DRAFT REPORT

City of Folsom

Comprehensive Water and Sewer Rate Study

October 2019

October 9, 2019

Mr. Marcus Yasutake
City of Folsom
50 Natoma Street
Folsom, California 95630

Subject: 2019 Comprehensive Water and Sewer Rate Study Draft Report

Dear Mr. Yasutake:

Please find attached the draft report on the comprehensive water and sewer rate study prepared by HDR Engineering, Inc. (HDR) for the City of Folsom (City). This report was prepared through the mutual efforts of HDR and the City. The conclusions and recommendations contained within this report are intended to enable the City's water and sewer utility to be adequately funded and operate on a prudent and financially sound basis.

This study has been developed utilizing generally accepted water and sewer rate-setting principles and methodologies. The objective of this study was to develop and establish rates which are cost-based, proportional and equitable to the City's water and sewer customers.

The proposed rates contained within this study are based on current budgeted and projections of future costs and anticipated customer consumption. Given that, the City should closely monitor their revenues, costs, and capital plans against this study to determine in a timely manner any significant variances and then take appropriate management and Council action to reconcile any major differences.

We appreciate your assistance, along with that of the City's management team and staff in the development of this report. We look forward to the opportunity to provide other technical assistance in the future.

Sincerely yours,
HDR Engineering, Inc.

Shawn Koorn
Associate Vice President

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Executive Summary

Introduction

HDR Engineering (HDR) was retained by the City of Folsom (City) to conduct a comprehensive water and sewer rate study. The objective of this study was to develop financial plans and cost-based rates necessary to meet the City's operation and maintenance (O&M) needs and the capital improvement program for each utility. This study determined the adequacy of the existing water and sewer rates and provides the framework for any needed future adjustments.

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Key Water and Sewer Rate Study Results

Based upon the technical analysis undertaken as a part of this study, the following findings, conclusions and recommendations were noted.

- The water and sewer utility were reviewed on a stand-alone basis.
- A separate revenue requirement was developed for the water and sewer utility for the period of projected years of FY 2020 to FY 2025.
- The starting point for the revenue requirement analyses was the City's proposed FY 2020 O&M budget and capital improvement plans for each utility.
- Results were presented to the Utility Commission which recommended the following:
  - Rate adjustments January 1, 2020, and July 1, 2022.
  - The re-investment capital for both water and sewer would be set in FY 2021, of $2.5 million for water, and $3.0 million for sewer, with 5% increases annually over the time period.
  - The current City policy of adequate reserves of 40% of O&M, capital improvements from rates, debt service, and cost allocations be maintained over the time period.
- Rate adjustments were proposed to prudently fund the water and sewer utility operating and capital needs.
  - For the water utility, of 16% on January 1, 2020, and another adjustment on July 1, 2022 of 11%.
  - For the sewer utility, rates adjustments proposed of 27.0% on January 1, 2020, and again in July, 1 of 2022 for 24%.
- Based upon the findings of the water cost-of-service analyses conducted, it is recommended the FY 2020 rate adjustment reflect the FY 2021 cost of service results to be made to the rate structure based on the unit costs. The FY 2021 cost of service reflected a full year of rate adjustment.
- The proposed rate adjustments are necessary for the City to adequately fund its financial needs and maintain prudent financial measures and operating metrics. In reviewing the

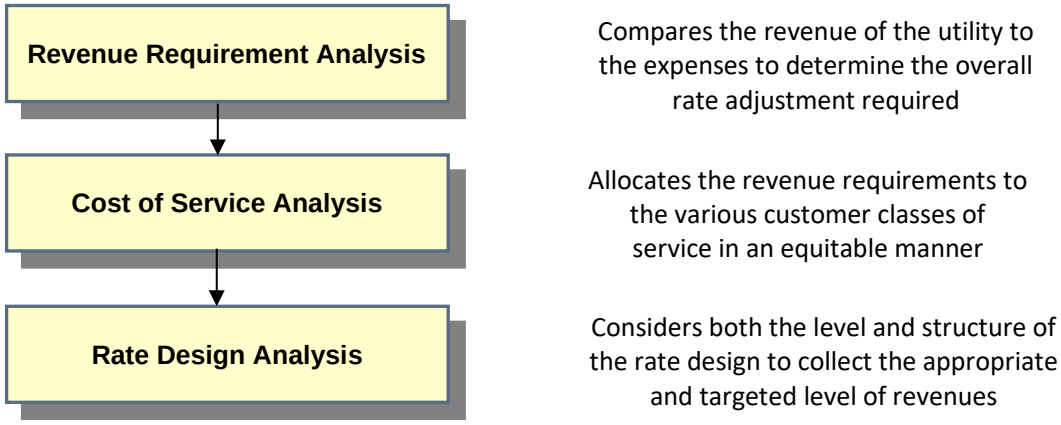
water and sewer rates, no major changes in the structure of the rates is recommended at this time. Rates have been proposed for both the water and sewer utility for January 1, of FY 2020, and July 1, of FY 2022.

