\$ 2,443,000	\$ 2,549,000	\$ 2,656,000	\$ 2,769,000	\$ 2,887,000	\$ 3,012,000
Capital Rehabilitation & Replacement Reserve												
Beginning Reserve Balance (2)	\$ 7,728,631	\$ 1,657,558	\$ 1,657,558	\$ 1,657,558	\$ 1,657,558	\$ 1,657,558	\$ 1,721,109	\$ 2,099,593	\$ 3,028,277	\$ 3,984,852	\$ 5,162,542	\$ 6,664,072
Plus: Grant Proceeds	3,965,000	7,100,000	-	-	-	63,551	378,484	928,684	956,575	1,177,690	1,501,531	1,514,422
Plus: Transfer of Operating Reserve Surplus	1,164,067	-	-	-	-	-	-	-	-	-	-	-
Less: Use of Reserves for Capital Projects	(5,670,474)	(7,100,000)	-	-	-	-	-	-	-	-	-	-
Ending Capital Improvement & Depreciation Reserve Balance	\$ 7,187,224	\$ 1,657,558	\$ 1,657,558	\$ 1,657,558	\$ 1,657,558	\$ 1,721,109	\$ 2,099,593	\$ 3,028,277	\$ 3,984,852	\$ 5,162,542	\$ 6,664,072	\$ 8,178,495
Target Ending Balance (3% of Assets) (5)	\$ 4,027,500	\$ 4,144,100	\$ 4,164,800	\$ 4,202,100	\$ 4,272,800	\$ 4,347,400	\$ 4,409,500	\$ 4,809,500	\$ 5,561,200	\$ 6,476,700	\$ 7,639,900	\$ 8,558,900
Ending Balance - Excludes Restricted Reserves	\$ 9,006,224	\$ 4,796,200	\$ 3,537,702	\$ 3,742,435	\$ 4,082,576	\$ 4,551,824	\$ 5,427,277	\$ 6,490,852	\$ 7,931,542	\$ 9,551,072	\$ 11,190,495	\$ 11,900,495
Minimum Target Ending Balance - Excludes Restricted Reserve	\$ 5,846,500	\$ 6,220,100	\$ 6,315,800	\$ 6,448,100	\$ 6,617,800	\$ 6,790,400	\$ 7,358,500	\$ 8,217,200	\$ 9,245,700	\$ 10,526,900	\$ 11,570,900	\$ 12,570,900
Ending Surplus/(Deficit) Compared to Reserve Targets	\$ 3,159,724	\$ (1,423,900)	\$ (2,778,098)	\$ (2,705,665)	\$ (2,635,224)	\$ (2,238,576)	\$ (1,931,223)	\$ (1,726,348)	\$ (1,314,158)	\$ (975,828)	\$ (380,405)	\$ (380,405)
Days Cash on Hand	323	166	113	116	122	131	162	176	207	241	273	273
Restricted Reserves:												
Debt Reserve												
Beginning Reserve Balance (6)	\$ 432,371	\$ 392,567	\$ 548,548	\$ 706,291	\$ 866,588	\$ 1,025,254	\$ 1,186,070	\$ 1,355,891	\$ 1,528,536	\$ 1,707,171	\$ 1,895,806	\$ 2,095,436
Plus: Reserve Funding for Existing Debt Obligations (3)	-	155,000	2,743	5,297	8,666	12,816	17,821	23,728	30,571	30,571	30,571	30,571
Plus: Interest Earnings	1,081	981	-	-	-	-	-	(1,083)	(30,571)	(30,571)	(30,571)	(30,571)
Less: Transfer of Surplus to Operating Reserve	-	-	-	-	-	-	-	-	-	-	-	-
Ending Debt Reserve Balance	\$ 433,452	\$ 548,548	\$ 706,291	\$ 866,588	\$ 1,025,254	\$ 1,186,070	\$ 1,355,891	\$ 1,528,536	\$ 1,707,171	\$ 1,895,806	\$ 2,095,436	\$ 2,295,436
Target Ending Balance	\$ 458,561	\$ 611,414	\$ 764,268	\$ 917,121	\$ 1,069,975	\$ 1,222,829	\$ 1,375,682	\$ 1,528,536	\$ 1,681,389	\$ 1,834,242	\$ 1,987,095	\$ 2,139,948
Bond Project Fund												
Beginning Reserve Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Plus: SRF Loan Funding Proceeds	-	-	-	-	-	-	-	-	-	-	-	-
Plus: Revenue Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-	-
Less: Use of Bond & Loan Funds for Capital Projects	-	-	-	-	-	-	-	-	-	-	-	-
Ending Bond Project Fund Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Target Ending Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Connection Fee Reserve												
Beginning Reserve Balance (7)	\$ 1,434,673	\$ 263,331	\$ 171,045	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Plus: Interest Earnings	3,587	658	855	-	-	-	-	-	-	-	-	-
Plus: Connection Fee Revenue	399,310	2,030,900	370,940	370,940	370,940	370,940	370,940	370,940	370,940	370,940	370,940	370,940
Plus: Other Connection Fee Fund Revenue	80,203	62,800	40,108	40,216	40,325	40,433	40,541	40,649	40,758	40,866	40,974	40,974
Less: Use of Reserves for Capital Projects	(1,917,773)	(687,525)	(220,137)	(226,741)	(244,798)	(252,142)	(259,496)	(266,850)	(274,204)	(281,558)	(288,912)	(296,266)
Less: Transfer to Operating Reserve for Debt Service (4)	-	(1,499,119)	(362,812)	(184,416)	(166,466)	(159,231)	-	-	-	-	-	-
Ending Connection Fee Fund Balance	\$ -	\$ 171,045	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Interest Earnings Rate (8)	0.25%	0.25%	0.50%	0.75%	1.00%	1.25%	1.50%	1.75%	2.00%	2.00%	2.00%	2.00%

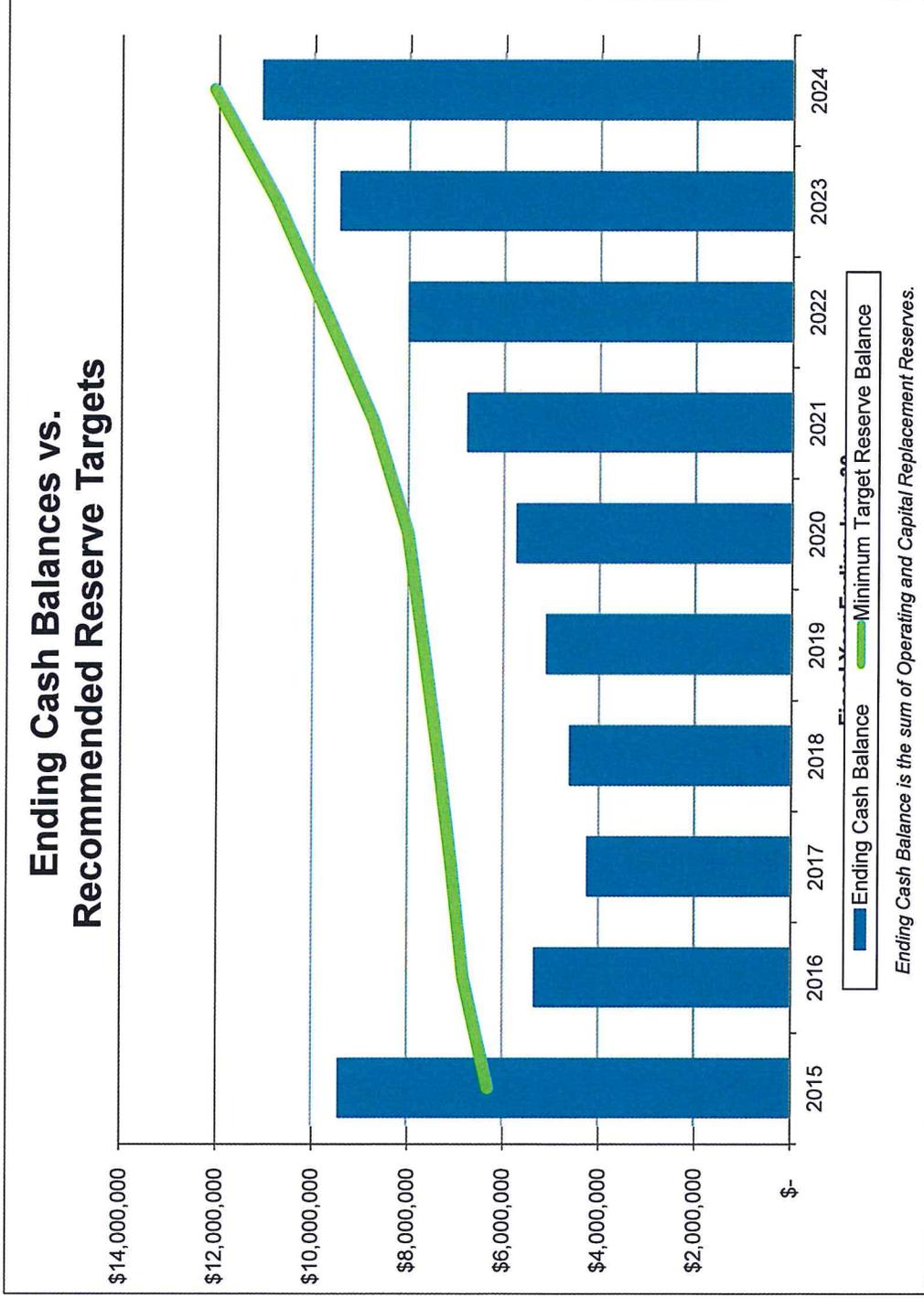
CITY OF YUBA CITY
WATER RATE STUDY
Financial Plan and Reserve Projections

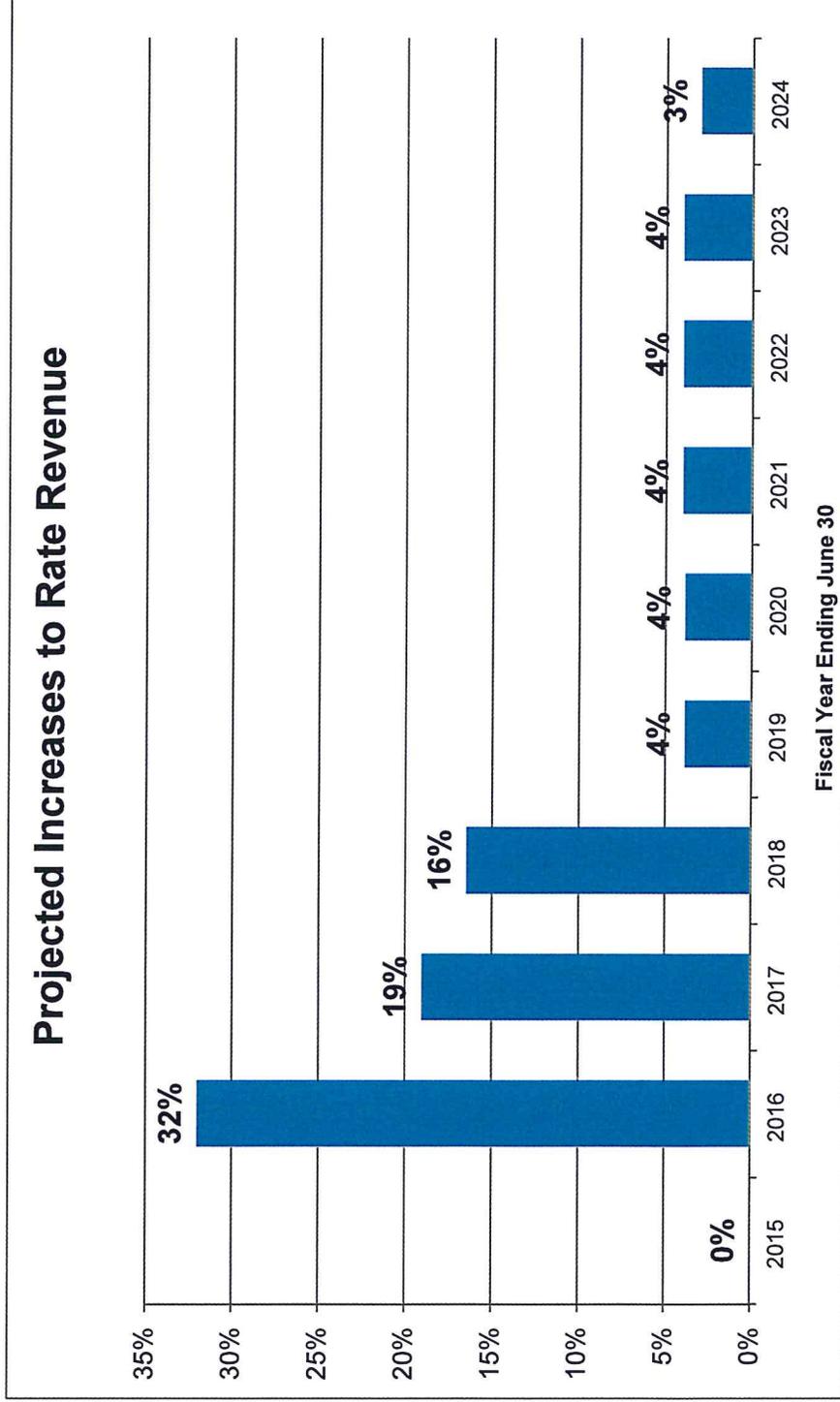
Footnotes to Table 2 - Reserve Fund Summary:

- (1) Beginning cash balance is from both the Consolidated Balance Sheet and the City's proforma analysis for Funds 507, 508, 509, 517, 531, 533, 534 and 537, from FY 2013/14 end; reports provided by City staff 12/19/2014 (file: 14-15 Beg Cash Bal Water.pdf and Water Debt Coverage Ratio Actual 13- 14.xls). FY 2015/16 Beginning Balances reported in the City's Proposed FY 2015/16 Budget (file: Proposed Budget - FY 15-16 pn V2.pdf) and via email from City staff.
- (2) The total beginning cash balance for FY 2014/15 is based on the City's proforma analysis for Funds 517 - Cash CIP and Fund 507 - Water Operating Cash (file: Water Debt Coverage Ratio Actual 13-14.xls). The total beginning cash balance for FY 2015/16 is based on the City's Proposed FY 2015/16 Budget (file: Proposed Budget - FY 15-16 pn V2.pdf). Capital R&R Reserve balance for FY 2015/16 was provided by City staff via email 06/02/2015.
- (3) Per the SRF Loan Agreements, the reserve funds for both loans shall be accumulated by FY 2021/22.
- (4) NBS assumes the City will fund the % of debt service allocated to connection fees, with connection fee revenue as long as it is available.
- (5) The Capital Rehabilitation & Replacement reserve target is set to 3% of net assets.
- (6) Beginning cash in the debt reserve for FY 2014/15 is the amount in Fund 533 and Fund 534, (Region 1 and Region 2/3 SRF Loan), per the City's proforma analysis (file: Water Debt Coverage Ratio Actual 13-14.xls). Beginning balance for FY 2015/16 is as reported in the Proposed FY2015/16 Budget (file: Proposed Budget - FY 15-16 pn V2.pdf).
- (7) The beginning connection fee reserve balance is per the proforma analysis provided by City Staff (file: Water Debt Coverage Ratio Actual 13-14.xls).
- (8) Historical interest earning rates were referenced on the California Treasurer's Office website for funds invested in LAIF. Future years earnings were conservatively estimated through 2021 and phase into the historical 10 year average interest earnings rate.









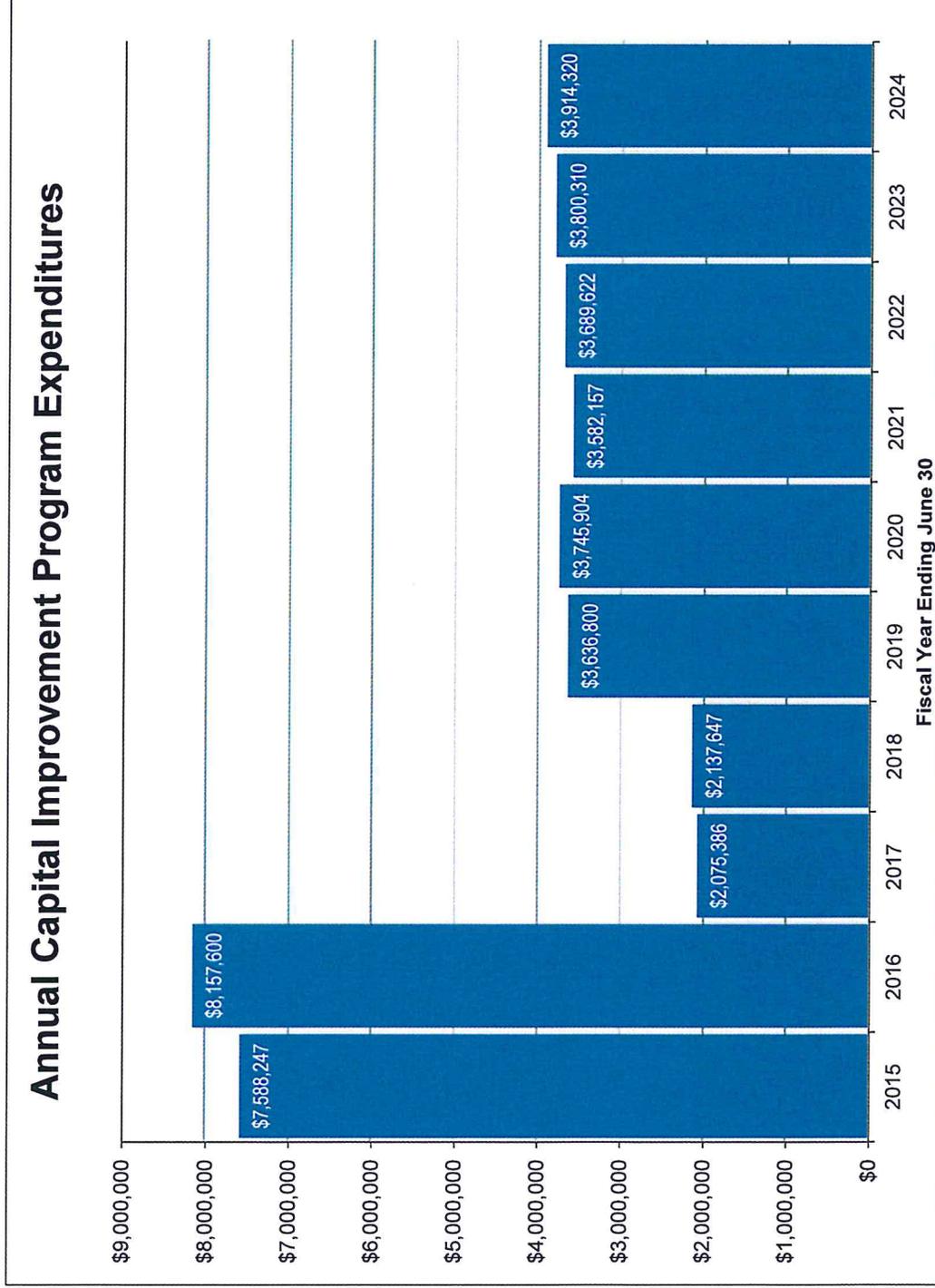


EXHIBIT 1

CITY OF YUBA CITY
WATER RATE STUDY
Operating Revenue and Expenses

REVENUE FORECAST (1)

SOURCES OF REVENUE	Basis	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Fund 507 Water Fund												
44560 Fire Sys Flow Test	10	\$ 1,169	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
44565 Backflow Prev Fees	10	\$ 18,734	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000
44510 Water Sales (2)	1	\$ 9,381,644	\$ 8,085,804	\$ 8,107,680	\$ 8,129,556	\$ 8,151,432	\$ 8,173,308	\$ 8,195,184	\$ 8,217,060	\$ 8,238,936	\$ 8,260,812	\$ 8,282,688
44520 Water - Hydrant Fees	1	\$ 2,198	\$ 2,000	\$ 2,005	\$ 2,011	\$ 2,016	\$ 2,022	\$ 2,027	\$ 2,032	\$ 2,038	\$ 2,043	\$ 2,048
44540 Water - Meter Labor	1	\$ 27,989	\$ 25,000	\$ 25,068	\$ 25,135	\$ 25,203	\$ 25,271	\$ 25,338	\$ 25,406	\$ 25,473	\$ 25,541	\$ 25,609
44560 Utility Billing Penalties	1	\$ 204,914	\$ 200,000	\$ 200,541	\$ 201,082	\$ 201,623	\$ 202,164	\$ 202,705	\$ 203,247	\$ 203,788	\$ 204,329	\$ 204,870
44565 Water - Tap Machine	1	\$ 17,637	\$ 15,000	\$ 15,041	\$ 15,081	\$ 15,122	\$ 15,162	\$ 15,203	\$ 15,243	\$ 15,284	\$ 15,325	\$ 15,365
46110 Interest on Investment (3)	See FP	\$ 38,795	\$ 47,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
49010 Other Revenue	10	\$ 259,025	\$ 111,131	\$ 111,131	\$ 111,131	\$ 111,131	\$ 111,131	\$ 111,131	\$ 111,131	\$ 111,131	\$ 111,131	\$ 111,131
49510 Lease Proceeds	10	\$ 984,818	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fund 508 Water Connection Fees												
44515 Water Main Ext Fees	1	\$ 26,698	\$ 30,000	\$ 30,081	\$ 30,162	\$ 30,243	\$ 30,325	\$ 30,406	\$ 30,487	\$ 30,568	\$ 30,649	\$ 30,730
44525 Water - Connection Fees (4)	10	\$ 399,310	\$ 2,030,900	\$ 370,940	\$ 370,940	\$ 370,940	\$ 370,940	\$ 370,940	\$ 370,940	\$ 370,940	\$ 370,940	\$ 370,940
44535 Water - Meter Materials	1	\$ 28,433	\$ 10,000	\$ 10,027	\$ 10,054	\$ 10,081	\$ 10,108	\$ 10,135	\$ 10,162	\$ 10,189	\$ 10,216	\$ 10,243
46110 Interest on Investment (3)	See FP	\$ 25,072	\$ 22,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fund 533 Reg 1 SRF Loan Debt Service												
44571 Water Customer SRF Surcharge	10	\$ 151,105	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000
46110 Interest on Investment (3)	See FP	\$ 433	\$ 700	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fund 534 Reg 2/3 SRF Loan Debt Service												
44571 Water Customer SRF Surcharge	10	\$ 502,312	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
46110 Interest on Investment (3)	See FP	\$ 4,018	\$ 5,700	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL: REVENUE		\$12,074,304	\$11,250,035	\$9,536,514	\$9,558,153	\$9,581,792	\$9,604,431	\$9,627,070	\$9,649,709	\$9,672,348	\$9,694,986	\$9,717,625

REVENUE SUMMARY	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Fund 507 Water Fund											
Water Rate Revenue	\$ 9,381,644	\$ 8,085,804	\$ 8,107,680	\$ 8,129,556	\$ 8,151,432	\$ 8,173,308	\$ 8,195,184	\$ 8,217,060	\$ 8,238,936	\$ 8,260,812	\$ 8,282,688
Other Operating Revenue	\$ 1,516,484	\$ 367,131	\$ 367,786	\$ 368,440	\$ 369,095	\$ 369,750	\$ 370,405	\$ 371,059	\$ 371,714	\$ 372,369	\$ 373,024
Interest Earnings	\$ 38,795	\$ 47,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fund 508 Water Connection Fees											
Connection Fees	\$ 399,310	\$ 2,030,900	\$ 370,940	\$ 370,940	\$ 370,940	\$ 370,940	\$ 370,940	\$ 370,940	\$ 370,940	\$ 370,940	\$ 370,940
Other Connection Fee Fund Revenue	\$ 80,203	\$ 62,800	\$ 40,108	\$ 40,216	\$ 40,325	\$ 40,433	\$ 40,541	\$ 40,649	\$ 40,758	\$ 40,866	\$ 40,974
Fund 533 Reg 1 SRF Loan Debt Service											
Water Customer SRF Surcharge	\$ 151,105	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000
Interest Earnings	\$ 433	\$ 700	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fund 534 Reg 2/3 SRF Loan Debt Service											
Water Customer SRF Surcharge	\$ 502,312	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Interest Earnings	\$ 4,018	\$ 5,700	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL: REVENUE	\$12,074,304	\$11,250,035	\$9,536,514	\$9,558,153	\$9,581,792	\$9,604,431	\$9,627,070	\$9,649,709	\$9,672,348	\$9,694,986	\$9,717,625

Check to total revenue

CITY OF YUBA CITY
WATER RATE STUDY
Operating Revenue and Expenses

OPERATING EXPENSE FORECAST (6):

	Basis	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Operating Transfers												
269990	Operating Transfers Out (Fund 507-7120)	\$ 1,471,500	\$ 1,554,300	\$ 1,616,472	\$ 1,681,131	\$ 1,748,376	\$ 1,818,311	\$ 1,891,044	\$ 1,966,685	\$ 2,045,353	\$ 2,127,167	\$ 2,212,254
269993	OPER TRSF - Sewer Lab Svcs (Fund 507-7120)	\$ 245,000	\$ 200,000	\$ 206,000	\$ 212,180	\$ 218,545	\$ 225,102	\$ 231,955	\$ 238,810	\$ 245,975	\$ 253,354	\$ 260,955
	Total: Water Fund Operations - Operating Transfers	\$ 1,716,500	\$ 1,754,300	\$ 1,822,472	\$ 1,893,311	\$ 1,966,922	\$ 2,043,413	\$ 2,122,999	\$ 2,205,496	\$ 2,291,328	\$ 2,380,521	\$ 2,473,208
Water Fund Operations - 7100												
Fund 507 Water Fund												
Division 7110 Water Distribution												
Salaries and Benefits												
61210	Salaries - Regular	\$ 433,559	\$ 448,057	\$ 461,499	\$ 475,344	\$ 489,604	\$ 504,292	\$ 519,421	\$ 535,003	\$ 551,054	\$ 567,585	\$ 584,613
61211	Salaries - Sick Leave	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61212	Salaries - Vacation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61215	Salaries - Standby	\$ 5,600	\$ 5,600	\$ 5,768	\$ 5,941	\$ 6,119	\$ 6,303	\$ 6,482	\$ 6,687	\$ 6,887	\$ 7,094	\$ 7,307
61310	Salaries - ADM Payoff	\$ 609	\$ 609	\$ 627	\$ 646	\$ 665	\$ 685	\$ 706	\$ 727	\$ 749	\$ 771	\$ 795
61430	Wages - Extra Help	\$ 17,000	\$ 17,000	\$ 17,510	\$ 18,035	\$ 18,576	\$ 19,134	\$ 19,708	\$ 20,299	\$ 20,908	\$ 21,535	\$ 22,181
61501	Overtime - Regular	\$ 6,797	\$ 7,094	\$ 7,360	\$ 7,731	\$ 8,113	\$ 8,506	\$ 8,911	\$ 9,329	\$ 9,758	\$ 10,207	\$ 10,677
61502	Medicare	\$ 112,409	\$ 123,411	\$ 135,752	\$ 149,327	\$ 164,260	\$ 180,686	\$ 198,755	\$ 218,630	\$ 240,493	\$ 264,542	\$ 290,997
61503	Health Plan	\$ 139,407	\$ 146,308	\$ 158,573	\$ 170,902	\$ 183,828	\$ 199,917	\$ 218,614	\$ 241,483	\$ 270,527	\$ 293,753	\$ 320,165
61504	Workers Compensation	\$ 30,441	\$ 31,543	\$ 32,489	\$ 33,464	\$ 34,468	\$ 35,502	\$ 36,567	\$ 37,664	\$ 38,794	\$ 39,958	\$ 41,156
61505	Life Insurance	\$ 230	\$ 230	\$ 237	\$ 244	\$ 251	\$ 259	\$ 267	\$ 275	\$ 283	\$ 291	\$ 300
61506	Unemployment Insurance	\$ 5,689	\$ 48	\$ 49	\$ 51	\$ 54	\$ 57	\$ 61	\$ 65	\$ 69	\$ 73	\$ 77
61507	Dental / Vision	\$ 14,762	\$ 14,762	\$ 16,238	\$ 17,862	\$ 19,648	\$ 21,613	\$ 23,774	\$ 26,152	\$ 28,767	\$ 31,644	\$ 34,808
61508	Premium Incentive - Health	\$ -	\$ 5,980	\$ 6,578	\$ 7,236	\$ 7,959	\$ 8,755	\$ 9,631	\$ 10,594	\$ 11,653	\$ 12,819	\$ 14,101
Supplies and Services												
62201	TEL - Service	\$ 1,500	\$ 1,500	\$ 1,545	\$ 1,591	\$ 1,639	\$ 1,688	\$ 1,739	\$ 1,791	\$ 1,845	\$ 1,900	\$ 1,957
62204	TEL - Long Distance	\$ 200	\$ 200	\$ 206	\$ 212	\$ 219	\$ 225	\$ 232	\$ 239	\$ 246	\$ 253	\$ 261
62206	TEL - Voice Mail	\$ 135	\$ 135	\$ 139	\$ 143	\$ 148	\$ 152	\$ 157	\$ 161	\$ 166	\$ 171	\$ 176
62210	TEL - Cellular Phone	\$ 4,750	\$ 4,750	\$ 4,893	\$ 5,039	\$ 5,190	\$ 5,346	\$ 5,507	\$ 5,672	\$ 5,842	\$ 6,017	\$ 6,198
62250	TEL - Internet	\$ 384	\$ 401	\$ 413	\$ 425	\$ 438	\$ 451	\$ 465	\$ 479	\$ 493	\$ 508	\$ 523
62301	Postage & Freight	\$ 500	\$ 500	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580	\$ 597	\$ 615	\$ 633	\$ 652
62501	Office Supplies	\$ 1,800	\$ 1,800	\$ 1,854	\$ 1,910	\$ 1,967	\$ 2,026	\$ 2,087	\$ 2,149	\$ 2,214	\$ 2,280	\$ 2,348
62601	Printing & Binding	\$ 2,000	\$ 2,000	\$ 2,060	\$ 2,122	\$ 2,185	\$ 2,251	\$ 2,319	\$ 2,388	\$ 2,460	\$ 2,534	\$ 2,610
62701	Professional Services	\$ 28,194	\$ 28,194	\$ 29,040	\$ 29,911	\$ 30,808	\$ 31,733	\$ 32,685	\$ 33,665	\$ 34,675	\$ 35,715	\$ 36,787
62702	PARS Admin Fee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
62706	Employee Physical Exams	\$ 500	\$ 500	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580	\$ 597	\$ 615	\$ 633	\$ 652
R62701	Professional Services	\$ 1,310	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
62801	Professional Development	\$ 5,000	\$ 5,000	\$ 5,150	\$ 5,305	\$ 5,464	\$ 5,628	\$ 5,796	\$ 5,970	\$ 6,149	\$ 6,334	\$ 6,524
63010	Dues & Subscrip	\$ 3,400	\$ 3,400	\$ 3,502	\$ 3,607	\$ 3,715	\$ 3,827	\$ 3,942	\$ 4,060	\$ 4,182	\$ 4,307	\$ 4,436
63201	Rental - Bldgs/Equip/Land	\$ 2,000	\$ 2,000	\$ 2,060	\$ 2,122	\$ 2,185	\$ 2,251	\$ 2,319	\$ 2,388	\$ 2,460	\$ 2,534	\$ 2,610
63310	O&M Radio Service	\$ 900	\$ 900	\$ 927	\$ 955	\$ 983	\$ 1,013	\$ 1,043	\$ 1,075	\$ 1,107	\$ 1,140	\$ 1,174
63401	Special Equipment/O&M	\$ 35,200	\$ 35,200	\$ 36,256	\$ 37,344	\$ 38,464	\$ 39,618	\$ 40,806	\$ 42,031	\$ 43,292	\$ 44,589	\$ 45,928
63424	Spec O&M Fire Service SU	\$ 20,000	\$ 20,000	\$ 20,600	\$ 21,218	\$ 21,855	\$ 22,510	\$ 23,185	\$ 23,881	\$ 24,597	\$ 25,335	\$ 26,095
63501	Vehicle MTOE - ISF	\$ 33,512	\$ 115,725	\$ 119,197	\$ 122,773	\$ 126,456	\$ 130,250	\$ 134,157	\$ 138,182	\$ 142,327	\$ 146,597	\$ 150,995
63510	Vehicle Maint Fuel	\$ 29,757	\$ 34,954	\$ 36,003	\$ 37,083	\$ 38,195	\$ 39,341	\$ 40,521	\$ 41,737	\$ 42,989	\$ 44,279	\$ 45,607
63599	Vehicle Replacement Fee	\$ 39,115	\$ 61,619	\$ 63,468	\$ 65,372	\$ 67,333	\$ 69,353	\$ 71,433	\$ 73,576	\$ 75,784	\$ 78,057	\$ 80,399
63601	Bldg O&M Mice	\$ -	\$ 5,700	\$ 5,871	\$ 6,047	\$ 6,229	\$ 6,415	\$ 6,608	\$ 6,806	\$ 7,010	\$ 7,221	\$ 7,437
63604	Spec O&M Laundry	\$ 3,400	\$ 3,400	\$ 3,502	\$ 3,607	\$ 3,715	\$ 3,827	\$ 3,942	\$ 4,060	\$ 4,182	\$ 4,307	\$ 4,436
63642	Spec O&M Hydrants	\$ 20,500	\$ 20,500	\$ 21,115	\$ 21,748	\$ 22,401	\$ 23,073	\$ 23,765	\$ 24,478	\$ 25,212	\$ 25,969	\$ 26,748
63670	Bldg O&M Lines Repair	\$ 60,000	\$ 60,000	\$ 61,800	\$ 63,654	\$ 65,564	\$ 67,531	\$ 69,556	\$ 71,643	\$ 73,792	\$ 76,006	\$ 78,286
63671	Bldg O&M Lines New	\$ 27,000	\$ 27,000	\$ 27,810	\$ 28,644	\$ 29,504	\$ 30,389	\$ 31,300	\$ 32,239	\$ 33,207	\$ 34,203	\$ 35,229
63672	Bldg O&M Meters	\$ 36,500	\$ 73,000	\$ 75,190	\$ 77,446	\$ 79,769	\$ 82,162	\$ 84,627	\$ 87,166	\$ 89,781	\$ 92,474	\$ 95,248
63801	Tools, Supplies, Equip <5k	\$ 24,500	\$ 24,500	\$ 25,235	\$ 25,992	\$ 26,772	\$ 27,575	\$ 28,402	\$ 29,254	\$ 30,132	\$ 31,036	\$ 31,967
63802	Training Program /Aids	\$ 8,000	\$ 8,000	\$ 8,240	\$ 8,487	\$ 8,742	\$ 9,004	\$ 9,274	\$ 9,552	\$ 9,839	\$ 10,134	\$ 10,438
63901	Safety Equipment	\$ 6,500	\$ 6,500	\$ 6,695	\$ 6,896	\$ 7,103	\$ 7,316	\$ 7,535	\$ 7,761	\$ 7,994	\$ 8,234	\$ 8,481
64101	Raw Water Purchases	\$ 17,000	\$ 17,000	\$ 17,510	\$ 18,035	\$ 18,576	\$ 19,134	\$ 19,708	\$ 20,299	\$ 20,908	\$ 21,535	\$ 22,181
64151	City Fac SWR Charges	\$ 714	\$ 642	\$ 661	\$ 681	\$ 702	\$ 723	\$ 744	\$ 767	\$ 790	\$ 813	\$ 838
64310	Liability Insurance	\$ 241	\$ 259	\$ 267	\$ 275	\$ 283	\$ 292	\$ 300	\$ 309	\$ 319	\$ 328	\$ 338
64910	Depreciation (6)	\$ 38,303	\$ 24,345	\$ 25,075	\$ 25,828	\$ 26,602	\$ 27,401	\$ 28,223	\$ 29,069	\$ 29,941	\$ 30,840	\$ 31,765
65801	Computer Maint/Rep - ISF	\$ 14,461	\$ 19,146	\$ 19,720	\$ 20,312	\$ 20,921	\$ 21,549	\$ 22,195	\$ 22,861	\$ 23,547	\$ 24,254	\$ 24,981
66001	Other Materials & Supplies	\$ 15,000	\$ 15,000	\$ 15,450	\$ 15,914	\$ 16,391	\$ 16,883	\$ 17,389	\$ 17,911	\$ 18,448	\$ 19,002	\$ 19,572
	Total: Water Fund Operations - Water Distribution	\$ 1,260,779	\$ 1,436,412	\$ 1,497,968	\$ 1,562,124	\$ 1,629,598	\$ 1,693,151	\$ 1,759,446	\$ 1,829,281	\$ 1,902,915	\$ 1,980,534	\$ 2,062,748