Provided below is the executive summary of the analyses undertaken for the City and the findings, conclusions and recommendations reached as a result of this study.

Overview of the Rate Study Process

A comprehensive rate study consists of three interrelated analyses. Table ES-1 provides an overview of these analyses.

Table ES-1
Overview of the Comprehensive Rate Analyses



A comprehensive review of the City's water and sewer rates was undertaken. Each utility was financially evaluated on a stand-alone basis. That is, no subsidies between the utilities should occur. By viewing each utility on a stand-alone basis, the need to adequately fund both O&M and capital infrastructure must be balanced against the rate impacts to customers.

Prudent Financial Planning

In developing revenue requirements, the City's budget revenue and expenses for proposed period of FY 2020 were used as the initial starting point. However, within the development of the revenue requirements, the analysis considered prudent financial planning criteria. The prudent financial planning criteria considered during the development of this study were as follows:

- **Establishing a Minimum Funding Level for Capital Projects Funded from Rates** – Prudent financial planning dictates that a utility should fund a certain portion of capital improvement projects from rates on an on-going basis. The general financial guideline used is that at a minimum, a utility should fund an amount equal to or greater than annual depreciation expense. For this study, both the water and sewer utility reflect the capital improvement re-investment dollars as set in FY 2021.

- **Establishing a Minimum Debt Service Coverage Ratio** – The debt service coverage ratio is an important financial measure that is reviewed by bond rating agencies and banks to evaluate a utility's ability to make debt service payments. While the City will have a legal obligation to meet a specified minimum DSC, for financial planning purposes it is prudent to plan around meeting a debt service coverage ratio that is above the minimum (e.g. 1.50 – 1.75). The sewer utility currently has no outstanding debt or anticipated future debt, and the outstanding debt for the water utility meets these debt service coverage requirements of a 1.25 debt service coverage when rate adjustments are considered.
- **Establishing Minimum Reserve Levels** – The City should strive to maintain a cash balance sufficient to meet the total operating expenses for the water and sewer utilities in order to provide sufficient cash flow to meet daily operating expenses. Within this planning horizon, the financial plan developed for each utility maintains the 40% City target for reserves.

These prudent financial planning practices were used within the City's study. In addition to these financial planning criteria, certain financial policies related to rate setting were also examined. These policies closely following the prudent financial planning criteria noted above.

Water Rate Study

In conducting the water rate study, the three analyses of a comprehensive rate study were conducted; a revenue requirement analysis, a cost of service analysis and the design of rates. Provided below is a summary of each analysis.

Water Revenue Requirement Analysis – The development of the water revenue requirements was the first analysis undertaken. This analysis is used to determine the overall adequacy of the water utility rates.

For this particular analysis, the revenue requirements were developed for the six-year time period of FY 2020 through projected FY 2025. The City's analysis utilized the cash-basis approach to accumulate costs. The cash basis approach sums the water utility's O&M expenses, taxes, debt service and capital improvements funded from rates to determine the overall funding requirements. This approach is the most commonly used methodology to set revenue requirements and was used in the City's last comprehensive rate study.

Another important aspect of the water revenue requirements was the proper and adequate funding of capital improvements. The City's capital improvement plan was used as a starting point. The City has planned on approximately $20.0 million in projects over the review period. No new debt issues were assumed during this six-year period.

Another important aspect of the water revenue requirements was the proper and adequate funding of capital improvements.

A general financial guideline that can be used to determine proper funding levels for capital improvements from rates is that, at a minimum, a utility should fund an amount equal to or greater than annual depreciation expenses. The City's current annual depreciation expense is approximately $3.9 million. For FY 2020, $2.2 million was used with an increase to $2.5 million in FY 2021, and then five (5) percent increases annually over the

remaining four year project time period to a funding level of $3.0 million by FY 2025. A summary of the water revenue requirement analysis is provided below in Table ES-2.

Table ES-2
Summary of the Water Revenue Requirement Analysis ($000)

	Proposed	Projected				
	FY 2020	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**
Revenues						
Rate Revenue	$14,612	$14,831	$14,980	$15,129	$15,281	$15,434
Non-Operating Revenue	660	578	584	589	598	605
Total Revenues	**$15,272**	**$15,409**	**$15,564**	**$15,718**	**$15,879**	**$16,039**
Expenses						
Total Operations & Maintenance	$11,068	$11,837	$12,378	$13,067	$13,768	$14,364
Net Annual Debt Service	2,014	2,005	2,004	2,005	2,004	2,005
Capital Improvements from Rates	2,200	2,500	2,625	2,756	2,894	3,039
Transfers	1,159	1,439	953	2,241	1,608	1,070
Total Expenses	**$16,441**	**$17,782**	**$17,960**	**$20,069**	**$20,274**	**$20,478**
Bal/(Def.) of Funds	($1,169)	($2,373)	($2,396)	($4,351)	($4,395)	($4,439)
Rate Adj. as a % of Rate Rev.	8.0%	16.0%	16.0%	28.8%	28.8%	28.8%
Proposed Revenue Adjustment	**16.0%**	**0.0%**	**0.0%**	**11.0%**	**0.0%**	**0.0%**
Add'l Revenue from Adj.	$1,169	$2,373	$2,396	$4,351	$4,395	$4,439
Total Bal/(Def.) of Funds	$0	$0	$0	$0	$0	$0

It should be noted that the balance or deficiencies in any single year are cumulative. That is, any adjustments in the initial years will reduce the deficiency in the following years. Over the six-year period, revenues need to be adjusted by approximately 28.8% in order to adequately and properly fund the City's water utility O&M and capital infrastructure needs.