Water Fund Operations - 7100, continued		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Fund 507 Water Fund												
Division 7120 Water Treatment Plant												
Salaries and Benefits												
61210 Salaries - Regular	3	\$ 928,765	\$ 1,013,709	\$ 1,044,120	\$ 1,075,444	\$ 1,107,707	\$ 1,140,938	\$ 1,175,167	\$ 1,210,422	\$ 1,246,734	\$ 1,284,136	\$ 1,322,660
61211 Salaries - Sick Leave	3	-	-	-	-	-	-	-	-	-	-	-
61212 Salaries - Vacation	3	-	-	-	-	-	-	-	-	-	-	-
61215 Salaries - Standby	3	\$ 6,000	\$ 6,000	\$ 6,180	\$ 6,365	\$ 6,556	\$ 6,753	\$ 6,956	\$ 7,164	\$ 7,379	\$ 7,601	\$ 7,829
61216 Salary - Shift Differential	3	\$ 7,200	\$ 7,200	\$ 7,416	\$ 7,638	\$ 7,868	\$ 8,104	\$ 8,347	\$ 8,597	\$ 8,855	\$ 9,121	\$ 9,394
61217 Salaries - ADM Payoff	3	\$ 2,974	\$ 2,910	\$ 2,997	\$ 3,087	\$ 3,180	\$ 3,275	\$ 3,373	\$ 3,475	\$ 3,579	\$ 3,686	\$ 3,797
61310 Wages - Extra Help	3	\$ 20,000	\$ 20,000	\$ 20,600	\$ 21,218	\$ 21,855	\$ 22,510	\$ 23,185	\$ 23,881	\$ 24,597	\$ 25,335	\$ 26,095
61430 Overtime - Regular	3	\$ 15,500	\$ 15,500	\$ 15,865	\$ 16,444	\$ 16,937	\$ 17,445	\$ 17,969	\$ 18,508	\$ 19,063	\$ 19,635	\$ 20,224
61431 Overtime - Holiday	3	\$ 14,862	\$ 16,389	\$ 18,028	\$ 19,831	\$ 21,814	\$ 23,985	\$ 26,395	\$ 29,094	\$ 31,938	\$ 35,131	\$ 38,644
61501 Medicare	4	\$ 183,532	\$ 175,861	\$ 193,447	\$ 212,792	\$ 234,071	\$ 257,478	\$ 283,226	\$ 311,548	\$ 342,703	\$ 376,974	\$ 414,671
61502 Health Plan	5	\$ 306,451	\$ 325,271	\$ 352,539	\$ 379,949	\$ 408,685	\$ 442,221	\$ 484,888	\$ 531,935	\$ 584,773	\$ 643,639	\$ 704,470
61503 PERS	3	\$ 61,745	\$ 66,815	\$ 70,884	\$ 73,011	\$ 75,201	\$ 77,457	\$ 79,781	\$ 82,174	\$ 84,639	\$ 87,176	\$ 89,794
61504 Workers Compensation	4	\$ 423	\$ 433	\$ 476	\$ 524	\$ 576	\$ 634	\$ 697	\$ 767	\$ 844	\$ 928	\$ 1,021
61505 Life Insurance	4	\$ 23,678	\$ 24,473	\$ 25,920	\$ 28,612	\$ 32,574	\$ 36,831	\$ 41,414	\$ 46,355	\$ 51,661	\$ 57,400	\$ 63,576
61507 Dental / Vision	4	-	-	-	-	-	-	-	-	-	-	-
61508 Premium Incentive - Health	4	-	\$ 20,436	\$ 22,480	\$ 24,728	\$ 27,200	\$ 29,920	\$ 32,912	\$ 36,204	\$ 39,824	\$ 43,806	\$ 48,187
Supplies and Services												
62110 Heat/Power - Electric (7)	7	\$ 700,000	\$ 561,000	\$ 563,440	\$ 606,778	\$ 631,049	\$ 666,291	\$ 682,542	\$ 709,844	\$ 738,238	\$ 767,767	\$ 798,478
62112 Heat/Power - Gas (7)	7	\$ 2,500	\$ 1,700	\$ 1,768	\$ 1,839	\$ 1,912	\$ 1,989	\$ 2,068	\$ 2,151	\$ 2,237	\$ 2,327	\$ 2,420
62170 Heat/Power - Lift Pumps (7)	7	\$ 300,000	\$ 221,000	\$ 229,840	\$ 239,034	\$ 248,595	\$ 258,539	\$ 268,820	\$ 279,636	\$ 290,821	\$ 302,454	\$ 314,552
62199 Energy Eff. Contra Expense	7	-	\$ (117,389)	\$ (122,085)	\$ (126,968)	\$ (132,047)	\$ (137,329)	\$ (142,822)	\$ (148,535)	\$ (154,476)	\$ (160,655)	\$ (167,082)
62201 TEL - Service	2	\$ 3,500	\$ 3,500	\$ 3,605	\$ 3,713	\$ 3,825	\$ 3,939	\$ 4,057	\$ 4,179	\$ 4,305	\$ 4,434	\$ 4,567
62202 TEL - Installation	2	\$ 500	\$ 500	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580	\$ 597	\$ 615	\$ 633	\$ 652
62210 TEL - Cellular Phone	2	\$ 2,000	\$ 2,000	\$ 2,060	\$ 2,122	\$ 2,185	\$ 2,251	\$ 2,319	\$ 2,388	\$ 2,460	\$ 2,534	\$ 2,610
62250 TEL - Internet	2	\$ 480	\$ 501	\$ 516	\$ 532	\$ 547	\$ 564	\$ 581	\$ 598	\$ 616	\$ 635	\$ 654
62301 Postage & Freight	2	\$ 2,500	\$ 2,500	\$ 2,575	\$ 2,652	\$ 2,732	\$ 2,814	\$ 2,898	\$ 2,985	\$ 3,075	\$ 3,167	\$ 3,262
62401 Advertising	2	\$ 6,000	\$ 5,000	\$ 5,150	\$ 5,305	\$ 5,464	\$ 5,628	\$ 5,796	\$ 5,970	\$ 6,149	\$ 6,334	\$ 6,524
62501 Office Supplies	2	\$ 5,000	\$ 5,000	\$ 5,150	\$ 5,305	\$ 5,464	\$ 5,628	\$ 5,796	\$ 5,970	\$ 6,149	\$ 6,334	\$ 6,524
62505 Supplies - Photo	2	\$ -	\$ 2,000	\$ 2,060	\$ 2,122	\$ 2,185	\$ 2,251	\$ 2,319	\$ 2,388	\$ 2,460	\$ 2,534	\$ 2,610
62507 Computer Forms & Supplies	2	\$ 2,000	\$ 2,000	\$ 2,060	\$ 2,122	\$ 2,185	\$ 2,251	\$ 2,319	\$ 2,388	\$ 2,460	\$ 2,534	\$ 2,610
62508 Photocopy Machine	2	\$ 250	\$ 1,600	\$ 1,648	\$ 1,697	\$ 1,748	\$ 1,801	\$ 1,855	\$ 1,910	\$ 1,968	\$ 2,027	\$ 2,088
62599 Photocopy Charges - ISF	2	\$ 100	\$ 100	\$ 103	\$ 106	\$ 109	\$ 113	\$ 116	\$ 119	\$ 123	\$ 127	\$ 130
62601 Printing & Binding	2	\$ 5,000	\$ 5,000	\$ 5,150	\$ 5,305	\$ 5,464	\$ 5,628	\$ 5,796	\$ 5,970	\$ 6,149	\$ 6,334	\$ 6,524
62701 Professional Services	2	\$ 80,000	\$ 150,000	\$ 154,500	\$ 159,135	\$ 163,909	\$ 168,826	\$ 173,891	\$ 179,108	\$ 184,481	\$ 190,016	\$ 195,716
62706 Employee Physical Exams	2	\$ 100	\$ 100	\$ 103	\$ 106	\$ 109	\$ 113	\$ 116	\$ 119	\$ 123	\$ 127	\$ 130
62713 Annual Audit	2	\$ 3,605	\$ 3,605	\$ 3,713	\$ 3,825	\$ 3,939	\$ 4,057	\$ 4,179	\$ 4,305	\$ 4,434	\$ 4,567	\$ 4,704
62717 Water Contractors	2	\$ 5,000	\$ 5,000	\$ 5,150	\$ 5,305	\$ 5,464	\$ 5,628	\$ 5,796	\$ 5,970	\$ 6,149	\$ 6,334	\$ 6,524
62724 Levee Assessments	2	\$ 12,250	\$ 12,250	\$ 12,618	\$ 12,996	\$ 13,386	\$ 13,787	\$ 14,201	\$ 14,627	\$ 15,066	\$ 15,518	\$ 15,983
62733 Willdan Fees	2	\$ 2,300	\$ 2,300	\$ 2,369	\$ 2,440	\$ 2,513	\$ 2,589	\$ 2,666	\$ 2,746	\$ 2,828	\$ 2,914	\$ 3,001
62742 DR/CR Card Processing Fees	2	\$ 14,000	\$ 14,000	\$ 14,420	\$ 14,853	\$ 15,298	\$ 15,757	\$ 16,230	\$ 16,717	\$ 17,218	\$ 17,735	\$ 18,267
62761 Water Conservation	2	\$ 50,000	\$ 250,000	\$ 257,500	\$ 265,225	\$ 273,182	\$ 281,377	\$ 289,819	\$ 298,513	\$ 307,468	\$ 316,693	\$ 326,193
R62701 Professional Services	2	\$ 33,932	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
62801 Professional Development	2	\$ 5,000	\$ 10,300	\$ 10,300	\$ 10,609	\$ 10,927	\$ 11,255	\$ 11,593	\$ 11,941	\$ 12,299	\$ 12,668	\$ 13,048
63101 Dues & Subscriptions	2	\$ 50,000	\$ 50,000	\$ 51,500	\$ 53,045	\$ 54,636	\$ 56,275	\$ 57,964	\$ 59,703	\$ 61,494	\$ 63,339	\$ 65,239
63202 Rental - Heavy Equipment	2	\$ 2,000	\$ 2,000	\$ 2,060	\$ 2,122	\$ 2,185	\$ 2,251	\$ 2,319	\$ 2,388	\$ 2,460	\$ 2,534	\$ 2,610
63320 O&M Computer System	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-Total: Water Fund Operations - Water Treatment Plant		\$ 2,903,647	\$ 2,934,764	\$ 3,063,611	\$ 3,197,577	\$ 3,338,173	\$ 3,469,226	\$ 3,605,448	\$ 3,748,503	\$ 3,898,852	\$ 4,056,956	\$ 4,223,476

Water Fund Operations - 7100, continued		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Fund 507 Water Fund												
Division 7120 Water Treatment Plant, continued												
Special Equipment O&M												
63401	Special Equipment O&M	\$ 1,500	\$ 1,500	\$ 1,545	\$ 1,591	\$ 1,639	\$ 1,688	\$ 1,739	\$ 1,791	\$ 1,845	\$ 1,900	\$ 1,957
63405	SPEC O&M - Reagents & Medi	\$ 3,000	\$ 3,000	\$ 3,090	\$ 3,183	\$ 3,278	\$ 3,377	\$ 3,478	\$ 3,582	\$ 3,690	\$ 3,800	\$ 3,914
63420	SPEC O&M - Compressor	\$ 1,000	\$ 1,000	\$ 1,030	\$ 1,061	\$ 1,093	\$ 1,126	\$ 1,159	\$ 1,194	\$ 1,230	\$ 1,267	\$ 1,305
63430	SPEC O&M - Electric Control	\$ 5,000	\$ 5,000	\$ 7,725	\$ 7,957	\$ 8,195	\$ 8,441	\$ 8,695	\$ 8,955	\$ 9,224	\$ 9,501	\$ 9,786
63431	SPEC O&M - Elec Spare Part	\$ 10,000	\$ 10,000	\$ 10,300	\$ 10,609	\$ 10,927	\$ 11,255	\$ 11,593	\$ 11,941	\$ 12,299	\$ 12,668	\$ 13,048
63432	SPEC O&M - Elec Motors	\$ -	\$ 2,500	\$ 2,575	\$ 2,652	\$ 2,732	\$ 2,814	\$ 2,898	\$ 2,985	\$ 3,075	\$ 3,167	\$ 3,262
63433	SPEC O&M - Instrumentation	\$ 55,000	\$ 55,000	\$ 56,650	\$ 58,350	\$ 60,100	\$ 61,903	\$ 63,760	\$ 65,673	\$ 67,643	\$ 69,672	\$ 71,763
63450	SPEC O&M - Lubrication	\$ 2,500	\$ 2,500	\$ 2,575	\$ 2,652	\$ 2,732	\$ 2,814	\$ 2,898	\$ 2,985	\$ 3,075	\$ 3,167	\$ 3,262
63451	SPEC O&M - Major MTCE	\$ 150,000	\$ 200,000	\$ 206,000	\$ 212,180	\$ 218,545	\$ 225,102	\$ 231,855	\$ 238,810	\$ 245,975	\$ 253,354	\$ 260,955
63456	SPEC O&M - Machine	\$ 2,000	\$ 2,000	\$ 2,060	\$ 2,122	\$ 2,185	\$ 2,251	\$ 2,319	\$ 2,388	\$ 2,460	\$ 2,534	\$ 2,610
63457	SPEC O&M - Mech Supplies	\$ 13,000	\$ 13,000	\$ 13,390	\$ 13,792	\$ 14,205	\$ 14,632	\$ 15,071	\$ 15,523	\$ 15,988	\$ 16,468	\$ 16,962
63460	SPEC O&M - Mech Chem Feed	\$ 14,000	\$ 14,000	\$ 14,420	\$ 14,853	\$ 15,298	\$ 15,757	\$ 16,230	\$ 16,718	\$ 17,218	\$ 17,735	\$ 18,267
63463	SPEC O&M - Mech Spare Part	\$ 10,000	\$ 10,000	\$ 10,300	\$ 10,609	\$ 10,927	\$ 11,255	\$ 11,593	\$ 11,941	\$ 12,299	\$ 12,668	\$ 13,048
63470	SPEC O&M - Lab Supplies	\$ 2,000	\$ 2,500	\$ 2,575	\$ 2,652	\$ 2,732	\$ 2,814	\$ 2,898	\$ 2,985	\$ 3,075	\$ 3,167	\$ 3,262
63451	Vehicle MTCE - ISF	\$ 65,846	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63501	Vehicle MTCE - ISF	\$ 11,835	\$ 15,414	\$ 15,876	\$ 16,353	\$ 16,843	\$ 17,349	\$ 17,869	\$ 18,405	\$ 18,957	\$ 19,526	\$ 20,112
63505	Vehicle Maint Fuel	\$ 579	\$ 8,810	\$ 9,074	\$ 9,347	\$ 9,627	\$ 9,916	\$ 10,213	\$ 10,520	\$ 10,835	\$ 11,160	\$ 11,495
63599	Vehicle Replacement Fee	\$ 10,580	\$ 14,387	\$ 14,819	\$ 15,263	\$ 15,721	\$ 16,193	\$ 16,678	\$ 17,179	\$ 17,694	\$ 18,225	\$ 18,772
63601	BLDG O&M - MTCE	\$ 25,000	\$ 25,000	\$ 25,750	\$ 26,523	\$ 27,318	\$ 28,138	\$ 28,982	\$ 29,851	\$ 30,747	\$ 31,669	\$ 32,619
63603	BLDG O&M - Janitorial	\$ 1,500	\$ 1,500	\$ 1,545	\$ 1,591	\$ 1,639	\$ 1,688	\$ 1,739	\$ 1,791	\$ 1,845	\$ 1,900	\$ 1,957
63604	SPEC O&M - Laundry	\$ 3,200	\$ 4,200	\$ 4,326	\$ 4,456	\$ 4,589	\$ 4,727	\$ 4,869	\$ 5,015	\$ 5,165	\$ 5,320	\$ 5,480
63684	SPEC O&M - Landscape	\$ 15,000	\$ 15,000	\$ 15,450	\$ 15,914	\$ 16,391	\$ 16,883	\$ 17,389	\$ 17,911	\$ 18,448	\$ 19,002	\$ 19,572
Chemicals												
63701	Chemicals (7)	\$ 5,000	\$ 3,400	\$ 3,570	\$ 3,749	\$ 3,936	\$ 4,133	\$ 4,339	\$ 4,556	\$ 4,784	\$ 5,023	\$ 5,275
63702	Chlorine (7)	\$ 45,000	\$ 30,600	\$ 32,130	\$ 33,737	\$ 35,423	\$ 37,194	\$ 39,054	\$ 41,007	\$ 43,057	\$ 45,210	\$ 47,471
63703	Alum (7)	\$ 160,000	\$ 98,600	\$ 103,530	\$ 108,707	\$ 114,142	\$ 119,849	\$ 125,847	\$ 132,133	\$ 138,740	\$ 145,677	\$ 152,961
63704	Carbon (7)	\$ 25,000	\$ 30,600	\$ 32,130	\$ 33,737	\$ 35,423	\$ 37,194	\$ 39,054	\$ 41,007	\$ 43,057	\$ 45,210	\$ 47,471
63705	Anthracite (7)	\$ 5,000	\$ 3,400	\$ 3,570	\$ 3,749	\$ 3,936	\$ 4,133	\$ 4,339	\$ 4,556	\$ 4,784	\$ 5,023	\$ 5,275
63706	Polymer (7)	\$ 20,000	\$ 13,600	\$ 14,280	\$ 14,994	\$ 15,744	\$ 16,531	\$ 17,357	\$ 18,225	\$ 19,137	\$ 20,093	\$ 21,098
63707	Lime (7)	\$ 150,000	\$ 88,400	\$ 92,820	\$ 97,461	\$ 102,334	\$ 107,451	\$ 112,823	\$ 118,464	\$ 124,388	\$ 130,607	\$ 137,137
63708	Fluoride (7)	\$ 65,000	\$ 37,400	\$ 39,270	\$ 41,234	\$ 43,295	\$ 45,460	\$ 47,733	\$ 50,120	\$ 52,626	\$ 55,257	\$ 58,020
63714	Citric Acid (7)	\$ 20,000	\$ 13,600	\$ 14,280	\$ 14,994	\$ 15,744	\$ 16,531	\$ 17,357	\$ 18,225	\$ 19,137	\$ 20,093	\$ 21,098
63720	Weed Control (7)	\$ 15,000	\$ 10,200	\$ 10,710	\$ 11,248	\$ 11,808	\$ 12,398	\$ 13,018	\$ 13,669	\$ 14,352	\$ 15,070	\$ 15,824
63720	Lime (7)	\$ 8,711	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Supplies and Services												
63801	Tools, Supplies & Equip <5k	\$ 10,000	\$ 10,000	\$ 10,300	\$ 10,609	\$ 10,927	\$ 11,255	\$ 11,593	\$ 11,941	\$ 12,299	\$ 12,668	\$ 13,048
63901	Training Program / Aids	\$ 20,000	\$ 20,000	\$ 20,600	\$ 21,218	\$ 21,855	\$ 22,510	\$ 23,185	\$ 23,881	\$ 24,597	\$ 25,335	\$ 26,095
63904	Manuals / Codes	\$ 500	\$ 500	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580	\$ 597	\$ 615	\$ 633	\$ 652
63909	Safety Equipment	\$ 10,000	\$ 7,500	\$ 7,725	\$ 7,957	\$ 8,195	\$ 8,441	\$ 8,695	\$ 8,955	\$ 9,224	\$ 9,501	\$ 9,786
64101	Raw Water Purchases	\$ 805,000	\$ 1,100,000	\$ 1,165,076	\$ 1,234,001	\$ 1,307,004	\$ 1,384,326	\$ 1,466,222	\$ 1,552,963	\$ 1,644,835	\$ 1,742,143	\$ 1,845,207
64151	City Fac SWR Charges	\$ 442	\$ 513	\$ 528	\$ 544	\$ 561	\$ 577	\$ 595	\$ 613	\$ 631	\$ 650	\$ 669
64310	Liability Insurance	\$ 47,038	\$ 50,894	\$ 52,421	\$ 53,993	\$ 55,613	\$ 57,282	\$ 59,000	\$ 60,770	\$ 62,593	\$ 64,471	\$ 66,405
64910	Depreciation (6)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
65201	Interest (6)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
65202	Principal (6)	\$ -	\$ 78,165	\$ 61,860	\$ 69,231	\$ 77,051	\$ 85,343	\$ 106,176	\$ 116,318	\$ 127,052	\$ 138,406	\$ 150,413
65801	Computer Maint/Rep - ISF	\$ 14,715	\$ 14,897	\$ 15,344	\$ 15,804	\$ 16,278	\$ 16,767	\$ 17,270	\$ 17,788	\$ 18,321	\$ 18,871	\$ 19,437
66001	Other Material & Supplies	\$ 20,000	\$ 20,000	\$ 20,600	\$ 21,218	\$ 21,855	\$ 22,510	\$ 23,185	\$ 23,881	\$ 24,597	\$ 25,335	\$ 26,095
69201	Equipment	\$ 59,250	\$ 35,000	\$ 36,050	\$ 37,132	\$ 38,245	\$ 39,393	\$ 40,575	\$ 41,792	\$ 43,046	\$ 44,337	\$ 45,667
Sub-Total: Water Fund Operations - Water Treatment Plant		\$ 1,908,196	\$ 2,176,435	\$ 2,219,196	\$ 2,328,494	\$ 2,443,494	\$ 2,564,505	\$ 2,703,769	\$ 2,838,278	\$ 2,979,856	\$ 3,128,889	\$ 3,285,784
Total: Water Fund Operations - Water Treatment Plant		\$ 4,811,843	\$ 5,111,199	\$ 5,282,807	\$ 5,528,072	\$ 5,781,668	\$ 6,033,731	\$ 6,309,217	\$ 6,586,781	\$ 6,878,709	\$ 7,185,885	\$ 7,509,260

CITY OF YUBA CITY
 WATER RATE STUDY
 Operating Revenue and Expenses

EXHIBIT 1

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Water Fund Operations - 7300											
Fund 533 Water HWS-Region 1 Fund											
Division 7341											
62701 Professional Services	10	\$ 1,125	\$ 1,313	\$ 1,313	\$ 1,313	\$ 1,313	\$ 1,313	\$ 1,313	\$ 1,313	\$ 1,313	\$ 1,313
65201 Interest	See Ex.3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fund 534 Water HWS-Region 2/3 Fund											
Division 7342											
62701 Professional Services	10	\$ 1,125	\$ 1,313	\$ 1,313	\$ 1,313	\$ 1,313	\$ 1,313	\$ 1,313	\$ 1,313	\$ 1,313	\$ 1,313
65201 Interest	See Ex.3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total: Water Fund Operations - Region 1 & Region 2/3 Funds		\$ 2,250	\$ 2,625	\$ 2,625	\$ 2,625	\$ 2,625					
Total: Water Fund Operations - Operating Transfers		\$ 1,716,500	\$ 1,754,300	\$ 1,822,472	\$ 1,893,311	\$ 1,966,922	\$ 2,043,413	\$ 2,122,898	\$ 2,205,496	\$ 2,291,328	\$ 2,380,521
Total: Water Fund Operations - Water Treatment Plant		\$ 4,811,843	\$ 5,111,199	\$ 5,282,807	\$ 5,526,072	\$ 5,781,668	\$ 6,033,731	\$ 6,309,217	\$ 6,586,781	\$ 6,878,709	\$ 7,185,885
Total: Water Fund Operations - Water Distribution		\$ 1,260,779	\$ 1,436,412	\$ 1,497,968	\$ 1,562,124	\$ 1,629,598	\$ 1,693,151	\$ 1,759,446	\$ 1,829,281	\$ 1,902,915	\$ 1,980,634
Grand Total: Water Fund Operations		\$ 7,791,372	\$ 8,304,536	\$ 8,605,872	\$ 8,984,132	\$ 9,380,812	\$ 9,772,920	\$ 10,194,186	\$ 10,624,183	\$ 11,075,576	\$ 11,549,665

Non-Cash Items, Show for Reference Purposes:

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual Depreciation Expense (6)											
Water Distribution Depreciation	2	\$ 2,877,764	\$ 2,761,259	\$ 2,844,096	\$ 2,929,419	\$ 3,017,302	\$ 3,107,621	\$ 3,297,087	\$ 3,386,000	\$ 3,497,880	\$ 3,602,816
Water Treatment Plant Depreciation	2	\$ 1,951,400	\$ 1,930,409	\$ 1,988,321	\$ 2,047,971	\$ 2,109,410	\$ 2,237,873	\$ 2,305,009	\$ 2,374,159	\$ 2,445,384	\$ 2,518,746
Total: Annual Depreciation Expense		\$ 4,829,163	\$ 4,691,667	\$ 4,832,418	\$ 4,977,390	\$ 5,126,712	\$ 5,280,513	\$ 5,602,096	\$ 5,770,159	\$ 5,943,264	\$ 6,121,562
Operating Transfers (6)											
Z69990 Operating Transfers In (Fund 507-7110)	10	\$ (475,636)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Z69990 Operating Transfers Out (Fund 507-7110)	10	\$ 711,098	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Z69970 Debt Service Transfer Out (Fund 507-7120)	10	\$ 792,633	\$ 792,676	\$ 792,306	\$ 792,565	\$ 792,280	\$ 792,509	\$ 791,718	\$ 791,548	\$ 791,948	\$ 791,723
Z69970 Debt Service Transfer Out (Fund 509)	10	\$ 1,498,982	\$ 1,499,119	\$ 1,498,009	\$ 1,498,786	\$ 1,497,932	\$ 1,498,619	\$ 1,496,245	\$ 1,495,735	\$ 1,496,935	\$ 1,496,260
Z69990 Operating Transfers Out (Fund 509)	10	\$ 207,500	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Z69980 Operating Transfers In (Fund 533)	10	\$ -	\$ (222,944)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Z69980 Operating Transfers In (Fund 534)	10	\$ -	\$ (677,354)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total: Water Fund Operations - Operating Transfers		\$ 2,734,587	\$ 1,411,487	\$ 2,290,315	\$ 2,291,350	\$ 2,290,213	\$ 2,291,853	\$ 2,287,963	\$ 2,287,283	\$ 2,288,883	\$ 2,287,983

FORECASTING ASSUMPTIONS:

ECONOMIC VARIABLES	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1 Customer Growth	-	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.26%
2 General Cost Inflation	-	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
3 Labor Cost Inflation (10)	-	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
4 Health Benefits Cost Inflation (11)	-	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
5 Retirement Benefits Cost Inflation (12)	-	14.64%	8.38%	7.77%	7.56%	3.31%	3.00%	3.00%	3.00%	3.00%	3.00%
6 Chemicals	-	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
7 Energy (13)	-	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
8 Raw Water (14)	-	5.92%	5.92%	5.92%	5.92%	5.92%	5.92%	5.92%	5.92%	5.92%	5.92%
9 Internal Transfers	-	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
10 No Escalation	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

- Revenues for FY 2014/15-2015/16 are from the City's Actual FY 2014/15 and Proposed FY 2015/16 Pro Forma Analysis (files: Water Debt Coverage Ratio 14-15.xls).
- Water Sales were reduced in FY 2015/16 to account for State mandated conservation. Variable revenues (estimated at 48% of total revenues) were reduced by 32%.
- Interest earnings are per the City's budget in FY 2014/15, and calculated in the Financial Plan for all future years.
- Connection fee revenue for FY 2014/15-2015/16 are per the City's budget and includes \$1,630,900 in Proposition 84 Water Line Grant funding in FY 2015/16. NBS has conservatively estimated future connection fee revenue based on 50 new 1-inch connections per year, per City staff's direction on 03/19/2015.
- Inflationary factors are applied to these expenses to project costs in 2015/16 and beyond.
- The City's budgeted depreciation expense is included in this forecast for purposes of the analysis. Contributions to reserves in the Financial Plan and Reserve Fund summaries in this model, and Capital Improvement Program funding is excluded in Exhibit 2 (CIP). Operating Transfers were also excluded from this analysis as they do not represent actual cash expenditures. All Operating Transfer amounts are set to zero for future years as they vary annually, with the exception of Debt Service Operating Transfers, which are equal to Debt Service payments that are to be satisfied with Water Rates or Connection Fees (see Exhibit 3 for detail).
- FY 2015/16 Budgeted expenses have been reduced by 32%, which is equal to the CA State mandated conservation requirement. These expenses are directly related to the amount of water processed or sold.
- Principal and interest is for the Opierra Bank of America debt service and the portion thereof that Fund 507 is responsible for. The Opierra debt is charged to divisions instead of using a debt service fund. Data provided by City staff, June 2015, file: Opierra - Bank of America Debt Service.xlsx.
- Per the City's direction, growth is based on 50 new 1-inch water connections per year (meeting with City staff on 03/19/2015).
- Labor Cost Inflation factor increases noticeably for FY 2016/17 as the City eliminates all furloughs. Inflation is expected to be 3% thereafter (meeting with City staff on 03/19/2015).
- Health Benefit Cost Inflation factor was determined by City staff, (meeting with City staff on 03/19/2015).
- Retirement Benefit Cost Inflation factor was determined by City staff, Inflation factor calculated based on retirement benefits costing an average of 30% of the wastewater utilities payroll annually (meeting with City staff on 03/19/2015).
- Energy Cost Inflation factor was determined by City staff (meeting with City staff on 03/19/2015).
- Raw Water Inflation factor was determined by City Staff for SWP water and with the All Urban Consumers San Francisco CPI for NYWD water.