To implement the needed adjustments, a water transition plan was developed. Provided in Table ES-3 is the proposed water utility rate transition plan.

Table ES-3 Summary of the Water Rate Transition Plan							
	Present	**Jan. 1 FY 2020**	**Jul. 1 FY 2020**	**Jul. 1 FY 2021**	**Jul. 1 FY 2022**	**Jul. 1 FY 2023**	**Jul. 1 FY 2024**
Monthly Residential Water Bill *[1]*	$32.28						
Monthly Residential Bill		$39.86	$39.86	$39.86	$44.24	$44.24	$44.24
Avg. Monthly Res. Water Bill[2]		$36.07	$39.86	$39.86	$44.24	$44.24	$44.24
$ Change Per Month		3.79	3.79	0.00	4.38	0.00	0.00
Cumulative $ Change Per Month		3.79	7.58	7.58	11.96	11.96	11.96

[1] - Bill was assumed a 1" meter with monthly usage of 16 hundred cubic feet

[2] - Average bill, for FY 2020, shows 6 months of present bill and 6 months of proposed bill.

As can be seen in Table ES-3, a customer with a 1" meter using 16 hundred cubic feet of water in a month is currently charged $32.28. The proposed revenue adjustment on January 1, 2020 would bring the average bill to $39.86, and the July 1, 2022 adjustment would bring the average bill to $44.24 or an overall monthly change of $11.96 over the six year period. This projected average bill is before consideration of any cost of service results or changes to the water rate structure.

Water Cost of Service Analysis – A water cost of service analysis is concerned with the proportional and equitable distribution of the total water revenue requirement to the various water customer classes of service. The objectives of the water cost of service analysis are different from determining revenue requirements. A revenue requirement analysis determines the utility's overall financial needs, while the cost of service study determines the proportional and equitable manner to collect those revenue requirements.

The customer classes were reviewed, and reflected generally accepted customer classes of service and City customer class characteristics. A key element of the study was the review of the consumption patterns by customer type to equitably and proportionally allocate the City's costs of providing service. For example, the residential customer class and rate schedule, which are single-family customers, was developed based on the consumption patterns of residential customers' water demand which typically peak in the summer based on outdoor watering needs. In addition, the consumption patterns of residential customers is similar from customer to customer. However, when reviewing non-residential customers, the consumption levels can vary between customers depending on the type of business and other variables. Given this difference in overall consumption patterns, it was appropriate to maintain a separate class of service to reflect the impacts different customer types place on the system. Based on these customer classes of service, each with their own unique customer consumption characteristics, the cost of service can be developed based on generally accepted methodologies (i.e., AWWA M1 Manual).

In summary form, the cost of service analysis began by functionalizing the revenue requirement for the City's water utility. The functionalized revenue requirement was then allocated into the various cost components (e.g., average day, peak day, customer related). The individual allocation totals were then proportionally distributed to the various customer classes of service based on the appropriate distribution factor. The distributed expenses for each customer class were then aggregated to determine each customer class's overall revenue responsibility. As noted, it was determined that the current customer classes were appropriate and are maintained in this analysis. Given this, proposed water rates can be developed that reflect the costs incurred to provide service to these customers. As a result, the cost of service proportionally allocated costs to residential and non-residential customer classes. Table ES - 4 provides the summary of the cost of service analysis for the FY 2021 test year. The FY 2021 test year was used in the cost of service analysis since it would reflect a full year of costs at the proposed rate adjustment in FY 2020.

Table ES-4
Summary of the Water Utility Cost of Service Analysis ($000's)

Classes of Service	Present Rate Revenues	Distributed Costs	$ Difference	% Difference
Residential	$10,700	$12,284	($1,585)	14.8%
Non-Residential	4,131	4,920	(788)	19.1%
Total	**$14,831**	**$17,204**	**($2,373)**	**16.0%**

[1] – Summation of table may reflect rounding errors due to decimal points.

The cost of service study allocates the proportional share of the revenue requirement to each customer class based on their use of the system and facilities. The results of the analysis indicate that minor cost differences exist between the customer classes of service. The results show that, for example, residential customers' proportional share of costs is greater than current revenues. This is the result of the allocation of costs and residential customer's proportional share of costs based on average day, peak day, and customer related costs. For example, the rates for residential should be increased to cover their related costs to provide service, and in this case that is 14.8%. It is important to understand that a cost of service analysis is based on a projection of customer consumption data based on recent year's consumption history. The key outcome of the cost of service analysis is the unit costs (e.g., $ / CCF). The unit costs provide the cost basis for the development of the proposed water rates.

The cost of service goes a step further than just distributing costs to customer classes. The analysis distributes costs to the tiers of residential which is done in order to satisfy the administrative record requirements of Proposition 218, especially in light of recent legal decisions regarding water rates.

Provided in Table ES - 5 is a summary of the consumption related unit costs derived in the cost of service analysis that will be used to develop the proposed rate designs.

Table ES-5 Summary of the Water Utility Cost of Service Analysis Unit Costs		
	Residential	**Non-Residential**
Customer Related - $/Equivalent meter/Month	$18.10/per month	$12.06/per month
Consumption Related - $/CCF[1]		
Tier 1	$1.36	n/a
Tier 2	1.45	n/a
Tier 3	1.58	n/a
All Consumption	n/a	$1.40

[1] One hundred cubic feet (CCF) = 748 gallons

As can be seen in Table ES - 5, for residential customers, the tiered rate structures have been maintained and the costs of providing service at each tier have been developed based on the peaking factors and system requirements to provide water service at higher consumption levels. The non-residential customers maintain their uniform structure and have been developed in the same manner as the tiers for residential.

Section 3 of this report provides a detailed discussion of the cost of service analysis conducted for the City and the development of the unit costs provided in Table ES-5. Given the results of the cost of service analysis, HDR would recommend that the unit costs, as developed, are the basis for the rate designs. The Technical Appendix A contains the various water exhibits and additional details associated with the cost of service analysis.

Water Rate Design – The final step of the comprehensive rate study process is the design of water rates to collect the desired levels of revenue, based on the results of the revenue requirement and cost of service analysis. The revenue requirement analysis provides a set of recommendations in the form of annual revenue adjustments which is the level of total revenues necessary to provide sufficient funding. The cost of service analysis results provide recommendations as to how the revenue is collected proportionally from each customer classes of service. The rate design, therefore, incorporates both of the prior analyses to design the proposed rates for the City.

Developing cost-based and equitable rates is of paramount importance in developing proposed water rates. Given this, the City's proposed water rates have been developed with the intent of meeting the legal requirements of California constitution article XIII D, section 6 (Article XIII D), which is commonly referred to as Proposition 218. A key component of Article XIII D is the development of rates which reflect the cost of providing service and are proportionally allocated among the various customer classes of service. HDR would point out that there is no single methodology for equitably assigning costs to the various customer groups. The American Water Works Association (AWWA) M1 Manual clearly delineates various methodologies which may be used to establish cost-based rates. Article XIII D does not prescribe a particular methodology for establishing rates; consequently, HDR developed the City's proposed water rates based on the

AWWA M1 manual methodology, and the City's system and customer characteristics, to meet the requirements of Article XIII D and recent legal decisions to provide an administrative record of the steps taken to establish the City's water rates.

HDR is of the opinion that the proposed rates comply with legal requirements of Article XIII D. HDR reaches this conclusion based upon the following:

- **The revenue derived from water rates does not exceed the funds required to provide the property related service (i.e., water service).** The proposed rates are designed to collect the overall revenue requirement of the City's water utility.
- **The revenues derived from water rates shall not be used for any purpose other than that for which the fee or charge is imposed.** The revenues derived from the City's water rates are used exclusively to operate and maintain the City's water system.
- **The amount of a fee or charge imposed upon a parcel or person as an incident of property ownership shall not exceed the proportional costs of the service attributable to the parcel.** This study has focused on the issue of proportional assignment of costs to customer classes of service. The proposed rates have appropriately grouped customers into customer classes of service (Residential, Non-Residential) that reflect the varying consumption patterns and system requirements of each customer class of service. The grouping of customers and rates into these classes of service creates the equity and fairness expected under Article XIII D by having differing rates reflecting both the *level* of revenue to be collected by the City for sufficient funding and the *manner* in which these costs are incurred and equitably assigned based on each classes' proportional impact and burden on the water system and water resources.

The City's current rate structure for residential customers has a monthly fixed charge based on the type of customers. The commodity charge is comprised of a three-tier consumption charge. The rate schedule for non-residential customers is similar with a fixed monthly charge based on service meter size and a uniform rate for the commodity charge. Given the difference in the consumption patterns of the various customer classes and the need to develop rates based on cost of service principles, the proposed water rates were developed for the City's customers based on the cost of service unit costs shown in Table ES – 5. The sizing of the consumption tiers for residential customers is maintained which reflects the City's customer consumption patterns. The pricing of the tiers is revised, however, to reflect the cost of service analysis unit costs which specifically reflect the cost of providing service at various consumption levels.