CITY OF YUBA CITY
 WATER RATE STUDY
 Capital Improvement Plan Expenditures

EXHIBIT 2

CAPITAL FUNDING SUMMARY

Funding Sources:	Budget										Projected												
	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	
Grants	\$ 3,985,000	\$ 7,100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Use of Connection Fee Reserves	\$ 1,917,773	\$ 687,525	\$ 220,137	\$ 226,741	\$ 244,798	\$ 252,142	\$ 411,481	\$ 411,589	\$ 411,698	\$ 411,806	\$ 411,914	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SRF Loan Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Use of New Revenue Bond Proceeds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Use of Capital Rehabilitation and Replacement Reserve	\$ 1,705,474	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Rate Revenue	\$ -	\$ 370,075	\$ 1,855,249	\$ 1,910,906	\$ 3,392,002	\$ 3,493,762	\$ 3,170,676	\$ 3,278,032	\$ 3,388,613	\$ 3,502,514	\$ 3,619,835	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Sources of Capital Funds	\$ 7,688,247	\$ 8,157,600	\$ 2,075,386	\$ 2,137,647	\$ 3,636,800	\$ 3,745,904	\$ 3,582,157	\$ 3,689,622	\$ 3,800,310	\$ 3,914,320	\$ 4,031,749	\$ -											
Uses of Capital Funds:																							
Total Project Costs (Inflated to Future Year Dollars)	\$ 7,688,247	\$ 8,157,600	\$ 2,075,386	\$ 2,137,647	\$ 3,636,800	\$ 3,745,904	\$ 3,582,157	\$ 3,689,622	\$ 3,800,310	\$ 3,914,320	\$ 4,031,749	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Funding Surplus (Deficiency)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -										
SRF Loan Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -										
New Revenue Bond Proceeds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -										

Set Capital Spending here: \$ 1,969,269 \$ 1,969,269 \$ 3,251,250 \$ 3,251,250 \$ 3,000,000 \$ 3,000,000 \$ 3,000,000 \$ 3,000,000 \$ 3,000,000 \$ 3,000,000 \$ 3,000,000

Option #2 Total Project Expenditures:	FY 2015/16 -	FY 2019/20
Electrical & Instrumentation Improvements	\$ 1,000,000	\$ 1,000,000
Aquifer Storage Recovery / Second Well	\$ 4,600,000	\$ 4,600,000
Fluoride System Replacement	\$ 200,000	\$ 200,000
Security Improvements	\$ 75,000	\$ 75,000
Carbon Feed System Replacement	\$ 500,000	\$ 500,000
Total:	\$ 6,375,000	\$ 6,375,000

Note: these projects may be included in the approved capital projects list (below).

Annual % Of Project Expenditures:	2016	2017	2018	2019	2020	Total
	0%	15%	15%	35%	35%	100%

FORECASTING ASSUMPTIONS:

Economic Variables	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual Construction Cost Inflation, Per Engineering News Record (1)	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Cumulative Construction Cost Multiplier from 2015	1.00	1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.27	1.30	1.34

(1) For reference purposes, the annual Construction Cost Inflation percentage is the 10 year average change in the Construction Cost Index for 2004-2014. Source: Engineering News Record website (<http://enr.construction.com>).

CITY OF YUBA CITY
WATER RATE STUDY
Debt Service

EXISTING DEBT OBLIGATIONS	Budget		Projected											
	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25			
Annual Repayment Schedules:														
Water Revenue Refunding Bonds - 2013 - \$21,710,000 (1)														
Principal Payment	\$ 805,000	\$ 810,000	\$ 815,000	\$ 825,000	\$ 835,000	\$ 850,000	\$ 865,000	\$ 880,000	\$ 900,000	\$ 925,000	\$ 950,000			
Interest Payment	\$ 586,318	\$ 581,488	\$ 575,008	\$ 566,043	\$ 554,905	\$ 541,545	\$ 525,820	\$ 507,655	\$ 486,975	\$ 463,575	\$ 437,675			
Subtotal: Annual Debt Service	\$ 1,391,318	\$ 1,391,488	\$ 1,390,008	\$ 1,391,043	\$ 1,389,905	\$ 1,391,545	\$ 1,390,820	\$ 1,387,655	\$ 1,386,975	\$ 1,388,575	\$ 1,387,675			
Coverage Requirement (\$-Amnt above annual payment) (2)	\$ 1,669,854	\$ 1,669,854	\$ 1,669,854	\$ 1,669,854	\$ 1,669,854	\$ 1,669,854	\$ 1,669,104	\$ 1,669,104	\$ 1,669,104	\$ 1,669,104	\$ 1,669,104			
Reserve Requirement (total fund balance) (3)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Water SRF Loan - Region 1 - \$5,927,874 (4)														
Principal Payment	\$ 243,464	\$ 249,593	\$ 255,876	\$ 262,317	\$ 268,921	\$ 275,039	\$ 282,631	\$ 289,745	\$ 297,039	\$ 304,517	\$ 312,183			
Interest Payment	\$ 135,048	\$ 128,919	\$ 122,636	\$ 116,195	\$ 109,591	\$ 102,822	\$ 95,681	\$ 88,767	\$ 81,473	\$ 73,995	\$ 66,330			
Subtotal: Annual Debt Service	\$ 378,512	\$ 378,512	\$ 378,512	\$ 378,512	\$ 378,512	\$ 378,512	\$ 378,512	\$ 378,512	\$ 378,512	\$ 378,512	\$ 378,512			
Reserve Requirement (total fund balance) (5)	\$ 113,554	\$ 151,405	\$ 189,256	\$ 227,107	\$ 264,959	\$ 302,810	\$ 340,661	\$ 378,512	\$ 378,512	\$ 378,512	\$ 378,512			
Water SRF Loan - Region 2/3 - \$18,381,507 (6)														
Principal Payment	\$ 768,555	\$ 786,205	\$ 804,262	\$ 822,733	\$ 841,628	\$ 860,957	\$ 880,730	\$ 900,957	\$ 921,649	\$ 942,816	\$ 964,469			
Interest Payment	\$ 381,469	\$ 363,818	\$ 345,762	\$ 327,291	\$ 308,396	\$ 289,067	\$ 269,294	\$ 249,066	\$ 228,375	\$ 207,208	\$ 185,555			
Subtotal: Annual Debt Service	\$ 1,150,024	\$ 1,150,024	\$ 1,150,024	\$ 1,150,024	\$ 1,150,024	\$ 1,150,024	\$ 1,150,024	\$ 1,150,024	\$ 1,150,024	\$ 1,150,024	\$ 1,150,024			
Reserve Requirement (total fund balance) (7)	\$ 345,007	\$ 460,009	\$ 575,012	\$ 690,014	\$ 805,017	\$ 920,019	\$ 1,035,021	\$ 1,150,024	\$ 1,150,024	\$ 1,150,024	\$ 1,150,024			
Grand Total: Existing Annual Debt Service	\$ 2,919,863	\$ 2,920,023	\$ 2,918,543	\$ 2,919,578	\$ 2,918,441	\$ 2,920,081	\$ 2,919,356	\$ 2,916,191	\$ 2,915,511	\$ 2,917,111	\$ 2,916,211			
Grand Total: Existing Annual Coverage Requirement	\$ 1,669,854	\$ 1,669,854	\$ 1,669,854	\$ 1,669,854	\$ 1,669,854	\$ 1,669,854	\$ 1,669,104	\$ 1,669,104	\$ 1,669,104	\$ 1,669,104	\$ 1,669,104			
Grand Total: Existing Debt Reserve Target	\$ 488,561	\$ 611,414	\$ 764,268	\$ 917,121	\$ 1,069,975	\$ 1,222,829	\$ 1,375,682	\$ 1,528,536	\$ 1,528,536	\$ 1,528,536	\$ 1,528,536			
Existing Annual Debt Obligations to be Satisfied by Water Customer SRF Surcharge (8):														
Existing Annual Debt Service	\$ 628,228	\$ 628,228	\$ 628,228	\$ 628,228	\$ 628,228	\$ 628,228	\$ 628,228	\$ 628,228	\$ 628,228	\$ 628,228	\$ 628,228			
Existing Annual Coverage Requirement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Existing Debt Reserve Target	\$ 188,468	\$ 251,291	\$ 314,114	\$ 376,937	\$ 439,760	\$ 502,583	\$ 565,405	\$ 628,228	\$ 628,228	\$ 628,228	\$ 628,228			
Existing Annual Debt Obligations to be Satisfied by Water Rates (9):														
Existing Annual Debt Service	\$ 792,633	\$ 792,676	\$ 792,306	\$ 792,666	\$ 792,280	\$ 792,690	\$ 792,609	\$ 791,718	\$ 791,648	\$ 791,948	\$ 791,723			
Existing Annual Coverage Requirement	\$ 417,464	\$ 417,464	\$ 417,464	\$ 417,464	\$ 417,464	\$ 417,464	\$ 417,276	\$ 417,276	\$ 417,276	\$ 417,276	\$ 417,276			
Existing Debt Reserve Target	\$ 133,441	\$ 177,922	\$ 222,402	\$ 266,682	\$ 311,363	\$ 355,843	\$ 400,324	\$ 444,804	\$ 444,804	\$ 444,804	\$ 444,804			
Existing Annual Debt Obligations to be Satisfied by Connection Fees (10):														
Existing Annual Debt Service	\$ 1,498,992	\$ 1,498,119	\$ 1,498,009	\$ 1,498,786	\$ 1,497,932	\$ 1,499,162	\$ 1,498,619	\$ 1,496,245	\$ 1,496,735	\$ 1,496,935	\$ 1,498,260			
Existing Annual Coverage Requirement	\$ 1,252,391	\$ 1,252,391	\$ 1,252,391	\$ 1,252,391	\$ 1,252,391	\$ 1,252,391	\$ 1,251,828	\$ 1,251,828	\$ 1,251,828	\$ 1,251,828	\$ 1,251,828			
Existing Debt Reserve Target	\$ 158,661	\$ 182,201	\$ 227,752	\$ 273,302	\$ 318,953	\$ 364,403	\$ 409,953	\$ 455,604	\$ 455,604	\$ 455,604	\$ 455,604			

(1) Per City staff notes on the Debt Service schedule, it is indicated that the Water Revenue Refunding Bonds are allocated to Fund 507 (Operating) at 25% and Fund 508 (Connection) at 75%.

(2) The City must have net revenues that are at least equal to 120% of the maximum annual debt service payment (Official Statement, Parity Obligation, section (b), page 10, file: A_007.pdf).

(3) There is no reserve fund requirement for this debt issue (Official Statement, page 10, file: A_007.pdf), confirmed with City staff via email 03/23/2015.

(4) Per City staff notes on the Debt Service schedule, it is indicated that the Water SRF Loan Region 1 is allocated to Fund 533 (Debt Service) at 41.1%, Fund 507 (Operating) at 29.1%, and Fund 509 (Connection) at 29.8%.

(5) The Reserve Requirement is equal to two semiannual payments which shall be accumulated during the first ten years of the Loan Repayment Term and thereafter maintained at that level (file: SRF Funding Agreement--Region 1.pdf, Article B-4, pg. 25).

(6) Per City staff notes on the Debt Service schedule, it is indicated that the Water SRF Loan Region 2/3 is allocated to Fund 534 (Debt Service) at 41.1%, Fund 507 (Operating) at 29.1%, and Fund 509 (Connection) at 29.8%.

(7) The Reserve Requirement is equal to two semiannual payments which shall be accumulated during the first ten years of the Loan Repayment Term and thereafter maintained at that level (file: Region 2-3 SRF Funding Agreement.pdf, Article B-4, pg. 25).

(8) Existing Debt Obligations are allocated as follows: Water SRF Loan- Region 1 and Region 2/3 at 41.1%.

(9) Existing Debt Obligations are allocated as follows: Water Revenue Refunding Bonds - 2013 at 25% and Water SRF Loan- Region 1 and Region 2/3 at 29.1%.

(10) Existing Debt Obligations are allocated as follows: Water Revenue Refunding Bonds - 2013 at 75% and Water SRF Loan- Region 1 and Region 2/3 at 29.8%.

CITY OF YUBA CITY
WATER RATE STUDY
Debt Service

NEW DEBT FINANCING ASSUMPTIONS:

Long-Term Debt Terms	State Revolving Fund Loan	Revenue Bonds
Issuance Cost	0.00%	2.00%
Annual Interest Cost (%)	3.00%	5.50%
Term	30	30
Debt Reserve Funded?	Yes	Yes
Coverage Requirement (% above annual pmt)	20%	25%

NEW DEBT OBLIGATIONS:

Annual Repayment Schedules	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SRF Loan Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Principal Payment	-	-	-	-	-	-	-	-	-	-	-
Interest Payment	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Annual Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Revenue Bonds	-	-	-	-	-	-	-	-	-	-	-
Principal Payment	-	-	-	-	-	-	-	-	-	-	-
Interest Payment	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Annual Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total: New Annual Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total: New Annual Coverage Requirement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total: New Debt Reserve Target	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

TOTAL DEBT SERVICE:

Annual Obligations	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual Debt Service	\$ 2,919,853	\$ 2,920,023	\$ 2,918,543	\$ 2,919,578	\$ 2,918,441	\$ 2,920,081	\$ 2,919,356	\$ 2,916,191	\$ 2,915,511	\$ 2,917,111	\$ 2,916,211
Annual Coverage Requirement	\$ 1,669,854	\$ 1,669,854	\$ 1,669,854	\$ 1,669,854	\$ 1,669,854	\$ 1,669,854	\$ 1,669,104	\$ 1,669,104	\$ 1,669,104	\$ 1,669,104	\$ 1,669,104
Total Debt Reserve Target	\$ 458,561	\$ 611,414	\$ 764,268	\$ 917,121	\$ 1,069,975	\$ 1,222,829	\$ 1,375,682	\$ 1,528,536	\$ 1,528,536	\$ 1,528,536	\$ 1,528,536

EXHIBIT 4

**CITY OF YUBA CITY
WATER RATE STUDY
Projected Water Rates Under Existing Rate Schedule**

PROJECTED WATER RATES - EXISTING RATE STRUCTURE (NO CHANGES) (1)	Baseline HCF's (2)	Current Rates	
		09/01/14 - 08/31/15	09/01/15 - 08/31/16
Monthly Water Rates (up to baseline hcf)			
1"	15	\$20.98	\$21.59
1 1/2"	30	\$41.96	\$43.18
2"	60	\$83.93	\$86.37
3"	240	\$335.71	\$345.47
4"	480	\$671.42	\$690.95
6"	900	\$1,258.92	\$1,295.52
8"	2,100	\$2,937.48	\$3,022.89
Monthly Variable Water Rates (after baseline hcf)			
Water Flow Rates per Excess HCF		\$1.39	\$1.43
Fire Hydrant Use		\$69.50	\$71.50
Minimum Monthly Usage - Metered (50 HCF at current rate)		\$64.00	\$65.00
Minimum Monthly Usage - Flat			

1. Rates are effective rates as of September 1st, Sections 6-6.18, Water Ordinance.
2. Baseline HCF's per meter size are listed in Water Ordinance 6-6.18.(f)(2), Summary of Charges.

Meter Size	Current Baseline (hcf)	New Baseline (hcf)
1"	15	11
1 1/2"	30	22
2"	60	44
3"	240	176
4"	480	352
6"	900	660
8"	2,100	1,540

CITY OF YUBA CITY
WATER RATE STUDY
Water Cost of Service Analysis/Rate Design

CURRENT VS. PROPOSED WATER RATES:

Water Rate Schedule		Current Rate Structure		Proposed Water Rates					
		Baseline HCF's per month	Current Rates	Baseline HCF's per month	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
Fixed Service Charge		<i>Projected Increase in Rate Rev. (Financial Plan)</i>							
Monthly Service charge					32.00%	19.00%	16.45%	3.85%	3.85%
5/8 inch	15	\$21.59	11	\$28.50	\$33.91	\$39.49	\$41.01	\$42.59	
3/4 inch	15	\$21.59	11	\$28.50	\$33.91	\$39.49	\$41.01	\$42.59	
1 inch	15	\$21.59	11	\$28.50	\$33.91	\$39.49	\$41.01	\$42.59	
1.5 inch	30	\$43.18	22	\$57.00	\$67.83	\$78.98	\$82.03	\$85.18	
2 inch	60	\$86.37	44	\$114.01	\$135.67	\$157.99	\$164.07	\$170.39	
2 inch Turbo	60	\$86.37	44	\$114.01	\$135.67	\$157.99	\$164.07	\$170.39	
3 inch	240	\$345.47	176	\$456.02	\$542.66	\$631.93	\$656.26	\$681.53	
3 inch Compound	240	\$345.47	176	\$456.02	\$542.66	\$631.93	\$656.26	\$681.53	
3 inch Turbo	240	\$345.47	176	\$456.02	\$542.66	\$631.93	\$656.26	\$681.53	
4 inch	480	\$690.95	352	\$912.05	\$1,085.34	\$1,263.88	\$1,312.54	\$1,363.08	
4 inch Compound	480	\$690.95	352	\$912.05	\$1,085.34	\$1,263.88	\$1,312.54	\$1,363.08	
4 inch Turbo	480	\$690.95	352	\$912.05	\$1,085.34	\$1,263.88	\$1,312.54	\$1,363.08	
6 inch	900	\$1,295.52	660	\$1,710.09	\$2,035.00	\$2,369.76	\$2,461.00	\$2,555.74	
8 inch	2,100	\$3,022.89	1,540	\$3,990.21	\$4,748.36	\$5,529.46	\$5,742.34	\$5,963.42	
Commodity Charges for All Water Consumed									
Rate Per HCF of Water Consumed	--	\$1.43	--	\$1.430	\$1.701	\$1.981	\$2.057	\$2.137	
Conservation Level Volumetric (Uniform) Rates²									
Base Level (20% Conservation)	--	--	--	\$1.337	\$1.591	\$1.852	\$1.924	\$1.998	
Scenario 1 (30% Conservation) ³	--	--	--	\$1.430	\$1.701	\$1.981	\$2.057	\$2.137	
Scenario 2 (40% Conservation)	--	--	--	\$1.543	\$1.836	\$2.139	\$2.221	\$2.306	
Scenario 3 (50% Conservation)	--	--	--	\$1.685	\$2.006	\$2.335	\$2.425	\$2.519	
Scenario 4 (60% Conservation)	--	--	--	\$1.868	\$2.223	\$2.589	\$2.688	\$2.792	

1. Consumption above baseline hcf/month, as listed above.
2. These conservation levels reflect consumption compared to base-line (2013) consumption levels.
3. Current level, which includes assumed conservation of approximately 30%.

CITY OF YUBA CITY
WATER RATE STUDY
Water Cost of Service Analysis/Rate Design

PROPOSED VOLUMETRIC CHARGES FOR FY 2015/16:

Customer Classes	Number of Meters ¹	Adjusted Water Consumption	Target Rev. Req't from Vol. Charges	Uniform Commodity Rates (\$/hcf)	Proposed Rate Structure
Single Family Residential	15,542	1,341,616	\$ 1,918,017	\$1.430	Uniform
Multi Family Residential	1,167	438,649	\$ 627,106	\$1.430	Uniform
Commercial	1,218	447,083	\$ 639,164	\$1.430	Uniform
Metered Water	12	23,581	\$ 33,713	\$1.430	Uniform
Industrial	6	735,829	\$ 1,051,964	\$1.430	Uniform
Irrigation	325	256,386	\$ 366,537	\$1.430	Uniform
Construction	36	2,021	\$ 2,890	\$1.430	Uniform
Outside City Limits - SFR	45	6,157	\$ 8,802	\$1.430	Uniform
Outside City Limits - Commercial	30	7,702	\$ 11,012	\$1.430	Uniform
Total	18,381	3,259,023	\$ 4,659,205		

1. Number of meters is for June 2014, as provided by the City staff in files YubaCityConsumption.zip on November 6, 2014.

2. Water consumption is roughly 30% less than FY 2013/14 consumption by customer class (above baseline hcf per month allotment) to account for mandated conservation.

CITY OF YUBA CITY
WATER RATE STUDY
Water Cost of Service Analysis/Rate Design

CONSERVATION RATES

These conservation surcharges assume that city customers will reduce water use by the reduction levels in each Conservation Scenario.

Adjusted Net Revenue Requirements (60% Fixed / 40% Variable)

Estimated Volumetric Rates Needed to Offset Net Revenue Losses Due to Conservation	Conservation Scenario				
	Base Level	Scenario 1 ^a	Scenario 2	Scenario 3	Scenario 4
<i>Conservation Level (vs. 2013 Level)</i>	20%	30%	40%	50%	60%
<i>Additional Conservation (vs. Current Level)</i>	-10%	0%	10%	20%	30%
Annual Water Sales & Reductions					
Current Water Sales (hcf/yr.) ¹	3,259,023	3,259,023	3,259,023	3,259,023	3,259,023
Change in Water Sales vs. Current per Stage (hcf) ²	325,902	0	(325,902)	(651,805)	(977,707)
Adjusted Water Sales (hcf/yr.)	3,584,925	3,259,023	2,933,121	2,607,218	2,281,316
Revenue Reqs. & Conservation Rate Calculation					
Current Volumetric Rate Revenue Requirements ³	\$4,659,205	\$4,659,205	\$4,659,205	\$4,659,205	\$4,659,205
Adjustment to Volumetric Costs ⁴ :					
Purchased Water	\$33,000	\$0	(\$33,000)	(\$66,000)	(\$99,000)
Chemicals	\$32,980	\$0	(\$32,980)	(\$65,960)	(\$98,940)
Energy	\$66,631	\$0	(\$66,631)	(\$133,262)	(\$199,893)
Total: Adjustment to Volumetric Costs	\$132,611	\$0	(\$132,611)	(\$265,222)	(\$397,833)
Adjusted Volumetric Rate Revenue Reqs.	\$4,791,816	\$4,659,205	\$4,526,593	\$4,393,982	\$4,261,371
Adjusted Uniform Volumetric Rate (\$/hcf)⁵	\$1.337	\$1.430	\$1.543	\$1.685	\$1.868

a. Current level, which includes assumed conservation of approximately 30%.

1. From Water Rate Model. Water sales are based on reduction to FY 2013/14 consumption levels; considered "the new normal."

2. Conservation Scenario % reduction multiplied by Current Water Sales.

3. From proposed new rates (60% fixed/40% variable).

4. FY 2015/16 Budget expense times Conservation Scenario percentage.

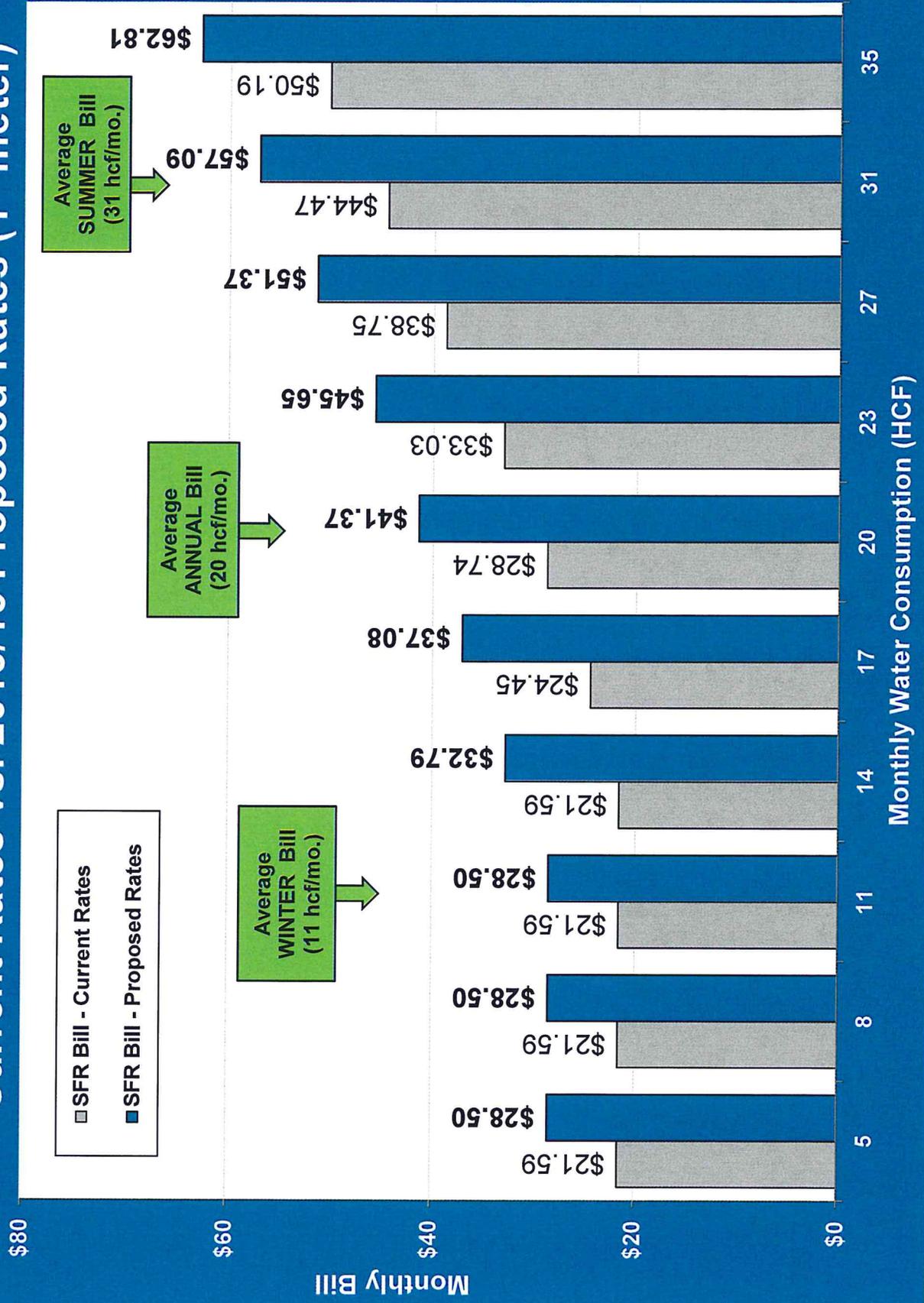
5. Volumetric Rate is calculated by dividing Adjusted Volumetric Rate Revenue Requirements by Adjusted Water Sales.

Purchased Water is adjusted for NYWD water contract only; Chemicals & Energy represent 68% of FY 2015/16 budgeted expenses.