Presented below in Table ES-6 is a summary of the present and proposed residential and non-residential water rate schedules.

Table ES-6
Summary of the Present and Proposed Water Rates

Rate Components	Present Rates	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Residential							
Monthly Fixed Charge							
SFR (1") Base	$15.00	$18.10	$18.10	$18.10	$20.09	$20.09	$20.09
Manufactured Home	6.83	8.24	8.24	8.24	9.15	9.15	9.15
Condo	9.45	11.40	11.40	11.40	12.66	12.66	12.66
Comm./Residential	4.27	5.15	5.15	5.15	5.72	5.72	5.72
Commodity Charge *($/CCF)*							
0 – 20	$1.08	$1.36	$1.36	$1.36	$1.51	$1.51	$1.51
20 – 40	1.30	1.45	1.45	1.45	1.61	1.61	1.61
40 +	1.60	1.58	1.58	1.58	1.75	1.75	1.75
Non-Residential							
Monthly Meter Charge							
5/8"	$12.61	$12.06	$12.06	$12.06	$13.39	$13.39	$13.39
3/4"	16.62	18.09	18.09	18.09	20.08	20.08	20.08
1"	26.88	30.15	30.15	30.15	33.47	33.47	33.47
1.5"	52.68	60.30	60.30	60.30	66.93	66.93	66.93
2"	84.29	96.48	96.48	96.48	107.09	107.09	107.09
3"	156.31	180.90	180.90	180.90	200.80	200.80	200.80
4"	259.82	301.50	301.50	301.50	334.67	334.67	334.67
6"	518.22	603.00	603.00	603.00	669.33	669.33	669.33
8"	828.84	964.80	964.80	964.80	1,070.93	1,070.93	1,070.93
10"	1,191.69	1,386.90	1,386.90	1,386.90	1,539.46	1,539.46	1,539.46
12”	1,712.97	2,035.13	2,035.13	2,035.13	2,258.99	2,258.99	2,258.99
Commodity Charge *($/CCF)*							
All Consumption	$1.12	$1.40	$1.40	$1.40	$1.55	$1.55	$1.55

As can be seen, the current rate structure has been maintained and only the level of rates has been adjusted. The first year, FY 2020, is based on the unit cost calculation from the cost of service analysis and thereafter the rates are adjusted by the proposed rate adjustment.

Folsom Plan Area Surcharge (South of 50) Analysis –
The Folsom Plan Area (FPA) for the South of 50 Area is supplied by water from the Golden State Water Company (Golden State). In 1994 an agreement between Golden State and the City was made in which Golden State agreed to transfer up to 5,000 acre feet of their 10,000 acre feet to the City. This is a take-or-pay obligation for the City. The purchase price was set in 1994, and by agreement, the rate per acre foot is annually adjusted by the Engineering News Record Construction Cost Index (ENR CCI), 20-city average, for the last quarter of the previous fiscal year, compared to the previous fiscal year before that fiscal year. The increase in each year is to not exceed five percent based on a five year rolling average. Based on 2019/20 information from the

City, the total contract price is $1,783,350.

The City currently has a similar surcharge in place for the East Area, which is based on a flat fee approach for residential and a consumption or volumetric rate for the non-residential customers. This same approach is used for the South of 50 Area surcharge. Provided in Table ES-7 below is a summary of the proposed South of 50 Area Surcharges for the residential and non-residential customers. Further detail can be found in Technical Appendix C, which details this calculation.

Table ES-7
Proposed South of 50 Area Surcharges

Class of Service	Proposed Surcharge
Residential	$9.20/Month
Non-Residential	$0.85/CCF

A separate line item on the City bill for all properties within the Folsom Plan Area will show this surcharge.

Sewer Rate Study

The comprehensive sewer rate study was developed using the same analytical framework as the water rate study. This analytical framework included the development of sewer revenue requirements, cost of service, and the development of proposed sewer rates. Provided below is a summary of the findings, conclusions and recommendations of the sewer rate study.

Sewer Revenue Requirement Analysis - The same general approach and methodology that was used for the water utility was utilized in developing the sewer revenue requirement analysis. This methodology included the use of the cash basis methodology. The sewer revenue requirements were developed for the six-year period of FY 2020 to FY 2025.

Similar to the water utility, an important aspect of the sewer revenue requirements was the proper and adequate funding of capital improvements. The City has planned on a total of $25.7 million of capital improvement projects during this time period of which $1.1 is being deferred at this time. No new debt service issues were assumed during this planning horizon.

Given a projection of revenues and expenses, the City's sewer revenue requirements could be developed. A summary of the sewer revenue requirements can be seen in Table ES-8.

Table ES-8 Summary of the Sewer Revenue Requirement Analysis ($000)						
	Proposed			**Projected**		
	FY 2020	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**
Revenues						
Rate Revenue	$6,557	$6,676	$6,743	$6,811	$6,879	$6,947
Non-Operating Revenue	197	101	91	86	87	89
Total Revenues	**$6,774**	**$6,777**	**$6,834**	**$6,897**	**$6,966**	**$7,036**
Expenses						
Total Operations & Maintenance	$5,030	$5,362	$5,617	$5,843	$6,081	$6,427
Net Annual Debt Service	0	0	0	0	0	0
Capital Improvements from Rates	2,100	3,000	3,150	3,308	3,473	3,647
Transfers	532	218	(112)	1,661	1,366	955
Total Expenses	**$7,662**	**$8,580**	**$8,655**	**$10,812**	**$10,920**	**$11,029**
Bal/(Def.) of Funds	($888)	($1,803)	($1,821)	($3,915)	($3,954)	($3,993)
Rate Adj. as a % of Rate Rev.	13.5%	27.0%	27.0%	57.5%	57.5%	57.5%
Proposed Revenue Adjustment	**27.0%**	**0.0%**	**0.0%**	**24.0%**	**0.0%**	**0.0%**
Add'l Revenue from Adj.	$888	$1,803	$1,821	$3,915	$3,954	$3,993
Total Bal/(Def.) of Funds	$0	$0	$0	$0	$0	$0

The results of the sewer revenue requirements indicate deficiencies over the six-year period. A sewer rate transition plan was developed for this utility. Table ES-9 provides a summary of the sewer rate transition plan.

Table ES-9 Summary of the Sewer Rate Transition Plan							
	Present	**Jan. 1 FY 2020**	**Jul. 1 FY 2020**	**Jul. 1 FY 2021**	**Jul. 1 FY 2022**	**Jul. 1 FY 2023**	**Jul. 1 FY 2024**
Monthly Residential Sewer Bill *[1]*	$16.15						
Monthly Residential Sewer Bill		$20.51	$20.51	$20.51	$25.43	$25.43	$25.43
Avg. Monthly Res. Sewer Bill[2]		$18.33	$20.51	$20.51	$25.43	$25.43	$25.43
$ Change Per Month		2.18	2.18	0.00	4.92	0.00	0.00
Cumulative $ Change Per Month		2.18	4.36	4.36	9.28	9.28	9.28

[1] – Flat rate per month.

[2] - Average bill, for FY 2020, shows rate adjustment of 6 months of present bill and 6 months of proposed bill.

Sewer Cost of Service Analysis - Similar to the water cost of service analysis, a sewer cost of service analysis is concerned with the proportional and equitable distribution of the total sewer revenue requirements to the various customer classes of service of the utility. Provided below in Table ES-10 is a summary of the sewer cost of service analysis.

Table ES-10
Summary of the Sewer Utility Cost of Service Analysis ($000's)

Classes of Service	Present Rate Revenues	Distributed Costs	$ Difference	% Difference
Residential	$4,403	$5,591	($1,188)	27.0%
Non-Residential	2,273	2,888	(615)	27.0%
Total	**$6,676**	**$8,479**	**($1,803)**	**27.0%**

The cost of service results for the sewer utility shows that there are no cost differences between the various customer classes of service. This is due to the allocation of costs on a per Equivalent Single Family Dwelling (ESD). The number of ESDs for each customer class was identified and costs were allocated and distributed based on the ESDs. This approach also follows the Sacramento County Regional Sanitation District (Regional San) equivalent dwelling unit ratios. Given that finding, no interclass rate adjustments are proposed at this time.

Sewer Rate Design – The final step of the comprehensive sewer rate study process is the design of sewer rates to collect the desired level of revenue, based on the results of the revenue requirement and cost of service analysis. The individual classification totals were then allocated to the different customer classes. The allocated expenses were then aggregated to determine overall customer class responsibility.

Developing proportional and equitable rates is of paramount importance in developing proposed sewer rates. Given this, the City's proposed sewer rates have been developed with the intent of meeting the legal requirements of California constitution article XIII D, section 6 (Article XIII D), commonly referred to as Proposition 218. A key component of Article XIII D is the development of rates which reflect the cost of providing service and are proportionally allocated among the various customer classes of service. HDR would point out that there is no single methodology for equitably assigning costs to the various customer groups. The Water Environment Federation (WEF) Manual of Practice No. 27 clearly delineates various methodologies which may be used to establish cost-based rates. Article XIII D does not prescribe a particular methodology for establishing rates; consequently, HDR developed the City's proposed sewer rates based on the WEF MOP #27 methodology, and the City's sewer collection system operating and customer characteristics, to meet the requirements of Article XIII D to provide an administrative record of the steps taken to establish the City's proposed sewer rates.

HDR is of the opinion that the proposed rates comply with legal requirements of Article XIII D. HDR reaches this conclusion based upon the following:

- **The revenue derived from sewer rates does not exceed the funds required to provide the property related service (i.e., sewer service).** The proposed rates are designed to collect the overall revenue requirements of the City's sewer system.
- **The revenues derived from sewer rates shall not be used for any purpose other than that for which the fee or charge is imposed.** The revenues derived from the City's sewer rates are used exclusively to operate and maintain the City's sewer system.
- **The amount of a fee or charge imposed upon a parcel or person as an incident of property ownership shall not exceed the proportional costs of the service attributable to the parcel.** The cost of service analysis was specifically developed to focus on the issue of proportional assignment of costs.