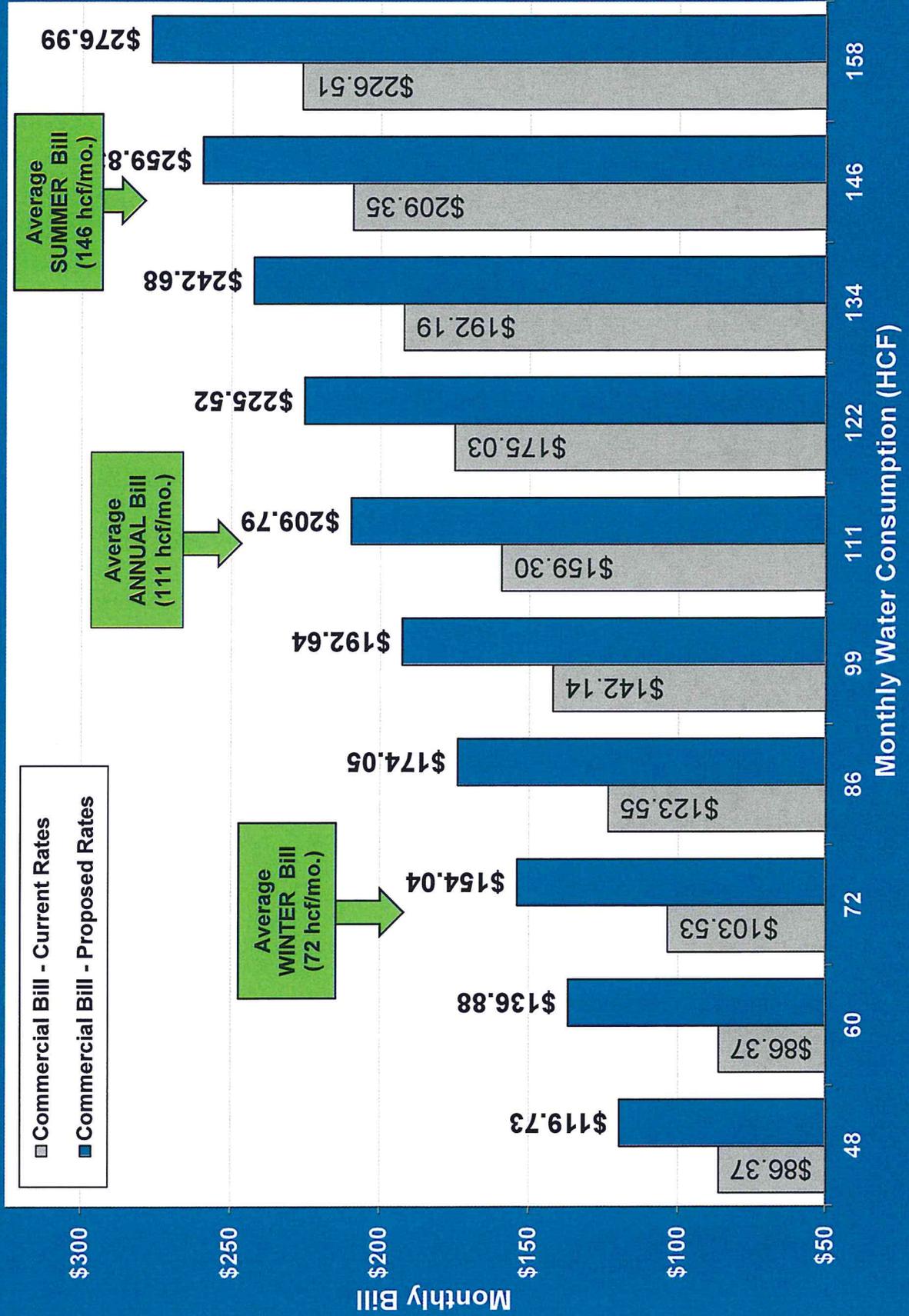
Proposed Uniform Volumetric Rates by Conservation Level	Conservation Scenario				
	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
<i>Projected Rate Revenue Increases (per Financial Plan):</i>	32.00%	19.00%	16.45%	3.85%	3.85%
Base Level (20% Conservation)	\$1.337	\$1.591	\$1.852	\$1.924	\$1.998
Scenario 1 ^a (30% Conservation)	\$1.430	\$1.701	\$1.981	\$2.057	\$2.137
Scenario 2 (40% Conservation)	\$1.543	\$1.836	\$2.139	\$2.221	\$2.306
Scenario 3 (50% Conservation)	\$1.685	\$2.006	\$2.335	\$2.425	\$2.519
Scenario 4 (60% Conservation)	\$1.868	\$2.223	\$2.589	\$2.688	\$2.792

a. Current level, which includes assumed conservation of approximately 30%.

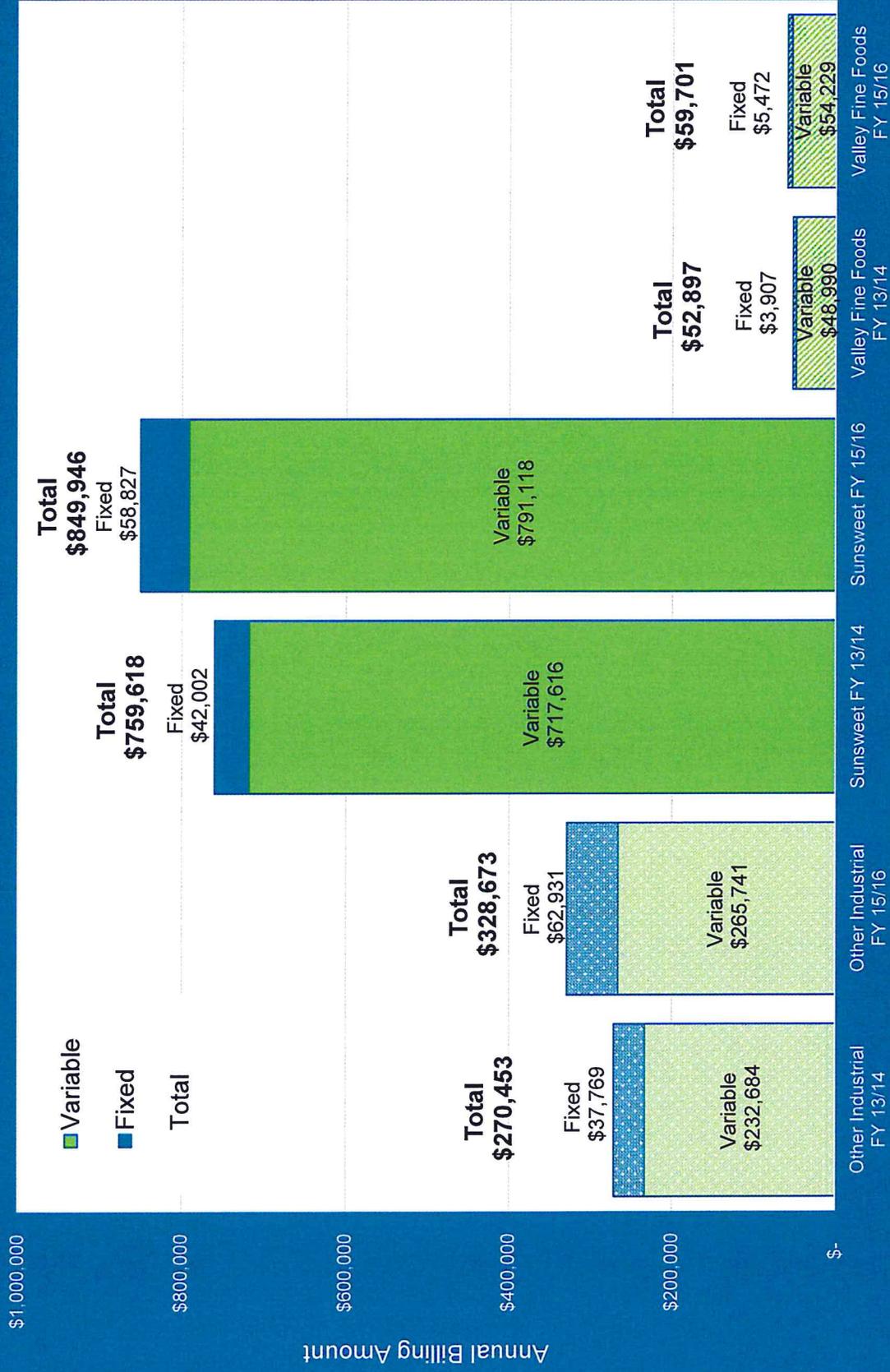
Residential Water Bill Comparison Current Rates vs. 2015/16 Proposed Rates (1" meter)



Commercial Water Bill Comparison Current vs. Proposed 2015/16 Rates (2" meter)



Water Bill Comparison - Industrial Customers (Annual)



CITY OF YUBA CITY
WATER RATE STUDY
Customer Data

Consumption Summary by Class	FY 2013/14												Total
	Jul 2013	Aug 2013	Sep 2013	Oct 2013	Nov 2013	Dec 2013	Jan 2014	Feb 2014	Mar 2014	Apr 2014	May 2014	Jun 2014	
Single Family Residential	461,012	518,509	473,206	390,480	318,925	233,431	184,101	182,773	137,510	170,061	236,591	364,287	3,670,885
Multi Family Residential	82,692	91,563	86,974	76,061	67,470	56,639	52,443	52,261	44,619	50,219	56,356	69,956	787,253
Commercial*	74,069	85,025	80,381	70,967	63,791	52,975	47,821	48,533	41,605	47,899	53,028	66,077	732,189
Metered Water	7,166	7,109	7,098	4,724	3,499	2,200	922	1,245	553	783	2,124	3,504	40,927
Industrial	69,159	83,340	77,542	70,837	68,384	47,466	44,127	63,482	58,100	60,335	64,021	66,700	773,493
Irrigation	74,312	80,327	73,720	66,237	51,697	34,564	15,153	18,914	10,355	13,156	25,269	44,344	508,049
Construction	366	447	350	434	327	112	195	204	223	160	330	815	3,963
Outside City Limits - SFR	1,652	1,792	1,629	1,275	1,068	756	687	674	507	569	802	1,374	12,783
Outside City Limits - Commercial	1,660	1,551	1,829	1,764	1,629	1,008	457	509	357	576	777	1,136	13,263
Total	772,053	889,653	802,729	682,779	576,789	429,151	345,905	369,393	283,838	343,758	439,297	618,192	6,442,764

* Includes Commercial (special) class.

Revenue Summary by Class	FY 2011/12*	FY 2012/13*	FY 2013/14	Total
Single Family Residential	\$ 4,856,528	\$ 5,558,574	\$ 5,673,075	\$ 16,088,177
Multi Family Residential	\$ 663,967	\$ 968,921	\$ 1,130,976	\$ 2,763,864
Commercial**	\$ 1,522,278	\$ 1,482,344	\$ 1,274,466	\$ 4,279,089
Metered Water	-	-	\$ 57,742	\$ 57,742
Industrial	\$ 982,469	\$ 1,035,067	\$ 1,030,071	\$ 3,047,608
Irrigation	\$ 575,206	\$ 800,867	\$ 712,890	\$ 2,088,963
Construction	-	-	\$ 9,080	\$ 9,080
Outside City Limits - SFR	-	-	\$ 19,527	\$ 19,527
Outside City Limits - Commercial	-	-	\$ 20,951	\$ 20,951
Total	\$ 8,600,443	\$ 9,845,773	\$ 9,928,779	\$ 28,375,000

* FY 2011/2012 and FY 2012/2013 Revenue totals are as reported in file: Utility Billing Summaries by Month and FY-Final 2-15.xls.

FY 2013/14 revenue data was further analyzed and categorized for this study.

** Includes Commercial (special) class.

Number of Meters by Class and Size (1)	FY 2013/14												Total		
	5/8 inch	3/4 inch	1 inch	1.5 inch	2 inch	2 inch Turbo	3 inch	3 inch Compound	3 inch Turbo	4 inch	4 inch Compound	4 inch Turbo		6 inch	8 inch
Single Family Residential	-	5,434	10,094	10	4	-	-	-	-	-	-	-	-	-	15,542
Multi Family Residential	1	313	532	171	124	-	8	5	-	6	1	-	4	1	1,167
Commercial (2)	-	150	571	283	159	1	25	3	1	16	5	-	2	2	1,218
Metered Water	-	1	-	-	3	-	-	-	-	-	-	-	-	-	12
Industrial	-	-	-	7	-	-	-	-	-	-	-	-	-	-	6
Irrigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	325
Construction	-	9	145	84	75	1	5	-	1	2	1	1	-	-	36
Outside City Limits - SFR	-	1	31	1	2	-	1	-	-	-	-	-	-	-	45
Outside City Limits - Commercial	-	10	35	-	-	-	-	-	-	-	-	-	-	-	50
Total	1	5,920	11,433	558	368	2	39	8	2	28	7	2	9	4	18,381

(1) Meter count is for June 2014, as provided by the City of Yuba City in files YubaCityConsumption.zip on November 6, 2014. The city bills customers monthly.

(2) Includes Commercial (special) class.

CITY OF YUBA CITY
 WATER RATE STUDY
 Water Production Data

Data Source: Item 11 - Monthly Water System Production.pdf

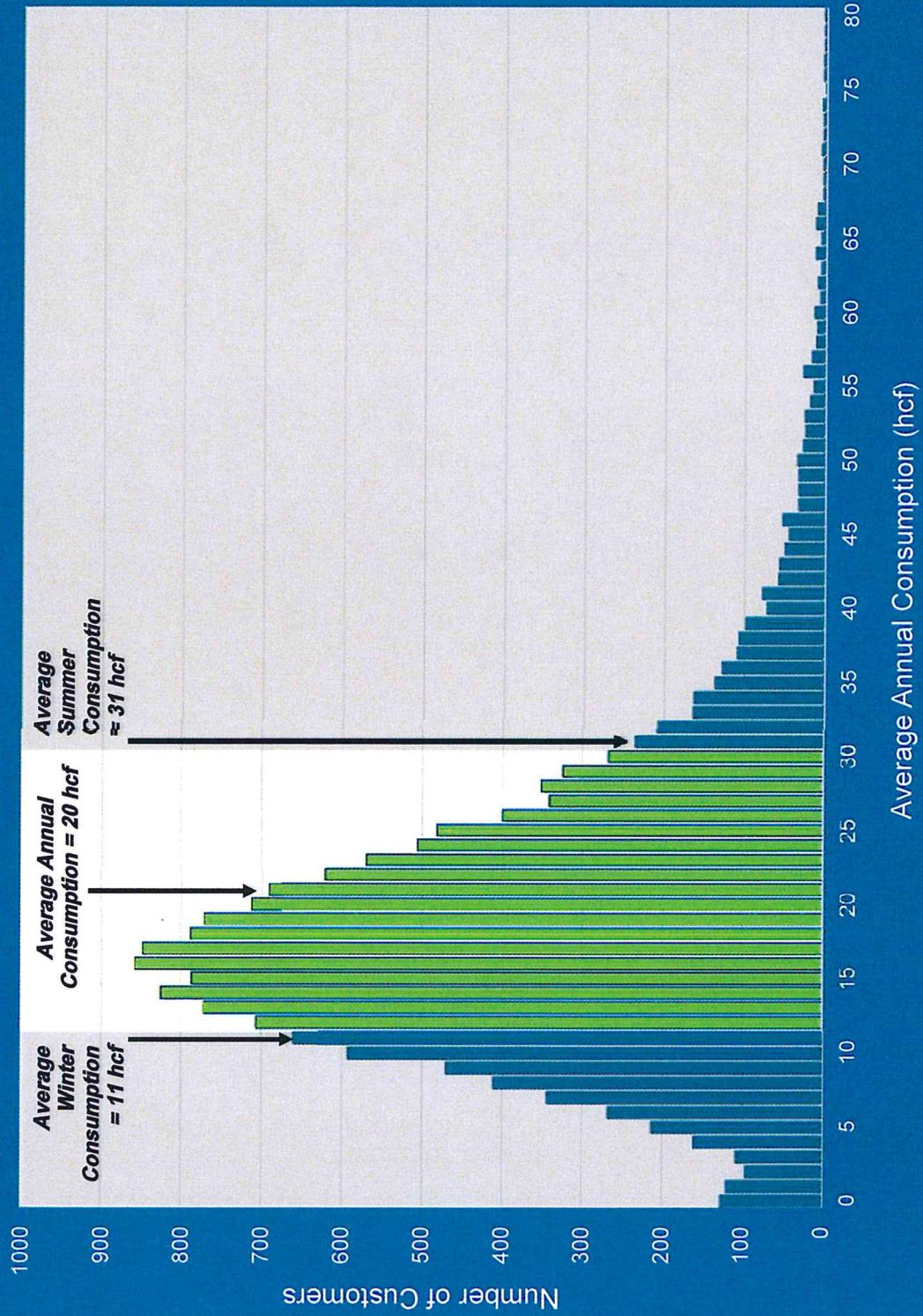
Month-Year	Water Production (MG)
Jun-12	626
Jul-12	717
Aug-12	701
Sep-12	600
Oct-12	482
Nov-12	296
Dec-12	251
Jan-13	265
Feb-13	263
Mar-13	369
Apr-13	429
May-13	532
Jun-13	639
Jul-13	705
Aug-13	665
Sep-13	553
Oct-13	472
Nov-13	359
Dec-13	294
Jan-14	305
Feb-14	249
Mar-14	288
Apr-14	349
May-14	511
Jun-14	580
Jul-14	615
Aug-14	546
Sep-14	456
Oct-14	402
Total	13,517

2012 Peak Monthly Production: 717 MG
 2013 Peak Monthly Production: 705 MG
 2014 Peak Monthly Production: 615 MG

2012 Estimated Loss 6.2%
 2013 Estimated Loss 5.9%
 2014 Estimated Loss 6.0%

FY 2013/14 Production (MG) 5,330
 FY 2013/14 P Production (hcf) 7,120,760

Single-Family Residential Water Consumption Distribution Curve - FY 2013-14



APPENDIX B – WASTEWATER RATE ANALYSIS

Detailed tables in Appendix B include:

- Ten-year Financial Plan Summary
- Graphical representation of 10-year Financial Plans
- Exhibit 1, Operating Expenses
- Exhibit 2, Capital Improvement Plan Expenditures
- Exhibit 3, Existing Debt Obligations
- Current Rates
- Current and Proposed Rates
- Various Bill Comparison Graphs
- FY 2013-2014 Customer Data
- Wastewater Treatment Plant Loading Data

TABLE 1
FINANCIAL PLAN AND SUMMARY OF REVENUE REQUIREMENTS

RATE REVENUE REQUIREMENTS SUMMARY	Projected											
	Budget	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Sources of Wastewater Funds												
Rate Revenue Under Prevailing Rates (1,2)	\$ 11,721,439	\$ 11,081,850	\$ 11,119,770	\$ 11,157,690	\$ 11,195,611	\$ 11,233,531	\$ 11,271,452	\$ 11,309,372	\$ 11,347,292	\$ 11,385,213	\$ 11,423,133	
Other Operating Revenue	311,630	300,603	301,563	302,523	303,483	304,442	305,402	306,362	307,322	308,281	309,241	
Interest Earnings (In Operating & Capital Reserves) (3)	54,792	95,700	53,696	76,971	83,052	101,257	91,650	123,095	159,604	180,024	201,086	
Total Sources of Funds	\$ 12,087,861	\$ 11,478,153	\$ 11,475,029	\$ 11,537,184	\$ 11,582,145	\$ 11,639,231	\$ 11,668,503	\$ 11,738,829	\$ 11,814,216	\$ 11,873,516	\$ 11,933,460	
Uses of Wastewater Funds												
Operating Expenses (4):												
Division 8110 Sewer Collection	\$ 807,334	\$ 822,511	\$ 859,273	\$ 897,599	\$ 937,965	\$ 975,394	\$ 1,001,875	\$ 1,042,697	\$ 1,085,819	\$ 1,131,420	\$ 1,179,691	
Division 8120 Sewer Treatment Plant	5,853,790	6,118,650	6,376,894	6,654,775	6,946,475	7,230,564	7,473,998	7,784,006	8,109,982	8,452,980	8,814,143	
Division 8130 Wastewater Pretreatment	146,290	147,634	154,165	160,945	168,068	174,478	178,482	185,392	192,664	200,326	208,405	
Division 8200 Stonegate Facility	955,402	1,138,638	1,050,485	1,094,050	1,139,789	1,183,084	1,216,500	1,263,565	1,313,100	1,365,284	1,420,312	
Operational Transfers	27,417	82,816	85,292	87,842	90,469	93,175	95,962	98,832	101,788	104,833	107,970	
Adjustment for FY 14/15 Actuals	(1,560,655)	(600,000)	(515,000)	(530,450)	(546,364)	(562,754)	(579,637)	(597,026)	(614,937)	(633,365)	(652,387)	
Subtotal: Operating Expenses	\$ 7,649,478	\$ 9,440,956	\$ 9,809,314	\$ 10,233,111	\$ 10,677,649	\$ 11,110,946	\$ 11,482,916	\$ 11,955,025	\$ 12,451,011	\$ 12,924,427	\$ 13,520,950	
Other Expenditures:												
Existing Debt Service	\$ 1,445,998	\$ 2,043,193	\$ 2,040,043	\$ 2,046,518	\$ 2,037,285	\$ 2,037,814	\$ 2,037,783	\$ 2,086,459	\$ 2,080,679	\$ 2,084,729	\$ 2,084,985	
New Debt Service	-	-	64,515	225,801	494,612	1,032,234	1,032,234	1,032,234	1,032,234	1,032,234	1,032,234	
Rate-Funded Capital Expenses	1,035,525	-	-	2,995,808	1,785,733	4,817,777	3,582,157	3,278,082	3,388,514	3,914,320	4,031,749	
Subtotal: Other Expenditures	\$ 2,481,523	\$ 2,043,193	\$ 2,104,558	\$ 5,268,127	\$ 4,317,630	\$ 7,887,825	\$ 6,652,174	\$ 6,396,775	\$ 6,501,427	\$ 7,031,282	\$ 7,148,968	
Total Uses of Wastewater Funds	\$ 10,131,001	\$ 11,484,149	\$ 11,913,872	\$ 15,501,238	\$ 14,995,279	\$ 18,998,771	\$ 18,135,089	\$ 18,351,800	\$ 18,952,438	\$ 20,003,710	\$ 19,903,916	
plus: Revenue from Rate Increases (5)	-	92,349	1,213,908	2,455,622	3,829,925	5,350,540	6,926,716	7,497,801	8,089,048	8,701,119	9,334,696	
Increase/(Decrease) to Reserves	\$ 1,956,860	\$ 86,353	\$ 775,066	\$ (1,508,432)	\$ 416,791	\$ (2,009,001)	\$ 460,130	\$ 884,830	\$ 950,828	\$ 570,927	\$ 1,364,239	
Net Revenue Reqd. (Total Uses less Non-Rate Revenue)	\$ 9,764,579	\$ 11,087,846	\$ 11,568,613	\$ 15,121,744	\$ 14,608,745	\$ 18,593,072	\$ 17,738,037	\$ 17,922,343	\$ 18,485,512	\$ 19,515,405	\$ 19,393,591	
Total Rate Revenue After Rate Increases	\$ 11,721,439	\$ 11,174,198	\$ 12,333,678	\$ 13,613,312	\$ 15,025,536	\$ 16,584,071	\$ 18,198,167	\$ 18,807,173	\$ 19,436,340	\$ 20,086,332	\$ 20,757,829	
Projected Annual Rate Revenue Increase	0.00%	10.00%	10.00%	10.00%	10.00%	10.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
Debt Coverage After Rate Increase (includes connection fee revenue)	3.39	1.24	1.56	1.84	2.03	2.05	2.45	2.47	2.53	2.57	3.47	

(1) FY 2014/15 Revenues are from the City's Fiscal Year 2014-15 Budget (files: 14-15 WW Rev Bond Bids.pdf and 14-15 WW Rev Op&Conn Bids).
 (2) Per the City's Wastewater System Master Plan 2006 Update, average annual customer growth is estimated to be 3.4% through 2030 (Wastewater System Master Plan Update, March 2006, Table 2-1, Page 2-2). For the purposes of this analysis, NBS has assumed 0.50% growth as a conservative estimate.
 (3) Interest earnings are per the City's budget in FY 2014/15, and calculated in the Financial Plan for all future years.
 (4) The FY 2014/15 operating expenses are from the City's Proposed Budget. Inflationary factors are applied to these expenses to project costs in 2015/16 and beyond.
 (5) Rate increases are anticipated to be effective 01/01/2016; FY 2015/16 represents three (3) months of revenue with increased rates.

TABLE 2
RESERVE FUND SUMMARY

	SUMMARY OF CASH ACTIVITY											
	Budget	Projected										
	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	
Total Beginning Cash (1)	\$ 9,853,656	\$ 15,569,564										
Operating Reserve												
Beginning Reserve Balance (2)	\$ 1,585,213	\$ 5,301,192	\$ 5,607,734	\$ 6,951,082	\$ 4,498,552	\$ 3,803,570	\$ 1,811,606	\$ 2,733,969	\$ 2,989,000	\$ 3,113,000	\$ 3,655,053	
Plus: Net Cash Flow (After Rate Increases)	1,956,860	86,353	775,066	(1,508,432)	416,791	(2,009,001)	460,130	884,830	950,828	570,927	1,364,239	
Plus: Transfer of Bond Debt Reserve Surplus	-	-	-	-	-	2,679	25,654	29,930	34,206	34,206	793,380	
Plus: Transfer of SRF Loan Debt Reserve Surplus	-	-	-	-	2,501	14,358	25,295	29,544	33,725	33,725	33,725	
Plus: Transfer of River Highland Reserve Surplus	101,259	-	-	-	-	-	-	-	-	-	-	
Less: Transfer Out to Capital Replacement Reserve	-	-	-	(494,098)	(489,275)	-	-	(689,273)	-	-	-	
Less: Reserve Funding to Meet SRF Loan Reserve Requirements	-	(250,000)	(250,000)	(450,000)	(625,000)	-	-	-	-	-	(1,168,860)	
Less: Reserve Funding to Meet Bond Reserve Requirements (3)	-	(350,000)	(350,000)	-	-	-	-	-	-	-	-	
Plus: Transfer in from Connection Fee Reserve for Debt Service (4)	770,099	820,189	818,283	-	-	-	411,283	-	-	412,053	352,316	
Ending Operating Reserve Balance	\$ 4,413,431	\$ 6,807,734	\$ 6,951,082	\$ 4,498,552	\$ 3,803,570	\$ 1,811,606	\$ 2,733,969	\$ 2,989,000	\$ 3,113,000	\$ 3,655,053	\$ 5,023,853	
Target Ending Balance (90-days of O&M)	\$ 1,912,000	\$ 2,360,000	\$ 2,452,000	\$ 2,558,000	\$ 2,669,000	\$ 2,778,000	\$ 2,871,000	\$ 2,989,000	\$ 3,113,000	\$ 3,243,000	\$ 3,380,000	
Stonewate Reserve												
Beginning Reserve Balance (5)	\$ 105,512	\$ 131,503	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	
Plus: Annual Contributions	264	329	550	825	1,100	1,375	1,650	1,925	2,200	2,200	2,200	
Plus: Interest Earnings	-	(21,832)	(550)	(825)	(1,100)	(1,375)	(1,650)	(1,925)	(2,200)	(2,200)	(2,200)	
Less: Transfer Out to Capital Replacement Reserve	-	-	-	-	-	-	-	-	-	-	-	
Ending Operating Reserve Balance	\$ 105,776	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	
Target Ending Balance	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	
River Highland Reserve												
Beginning Reserve Balance (6)	\$ 101,007	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Plus: Annual Contributions	-	-	-	-	-	-	-	-	-	-	-	
Plus: Interest Earnings	253	-	-	-	-	-	-	-	-	-	-	
Less: Transfer Out to Operating Reserve	(101,259)	-	-	-	-	-	-	-	-	-	-	
Ending Operating Reserve Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Target Ending Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Capital Rehabilitation & Replacement Reserve												
Beginning Reserve Balance (7)	\$ 4,873,075	\$ 7,528,658	\$ 5,131,534	\$ 3,311,702	\$ 3,806,625	\$ 4,297,000	\$ 4,298,375	\$ 4,300,025	\$ 4,991,223	\$ 5,888,182	\$ 6,399,240	
Plus: Grant Proceeds	-	-	-	-	-	-	-	-	-	-	-	
Plus: Transfer of Operating & Stonewate Reserve Surpluses	-	21,832	550	494,923	490,375	1,375	1,650	691,198	896,959	511,058	1,171,060	
Less: Use of Reserves for Capital Projects	(2,329,475)	(2,418,955)	(1,820,382)	-	-	-	-	-	-	-	-	
Ending Capital Improvement & Depreciation Reserve Balance	\$ 2,543,600	\$ 5,131,534	\$ 3,311,702	\$ 3,806,625	\$ 4,297,000	\$ 4,298,375	\$ 4,300,025	\$ 4,991,223	\$ 5,888,182	\$ 6,399,240	\$ 7,570,300	
Target Ending Balance (3% of Assets) (8)	\$ 2,543,600	\$ 2,738,900	\$ 3,288,400	\$ 3,805,800	\$ 4,295,900	\$ 6,044,400	\$ 6,007,200	\$ 7,067,100	\$ 7,708,500	\$ 7,634,800	\$ 7,568,700	
Ending Balance - Excludes Restricted Reserves	\$ 7,052,808	\$ 10,849,268	\$ 10,372,784	\$ 8,415,177	\$ 8,210,570	\$ 6,219,981	\$ 7,143,994	\$ 8,090,223	\$ 9,111,182	\$ 10,164,293	\$ 12,710,153	
Minimum Target Ending Balance - Excludes Restricted Reserve	\$ 4,565,600	\$ 5,208,900	\$ 5,850,400	\$ 6,473,800	\$ 7,074,900	\$ 8,932,400	\$ 8,988,200	\$ 10,186,100	\$ 10,931,500	\$ 10,987,800	\$ 11,058,100	
Ending Surplus/Deficit Compared to Reserve Targets	\$ 2,487,206	\$ 5,640,368	\$ 4,522,384	\$ 1,941,377	\$ 1,135,670	\$ (2,712,419)	\$ (1,844,206)	\$ (2,075,877)	\$ (1,820,318)	\$ (823,507)	\$ 1,652,053	
Days Cash on Hand	284	345	318	246	227	161	180	196	214	231	293	

TABLE 3
RESERVE FUND SUMMARY, continued

RESTRICTED RESERVES:	Projected											
	Budget	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Bond Project Fund												
Beginning Reserve Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Plus: New SRF Loan Proceeds (9)	-	-	1,200,000	-	3,000,000	5,000,000	10,000,000	-	-	-	-	-
Plus: New Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-	-
Less: Use of Bond & Loan Funds for Capital Projects	-	-	(1,200,000)	-	(3,000,000)	(5,000,000)	(10,000,000)	-	-	-	-	-
Ending Bond Project Fund Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Target Ending Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bond Debt Reserve												
Beginning Reserve Balance (10)	\$ 1,098	\$ -	\$ 350,000	\$ 601,750	\$ 1,056,263	\$ 1,691,826	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295
Plus: Reserve Funding from New Debt Obligations	-	-	-	-	-	-	-	-	-	-	-	-
Plus: Reserve Funding to Meet Bond Reserve Requirement (3)	-	-	350,000	450,000	625,000	21,148	25,654	-	-	-	-	-
Plus: Interest Earnings	3	-	1,750	4,513	10,563	(2,679)	(25,654)	29,930	29,930	34,206	34,206	34,206
Less: Transfer of Surplus to Operating Reserve	-	-	-	-	-	-	-	-	-	(34,206)	(34,206)	(793,380)
Ending Debt Reserve Balance	\$ 1,101	\$ 360,000	\$ 601,750	\$ 1,066,263	\$ 1,691,826	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295	\$ 951,121
Target Ending Balance	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295	\$ 1,710,295	\$ 951,121
SRF Reserve Fund												
Beginning Reserve Balance (11)	\$ 388,358	\$ 388,358	\$ 639,329	\$ 707,041	\$ 873,630	\$ 1,148,676	\$ 1,148,676	\$ 1,686,263	\$ 1,686,263	\$ 1,686,263	\$ 1,686,263	\$ 1,686,263
Plus: Reserve Funding from New Debt Obligations	-	-	64,515	161,286	268,811	537,622	-	-	-	-	-	-
Plus: Reserve Funding to Meet SRF Loan Reserve Requirement (3)	-	-	250,000	450,000	625,000	21,148	25,654	-	-	-	-	-
Plus: Interest Earnings	971	-	3,197	5,303	8,736	14,358	25,284	29,510	33,725	33,725	33,725	33,725
Less: Transfer of Surplus to Operating Reserve	-	-	-	-	-	-	-	-	-	-	-	-
Ending SRF Reserve Balance	\$ 389,329	\$ 639,329	\$ 707,041	\$ 873,630	\$ 1,148,676	\$ 1,686,297	\$ 1,686,297	\$ 1,686,263	\$ 1,686,263	\$ 1,686,263	\$ 1,686,263	\$ 1,686,263
Target Ending Balance	\$ 389,329	\$ 639,329	\$ 707,041	\$ 873,630	\$ 1,148,676	\$ 1,686,297	\$ 1,686,297	\$ 1,686,263	\$ 1,686,263	\$ 1,686,263	\$ 1,686,263	\$ 1,686,263
Connection Fee Reserve												
Beginning Reserve Balance (12)	\$ 2,799,394	\$ 2,219,850	\$ 1,876,661	\$ 576,253	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Plus: Interest Earnings	40,875	67,000	9,383	4,322	-	-	-	-	-	-	-	-
Plus: Connection Fee Revenue	416,111	335,000	335,000	335,000	335,000	335,000	335,000	335,000	335,000	335,000	335,000	335,000
Plus: Other Connection Fee Fund Revenue	54,846	75,000	75,257	75,513	75,770	76,027	76,283	76,540	76,796	77,053	77,310	77,310
Less: Use of Reserves for Capital Projects	(150,000)	-	(901,765)	(991,088)	(410,770)	(411,027)	(411,283)	(411,540)	(411,796)	(412,053)	(412,310)	(412,567)
Less: Transfer to Operating Reserve for Debt Service (4)	(770,098)	(820,189)	(818,283)	(818,283)	(818,283)	(818,283)	(818,283)	(818,283)	(818,283)	(818,283)	(818,283)	(818,283)
Ending Connection Fee Fund Balance	\$ 2,390,228	\$ 1,876,661	\$ 876,253	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Interest Earnings Rate (13)	0.25%	0.25%	0.50%	0.75%	1.00%	1.25%	1.50%	1.75%	2.00%	2.00%	2.00%	2.00%

(1) Beginning cash balance is from the City's Proforma report (file: Wastewater Debt Coverage Ratio Actual FY 13-14.xlsx) and is very close to the values reported in the Consolidated Balance Sheet, Funds 516, 518, 519, 527, 528, 532, 535, 536, and 539 from FY 2013/14 end; report provided by City staff 12/19/2014 (file: 14-15 Beg Cash Bal Wastewater.pdf).
 FY 2015/16 Beginning Balances reported in the City's Proforma report (file: Wastewater Debt Coverage Ratio Actual FY 14-15.xlsx) and via email from City staff.