The City currently has residential and non-residential sewer rate schedules. The residential rate is a flat monthly rate based on type of customer. As the cost of service showed, the customer classes are within tight tolerances of the overall cost of service. Additionally, the current sewer rate structures reflect industry standard approaches and appear to be meeting the goals and objectives of the City. Therefore the existing rate structures will be maintained. A summary of present and proposed residential sewer rates are provided below in Table ES-11.

Table ES-11
Summary of the Present and Proposed Residential Sewer Rates[1]

Rate Components	Present Rates	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Residential	$16.15	$20.51	$20.51	$20.51	$25.43	$25.43	$25.43
Manufactured Home	16.15	20.51	20.51	20.51	25.43	25.43	25.43
Multi-Family	16.15	20.51	20.51	20.51	25.43	25.43	25.43

[1] – The residential and manufactured home are per dwelling. Multi-Family is per unit.

The non-residential rate is based on type of customer served and the specific characteristics of their facility (e.g. square feet of an office building, etc.). The City of Folsom is a under the service area of the Regional Sacramento County Regional Sanitation District (Regional San). The non-residential customers are based on Equivalent Single Family Dwelling (ESD) units based on flow. The City's current ESD factors were reviewed and match the Regional San ESD factors. Therefore the existing rate structures will be maintained as they reflect industry standard ratios and reflect Regional San definitions of flow. A summary of present and proposed non-residential sewer rates are provided below in Table ES-12. A more detailed discussion of the sewer rates can be found in Section 4.

Table ES-12
Summary of the City's Sewer Non-Residential Rates

Class of Service	Unit	Present Rates	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Non-Residential								
AUTO DLR	*sq. ft.*[1]	$3.06	$4.10	$4.10	$4.10	$5.09	$5.09	$5.09
BAKERIES	*sq. ft.*[1]	26.07	38.97	38.97	38.97	48.32	48.32	48.32
BANKS	*sq. ft.*[1]	4.63	6.15	6.15	6.15	7.63	7.63	7.63
SALON	*per chair*	1.53	2.05	2.05	2.05	2.54	2.54	2.54
BARS	*sq. ft.*[1]	10.72	14.36	14.36	14.36	17.80	17.80	17.80
BOWLING ALLEY	*per lane*	6.13	8.20	8.20	8.20	10.17	10.17	10.17
DRY CLEAN	*sq. ft.*[1]	26.07	34.87	34.87	34.87	43.24	43.24	43.24
FIRE STATION	*sq. ft.*[1]	15.28	20.51	20.51	20.51	25.43	25.43	25.43
GARAGES	*per bay*	1.53	2.05	2.05	2.05	2.54	2.54	2.54
HALLS	*sq. ft.*[1]	4.63	6.15	6.15	6.15	7.63	7.63	7.63
HLTH/GYM	*sq. ft.*[1]	4.63	6.15	6.15	6.15	7.63	7.63	7.63
HOTELS-MOTELS	*per room*	4.63	8.20	8.20	8.20	10.17	10.17	10.17
LAUNDRY SELF	*per mach.*	7.69	10.26	10.26	10.26	12.72	12.72	12.72
MRKT w/disp	*sq. ft.*[1]	15.28	34.87	34.87	34.87	43.24	43.24	43.24
MRKT W/O DISP	*sq. ft.*[1]	3.06	4.10	4.10	4.10	5.09	5.09	5.09
MED/DENTAL	*sq. ft.*[1]	6.13	8.20	8.20	8.20	10.17	10.17	10.17
MINI STORAGE	*per fixture*	16.80	21.33	21.33	21.33	26.45	26.45	26.45
MORTUARY	*per room*	19.95	36.92	36.92	36.92	45.78	45.78	45.78
OFFICE	*sq. ft.*[1]	3.06	4.10	4.10	4.10	5.09	5.09	5.09
PARK	*sq. ft.*[1]	15.28	0.82	0.82	0.82	1.02	1.02	1.02
WORSHIP	*sq. ft.*[1]	3.06	4.10	4.10	4.10	5.09	5.09	5.09
REST HOMES	*per bed*	4.63	8.20	8.20	8.20	10.17	10.17	10.17
DINING RM	*sq. ft.*[1]	73.56	104.60	104.60	104.60	129.71	129.71	129.71
TAKE OUT RSTR	*sq. ft.*[1]	61.30	53.33	53.33	53.33	66.12	66.12	66.12
DINE IN/OUT RST.	*sq. ft.*[1]	67.40	86.14	86.14	86.14	106.82	106.82	106.82
RETAIL STORE	*sq. ft.*[1]	3.06	2.05	2.05	2.05	2.54	2.54	2.54
SERVICE STATION	*per pump*	1.53	2.05	2.05	2.05	2.54	2.54	2.54
THEATER	*/100 seats*	4.63	6.15	6.15	6.15	7.63	7.63	7.63
WAREHOUSE	*sq. ft.*[1]	1.53	2.05	2.05	2.05	2.54	2.54	2.54
MULTIFAMILY	*Per unit*	16.15	15.38	15.38	15.38	19.07	19.07	19.07
SCHLS-SECOND.	*/100 Stds*[1]	27.57	51.28	51.28	51.28	63.58	63.58	63.58
SCHOOLS-PRIM.	*/100 Stds*[1]	21.44	20.51	20.51	20.51	25.43	25.43	25.43
COLLEGES[1]	*per 100 gal*	0.12	2.46	2.46	2.46	3.05	3.05	3.05
VACANT	*sq. ft.*[1]	3.23	4.10	4.10	4.10	5.09	5.09	5.09
METERED (Auto, Carwashes, Hosp.)	*per CCF*[1]	0.90	1.14	1.14	1.14	1.41	1.41	1.41