(2) The total beginning cash balance in the Operating Reserve is the sum of the balances in Funds 518-Operating, 519-Stonewate and 516-River Highlands.

(3) Adjustments are made in cash balances to account for fully funding required debt reserve funds for outstanding bonds and SRF Loans.

(4) NBS assumes the City will fund the % of debt service allocated to connection fees, with connection fee revenue as long as it is available.

(5) The total beginning cash balance in the Stonewate reserve is the balance in Fund 519-Stonewate.

(6) The total beginning cash balance in the River Highland reserve is the balance in Fund 516-River Highlands. Per discussion with City Staff, the reserve fund balance will be transferred to Fund 518-Operating.

(7) The total beginning cash balance in the Capital Rehab & Replacement reserve is the sum of the balances in Funds 528-CIP and 539-WW 14 COP Project Cash.

(8) NBS assumes that the City has already secured SRF Loans to cover the \$8.38 million in project costs planned for FY 2014/15, per the funding sources listed in the City's CIP document, and that the payments are included in the debt issues shown in Exhibit 3 (Debt) of this model, therefore new debt service payments are not calculated for this issue.

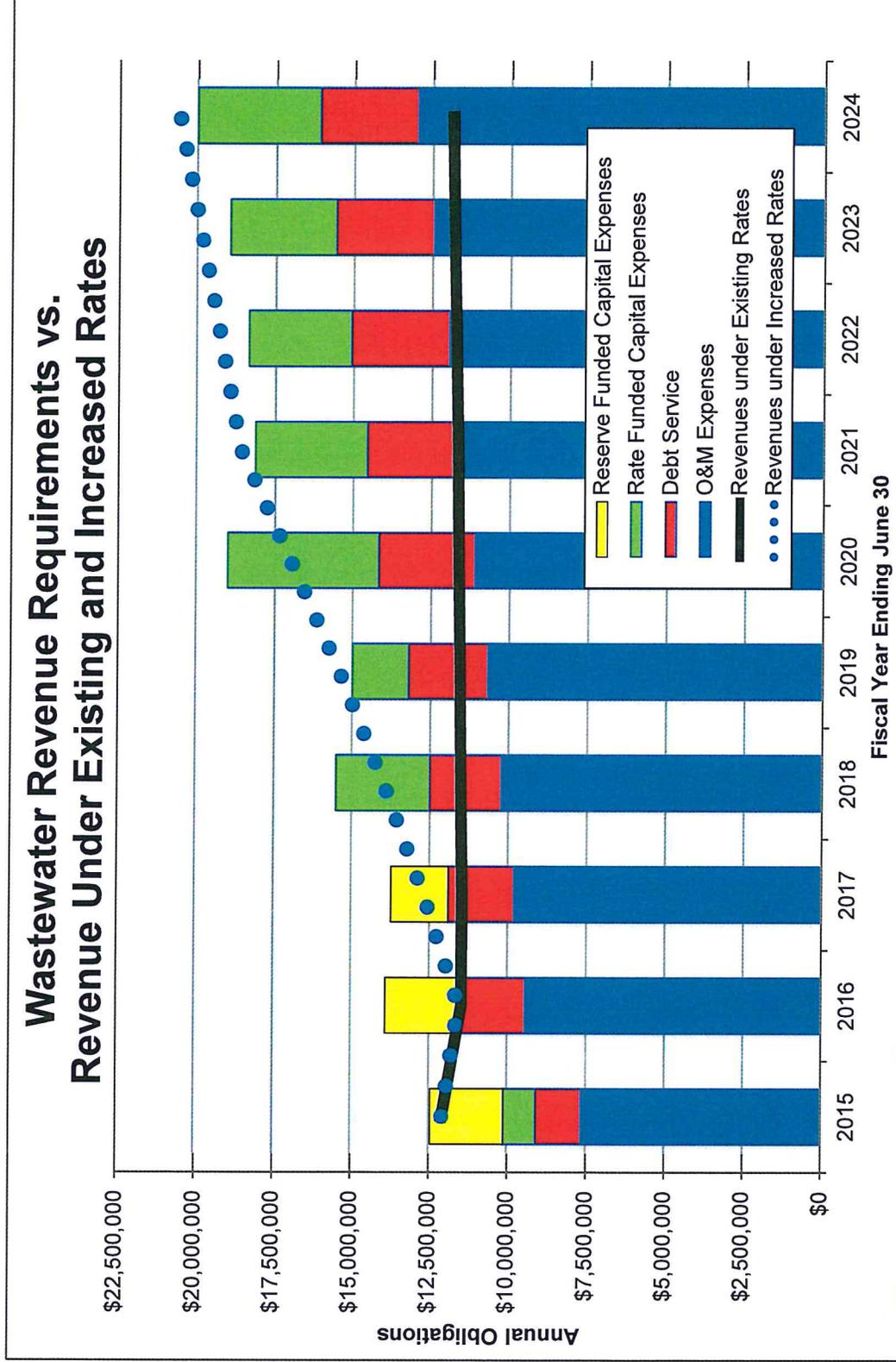
(9) Beginning cash in the Bond Debt Reserve is the balance in Fund 532-WW 2007 COP-Reserve.

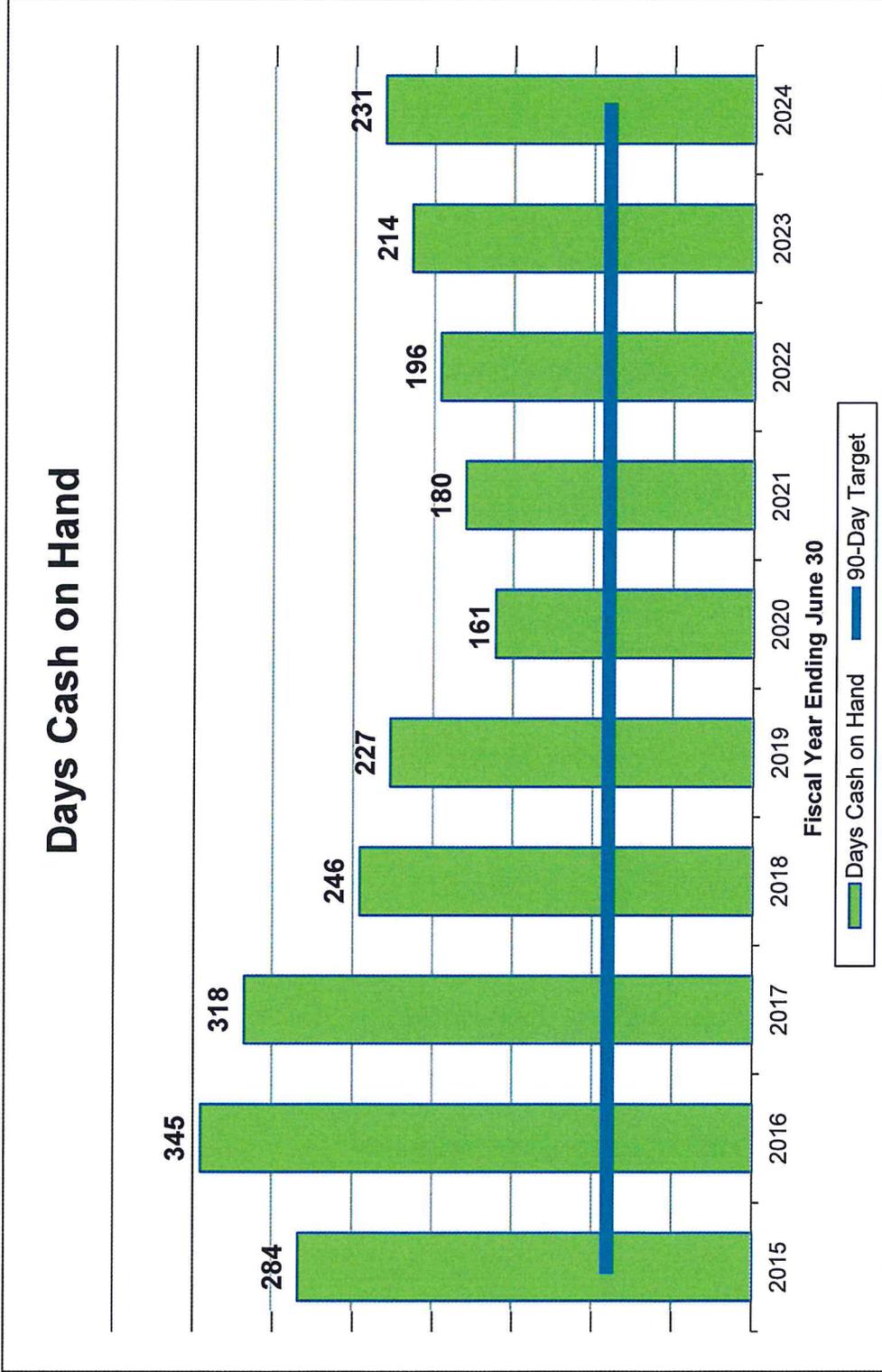
(10) Beginning cash in the SRF Reserve Fund is the balance in Fund 518-SRF Reserve Cash.

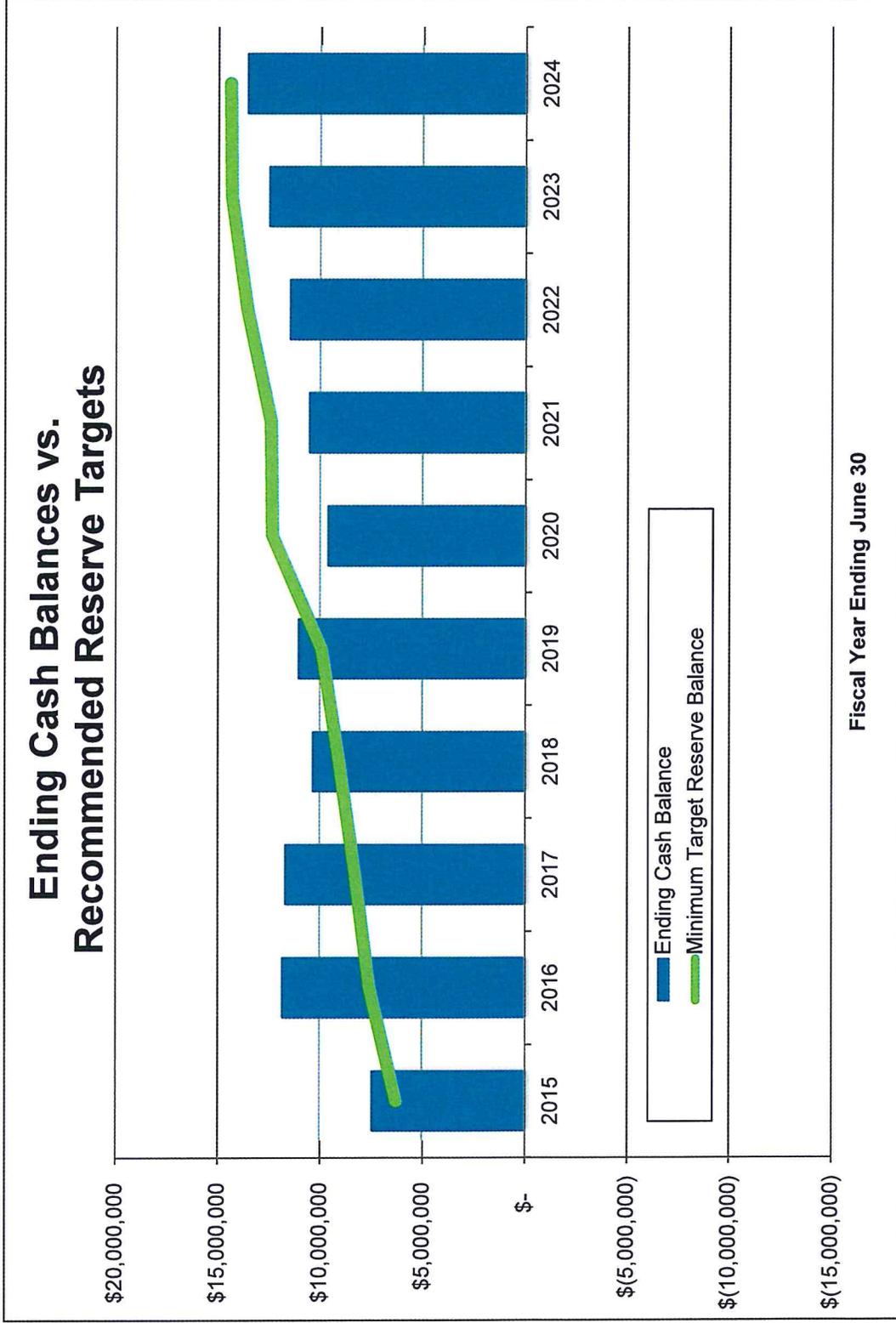
(11) Beginning cash in the Connection Fee Reserve is the sum of the two balances shown for Fund 527-Connection Fee Cash and Connection Fee-Reserved Cash.

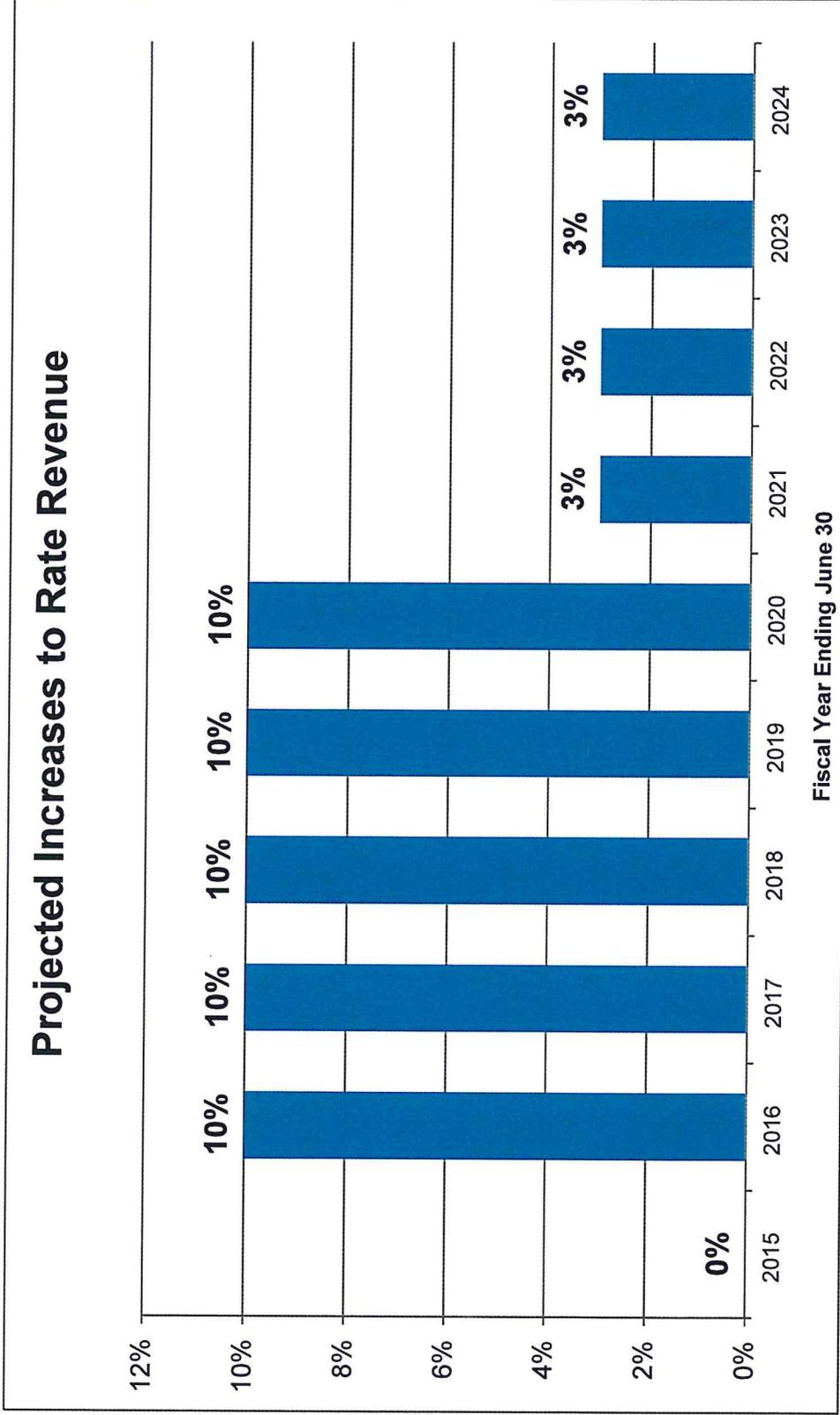
(12) Beginning cash in the Connection Fee Reserve is the sum of the two balances shown for funds invested in LAIF. Future years earnings were conservatively estimated through 2022 and phased into the historical 10 year average interest earnings rate.

(13) Historical interest earning rates were referenced on the California Treasurer's Office website for funds invested in LAIF. Future years earnings were conservatively estimated through 2022 and phased into the historical 10 year average interest earnings rate.

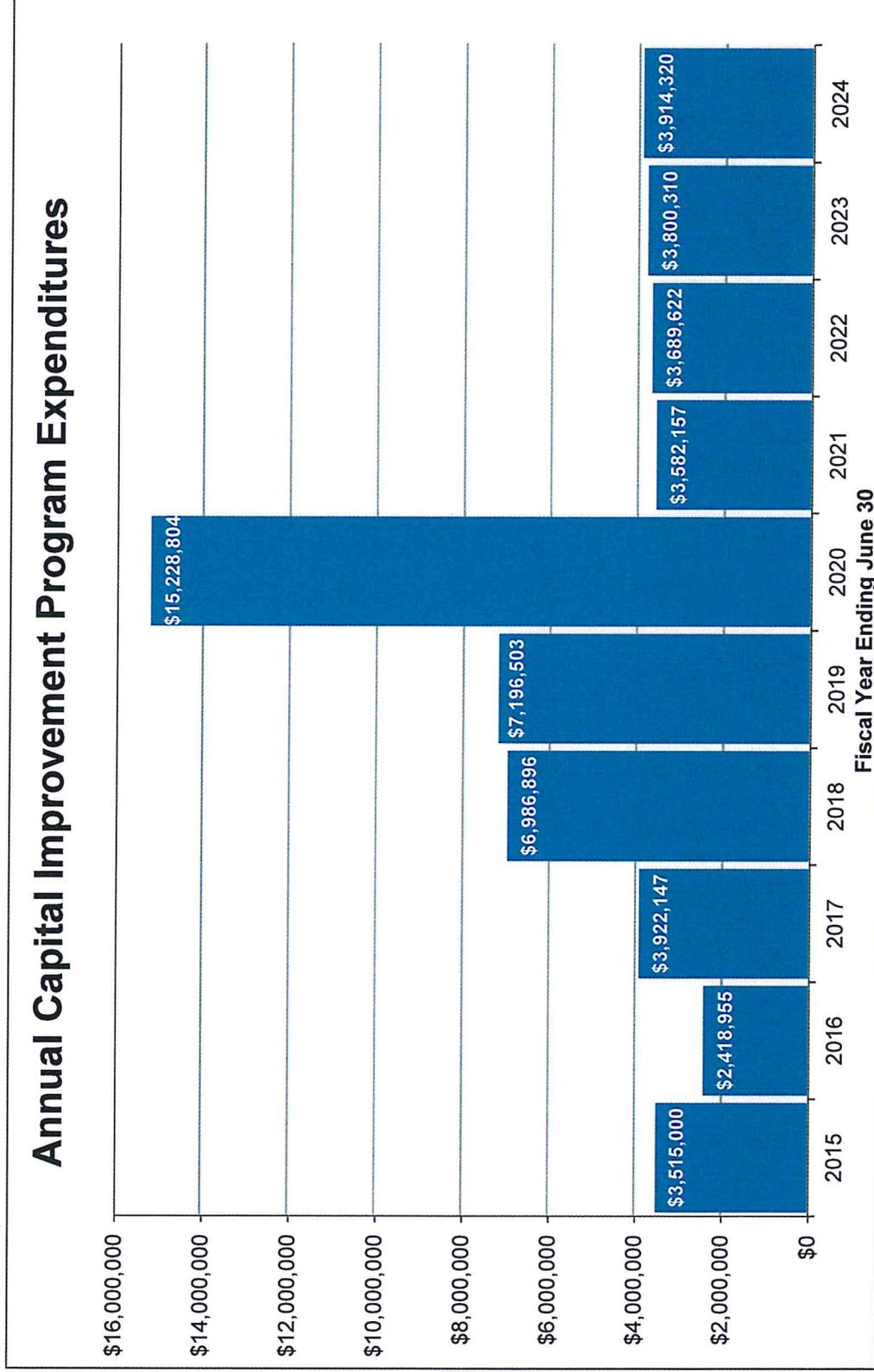








CITY OF YUBA CITY
 WASTEWATER RATE STUDY
 Rate Adjustment Charts and Report Tables



CITY OF YUBA CITY
WASTEWATER RATE STUDY
Operating Revenue and Expenses

EXHIBIT 1

REVENUE FORECAST (1)

SOURCES OF REVENUE	Basis	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Fund 518 - Sewer Fund											
44410 Sewer - Service Charges (2)	1	\$ 10,219,836	\$ 9,611,850	\$ 9,644,740	\$ 9,677,630	\$ 9,710,520	\$ 9,743,411	\$ 9,776,301	\$ 9,809,191	\$ 9,842,081	\$ 9,874,972
44419 Sewer - Septage Charges	1	\$ 281,252	\$ 250,000	\$ 250,855	\$ 251,711	\$ 252,566	\$ 253,422	\$ 254,277	\$ 255,133	\$ 255,988	\$ 256,844
44440 Sewer - Lab Testing	1	\$ 226,005	\$ 200,000	\$ 200,684	\$ 201,369	\$ 202,053	\$ 202,737	\$ 203,422	\$ 204,106	\$ 204,791	\$ 205,475
46315 Lease Payments	1	\$ 30,000	\$ 30,000	\$ 30,103	\$ 30,205	\$ 30,308	\$ 30,411	\$ 30,513	\$ 30,616	\$ 30,719	\$ 30,821
44450 Discharge Permit Fee	1	\$ 3,208	\$ 7,500	\$ 7,526	\$ 7,551	\$ 7,577	\$ 7,603	\$ 7,628	\$ 7,654	\$ 7,680	\$ 7,705
44415 Sewer - Sunsweet O&M	1	\$ 1,174,715	\$ 1,175,000	\$ 1,179,021	\$ 1,183,041	\$ 1,187,062	\$ 1,191,083	\$ 1,195,103	\$ 1,199,124	\$ 1,203,145	\$ 1,207,165
44416 Sewer - Sunsweet Capital	1	\$ 35,304	\$ 35,300	\$ 35,421	\$ 35,542	\$ 35,662	\$ 35,783	\$ 35,904	\$ 36,025	\$ 36,146	\$ 36,266
44417 Sewer - Sunsweet Debt Charge	1	\$ 7,680	\$ 7,680	\$ 7,706	\$ 7,733	\$ 7,759	\$ 7,785	\$ 7,811	\$ 7,838	\$ 7,864	\$ 7,890
46110 Interest on Investment (3)	See FP	\$ 53,884	\$ 94,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
49010 Other Revenue	9	\$ 9,434	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000
49210 Sale - Real/Personal Property	9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
49510 Lease Proceeds	9	\$ -	\$ 8,123	\$ 8,123	\$ 8,123	\$ 8,123	\$ 8,123	\$ 8,123	\$ 8,123	\$ 8,123	\$ 8,123
Fund 519 - Stonegate											
44480 Stonegate Revenues	1	\$ 45,636	\$ 45,000	\$ 45,154	\$ 45,308	\$ 45,462	\$ 45,616	\$ 45,770	\$ 45,924	\$ 46,078	\$ 46,232
46110 Interest on Investment (3)	See FP	\$ 908	\$ 1,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fund 527 - Sewer Connection Fees											
44420 Sewer - Main Extension	1	\$ 36,997	\$ 50,000	\$ 50,171	\$ 50,342	\$ 50,513	\$ 50,684	\$ 50,855	\$ 51,027	\$ 51,198	\$ 51,369
44430 Sewer - Connection Fee	9	\$ 416,111	\$ 335,000	\$ 335,000	\$ 335,000	\$ 335,000	\$ 335,000	\$ 335,000	\$ 335,000	\$ 335,000	\$ 335,000
44431 Sewer - Spec Connection Fee	1	\$ 17,649	\$ 25,000	\$ 25,086	\$ 25,171	\$ 25,257	\$ 25,342	\$ 25,428	\$ 25,513	\$ 25,599	\$ 25,684
46110 Interest on Investment (3)	See FP	\$ 40,875	\$ 67,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL: REVENUE		\$ 12,599,492	\$ 11,955,153	\$ 11,831,590	\$ 11,870,726	\$ 11,909,863	\$ 11,949,000	\$ 11,988,137	\$ 12,027,273	\$ 12,066,410	\$ 12,105,547
REVENUE SUMMARY											
Fund 518 - Sewer Fund											
Wastewater Rate Revenue		\$ 11,675,803	\$ 11,036,850	\$ 11,074,616	\$ 11,112,382	\$ 11,150,149	\$ 11,187,915	\$ 11,225,682	\$ 11,263,448	\$ 11,301,214	\$ 11,338,981
Sunsweet Non-Rate Revenue		\$ 42,984	\$ 42,980	\$ 43,127	\$ 43,274	\$ 43,421	\$ 43,568	\$ 43,715	\$ 43,862	\$ 44,009	\$ 44,157
Other Operating Revenue		\$ 288,646	\$ 257,623	\$ 258,436	\$ 259,249	\$ 260,061	\$ 260,874	\$ 261,687	\$ 262,499	\$ 263,312	\$ 264,125
Interest Earnings		\$ 53,884	\$ 94,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fund 519 - Stonegate											
Stonegate Revenues		\$ 45,636	\$ 45,000	\$ 45,154	\$ 45,308	\$ 45,462	\$ 45,616	\$ 45,770	\$ 45,924	\$ 46,078	\$ 46,232
Interest Earnings		\$ 908	\$ 1,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fund 527 - Sewer Connection Fees											
Connection Fees		\$ 416,111	\$ 335,000	\$ 335,000	\$ 335,000	\$ 335,000	\$ 335,000	\$ 335,000	\$ 335,000	\$ 335,000	\$ 335,000
Other Connection Fee Fund Revenue		\$ 54,646	\$ 75,000	\$ 75,257	\$ 75,513	\$ 75,770	\$ 76,027	\$ 76,283	\$ 76,540	\$ 76,796	\$ 77,053
Interest Earnings		\$ 40,875	\$ 67,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL: REVENUE		\$ 12,599,492	\$ 11,955,153	\$ 11,831,590	\$ 11,870,726	\$ 11,909,863	\$ 11,949,000	\$ 11,988,137	\$ 12,027,273	\$ 12,066,410	\$ 12,105,547

EXHIBIT 1

**CITY OF YUBA CITY
WASTEWATER RATE STUDY
Operating Revenue and Expenses**

OPERATING EXPENSE FORECAST (4):

	Basis	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Sewer Fund Operations											
Fund 518 Sewer Fund											
Division 8110 Sewer Collection											
Salaries and Benefits											
61210 Salaries - Regular	3	\$ 312,532	\$ 327,775	\$ 337,608	\$ 347,736	\$ 358,169	\$ 368,914	\$ 379,981	\$ 391,380	\$ 403,122	\$ 415,216
61211 Salaries - Sick Leave	3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61212 Salaries - Vacation	3	\$ 3,100	\$ 3,100	\$ 3,193	\$ 3,289	\$ 3,367	\$ 3,489	\$ 3,594	\$ 3,702	\$ 3,813	\$ 3,927
61215 Salaries - Standby	3	\$ 609	\$ 609	\$ 627	\$ 646	\$ 665	\$ 685	\$ 706	\$ 727	\$ 749	\$ 771
61217 Salaries - ADM Payoff	3	\$ 1,000	\$ 1,000	\$ 1,030	\$ 1,061	\$ 1,093	\$ 1,126	\$ 1,159	\$ 1,194	\$ 1,230	\$ 1,267
61310 Wages - Extra Help	3	\$ 7,000	\$ 7,000	\$ 7,210	\$ 7,426	\$ 7,649	\$ 7,879	\$ 8,115	\$ 8,358	\$ 8,609	\$ 8,867
61430 Overtime - Regular	4	\$ 4,701	\$ 5,183	\$ 5,701	\$ 6,271	\$ 6,899	\$ 7,588	\$ 8,347	\$ 9,182	\$ 10,100	\$ 11,110
61501 Medicare	4	\$ 88,209	\$ 60,594	\$ 66,653	\$ 73,319	\$ 80,651	\$ 88,716	\$ 97,587	\$ 107,346	\$ 118,081	\$ 129,889
61502 Health Plan	5	\$ 95,937	\$ 100,368	\$ 108,782	\$ 117,240	\$ 126,107	\$ 130,284	\$ 121,624	\$ 125,273	\$ 129,031	\$ 132,902
61503 PERS	3	\$ 19,575	\$ 20,653	\$ 21,273	\$ 21,911	\$ 22,568	\$ 23,245	\$ 23,942	\$ 24,661	\$ 25,401	\$ 26,163
61504 Workers Compensation	4	\$ 190	\$ 190	\$ 209	\$ 230	\$ 253	\$ 278	\$ 306	\$ 337	\$ 370	\$ 407
61505 Life Insurance	4	\$ 11,584	\$ 11,584	\$ 12,742	\$ 14,017	\$ 15,418	\$ 16,960	\$ 18,656	\$ 20,522	\$ 22,574	\$ 24,831
61507 Dental / Vision	4	\$ -	\$ 17,941	\$ 19,735	\$ 21,709	\$ 23,879	\$ 26,267	\$ 28,894	\$ 31,784	\$ 34,962	\$ 38,458
61508 Premium Incentive - Health	4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplies and Services											
62210 TEL - Cellular Phone	2	\$ 1,080	\$ 1,080	\$ 1,112	\$ 1,146	\$ 1,180	\$ 1,216	\$ 1,252	\$ 1,290	\$ 1,328	\$ 1,368
62250 TEL - Internet	2	\$ 96	\$ 100	\$ 103	\$ 106	\$ 109	\$ 113	\$ 116	\$ 119	\$ 123	\$ 127
62501 Office Supplies	2	\$ 1,000	\$ 1,000	\$ 1,030	\$ 1,061	\$ 1,093	\$ 1,126	\$ 1,159	\$ 1,194	\$ 1,230	\$ 1,267
62701 Professional Services	2	\$ 13,500	\$ 13,500	\$ 13,905	\$ 14,322	\$ 14,752	\$ 15,194	\$ 15,650	\$ 16,120	\$ 16,603	\$ 17,101
62706 Employee Physical Exams	2	\$ 120	\$ 120	\$ 124	\$ 127	\$ 131	\$ 135	\$ 139	\$ 143	\$ 148	\$ 152
62801 Professional Development	2	\$ 1,000	\$ 1,000	\$ 1,030	\$ 1,061	\$ 1,093	\$ 1,126	\$ 1,159	\$ 1,194	\$ 1,230	\$ 1,267
63101 Dues & Subscrip	2	\$ 800	\$ 800	\$ 824	\$ 849	\$ 874	\$ 900	\$ 927	\$ 955	\$ 984	\$ 1,013
63201 Rental - Bldgs/Equip/Land	2	\$ 2,000	\$ 2,000	\$ 2,060	\$ 2,122	\$ 2,185	\$ 2,251	\$ 2,319	\$ 2,388	\$ 2,460	\$ 2,534
63310 O&M Radio Service	2	\$ 300	\$ 300	\$ 309	\$ 318	\$ 328	\$ 338	\$ 348	\$ 358	\$ 369	\$ 380
63401 Special Equipment O&M	2	\$ 28,019	\$ 28,019	\$ 28,859	\$ 29,725	\$ 30,617	\$ 31,535	\$ 32,481	\$ 33,456	\$ 34,459	\$ 35,493
63501 Vehicle MTCE - ISF	2	\$ 45,577	\$ 29,753	\$ 30,646	\$ 31,565	\$ 32,512	\$ 33,487	\$ 34,492	\$ 35,527	\$ 36,592	\$ 37,690
63505 Vehicle Maint Fuel	2	\$ 34,929	\$ 35,715	\$ 36,786	\$ 37,890	\$ 39,027	\$ 40,198	\$ 41,403	\$ 42,646	\$ 43,925	\$ 45,243
63599 Vehicle Replacement Fee	2	\$ 25,289	\$ 83,177	\$ 85,672	\$ 88,242	\$ 90,890	\$ 93,616	\$ 96,425	\$ 99,318	\$ 102,297	\$ 105,366
63601 Bldg. O&M MTCE	2	\$ -	\$ 5,600	\$ 5,768	\$ 5,941	\$ 6,119	\$ 6,303	\$ 6,492	\$ 6,687	\$ 6,887	\$ 7,094
63604 Spec O&M Laundry	2	\$ 2,400	\$ 2,400	\$ 2,472	\$ 2,546	\$ 2,623	\$ 2,701	\$ 2,782	\$ 2,866	\$ 2,952	\$ 3,040
63670 Bldg. O&M Lines Repair	2	\$ 25,000	\$ 25,000	\$ 25,750	\$ 26,523	\$ 27,318	\$ 28,138	\$ 28,982	\$ 29,851	\$ 30,747	\$ 31,669
63701 Chemicals	2	\$ 5,100	\$ 5,100	\$ 5,253	\$ 5,411	\$ 5,573	\$ 5,740	\$ 5,912	\$ 6,090	\$ 6,272	\$ 6,461
63801 Tools, Supplies, Equip <5k	2	\$ 4,000	\$ 4,000	\$ 4,120	\$ 4,244	\$ 4,371	\$ 4,502	\$ 4,637	\$ 4,776	\$ 4,919	\$ 5,067
63901 Training Program / Aids	2	\$ 2,000	\$ 2,000	\$ 2,060	\$ 2,122	\$ 2,185	\$ 2,251	\$ 2,319	\$ 2,388	\$ 2,460	\$ 2,534
63909 Safety Equipment	2	\$ 6,000	\$ 6,000	\$ 6,180	\$ 6,365	\$ 6,556	\$ 6,753	\$ 6,956	\$ 7,164	\$ 7,379	\$ 7,601
64101 Raw Water Purchases	2	\$ 388	\$ 347	\$ 357	\$ 368	\$ 379	\$ 391	\$ 402	\$ 414	\$ 427	\$ 440
64151 City Fac SWR Charges	2	\$ 131	\$ 140	\$ 144	\$ 149	\$ 153	\$ 158	\$ 162	\$ 167	\$ 172	\$ 177
64310 Liability Insurance	2	\$ 34,168	\$ 19,363	\$ 19,944	\$ 20,542	\$ 21,158	\$ 21,793	\$ 22,447	\$ 23,120	\$ 23,814	\$ 24,528
64910 Depreciation (5)	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
69201 Equipment	2	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total: Sewer Fund Operations - Sewer Collection		\$ 807,334	\$ 822,511	\$ 859,273	\$ 897,599	\$ 937,965	\$ 975,394	\$ 1,001,875	\$ 1,042,697	\$ 1,085,819	\$ 1,131,420

CITY OF YUBA CITY
WASTEWATER RATE STUDY
Operating Revenue and Expenses

EXHIBIT 1

	Basis	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Sewer Fund Operations, continued											
Fund 518 Sewer Fund											
Division 8120 Sewer Treatment Plant											
Other Supplies and Services											
66101 Outreach Materials	2	\$ 8,500	\$ 8,500	\$ 8,755	\$ 9,018	\$ 9,288	\$ 9,567	\$ 9,854	\$ 10,149	\$ 10,454	\$ 10,768
Salaries - Regular	3	\$ 1,208,996	\$ 1,356,347	\$ 1,397,037	\$ 1,438,949	\$ 1,482,117	\$ 1,526,580	\$ 1,572,378	\$ 1,619,549	\$ 1,668,136	\$ 1,718,180
Salaries - Sick Leave	3	-	-	-	-	-	-	-	-	-	-
Salaries - Vacation	3	-	-	-	-	-	-	-	-	-	-
Salaries - Standby	3	\$ 5,000	\$ 5,000	\$ 5,150	\$ 5,305	\$ 5,464	\$ 5,628	\$ 5,796	\$ 5,970	\$ 6,149	\$ 6,334
Salary - Shift Differential	3	\$ 7,000	\$ 7,000	\$ 7,210	\$ 7,426	\$ 7,649	\$ 7,879	\$ 8,115	\$ 8,358	\$ 8,609	\$ 8,867
Salaries - ADM Payoff	3	\$ 2,974	\$ 2,910	\$ 2,997	\$ 3,087	\$ 3,180	\$ 3,275	\$ 3,373	\$ 3,475	\$ 3,579	\$ 3,686
Wages - Extra Help	3	\$ 40,000	\$ 40,000	\$ 41,200	\$ 42,436	\$ 43,709	\$ 45,020	\$ 46,371	\$ 47,762	\$ 49,195	\$ 50,671
Overtime - Regular	3	\$ 40,000	\$ 40,000	\$ 41,200	\$ 42,436	\$ 43,709	\$ 45,020	\$ 46,371	\$ 47,762	\$ 49,195	\$ 50,671
Overtime - Holiday	3	\$ 16,000	\$ 16,000	\$ 16,480	\$ 16,974	\$ 17,484	\$ 18,008	\$ 18,548	\$ 19,105	\$ 19,678	\$ 20,268
Medicare	4	\$ 19,140	\$ 21,521	\$ 23,673	\$ 26,040	\$ 28,644	\$ 31,509	\$ 34,660	\$ 38,126	\$ 41,938	\$ 46,132
Health Plan	4	\$ 256,132	\$ 265,184	\$ 291,702	\$ 320,873	\$ 352,960	\$ 388,256	\$ 427,081	\$ 469,790	\$ 516,769	\$ 568,445
PERS	5	\$ 387,275	\$ 436,857	\$ 473,480	\$ 510,292	\$ 548,887	\$ 587,067	\$ 629,377	\$ 675,258	\$ 725,258	\$ 779,464
Workers Compensation	4	\$ 493	\$ 553	\$ 608	\$ 669	\$ 736	\$ 810	\$ 891	\$ 980	\$ 1,078	\$ 1,185
Life Insurance	4	\$ 6,300	-	-	-	-	-	-	-	-	-
Unemployment Insurance	4	\$ 33,213	\$ 34,008	\$ 37,409	\$ 41,150	\$ 45,265	\$ 49,791	\$ 54,770	\$ 60,247	\$ 66,272	\$ 72,899
Dental/ Vision	4	-	\$ 16,946	\$ 18,641	\$ 20,505	\$ 22,555	\$ 24,811	\$ 27,292	\$ 30,021	\$ 33,023	\$ 36,325
Premium Incentive - Health	4	-	-	-	-	-	-	-	-	-	-
Supplies and Services											
62110 Heat/Power - Electric	7	\$ 900,000	\$ 750,000	\$ 780,000	\$ 811,200	\$ 843,648	\$ 877,394	\$ 912,490	\$ 948,989	\$ 986,949	\$ 1,026,427
62112 Heat/Power - Gas	7	\$ 50,000	\$ 60,000	\$ 62,400	\$ 64,896	\$ 67,492	\$ 70,192	\$ 72,999	\$ 75,919	\$ 78,956	\$ 82,114
62170 Heat/Power - Lift Pumps	7	\$ 100,000	\$ 120,000	\$ 124,800	\$ 129,792	\$ 134,984	\$ 140,383	\$ 145,998	\$ 151,838	\$ 157,912	\$ 164,228
R62110 Heat/Power - Electric	7	\$ 17,445	-	-	-	-	-	-	-	-	-
62199 Energy EFF Contra Expense	7	\$ (15,599)	\$ (15,599)	\$ (16,223)	\$ (16,872)	\$ (17,547)	\$ (18,249)	\$ (18,979)	\$ (19,738)	\$ (20,527)	\$ (21,348)
62201 TEL - Service	2	\$ 8,000	\$ 6,000	\$ 6,180	\$ 6,365	\$ 6,556	\$ 6,753	\$ 6,956	\$ 7,164	\$ 7,379	\$ 7,601
62210 TEL - Cellular Phone	2	\$ 7,500	\$ 6,500	\$ 6,695	\$ 6,896	\$ 7,103	\$ 7,316	\$ 7,535	\$ 7,761	\$ 7,994	\$ 8,234
62245 TEL - Lease Lines	2	\$ 4,500	\$ 4,500	\$ 4,635	\$ 4,774	\$ 4,917	\$ 5,065	\$ 5,217	\$ 5,373	\$ 5,534	\$ 5,700
62250 TEL - Internet	2	\$ 3,552	\$ 3,707	\$ 3,818	\$ 3,933	\$ 4,051	\$ 4,172	\$ 4,297	\$ 4,426	\$ 4,559	\$ 4,696
62301 Postage & Freight	2	\$ 2,000	\$ 2,000	\$ 2,060	\$ 2,122	\$ 2,185	\$ 2,251	\$ 2,319	\$ 2,388	\$ 2,460	\$ 2,534
62401 Advertising	2	\$ 5,000	\$ 5,000	\$ 5,150	\$ 5,305	\$ 5,464	\$ 5,628	\$ 5,796	\$ 5,970	\$ 6,149	\$ 6,334
62501 Office Supplies	2	\$ 7,000	\$ 7,000	\$ 7,210	\$ 7,426	\$ 7,649	\$ 7,879	\$ 8,115	\$ 8,358	\$ 8,609	\$ 8,867
62507 Computer Forms & Supplies	2	\$ 15,000	\$ 15,000	\$ 15,450	\$ 15,914	\$ 16,391	\$ 16,883	\$ 17,389	\$ 17,911	\$ 18,448	\$ 19,002
62508 Photocopy Machine	2	\$ 1,600	\$ 1,500	\$ 1,545	\$ 1,591	\$ 1,639	\$ 1,688	\$ 1,739	\$ 1,791	\$ 1,845	\$ 1,900
62599 Photocopy Charges - ISF	2	\$ 100	\$ 100	\$ 103	\$ 106	\$ 109	\$ 113	\$ 116	\$ 119	\$ 123	\$ 127
62601 Printing & Binding	2	\$ 2,000	\$ 2,000	\$ 2,060	\$ 2,122	\$ 2,185	\$ 2,251	\$ 2,319	\$ 2,388	\$ 2,460	\$ 2,534
62701 Professional Services	2	\$ 225,000	\$ 250,000	\$ 257,500	\$ 265,225	\$ 273,182	\$ 281,377	\$ 289,819	\$ 298,513	\$ 307,468	\$ 316,693
62702 PARS Admin Fee	2	\$ 100	\$ 100	\$ 103	\$ 106	\$ 109	\$ 113	\$ 116	\$ 119	\$ 123	\$ 127
62706 Employee Physical Exams	2	\$ 1,000	\$ 1,000	\$ 1,030	\$ 1,061	\$ 1,093	\$ 1,126	\$ 1,159	\$ 1,194	\$ 1,230	\$ 1,267
62721 Oxygen System	2	\$ 15,000	\$ 15,000	\$ 15,450	\$ 15,914	\$ 16,391	\$ 16,883	\$ 17,389	\$ 17,911	\$ 18,448	\$ 19,002
62724 Levee Assessments	2	\$ 12,000	\$ 12,000	\$ 12,360	\$ 12,731	\$ 13,113	\$ 13,508	\$ 13,911	\$ 14,329	\$ 14,758	\$ 15,201
62733 Willadan Fees	2	\$ 3,500	\$ 3,500	\$ 3,605	\$ 3,713	\$ 3,825	\$ 3,939	\$ 4,057	\$ 4,179	\$ 4,305	\$ 4,434
62742 DR/CR Card Processing Fees	2	\$ 10,000	\$ 10,000	\$ 10,300	\$ 10,609	\$ 10,927	\$ 11,255	\$ 11,593	\$ 11,941	\$ 12,299	\$ 12,668
R62701 Professional Services	2	\$ 10,707	-	-	-	-	-	-	-	-	-
62759 Specialty Contract Services	2	\$ -	\$ 275,000	\$ 283,250	\$ 291,748	\$ 300,500	\$ 309,515	\$ 318,800	\$ 328,364	\$ 338,215	\$ 348,362
62801 Professional Development	2	\$ 5,000	\$ 5,000	\$ 5,150	\$ 5,305	\$ 5,464	\$ 5,628	\$ 5,796	\$ 5,970	\$ 6,149	\$ 6,334
63101 Dues & Subscriptions	2	\$ 110,000	\$ 125,000	\$ 128,750	\$ 132,613	\$ 136,591	\$ 140,689	\$ 144,909	\$ 149,257	\$ 153,734	\$ 158,346
63202 Rental - Heavy Equipment	2	\$ 4,000	\$ 4,000	\$ 4,120	\$ 4,244	\$ 4,371	\$ 4,502	\$ 4,637	\$ 4,776	\$ 4,919	\$ 5,067
63301 O&M Office Equipment	2	\$ 500	\$ 500	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580	\$ 597	\$ 615	\$ 633
63310 O&M Radio Service	2	\$ 4,000	\$ 4,000	\$ 4,120	\$ 4,244	\$ 4,371	\$ 4,502	\$ 4,637	\$ 4,776	\$ 4,919	\$ 5,067
63320 O&M Computer System	2	\$ 2,000	\$ 2,000	\$ 2,060	\$ 2,122	\$ 2,185	\$ 2,251	\$ 2,319	\$ 2,388	\$ 2,460	\$ 2,534
R63310 O&M Radio Service	2	\$ 1,467	-	-	-	-	-	-	-	-	-
Sub-Total: Sewer Fund Operations - Sewer Treatment Plant		\$ 3,650,337	\$ 4,027,996	\$ 4,212,337	\$ 4,404,749	\$ 4,607,385	\$ 4,798,653	\$ 4,943,761	\$ 5,152,867	\$ 5,373,659	\$ 5,607,000

CITY OF YUBA CITY
WASTEWATER RATE STUDY
Operating Revenue and Expenses

EXHIBIT 1

	Basis	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Sewer Fund Operations, continued											
Division 8120 Sewer Treatment Plant											
Special Equipment O&M											
63401	Special Equipment O&M	2	\$ 25,000	\$ 25,000	\$ 25,750	\$ 27,318	\$ 28,138	\$ 28,982	\$ 29,851	\$ 30,747	\$ 31,689
63420	SPEC O&M - Compressor	2	\$ 75,000	\$ 75,000	\$ 77,250	\$ 79,568	\$ 84,413	\$ 86,946	\$ 89,554	\$ 92,241	\$ 95,008
63421	SPEC O&M - Analyzer	2	\$ 7,500	\$ 7,500	\$ 7,725	\$ 7,957	\$ 8,441	\$ 8,695	\$ 8,955	\$ 9,224	\$ 9,501
63430	SPEC O&M - Electric Control	2	\$ 15,000	\$ 15,000	\$ 15,450	\$ 15,914	\$ 16,391	\$ 17,389	\$ 17,911	\$ 18,448	\$ 19,002
63431	SPEC O&M - Elec Spare Part	2	\$ 35,000	\$ 35,000	\$ 36,050	\$ 37,132	\$ 38,245	\$ 40,575	\$ 43,046	\$ 44,337	\$ 45,750
63432	SPEC O&M - Elec Motors	2	\$ 20,000	\$ 20,000	\$ 20,600	\$ 21,218	\$ 21,855	\$ 22,510	\$ 23,881	\$ 24,597	\$ 25,335
63433	SPEC O&M - Instrumentation	2	\$ 40,000	\$ 40,000	\$ 41,200	\$ 42,436	\$ 43,709	\$ 46,371	\$ 47,762	\$ 49,195	\$ 50,671
63450	SPEC O&M - Lubrication	2	\$ 8,000	\$ 8,000	\$ 8,240	\$ 8,487	\$ 8,742	\$ 9,004	\$ 9,274	\$ 9,552	\$ 9,839
63451	SPEC O&M - Major MTCE	2	\$ 175,000	\$ 175,000	\$ 180,250	\$ 185,658	\$ 191,227	\$ 202,873	\$ 208,959	\$ 215,228	\$ 221,685
63456	SPEC O&M - Machine	2	\$ 1,500	\$ 1,500	\$ 1,545	\$ 1,591	\$ 1,639	\$ 1,739	\$ 1,791	\$ 1,845	\$ 1,900
63457	SPEC O&M - Mech Supplies	2	\$ 9,000	\$ 9,000	\$ 9,270	\$ 9,548	\$ 9,835	\$ 10,433	\$ 10,746	\$ 11,069	\$ 11,401
63460	SPEC O&M - Mech Chem Feed	2	\$ 30,000	\$ 30,000	\$ 30,900	\$ 31,827	\$ 32,782	\$ 34,778	\$ 35,822	\$ 36,896	\$ 38,003
63462	SPEC O&M - Mech Solid	2	\$ 25,000	\$ 25,000	\$ 25,750	\$ 26,523	\$ 27,318	\$ 28,982	\$ 29,851	\$ 30,747	\$ 31,689
63463	SPEC O&M - Mech Spare Part	2	\$ 15,000	\$ 15,000	\$ 15,450	\$ 15,914	\$ 16,391	\$ 17,389	\$ 17,911	\$ 18,448	\$ 19,002
63471	SPEC O&M - Bldg Solids	2	\$ 275,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R63420	SPEC O&M - Compressor	2	\$ 14,928	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R63433	SPEC O&M - Instrumentation	2	\$ 1,834	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R63451	SPEC O&M - Major MTCE	2	\$ 18,435	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63501	Vehicle MTCE - ISF	2	\$ 51,882	\$ 89,263	\$ 91,941	\$ 94,699	\$ 97,540	\$ 103,480	\$ 106,585	\$ 109,782	\$ 113,076
63505	Vehicle Maint Fuel	2	\$ 30,396	\$ 33,014	\$ 34,004	\$ 35,025	\$ 36,075	\$ 38,272	\$ 39,420	\$ 40,603	\$ 41,821
63599	Vehicle Replacement Fee	2	\$ 54,432	\$ 140,327	\$ 144,537	\$ 149,873	\$ 153,339	\$ 162,677	\$ 167,558	\$ 172,585	\$ 177,762
63601	BLDG O&M - MTCE	2	\$ 60,000	\$ 60,000	\$ 61,800	\$ 63,654	\$ 65,564	\$ 69,556	\$ 71,643	\$ 73,792	\$ 76,006
63603	SPEC O&M - Janitorial	2	\$ 2,500	\$ 2,500	\$ 2,575	\$ 2,652	\$ 2,732	\$ 2,898	\$ 2,985	\$ 3,075	\$ 3,167
63604	SPEC O&M - Laundry	2	\$ 7,500	\$ 7,500	\$ 7,725	\$ 7,957	\$ 8,441	\$ 8,695	\$ 8,955	\$ 9,224	\$ 9,501
63684	SPEC O&M - Landscape	2	\$ 15,000	\$ 15,000	\$ 15,450	\$ 15,914	\$ 16,391	\$ 17,389	\$ 17,911	\$ 18,448	\$ 19,002
R63601	BLDG O&M - MTCE	2	\$ 2,822	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Chemicals											
63701	Chemicals	6	\$ 20,000	\$ 20,000	\$ 21,000	\$ 22,050	\$ 23,153	\$ 25,526	\$ 26,802	\$ 28,142	\$ 29,549
63702	Chlorine	6	\$ 120,000	\$ 160,000	\$ 168,000	\$ 176,400	\$ 185,220	\$ 204,205	\$ 214,415	\$ 225,136	\$ 236,393
63720	Weed Control	6	\$ 20,000	\$ 20,000	\$ 21,000	\$ 22,050	\$ 23,153	\$ 25,526	\$ 26,802	\$ 28,142	\$ 29,549
63731	Sodium Bisulfite	6	\$ 80,000	\$ 110,000	\$ 115,500	\$ 121,275	\$ 127,339	\$ 140,391	\$ 147,411	\$ 154,781	\$ 162,520
63732	Oxygen	6	\$ 95,000	\$ 300,000	\$ 315,000	\$ 330,750	\$ 347,288	\$ 382,884	\$ 402,029	\$ 422,130	\$ 443,237
63733	Polymers	6	\$ 225,000	\$ 225,000	\$ 236,250	\$ 248,063	\$ 260,466	\$ 287,163	\$ 301,522	\$ 316,598	\$ 332,427
63735	Sodium Hydroxide	6	\$ 15,000	\$ 15,000	\$ 15,750	\$ 16,538	\$ 17,364	\$ 19,144	\$ 20,101	\$ 21,107	\$ 22,162
63738	Chemical - Odor Control	6	\$ 5,000	\$ 5,000	\$ 5,250	\$ 5,513	\$ 5,788	\$ 6,381	\$ 6,700	\$ 7,036	\$ 7,387
63739	Ammonium Polyphosphate	6	\$ 10,000	\$ 10,000	\$ 10,500	\$ 11,025	\$ 11,576	\$ 12,763	\$ 13,401	\$ 14,071	\$ 14,775
63740	Polymer Daff	6	\$ 110,000	\$ 110,000	\$ 115,500	\$ 121,275	\$ 127,339	\$ 140,391	\$ 147,411	\$ 154,781	\$ 162,520
Other Supplies and Services											
63801	Tools, Supplies & Equip <5k	2	\$ 12,500	\$ 12,500	\$ 12,875	\$ 13,261	\$ 13,659	\$ 14,491	\$ 14,926	\$ 15,373	\$ 15,835
63901	Training Program / Aids	2	\$ 30,000	\$ 30,000	\$ 30,900	\$ 31,827	\$ 32,782	\$ 34,778	\$ 35,822	\$ 36,896	\$ 38,003
63904	Manuals / Codes	2	\$ 1,000	\$ 1,000	\$ 1,030	\$ 1,061	\$ 1,093	\$ 1,126	\$ 1,159	\$ 1,200	\$ 1,267
63909	Safety Equipment	2	\$ 20,000	\$ 20,000	\$ 20,600	\$ 21,218	\$ 21,855	\$ 23,185	\$ 23,881	\$ 24,597	\$ 25,335
64101	Raw Water Purchases	1	\$ 7,143	\$ 6,933	\$ 6,957	\$ 6,980	\$ 7,004	\$ 7,052	\$ 7,075	\$ 7,099	\$ 7,123
64310	Liability Insurance	2	\$ 62,495	\$ 66,940	\$ 68,948	\$ 71,017	\$ 73,147	\$ 77,602	\$ 79,930	\$ 82,328	\$ 84,798
64910	Depreciation (4)	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
65201	Interest (6)	9	\$ -	\$ 13,336	\$ 8,081	\$ 7,833	\$ 7,556	\$ 6,890	\$ 6,468	\$ 6,006	\$ 5,502
65202	Principal (6)	9	\$ -	\$ 10,387	\$ 8,220	\$ 9,200	\$ 10,239	\$ 11,341	\$ 12,517	\$ 13,768	\$ 15,061
65801	Computer Maint/Rep - ISF	2	\$ 45,337	\$ 47,455	\$ 48,879	\$ 50,345	\$ 51,855	\$ 55,013	\$ 56,664	\$ 58,364	\$ 60,115
66001	Other Material & Supplies	2	\$ 25,000	\$ 25,000	\$ 25,750	\$ 26,523	\$ 27,318	\$ 28,982	\$ 29,851	\$ 30,747	\$ 31,689
69201	Equipment	2	\$ 284,250	\$ 53,500	\$ 55,105	\$ 56,758	\$ 58,461	\$ 62,021	\$ 63,882	\$ 65,798	\$ 67,772
Sub-Total: Sewer Fund Operations - Sewer Treatment Plant			\$ 2,203,453	\$ 2,090,654	\$ 2,164,557	\$ 2,250,026	\$ 2,339,091	\$ 2,530,237	\$ 2,631,139	\$ 2,736,323	\$ 2,845,980
Total: Sewer Fund Operations - Sewer Treatment Plant			\$ 5,853,790	\$ 6,118,650	\$ 6,376,894	\$ 6,654,775	\$ 6,946,475	\$ 7,473,998	\$ 7,784,006	\$ 8,109,982	\$ 8,452,980

CITY OF YUBA CITY
WASTEWATER RATE STUDY
Operating Revenue and Expenses

EXHIBIT 1

Sewer Fund Operations, continued		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Fund 518 Sewer Fund	Basis										
Division 8130 Wastewater Pretreatment											
Salaries and Benefits											
61210 Salaries - Regular	3	\$ 66,215	\$ 67,037	\$ 69,048	\$ 71,120	\$ 73,253	\$ 75,451	\$ 77,714	\$ 80,046	\$ 82,447	\$ 84,920
61211 Salaries - Sick Leave	3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61212 Salaries - Vacatlon	3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61310 Wages - Extra Help	3	\$ 1,000	\$ 1,000	\$ 1,030	\$ 1,061	\$ 1,093	\$ 1,126	\$ 1,159	\$ 1,194	\$ 1,230	\$ 1,267
61430 Overtime - Regular	3	\$ 750	\$ 750	\$ 773	\$ 796	\$ 820	\$ 844	\$ 869	\$ 896	\$ 922	\$ 950
61501 Medicare	4	\$ 985	\$ 1,041	\$ 1,145	\$ 1,260	\$ 1,386	\$ 1,524	\$ 1,677	\$ 1,844	\$ 2,029	\$ 2,231
61502 Health Plan	4	\$ 12,100	\$ 8,174	\$ 8,991	\$ 9,891	\$ 10,880	\$ 11,968	\$ 13,164	\$ 14,481	\$ 15,929	\$ 17,522
61503 PERS	5	\$ 20,039	\$ 21,116	\$ 22,886	\$ 24,666	\$ 26,551	\$ 27,410	\$ 25,588	\$ 26,356	\$ 27,146	\$ 27,951
61504 Workers Compensation	3	\$ 1,167	\$ 1,281	\$ 1,319	\$ 1,359	\$ 1,400	\$ 1,442	\$ 1,485	\$ 1,530	\$ 1,575	\$ 1,623
61505 Life Insurance	3	\$ 33	\$ 33	\$ 34	\$ 35	\$ 36	\$ 37	\$ 38	\$ 39	\$ 41	\$ 42
61507 Dental / Vision	4	\$ 1,590	\$ 1,590	\$ 1,749	\$ 1,924	\$ 2,116	\$ 2,328	\$ 2,561	\$ 2,817	\$ 3,098	\$ 3,408
61508 Premium Incentive - Health	4	\$ -	\$ 2,990	\$ 3,289	\$ 3,618	\$ 3,980	\$ 4,378	\$ 4,815	\$ 5,297	\$ 5,827	\$ 6,409
Supplies and Services											
62210 TEL - Cellular Phone	2	\$ 1,000	\$ 1,000	\$ 1,030	\$ 1,061	\$ 1,093	\$ 1,126	\$ 1,159	\$ 1,194	\$ 1,230	\$ 1,267
62250 TEL - Internet	2	\$ 96	\$ 100	\$ 103	\$ 106	\$ 109	\$ 113	\$ 116	\$ 119	\$ 123	\$ 127
62301 Postage & Freight	2	\$ 750	\$ 500	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580	\$ 597	\$ 615	\$ 633
62401 Advertising	2	\$ 500	\$ 500	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580	\$ 597	\$ 615	\$ 633
62501 Office Supplies	2	\$ 500	\$ 500	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580	\$ 597	\$ 615	\$ 633
62507 Computer Forms & Supplies	2	\$ 500	\$ 500	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580	\$ 597	\$ 615	\$ 633
62701 Professional Services	2	\$ 25,000	\$ 25,000	\$ 25,750	\$ 26,523	\$ 27,318	\$ 28,138	\$ 28,982	\$ 29,851	\$ 30,747	\$ 31,669
62801 Professional Development	2	\$ 250	\$ 250	\$ 258	\$ 265	\$ 273	\$ 281	\$ 290	\$ 299	\$ 307	\$ 317
63101 Dues & Subscrip	2	\$ 500	\$ 500	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580	\$ 597	\$ 615	\$ 633
63401 Special Equipment O&M	2	\$ 5,000	\$ 5,000	\$ 5,150	\$ 5,305	\$ 5,464	\$ 5,628	\$ 5,796	\$ 5,970	\$ 6,149	\$ 6,334
63470 Spec O&M - Lab Supplies	2	\$ 4,000	\$ 4,000	\$ 4,120	\$ 4,244	\$ 4,371	\$ 4,502	\$ 4,637	\$ 4,776	\$ 4,919	\$ 5,067
63505 Vehicle Maint Fuel	2	\$ 1,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63604 Spec O&M - Laundry	2	\$ -	\$ 250	\$ 258	\$ 265	\$ 273	\$ 281	\$ 290	\$ 299	\$ 307	\$ 317
63901 Training Program / Aids	2	\$ 500	\$ 500	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580	\$ 597	\$ 615	\$ 633
63904 Manuals/Codes	2	\$ 500	\$ 500	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580	\$ 597	\$ 615	\$ 633
63909 Safety Equipment	2	\$ 250	\$ 250	\$ 258	\$ 265	\$ 273	\$ 281	\$ 290	\$ 299	\$ 307	\$ 317
64310 Liability Insurance	2	\$ 3,165	\$ 3,272	\$ 3,370	\$ 3,471	\$ 3,575	\$ 3,683	\$ 3,793	\$ 3,907	\$ 4,024	\$ 4,145
64910 Depreciation (5)	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total: Sewer Fund Operations - Wastewater Pretreatment		\$ 148,290	\$ 147,634	\$ 154,165	\$ 160,945	\$ 168,068	\$ 174,478	\$ 178,482	\$ 185,392	\$ 192,664	\$ 200,326

CITY OF YUBA CITY
WASTEWATER RATE STUDY
Operating Revenue and Expenses

EXHIBIT 1

	Basis	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Sewer Fund Operations, continued											
Fund 518 Sewer Fund											
Division 8140 Treatment Plant Lab											
Salaries and Benefits											
61210 Salaries - Regular	3	\$ 283,016	\$ 284,895	\$ 293,442	\$ 302,245	\$ 311,312	\$ 320,652	\$ 330,271	\$ 340,180	\$ 350,385	\$ 360,896
61211 Salaries - Sick Leave	3	-	-	-	-	-	-	-	-	-	-
61212 Salaries - Vacation	3	-	-	-	-	-	-	-	-	-	-
61310 Wages - Extra Help	3	\$ 6,500	\$ 6,500	\$ 6,695	\$ 6,896	\$ 7,103	\$ 7,316	\$ 7,535	\$ 7,761	\$ 7,994	\$ 8,234
61430 Overtime - Regular	3	\$ 5,000	\$ 5,000	\$ 5,150	\$ 5,305	\$ 5,464	\$ 5,628	\$ 5,796	\$ 5,970	\$ 6,149	\$ 6,334
61431 Overtime - Holiday	3	\$ 3,000	\$ 3,000	\$ 3,090	\$ 3,183	\$ 3,278	\$ 3,377	\$ 3,478	\$ 3,582	\$ 3,690	\$ 3,800
61501 Medicare	4	\$ 4,314	\$ 4,385	\$ 4,824	\$ 5,306	\$ 5,836	\$ 6,420	\$ 7,062	\$ 7,768	\$ 8,545	\$ 9,400
61502 Health Plan	4	\$ 72,600	\$ 76,856	\$ 84,542	\$ 92,996	\$ 102,295	\$ 112,525	\$ 123,777	\$ 136,155	\$ 149,771	\$ 164,748
61503 PERS	5	\$ 90,711	\$ 93,335	\$ 101,160	\$ 109,025	\$ 117,270	\$ 121,154	\$ 113,102	\$ 116,495	\$ 119,990	\$ 123,590
61504 Workers Compensation	3	\$ 5,102	\$ 5,566	\$ 5,733	\$ 5,905	\$ 6,082	\$ 6,265	\$ 6,453	\$ 6,646	\$ 6,845	\$ 7,051
61505 Life Insurance	3	\$ 133	\$ 133	\$ 137	\$ 141	\$ 145	\$ 150	\$ 154	\$ 159	\$ 164	\$ 168
61507 Dental / Vision	4	\$ 9,535	\$ 9,535	\$ 10,489	\$ 11,537	\$ 12,691	\$ 13,960	\$ 15,356	\$ 16,892	\$ 18,581	\$ 20,439
61508 Premium Incentive - Health	4	-	\$ 2,990	\$ 3,289	\$ 3,618	\$ 3,980	\$ 4,378	\$ 4,815	\$ 5,297	\$ 5,827	\$ 6,409
Supplies and Services											
62250 TEL - Internet	2	\$ 1,056	\$ 1,102	\$ 1,135	\$ 1,169	\$ 1,204	\$ 1,240	\$ 1,278	\$ 1,316	\$ 1,355	\$ 1,396
62301 Postage & Freight	2	\$ 5,000	\$ 5,000	\$ 5,150	\$ 5,305	\$ 5,464	\$ 5,628	\$ 5,796	\$ 5,970	\$ 6,149	\$ 6,334
62501 Office Supplies	2	\$ 2,000	\$ 2,000	\$ 2,060	\$ 2,122	\$ 2,185	\$ 2,251	\$ 2,319	\$ 2,388	\$ 2,460	\$ 2,534
62507 Computer Forms & Supplies	2	\$ 1,500	\$ 1,500	\$ 1,545	\$ 1,591	\$ 1,639	\$ 1,688	\$ 1,739	\$ 1,791	\$ 1,845	\$ 1,900
62508 Photocopy Machine	2	\$ 2,000	\$ 2,000	\$ 2,060	\$ 2,122	\$ 2,185	\$ 2,251	\$ 2,319	\$ 2,388	\$ 2,460	\$ 2,534
62701 Professional Services	2	\$ 150,000	\$ 175,000	\$ 180,250	\$ 185,658	\$ 191,227	\$ 196,964	\$ 202,873	\$ 208,959	\$ 215,228	\$ 221,685
62725 Commercial Lab Expenses	2	\$ 40,000	\$ 50,000	\$ 51,500	\$ 53,045	\$ 54,636	\$ 56,275	\$ 57,964	\$ 59,703	\$ 61,494	\$ 63,339
62801 Professional Development	2	\$ 1,500	\$ 1,500	\$ 1,545	\$ 1,591	\$ 1,639	\$ 1,688	\$ 1,739	\$ 1,791	\$ 1,845	\$ 1,900
63101 Dues & Subscrip	2	\$ 1,250	\$ 1,250	\$ 1,288	\$ 1,326	\$ 1,366	\$ 1,407	\$ 1,449	\$ 1,493	\$ 1,537	\$ 1,583
63401 Special Equipment O&M	2	\$ 10,000	\$ 10,000	\$ 10,300	\$ 10,609	\$ 10,927	\$ 11,255	\$ 11,593	\$ 11,941	\$ 12,299	\$ 12,668
63470 Spec O&M - Lab Supplies	2	\$ 125,000	\$ 125,000	\$ 128,750	\$ 132,613	\$ 136,591	\$ 140,689	\$ 144,909	\$ 149,257	\$ 153,734	\$ 158,346
63501 Vehicle MTCE - ISF	2	\$ 3,422	\$ 8,852	\$ 9,118	\$ 9,391	\$ 9,673	\$ 9,963	\$ 10,262	\$ 10,570	\$ 10,887	\$ 11,213
63505 Vehicle Maint Fuel	2	\$ 2,177	\$ 1,765	\$ 1,818	\$ 1,872	\$ 1,929	\$ 1,987	\$ 2,046	\$ 2,108	\$ 2,171	\$ 2,236
63599 Vehicle Replacement Fee	2	\$ 482	\$ 2,384	\$ 2,456	\$ 2,529	\$ 2,605	\$ 2,683	\$ 2,764	\$ 2,847	\$ 2,932	\$ 3,020
63601 BLDG O&M - MTCE	2	\$ 7,500	\$ 7,500	\$ 7,725	\$ 7,957	\$ 8,195	\$ 8,441	\$ 8,695	\$ 8,955	\$ 9,224	\$ 9,501
63603 BLDG O&M - Janitorial	2	\$ 350	\$ 350	\$ 361	\$ 371	\$ 382	\$ 394	\$ 406	\$ 418	\$ 430	\$ 443
63604 SPEC O&M - Laundry	2	\$ 2,500	\$ 2,500	\$ 2,575	\$ 2,652	\$ 2,732	\$ 2,814	\$ 2,898	\$ 2,985	\$ 3,075	\$ 3,167
63901 Training Program / Aids	2	\$ 2,500	\$ 2,500	\$ 2,575	\$ 2,652	\$ 2,732	\$ 2,814	\$ 2,898	\$ 2,985	\$ 3,075	\$ 3,167
63904 Manuals/Codes	2	\$ 750	\$ 500	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580	\$ 597	\$ 615	\$ 633
63909 Safety Equipment	2	\$ 1,750	\$ 1,500	\$ 1,545	\$ 1,591	\$ 1,639	\$ 1,688	\$ 1,739	\$ 1,791	\$ 1,845	\$ 1,900
64310 Liability Insurance	2	\$ 14,004	\$ 14,240	\$ 14,667	\$ 15,107	\$ 15,560	\$ 16,027	\$ 16,500	\$ 17,003	\$ 17,513	\$ 18,039
64910 Depreciation (5)	2	-	-	-	-	-	-	-	-	-	-
66001 Other Materials & Supplies	2	\$ 10,000	\$ 10,000	\$ 10,300	\$ 10,609	\$ 10,927	\$ 11,255	\$ 11,593	\$ 11,941	\$ 12,299	\$ 12,668
69201 Equipment	2	\$ 90,000	\$ 220,000	\$ 92,700	\$ 95,481	\$ 98,345	\$ 101,296	\$ 104,335	\$ 107,465	\$ 110,689	\$ 114,009
Total: Sewer Fund Operations - Treatment Plant Lab		\$ 953,402	\$ 1,138,638	\$ 1,050,485	\$ 1,094,050	\$ 1,139,789	\$ 1,183,084	\$ 1,216,500	\$ 1,263,565	\$ 1,313,100	\$ 1,365,284

CITY OF YUBA CITY
WASTEWATER RATE STUDY
Operating Revenue and Expenses

EXHIBIT 1

	Basis	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Sewer Fund Operations											
Fund 519 Stonegate Fund											
Department 8200 Stonegate Facility											
Salaries and Benefits											
61210 Salaries - Regular	3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61501 Medicare	4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61502 Health Plan	4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61503 PERS	5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61504 Workers Compensation	3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61505 Life Insurance	3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61507 Dental / Vision	4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplies and Services											
63101 Dues & Subscrip	2	\$ 1,800	\$ 2,500	\$ 2,575	\$ 2,652	\$ 2,732	\$ 2,814	\$ 2,898	\$ 2,985	\$ 3,075	\$ 3,167
63401 Special Equipment O&M	2	\$ 25,000	\$ 80,000	\$ 82,400	\$ 84,872	\$ 87,418	\$ 90,041	\$ 92,742	\$ 95,524	\$ 98,390	\$ 101,342
63451 Spec O&M - Major MTCE	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R63401 Special Equipment O&M	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63601 BLDG O&M - MTCE	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
64101 Raw Water Purchases	1	\$ 617	\$ 316	\$ 317	\$ 318	\$ 319	\$ 320	\$ 321	\$ 322	\$ 324	\$ 325
Total: Sewer Fund Operations - Stonegate Facility		\$ 27,417	\$ 82,816	\$ 85,292	\$ 87,842	\$ 90,469	\$ 93,175	\$ 95,962	\$ 98,832	\$ 101,788	\$ 104,833
Sewer Fund Operations											
Operating Transfers											
Z69990 Operation Transfers Out (Fund 518-8120)	8	\$ 1,419,900	\$ 1,557,600	\$ 1,619,904	\$ 1,684,700	\$ 1,752,088	\$ 1,822,172	\$ 1,895,059	\$ 1,970,861	\$ 2,049,695	\$ 2,131,683
Operation Transfers Out (Fund 518 to Fund 620)	3	\$ -	\$ 173,107	\$ 178,300	\$ 183,649	\$ 189,159	\$ 194,833	\$ 200,678	\$ 206,699	\$ 212,900	\$ 219,287
Total: Sewer Fund Operations - Operating Transfers		\$ 1,419,900	\$ 1,730,707	\$ 1,798,204	\$ 1,868,349	\$ 1,941,247	\$ 2,017,005	\$ 2,095,737	\$ 2,177,560	\$ 2,262,595	\$ 2,350,970
Grand Total: Sewer Fund Operations		\$ 9,210,133	\$ 10,040,956	\$ 10,324,314	\$ 10,763,561	\$ 11,224,012	\$ 11,673,701	\$ 12,062,553	\$ 12,552,051	\$ 13,065,948	\$ 13,605,812

CITY OF YUBA CITY
WASTEWATER RATE STUDY
Operating Revenue and Expenses

EXHIBIT 1

Non-Cash Items, Show for Reference Purposes:

Annual Depreciation Expense (6)	Basis	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Sewer Collection Depreciation	2	\$ 1,043,944	\$ 1,127,876	\$ 1,161,712	\$ 1,196,563	\$ 1,232,460	\$ 1,269,434	\$ 1,307,517	\$ 1,346,743	\$ 1,387,145	\$ 1,428,759
Sewer Treatment Plant Depreciation	2	\$ 1,949,024	\$ 1,919,649	\$ 1,977,238	\$ 2,036,555	\$ 2,097,652	\$ 2,160,582	\$ 2,225,399	\$ 2,292,161	\$ 2,360,926	\$ 2,431,754
Wastewater Pretreatment Depreciation	2	\$ 2,200	\$ 2,200	\$ 2,266	\$ 2,334	\$ 2,405	\$ 2,477	\$ 2,551	\$ 2,627	\$ 2,706	\$ 2,787
Treatment Plant Lab Depreciation	2	\$ 49,373	\$ 57,642	\$ 59,371	\$ 61,152	\$ 62,987	\$ 64,877	\$ 66,823	\$ 68,828	\$ 70,892	\$ 73,019
Total: Annual Depreciation Expense		\$ 3,044,542	\$ 3,107,367	\$ 3,200,588	\$ 3,296,606	\$ 3,395,504	\$ 3,497,369	\$ 3,602,290	\$ 3,710,359	\$ 3,821,669	\$ 3,936,319
Operating Transfers (6)	Basis	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Z69980 Operating Transfers In (Fund 518-8110)	9	\$ (289,250)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Z69990 Operating Transfers Out (Fund 518-8110)	9	\$ 431,386	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Z69970 Debt Service Transfer Out (Fund 518-8120)	9	\$ 675,899	\$ 1,049,897	\$ 1,048,653	\$ 1,051,211	\$ 1,047,552	\$ 1,047,773	\$ 1,047,760	\$ 1,096,714	\$ 1,094,431	\$ 1,096,031
Total: Sewer Fund Operations - Operating Transfers		\$ 818,035	\$ 1,049,897	\$ 1,048,653	\$ 1,051,211	\$ 1,047,552	\$ 1,047,773	\$ 1,047,760	\$ 1,096,714	\$ 1,094,431	\$ 1,096,031

FORECASTING ASSUMPTIONS:

ECONOMIC VARIABLES	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1 Customer Growth (7)	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.33%
2 General Cost Inflation	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
3 Labor Cost Inflation (8)	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
4 Health Benefits Cost Inflation (9)	16.33%	16.33%	8.38%	7.77%	7.56%	3.31%	-6.65%	3.00%	3.00%	3.00%
5 Retirement Benefits Cost Inflation (10)	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
6 Chemicals	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
7 Energy (11)	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
8 Internal Transfers	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
9 No Escalation	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

- Revenues for FY 2014/15 -2015/16 are from the City's Actual FY 2014/15 and Proposed FY 2015/16 Pro Forma Analysis (files: Wastewater Debt Coverage Ratio Actual 14-15.xls).
- Sewer Service Charges were reduced in FY 2015/16 to account for State mandated conservation; commercial variable revenue was reduced by 32%.
- Interest earnings are per the City's budget in FY 2014/15, and calculated in the Financial Plan for all future years.
- Expenses for FY 2014/15 are from the City's Fiscal Year 2014-15 Budget (file: 14-15 WtrWW Rev Op Bgls Line Item Detail.pdf). FY 2015/16 expenses are from file: Wastewater Fund - Expenditures.xls.
- Inflationary factors are applied to these expenses to project costs in 2015/16 and beyond.
- The City's budgeted depreciation expense is excluded from this forecast for purposes of the analysis. Contributions to reserves is handled in the Financial Plan and Reserve Fund summaries in this model, and Capital Improvement Program funding is handled in Exhibit 2 (CIP). Operating Transfers were also excluded from this analysis as they do not represent actual cash expenditures.
- All Operating Transfer amounts are set to zero for future years as they vary annually, with the exception of Debt Service Operating Transfers, which are equal to Debt Service payments that are to be satisfied with Wastewater Rates, excluding the Wastewater Solar Project payments (see Exhibit 3 (Debt) for detail).
- Principal and Interest is for the Opterra Bank of America debt service and the portion thereof that Fund 518 is responsible for. The Opterra debt is charged to divisions instead of using a debt service fund.
- Data provided by City staff, June 2015, file: Opterra - Bank of America Debt Service.xlsx.
- Per the City's direction, growth is based on 50 new sewer connections per year (meeting with City staff on 03/19/2015).
- Labor Cost Inflation factor increases noticeably for FY 2016/17 as the City eliminates all furloughs. Inflation is expected to be 3% thereafter (meeting with City staff on 03/19/2015).
- Health Benefit Cost Inflation factor was determined by City staff (meeting with City staff on 03/19/2015).
- Retirement Benefit Cost Inflation factor was determined by City staff; inflation factor calculated based on retirement benefits costing an average of 30% of the wastewater utilities payroll annually (meeting with City staff on 03/19/2015).
- Energy Cost Inflation factor was determined by City staff (meeting with City staff on 03/19/2015).

CITY OF YUBA CITY
WASTEWATER RATE STUDY
Capital Improvement Plan Expenditures

CAPITAL FUNDING SUMMARY

Funding Sources:	Budget					Projected					
	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Grants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Use of Capacity Fee Reserves	\$ 150,000	\$ -	\$ 901,765	\$ 991,088	\$ 410,770	\$ 411,027	\$ -	\$ 411,540	\$ 411,796	\$ -	\$ -
Use of SRF Loan Funding	\$ -	\$ -	\$ 1,200,000	\$ 3,000,000	\$ 5,000,000	\$ 10,000,000	\$ -	\$ -	\$ -	\$ -	\$ -
Use of New Revenue Bond Proceeds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Use of Capital Rehabilitation and Replacement Reserve	\$ 2,329,475	\$ 2,418,955	\$ 1,820,382	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Rate Revenue	\$ 1,035,525	\$ -	\$ -	\$ 2,995,808	\$ 1,785,733	\$ 4,817,777	\$ 3,582,157	\$ 3,278,082	\$ 3,388,514	\$ 3,914,320	\$ 4,031,749
Total Sources of Capital Funds	\$ 3,515,000	\$ 2,418,955	\$ 3,922,147	\$ 6,986,896	\$ 7,196,503	\$ 15,228,804	\$ 3,582,157	\$ 3,689,622	\$ 3,800,310	\$ 3,914,320	\$ 4,031,749
Uses of Capital Funds:											
Total Project Costs (Inflated to Future Year Dollars)	\$ 3,515,000	\$ 2,418,955	\$ 3,922,147	\$ 6,986,896	\$ 7,196,503	\$ 15,228,804	\$ 3,582,157	\$ 3,689,622	\$ 3,800,310	\$ 3,914,320	\$ 4,031,749
Capital Funding Surplus (Deficiency)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					
New SRF Loan Funding	\$ -	\$ -	\$ 1,200,000	\$ 3,000,000	\$ 5,000,000	\$ 10,000,000	\$ -				
New Revenue Bond Proceeds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					

Set Capital Spending here: \$ 2,343,500 \$ 3,087,000 \$ 6,354,000 \$ 6,354,000 \$ 13,758,800 \$ 3,000,000 \$ 3,000,000 \$ 3,000,000 \$ 3,000,000 \$ 3,000,000 \$ 3,000,000

Option #2 Total Project Expenditures:	FY 2015/16 -	SFR Loan
	FY 2019/20	Funding
Digester Improvements	\$ 3,300,000	\$ 3,000,000
Secondary Clarifier #4	\$ 5,500,000	\$ 5,000,000
West Chlorine Contact Basin Rehabilitation	\$ 650,000	\$ -
New Outfall Diffuser	\$ 11,500,000	\$ 10,000,000
Advanced Treatment & Water Recycling Opportunities Evaluation	\$ 270,000	\$ -
Barscreen Rehabilitation / Replacement	\$ 1,200,000	\$ 1,200,000
Dewatering System Improvements	\$ 3,550,000	\$ -
Electrical Instrumentation Improvements	\$ 1,000,000	\$ -
Total:	\$ 26,970,000	\$ 19,200,000

Annual % Of Project Expenditures:	2016	2017	2018	2019	2020	Total
		5%	10%	20%	20%	45%

FORECASTING ASSUMPTIONS:

Economic Variables	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual Construction Cost Inflation, Per Engineering News Record (1)	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Cumulative Construction Cost Multiplier from 2015	1.00	1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.27	1.30	1.34

(1) For reference purposes, the annual Construction Cost Inflation percentage is the 10 year average change in the Construction Cost Index for 2004-2014. Source: Engineering News Record website (<http://enr.construction.com>).

CITY OF YUBA CITY
WASTEWATER RATE STUDY
Debt Service

EXHIBIT 3

EXISTING DEBT OBLIGATIONS	Budget		Projected											
	FY 2014/15	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25		
Annual Repayment Schedules:														
Wastewater Revenue Refunding Bonds - 2011 - \$9,715,000 (1)	\$ 155,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 160,000	\$ 155,000	\$ 160,000	\$ 165,000	\$ 170,000	\$ 170,000	\$ 180,000	\$ 180,000		
Principal Payment	\$ 358,716	\$ 356,004	\$ 352,854	\$ 349,329	\$ 349,329	\$ 345,129	\$ 340,634	\$ 335,594	\$ 330,149	\$ 324,369	\$ 318,419	\$ 311,849		
Interest Payment	\$ 513,716	\$ 506,004	\$ 502,854	\$ 509,329	\$ 509,329	\$ 500,129	\$ 500,634	\$ 500,594	\$ 500,149	\$ 494,369	\$ 498,419	\$ 491,849		
Subtotal: Annual Debt Service	\$ 1,488,119	\$ 1,488,119	\$ 1,488,119	\$ 1,488,119	\$ 1,488,119	\$ 1,488,119	\$ 1,488,119	\$ 1,488,119	\$ 1,488,119	\$ 1,488,119	\$ 1,488,119	\$ 1,488,119		
Coverage Requirement (\$-Amnt above annual payment) (2)	\$ 951,121	\$ 951,121	\$ 951,121	\$ 951,121	\$ 951,121	\$ 951,121	\$ 951,121	\$ 951,121	\$ 951,121	\$ 951,121	\$ 951,121	\$ 951,121		
Reserve Requirement (total fund balance) (3)	\$ 595,966	\$ 610,568	\$ 625,527	\$ 640,852	\$ 640,852	\$ 656,553	\$ 672,638	\$ 689,118	\$ 706,001	\$ 723,298	\$ 741,019	\$ 759,174		
Wastewater Revenue Refunding Bonds - 2014 - \$7,321,914 (4)	\$ 163,208	\$ 148,607	\$ 133,648	\$ 118,322	\$ 118,322	\$ 102,521	\$ 86,526	\$ 70,056	\$ 53,173	\$ 35,876	\$ 18,155	\$ -		
Principal Payment	\$ 759,174	\$ 759,174	\$ 759,174	\$ 759,174	\$ 759,174	\$ 759,174	\$ 759,164	\$ 759,174	\$ 759,174	\$ 759,174	\$ 759,174	\$ 759,174		
Interest Payment	\$ 759,174	\$ 759,174	\$ 759,174	\$ 759,174	\$ 911,009	\$ 911,009	\$ 911,009	\$ 911,009	\$ 911,009	\$ 911,009	\$ 911,009	\$ 911,009		
Subtotal: Annual Debt Service	\$ 1,518,348	\$ 1,518,348	\$ 1,518,348	\$ 1,518,348	\$ 1,670,183	\$ 1,670,183	\$ 1,670,178	\$ 1,670,183	\$ 1,670,183	\$ 1,670,183	\$ 1,670,183	\$ 1,670,183		
Coverage Requirement (\$-Amnt above annual payment) (5)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Reserve Requirement (total fund balance) (6)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Wastewater SRF Loan - WWTF - \$3,500,000 (7)	\$ -	\$ 141,734	\$ 144,852	\$ 148,039	\$ 148,039	\$ 151,273	\$ 154,625	\$ 158,026	\$ 161,478	\$ 165,030	\$ 168,661	\$ 172,372		
Principal Payment	\$ -	\$ 77,290	\$ 74,172	\$ 70,985	\$ 70,985	\$ 67,718	\$ 64,400	\$ 60,998	\$ 57,513	\$ 53,960	\$ 50,330	\$ 46,619		
Interest Payment	\$ -	\$ 219,024	\$ 219,024	\$ 219,024	\$ 219,024	\$ 218,991	\$ 219,025	\$ 219,024	\$ 218,991	\$ 218,991	\$ 218,991	\$ 218,991		
Subtotal: Annual Debt Service	\$ -	\$ 219,024	\$ 219,024	\$ 219,024	\$ 219,024	\$ 218,991	\$ 219,025	\$ 219,024	\$ 218,991	\$ 218,991	\$ 218,991	\$ 218,991		
Coverage Requirement (\$-Amnt above annual payment) (8)	\$ -	\$ 262,830	\$ 262,830	\$ 262,830	\$ 262,830	\$ 262,830	\$ 262,830	\$ 262,829	\$ 262,789	\$ 262,789	\$ 262,789	\$ 262,789		
Reserve Requirement (total fund balance) (9)	\$ -	\$ 219,025	\$ 219,025	\$ 219,025	\$ 219,025	\$ 219,025	\$ 219,025	\$ 219,024	\$ 218,991	\$ 218,991	\$ 218,991	\$ 218,991		
Wastewater SRF Loan - Collection - \$7,193,965 (10)	\$ -	\$ 273,328	\$ 274,947	\$ 279,896	\$ 279,896	\$ 284,934	\$ 290,063	\$ 295,284	\$ 300,600	\$ 306,018	\$ 311,436	\$ 316,854		
Principal Payment	\$ -	\$ 112,556	\$ 110,937	\$ 105,988	\$ 105,988	\$ 100,950	\$ 95,821	\$ 90,600	\$ 85,379	\$ 80,158	\$ 74,937	\$ 69,716		
Interest Payment	\$ -	\$ 385,884	\$ 385,884	\$ 385,884	\$ 385,884	\$ 385,884	\$ 385,884	\$ 385,884	\$ 385,884	\$ 385,884	\$ 385,884	\$ 385,884		
Subtotal: Annual Debt Service	\$ -	\$ 522,046	\$ 522,046	\$ 522,046	\$ 522,046	\$ 522,046	\$ 522,046	\$ 522,046	\$ 522,046	\$ 522,046	\$ 522,046	\$ 522,046		
Coverage Requirement (\$-Amnt above annual payment) (11)	\$ -	\$ 435,039	\$ 435,039	\$ 435,039	\$ 435,039	\$ 435,039	\$ 435,039	\$ 435,039	\$ 435,039	\$ 435,039	\$ 435,039	\$ 435,039		
Reserve Requirement (total fund balance) (12)	\$ -	\$ 273,328	\$ 274,947	\$ 279,896	\$ 279,896	\$ 284,934	\$ 290,063	\$ 295,284	\$ 300,600	\$ 306,018	\$ 311,436	\$ 316,854		
Wastewater Solar Project - \$2,398,711 (13)	\$ 82,164	\$ 85,451	\$ 88,869	\$ 92,423	\$ 92,423	\$ 96,120	\$ 99,965	\$ 103,964	\$ 108,122	\$ 112,447	\$ 116,945	\$ 121,623		
Principal Payment	\$ 90,943	\$ 87,657	\$ 84,239	\$ 80,684	\$ 80,684	\$ 76,987	\$ 73,142	\$ 69,143	\$ 64,985	\$ 60,660	\$ 56,162	\$ 51,484		
Interest Payment	\$ 173,107	\$ 173,107	\$ 173,107	\$ 173,107	\$ 173,107	\$ 173,107	\$ 173,107	\$ 173,107	\$ 173,107	\$ 173,107	\$ 173,107	\$ 173,107		
Subtotal: Annual Debt Service	\$ 264,111	\$ 266,215	\$ 266,196	\$ 266,214	\$ 266,214	\$ 264,114	\$ 263,214	\$ 261,214	\$ 259,114	\$ 257,214	\$ 255,214	\$ 253,214		
Grand Total: Existing Annual Debt Service	\$ 1,445,998	\$ 2,043,193	\$ 2,040,043	\$ 2,046,518	\$ 2,046,518	\$ 2,037,285	\$ 2,037,814	\$ 2,037,783	\$ 2,037,783	\$ 2,037,783	\$ 2,037,783	\$ 2,037,783		
Grand Total: Existing Annual Coverage Requirement	\$ 2,399,128	\$ 3,184,004	\$ 3,184,004	\$ 3,184,004	\$ 3,184,004	\$ 3,184,004	\$ 3,184,004	\$ 3,184,003	\$ 3,183,963	\$ 3,183,963	\$ 3,183,963	\$ 3,183,963		
Grand Total: Existing Debt Reserve Target	\$ 1,710,295	\$ 2,364,358	\$ 2,364,358	\$ 2,364,358	\$ 2,364,358	\$ 2,364,358	\$ 2,364,358	\$ 2,364,357	\$ 2,364,324	\$ 2,364,324	\$ 2,364,324	\$ 2,364,324		

Existing Annual Debt Obligations to be Satisfied by Wastewater Rates:

Existing Annual Debt Service	\$ 675,669	\$ 1,223,004	\$ 1,221,760	\$ 1,224,318	\$ 1,224,318	\$ 1,220,659	\$ 1,220,880	\$ 1,220,867	\$ 1,220,867	\$ 1,220,867	\$ 1,220,867	\$ 1,220,867
Existing Annual Coverage Requirement	\$ 947,655	\$ 1,666,824	\$ 1,666,824	\$ 1,666,824	\$ 1,666,824	\$ 1,666,824	\$ 1,666,824	\$ 1,666,823	\$ 1,666,793	\$ 1,666,793	\$ 1,666,793	\$ 1,666,793
Existing Bond Debt Reserve Target	\$ 675,666	\$ 675,566	\$ 675,566	\$ 675,566	\$ 675,566	\$ 675,566	\$ 675,566	\$ 675,566	\$ 675,566	\$ 675,566	\$ 675,566	\$ 675,566
Existing SRF Loan Debt Reserve Target	\$ -	\$ 699,307	\$ 699,307	\$ 699,307	\$ 699,307	\$ 699,307	\$ 699,307	\$ 699,307	\$ 699,307	\$ 699,307	\$ 699,307	\$ 699,307

Existing Annual Debt Obligations to be Satisfied by Connection Fees:

Existing Annual Debt Service	\$ 770,089	\$ 820,189	\$ 818,283	\$ 822,200	\$ 822,200	\$ 816,626	\$ 816,934	\$ 816,916	\$ 816,638	\$ 813,141	\$ 815,591	\$ 823,316
Existing Annual Coverage Requirement	\$ 1,451,472	\$ 1,517,180	\$ 1,517,180	\$ 1,517,180	\$ 1,517,180	\$ 1,517,180	\$ 1,517,180	\$ 1,517,179	\$ 1,517,169	\$ 1,517,169	\$ 1,517,169	\$ 1,517,169
Existing Bond Debt Reserve Target	\$ 1,034,728	\$ 1,034,728	\$ 1,034,728	\$ 1,034,728	\$ 1,034,728	\$ 1,034,728	\$ 1,034,728	\$ 1,034,728	\$ 1,034,728	\$ 1,034,728	\$ 1,034,728	\$ 1,034,728
Existing SRF Loan Debt Reserve Target	\$ -	\$ 54,756	\$ 54,756	\$ 54,756	\$ 54,756	\$ 54,756	\$ 54,756	\$ 54,756	\$ 54,748	\$ 54,748	\$ 54,748	\$ 54,748

CITY OF YUBA CITY
WASTEWATER RATE STUDY
Debt Service

EXHIBIT 3

- (1) The 2011 Wastewater Bonds refunded the 2002 Bonds. 2011 Bonds are Debt Service Fund 535; payment breakdown is 39.50% paid by Fund 518 and 60.50% by Fund 527. File: *Wastewater 2014 & 2011 Debt Service Schedule.pdf*
- (2) The Coverage Requirement for the 2011 Wastewater Bonds is at least equal to 120% of Maximum Annual Debt Service, taking into account all Parity Debt. File: *2011 Wastewater Refunding Indenture of Trust.pdf*; 3.05(b), page 10.
- (3) The Reserve Requirement for the 2011 Wastewater Bonds is equal to the lesser of (a) \$951,120.59, being 125% of Average Annual Debt Service on the bonds or (b) the amount of Maximum Annual Debt Service on the Bonds. File: *2011 Wastewater Refunding Indenture of Trust.pdf*; Appendix A, Definitions, page A-8.
- (4) The 2014 Wastewater Bonds refunded the 2007 Bonds. 2014 Bonds are Debt Service Fund 539; payment breakdown is 39.50% paid by Fund 518 and 60.50% by Fund 527. File: *Wastewater 2014 & 2011 Debt Service Schedule.pdf*
- (5) The Coverage Requirement for the 2014 Wastewater Revenue Refunding Bonds are at least equal to 120% Parity Debt. File: *A_003.pdf* City of Yuba City Resolution No. 14-026, Section 5.07, page 15.
- (6) NBS assumes the Reserve Requirement for the 2014 Wastewater Certificates is equal to the Maximum Annual Debt Service on the Bonds as Section 5.02 of Resolution 14-026 states that the city will observe all conditions of Parity Debt. File: *A_003.pdf* City of Yuba City Resolution No. 14-026, Section 5.02, page 13.
- (7) The Wastewater SRF Loan - WWTF is allocated 75% to Fund 518 (Operating) and 25% to Fund 527 (Connection). Original SRF loan amount was \$6,500,000 less \$3,000,000 in Contingent Principal Forgiveness. File: *Wastewater SRF - Fund 541 WWTF - revised 5-28-14.pdf* and *Agreement 11-830-550 \$6.5m.pdf*, Exhibit B (4), Project Financing Amount.
- (8) The Wastewater SRF Loan - WWTF Coverage Requirement is equal to at least 1.2 times the total annual debt service. File: *Agreement 11-830-550 \$6.5m.pdf*, Exhibit D (2), Special Conditions.
- (9) The Wastewater SRF Loan - WWTF Reserve Fund is equal to one years debt service. File: *Agreement 11-830-550 \$6.5m.pdf*, Exhibit D (1), Special Conditions.
- (10) The Wastewater SRF Loan - Collection is 100% allocated to Fund 518, and paid for with Debt Service Fund 542. Revised SRF loan amount was \$10,193,965 less \$3,000,000 in Contingent Principal Forgiveness. File: *Wastewater SRF - Fund 542 Collection System - Revised.pdf* and *Agreement 12-804-550 \$7.7m - Revised 8-8-13.pdf*, Exhibit B (1) and (3), Project Financing Amount.
- (11) The Wastewater SRF Loan - Collection Coverage Requirement is equal to at least 1.2 times the total annual debt service. File: *Agreement 12-804-550 \$7.7m.pdf*, Exhibit D, Special Conditions.
- (12) The Wastewater SRF Loan - Collection Reserve Fund is equal to one years debt service. File: *Agreement 12-804-550 \$7.7m.pdf*, Exhibit D, Special Conditions.
- (13) The Wastewater Solar Project is 100% allocated to Fund 518. NBS assumes there is no coverage or reserve requirement on this debt as it is a loan from the City of Yuba City - Pooled Cash Investment Fund. File: *Wastewater Solar System.pdf*.

NEW DEBT FINANCING ASSUMPTIONS:

Long-Term Debt Terms	State Revolving Fund Loan	Revenue Bonds
Issuance Cost	0.00%	2.00%
Annual Interest Cost (%)	3.00%	5.50%
Term	30	30
Debt Reserve Funded?	Yes	Yes
Coverage Requirement (% above annual pmt)	20%	25%

NEW DEBT OBLIGATIONS:

Annual Repayment Schedules	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SRF Loan Funding											
Principal Payment	\$ -	\$ -	\$ 26,579	\$ 93,824	\$ 207,386	\$ 435,100	\$ 448,153	\$ 461,598	\$ 475,446	\$ 489,709	\$ 504,400
Interest Payment	-	-	37,935	131,977	287,226	597,133	584,080	570,636	556,788	542,524	527,833
Subtotal: Annual Debt Service	\$ -	\$ -	\$ 64,515	\$ 225,801	\$ 494,612	\$ 1,032,234	\$ 1,032,234	\$ 1,032,234	\$ 1,032,234	\$ 1,032,234	\$ 1,032,234
Revenue Bonds											
Principal Payment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Payment	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Annual Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total: New Annual Debt Service	\$ -	\$ -	\$ 64,515	\$ 225,801	\$ 494,612	\$ 1,032,234	\$ 1,032,234	\$ 1,032,234	\$ 1,032,234	\$ 1,032,234	\$ 1,032,234
Grand Total: New Annual Coverage Requirement	\$ -	\$ -	\$ 12,903	\$ 45,160	\$ 98,922	\$ 206,447	\$ 206,447	\$ 206,447	\$ 206,447	\$ 206,447	\$ 206,447
Grand Total: New Bond Debt Reserve Target	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total: New SRF Loan Debt Reserve Target	\$ -	\$ -	\$ 64,515	\$ 225,801	\$ 494,612	\$ 1,032,234	\$ 1,032,234	\$ 1,032,234	\$ 1,032,234	\$ 1,032,234	\$ 1,032,234

TOTAL DEBT SERVICE:

Annual Obligations	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual Debt Service	\$ 1,445,998	\$ 2,043,193	\$ 2,104,558	\$ 2,272,319	\$ 2,531,897	\$ 3,070,048	\$ 3,070,017	\$ 3,118,693	\$ 3,112,913	\$ 3,116,963	\$ 3,151,219
Annual Coverage Requirement	\$ 2,399,128	\$ 3,184,004	\$ 3,196,907	\$ 3,229,164	\$ 3,282,926	\$ 3,390,451	\$ 3,390,449	\$ 3,390,409	\$ 3,390,409	\$ 3,390,409	\$ 3,479,400
Total Debt Reserve Target	\$ 1,710,295	\$ 2,364,358	\$ 2,428,873	\$ 2,590,160	\$ 2,858,970	\$ 3,396,592	\$ 3,396,591	\$ 3,396,558	\$ 3,396,558	\$ 3,396,558	\$ 2,637,383

CITY OF YUBA CITY
WASTEWATER RATE STUDY
Projected Water Rates Under Existing Rate Schedule

EXHIBIT 4

EXISTING WASTEWATER RATES (1)	Current Rates	
	09/01/14 - 08/31/15	09/01/15 - 08/31/16
Projected Annual Revenue Increase		
Sewer Service Charges (updated September 1st each year)		
Single family dwelling (per unit)	\$38.39	\$40.53
Duplex (per unit)	\$38.39	\$40.53
Multiple dwellings (per unit)	\$30.71	\$32.43
Churches	See Comm Rates	See Comm Rates
Offices & retail businesses, non-metered, each service	See Comm Rates	See Comm Rates
Schools, per student, per year (2)	\$17.63	\$18.61
Commercial		
C1 (Retail, Doctor, Church, Barber, Fitness, Theater, etc.)	\$38.39	\$40.53
C2 (Auto Sales, Motel, Auto Shop, Dry Cleaners, etc.)	\$43.19	\$45.60
C3 (Fast food, Bakery, Deli, Restaurant, Market, Gas, etc.)	\$52.29	\$55.23
Metered Rate Sewer Service Charges (per 100 cf)		
\$ per 100 cubic feet	\$1.513	\$1.597
Septage Waste Disposal		
Septic tank trucks discharging at the WWTP (per gallon)	\$0.296	\$0.312
Minimum 400 gallons per dump	\$118.40	\$124.80
Large Industrial User charges		
Waste water (per million gallons)	\$2,240.06	\$2,336.92
Suspended solids (per pound)	\$0.1724	\$0.1800
Biochemical demand (per pound)	\$0.2292	\$0.2393

(1) Rates are effective rates as of September 1st, Sections 6-5.408 and 6-5.507, Wastewater Ordinance.

(2) Average Daily Attendance (ADA) for past school year, for number of students.

CITY OF YUBA CITY
WASTEWATER RATE STUDY
Wastewater Cost of Service Analysis/Rate Design

Current vs. Proposed Sewer Rates (Monthly)

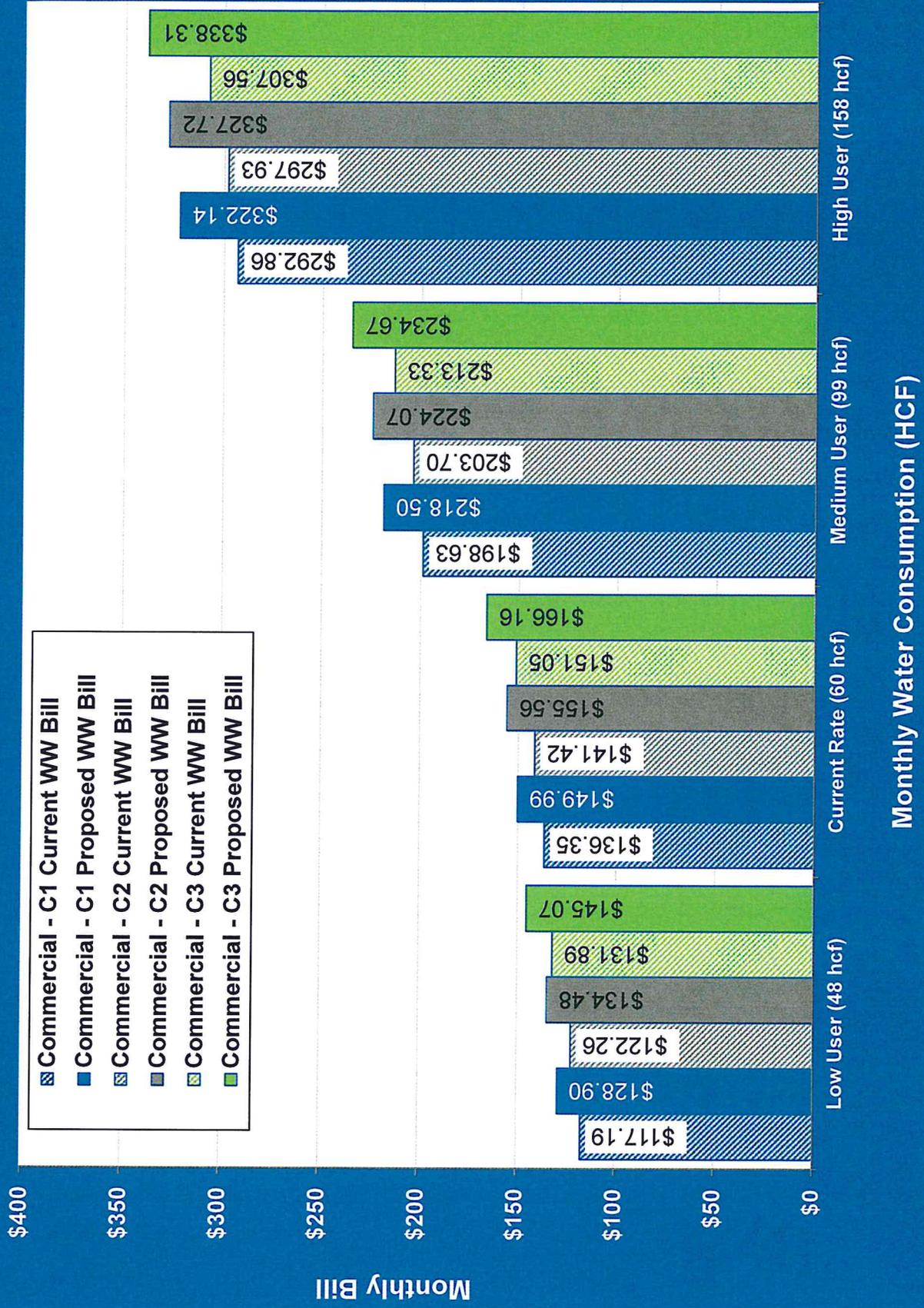
Sewer Rate Schedule	Current Rates	Recommended Sewer Rates				
		FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
<i>Projected Increase in Rate Revenue per Financial Plan:</i>		10.00%	10.00%	10.00%	10.00%	10.00%
Monthly Fixed Service Charge (\$/mo.)						
Single-Family/Duplex Residential (per unit)	\$40.53	\$44.58	\$49.04	\$53.95	\$59.34	\$65.27
Multi Family Residential (per unit)	\$32.43	\$35.67	\$39.24	\$43.16	\$47.48	\$52.23
Commercial - C1	\$40.53	\$44.58	\$49.04	\$53.95	\$59.34	\$65.27
Commercial - C2	\$45.60	\$50.16	\$55.18	\$60.69	\$66.76	\$73.44
Commercial - C3	\$55.23	\$60.75	\$66.83	\$73.51	\$80.86	\$88.95
Commercial Volumetric Charge (\$/HCF) (Applied to Monthly Water Use)						
Commercial - C1	\$1.60	\$1.76	\$1.93	\$2.13	\$2.34	\$2.57
Commercial - C2	\$1.60	\$1.76	\$1.93	\$2.13	\$2.34	\$2.57
Commercial - C3	\$1.60	\$1.76	\$1.93	\$2.13	\$2.34	\$2.57
Large Industrial User Charges						
Waste water (\$/million gallons)	\$2,336.92	\$2,570.61	\$2,827.67	\$3,110.44	\$3,421.48	\$3,763.63
Total Suspended solids (TSS - in \$/lb.)	\$0.180	\$0.198	\$0.218	\$0.240	\$0.264	\$0.290
Biochemical Oxygen Demand (BOD in \$/lb.)	\$0.239	\$0.263	\$0.290	\$0.319	\$0.350	\$0.385
Schools (Average Daily Attendance)						
Schools, per student, per year	\$18.61	\$20.47	\$22.52	\$24.77	\$27.25	\$29.97
Septage Hauler Charges¹						
<i>Projected Increase in Rate Revenue per Financial Plan:</i>		10.00%	10.00%	10.00%	10.00%	10.00%
Charge per Gallon	\$0.312	\$0.343	\$0.378	\$0.415	\$0.457	\$0.502
Minimum Charge: 400 gallons per dump	\$124.80	\$137.28	\$151.01	\$166.11	\$182.72	\$200.99
Minimum Charge: 1,000 gallon truck	\$312.00	\$343.20	\$377.52	\$415.27	\$456.80	\$502.48
Minimum Charge: 1,500 gallon truck	\$468.00	\$514.80	\$566.28	\$622.91	\$685.20	\$753.72

(1) Septage Haulers will be charged for a full tank each occurrence.

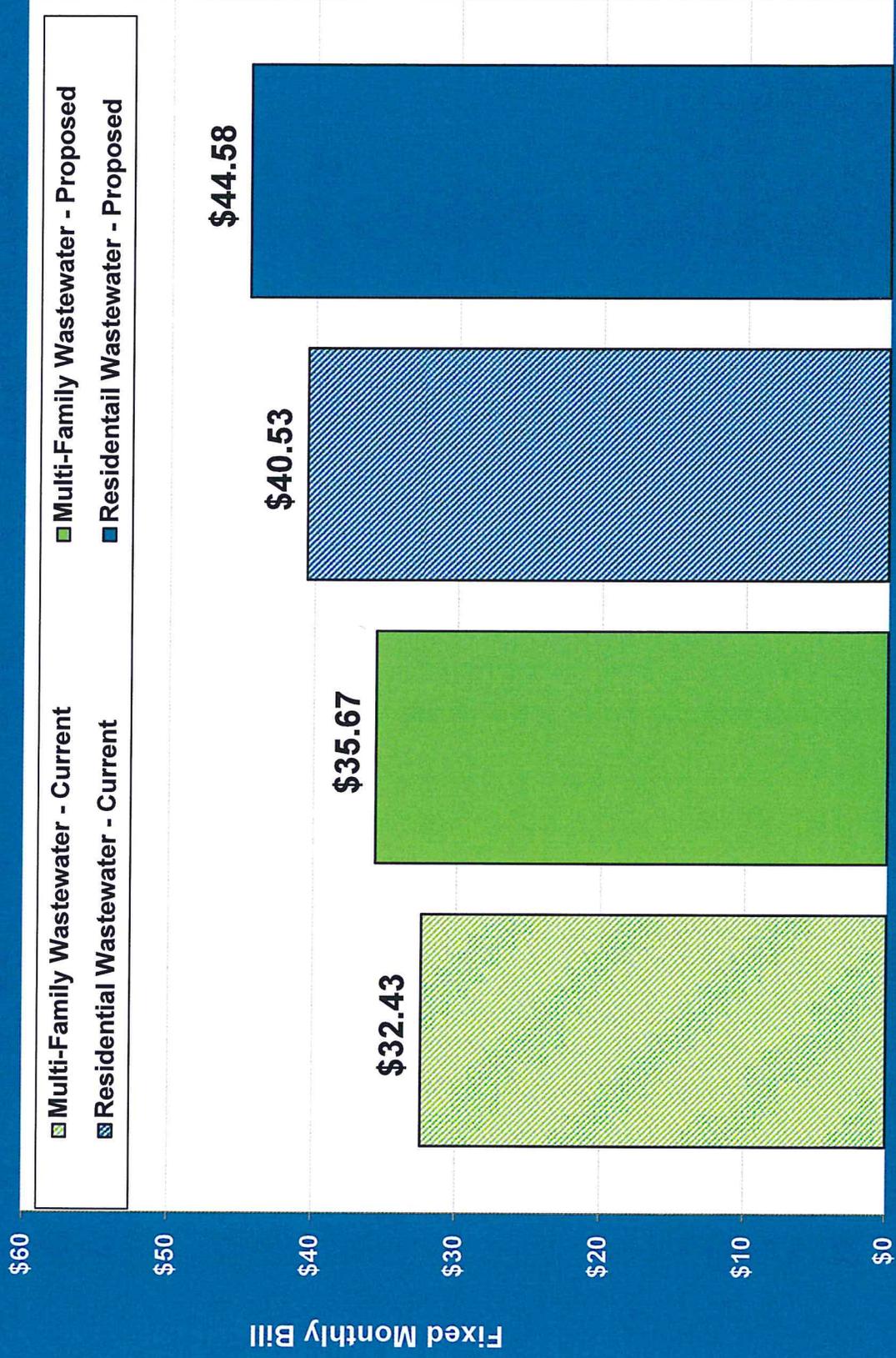
Sewer Rate Schedule - Conservation Rates (Commercial Customers Only) ¹	Current Rates	Recommended Sewer Conservation Rates				
		FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
<i>Projected Increase in Rate Revenue per Financial Plan:</i>		10.00%	10.00%	10.00%	10.00%	10.00%
Volumetric Charge (\$/HCF) - Adjusted for Conservation Scenarios¹						
<i>Scenario 1 (20% Conservation)</i>						
Commercial - C1	\$1.60	\$ 1.76	\$ 1.93	\$ 2.13	\$ 2.34	\$ 2.57
Commercial - C2	\$1.60	\$ 1.76	\$ 1.93	\$ 2.13	\$ 2.34	\$ 2.57
Commercial - C3	\$1.60	\$ 1.76	\$ 1.93	\$ 2.13	\$ 2.34	\$ 2.57
<i>Scenario 2 (30% Conservation)</i>						
Commercial - C1	\$1.60	\$ 2.02	\$ 2.22	\$ 2.44	\$ 2.69	\$ 2.96
Commercial - C2	\$1.60	\$ 2.02	\$ 2.22	\$ 2.44	\$ 2.69	\$ 2.96
Commercial - C3	\$1.60	\$ 2.02	\$ 2.22	\$ 2.44	\$ 2.69	\$ 2.96
<i>Scenario 3 (40% Conservation)</i>						
Commercial - C1	\$1.60	\$ 2.20	\$ 2.42	\$ 2.66	\$ 2.92	\$ 3.21
Commercial - C2	\$1.60	\$ 2.20	\$ 2.42	\$ 2.66	\$ 2.92	\$ 3.21
Commercial - C3	\$1.60	\$ 2.20	\$ 2.42	\$ 2.66	\$ 2.92	\$ 3.21
<i>Scenario 4 (50% Conservation)</i>						
Commercial - C1	\$1.60	\$ 2.37	\$ 2.61	\$ 2.87	\$ 3.16	\$ 3.47
Commercial - C2	\$1.60	\$ 2.37	\$ 2.61	\$ 2.87	\$ 3.16	\$ 3.47
Commercial - C3	\$1.60	\$ 2.37	\$ 2.61	\$ 2.87	\$ 3.16	\$ 3.47
<i>Scenario 5 (60% Conservation)</i>						
Commercial - C1	\$1.60	\$ 2.55	\$ 2.80	\$ 3.08	\$ 3.39	\$ 3.73
Commercial - C2	\$1.60	\$ 2.55	\$ 2.80	\$ 3.08	\$ 3.39	\$ 3.73
Commercial - C3	\$1.60	\$ 2.55	\$ 2.80	\$ 3.08	\$ 3.39	\$ 3.73

(1) Only Commercial customers have a true variable (volumetric rate). These rates reflect annual rate increases and percent rate increases needed to offset drought stage conservation.

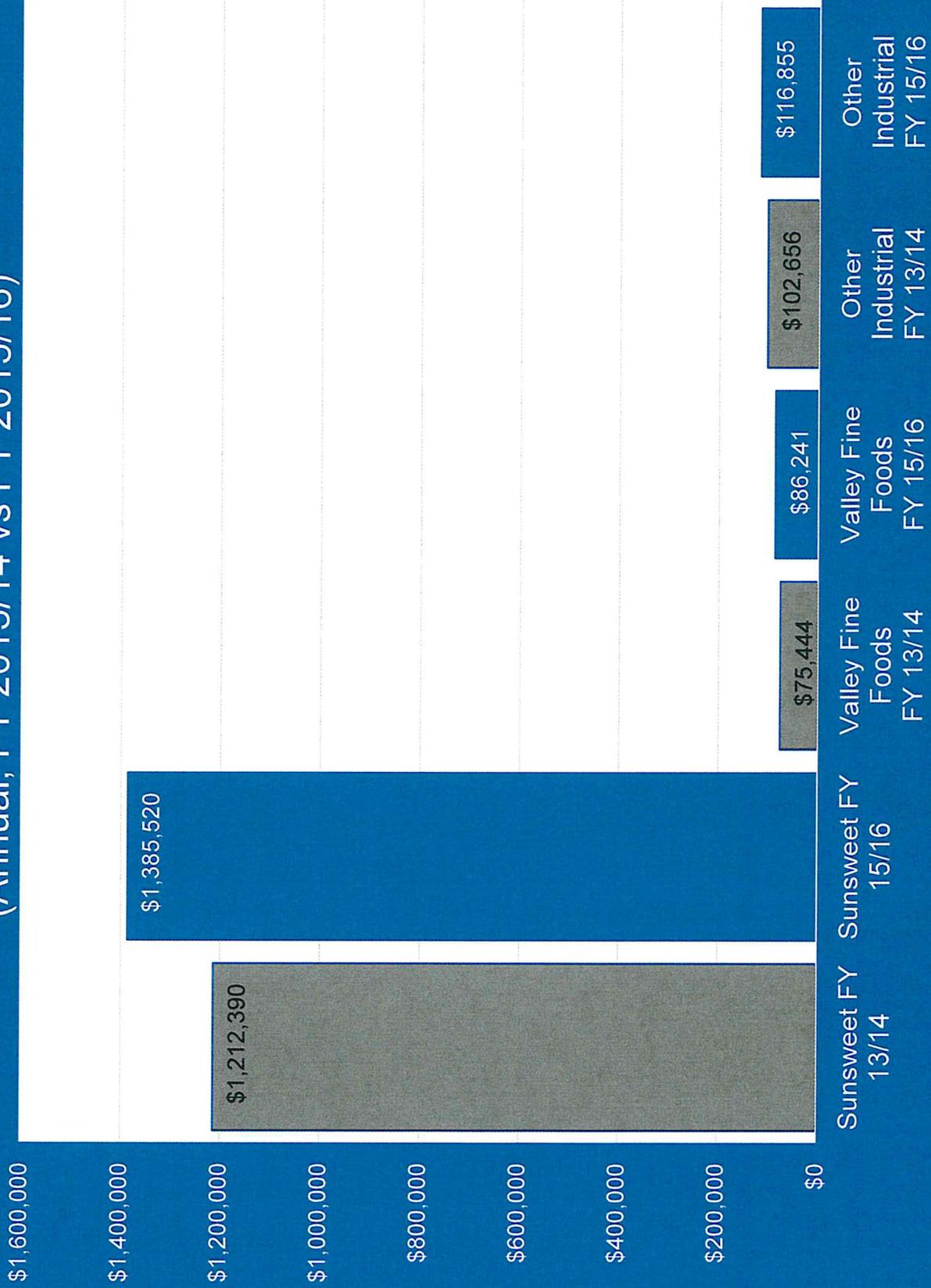
Wastewater Bill Comparisons - Commercial FY 2015/16



Wastewater Bill Comparisons - SFR & MFR (FY 2015/16)



Industrial Wastewater Revenue Comparison (Annual, FY 2013/14 vs FY 2015/16)



CITY OF YUBA CITY
WASTEWATER RATE STUDY
Customer Data

Number of Accounts by Class and Size (1)	FY 2013/14							Total
	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	Unknown Meter Size	
Single Family	-	-	-	-	-	-	12,312	12,312
Multi Family	-	-	-	-	-	-	1,028	1,028
Stonegate	-	-	-	-	-	-	103	103
Commercial - C1	502	202	101	15	6	1	31	858
Commercial - C2	39	13	5	1	-	-	-	58
Commercial - C3	35	42	23	4	1	-	-	106
Industrial	-	-	-	-	-	-	6	6
Schools ADA	6	2	6	7	7	-	13	41
Outside City Limits - Commercial C-1	-	1	-	-	-	-	-	1
Total	582	260	135	27	14	1	13,494	14,513

(1) Meter count is for June 2014, as provided by the City of Yuba City in file: Utility Billing Summaries by Month and FY-Final 2-15.xls and YCUSD reports. The City bills customers monthly.

Revenue Summary by Class FY 2013/14	Fixed	Variable	Other Revenues	Total
Single Family Residential	\$ 5,345,051	-	-	\$ 5,345,051
Multi Family Residential	\$ 2,570,530	-	-	\$ 2,570,530
Stonegate	\$ 45,358	-	-	\$ 45,358
Commercial - C1	\$ 20,737	\$ 860,926	-	\$ 881,663
Commercial - C2	-	\$ 67,480	-	\$ 67,480
Commercial - C3	\$ 834	\$ 212,056	-	\$ 212,890
Industrial	\$ 51,965	\$ 1,264,723	-	\$ 1,316,688
Schools ADA	\$ 17,361	-	-	\$ 17,361
Outside City Limits - Commercial C-1	\$ -	\$ 6,288	-	\$ 6,288
City Facility Sewer	\$ -	-	\$ 18,329	\$ 18,329
Septage Charges	\$ -	-	\$ 263,883	\$ 263,883
Back Sewer	\$ -	-	\$ 85,563	\$ 85,563
Total	\$ 8,051,836	\$ 2,411,473	\$ 367,775	\$ 10,831,084

CITY OF YUBA CITY
WASTEWATER RATE STUDY
WWTF Loading Data

WWTF Loading Data

Month	days	Influent Daily Average			Influent Daily Average			Influent Monthly Average		
		Flow, MGD	BOD, mg/L	TSS, mg/L	Flow, MGD	BOD, lbs/day	TSS, lbs/day	Flow, MG	BOD, lbs/mo.	TSS, lbs/mo.
June-12	30	6.896	420	298	6.896	24,155	17,139	207	724,659	514,163
July-12	31	6.904	465	285	6.904	26,774	16,410	214	830,006	508,714
August-12	31	6.444	387	298	6.444	20,799	16,015	200	644,754	496,477
September-12	30	6.382	422	293	6.382	22,461	15,595	191	673,840	467,855
October-12	31	6.535	431	332	6.535	23,490	18,095	203	728,200	560,934
November-12	30	6.294	404	344	6.294	21,207	18,057	189	636,203	541,717
December-12	31	6.623	390	320	6.623	21,542	17,675	205	667,801	547,939
January-13	31	6.737	414	297	6.737	23,261	16,687	209	721,099	517,310
February-13	28	6.892	393	305	6.892	22,589	17,531	193	632,502	490,873
March-13	31	6.812	368	271	6.812	20,907	15,396	211	648,112	477,278
April-13	30	6.920	387	239	6.920	22,335	13,793	208	670,046	413,801
May-13	31	6.748	395	275	6.748	22,230	15,477	209	689,128	479,773
June-13	30	6.854	367	262	6.854	20,979	14,977	206	629,358	449,296
July-13	31	6.625	361	241	6.625	19,946	13,316	205	618,331	412,791
August-13	31	6.641	393	255	6.641	21,767	14,123	206	674,767	437,826
September-13	30	6.285	395	257	6.285	20,705	13,471	189	621,140	404,134
October-13	31	6.012	435	235	6.012	21,811	11,783	186	676,139	365,270
November-13	30	5.776	457	257	5.776	22,015	12,380	173	660,436	371,405
December-13	31	5.677	378	246	5.677	17,897	11,647	176	554,803	361,062
January-14	31	5.893	382	263	5.893	18,774	12,926	183	582,006	400,701
February-14	28	6.067	389	323	6.067	19,683	16,343	170	551,122	457,615
March-14	31	6.130	350	278	6.130	17,893	14,213	190	554,698	440,588
April-14	30	6.290	383	301	6.290	20,092	15,790	189	602,749	473,701
May-14	31	6.214	441	307	6.214	22,855	15,910	193	708,496	493,216
June-14	30	6.396	421	299	6.396	22,457	15,949	192	673,718	478,483
July-14	31	6.324	391	259	6.324	20,622	13,660	196	639,288	423,467
August-14	31	6.271	401	265	6.271	20,972	13,860	194	650,143	429,646
September-14	30	5.999	433	252	5.999	21,664	12,608	180	649,911	378,239
October-14	31	5.954	395	257	5.954	19,614	12,762	185	608,042	395,612

Source: WWTF loading.xls

FY 2013/14 Summary

Average Daily Flow	6.17	Total Flow (million gallons)	2,251
Average BOD	399	Total BOD (lbs/yr)	7,478,404
Average TSS	272	Total TSS (lbs/yr)	5,096,794

Residential & Commercial Customers

Total Flow (million gallons)	1,951
Total BOD (lbs/yr)	5,064,168
Total TSS (lbs/yr)	4,566,069

2014 Summary - Industrial Customers ONLY

Average Daily Flow	0.00	Total Flow (million gallons)	300
Average BOD	0	Total BOD (lbs/yr)	2,414,236
Average TSS	0	Total TSS (lbs/yr)	530,725

Industrial Customers

Total Flow (million gallons)	300
Total Flow (million gallons/day, or MGD)	0.822
Total BOD (lbs/yr)	2,414,236
Total TSS (lbs/yr)	530,725