[1] – sq. ft = per 1,000 square feet; Stds = students; CCF = 100 cubic feet of water, Colleges based on winter average.

Summary

The previous discussion provided an executive summary of the rate analyses undertaken for the City's water and sewer utilities. In summary, it was concluded that the City's proposed water and sewer rates are proportional and equitable and set at a level that meets the City's current overall costs. Adjustments to the water and sewer rates are proposed to maintain cost-based rate levels and to help maintain the financial sustainability of the City. In addition the Folsom Plan Area Surcharge rate summary was updated. Included within this report are Technical Appendices, which documents all the analyses undertaken, along with our findings, conclusions and recommendations.

1.0 Introduction

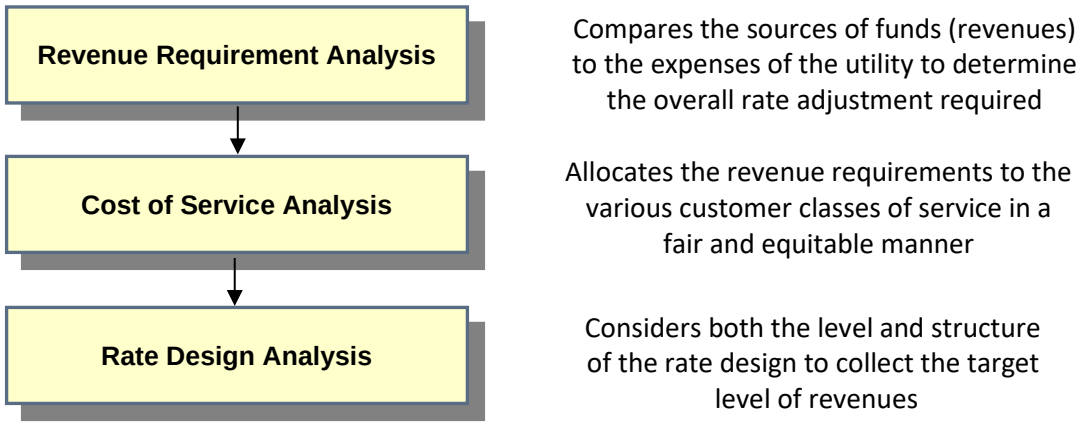
1.1 Introduction

HDR Engineering, Inc. (HDR) was retained by the City of Folsom (City) to conduct a comprehensive water and sewer rate study. The objective in conducting comprehensive water and sewer rate studies is to develop cost-based rates which adequately fund the City's operation and maintenance (O&M) needs, along with the necessary capital improvements (i.e., capital infrastructure) for each utility. This study determines the adequacy of the existing water and sewer rates and provides the analytical framework for any needed future adjustments.

1.2 Overview of the Rate Study Process

User rates must be set at a level where a utility's operating and capital expenses are met with the revenues received from customers. To evaluate the adequacy of the existing rates, a comprehensive water and sewer rate study is often performed. A comprehensive water and sewer rate study consists of three interrelated analyses. Figure 1-1 provides an overview of these analyses.

Figure 1-1
Overview of the Comprehensive Rate Analyses



In conducting the City's water and sewer rate study, each of these analyses has been conducted for the water and sewer utility. In this process, the analyses were tailored to reflect the specific and unique circumstances of the City and the specific utility being analyzed.

1.3 Organization of the Study

This report is organized in a sequential manner that first provides an overview of utility rate setting principles, followed by sections that detail the specific steps used to review the City's water and sewer rates. The water and sewer utility were evaluated on a stand-alone basis. The following sections comprise the City's water and sewer rate study report:

- Section 2 – Overview of Utility Rate Setting Principles
- Section 3 – Development of the Water Rate Analyses
- Section 4 – Development of the Sewer Rate Analyses

Technical Appendices are attached at the end of this report, which details the various water and sewer rate analyses that were used in the preparation of this report.

1.4 Summary

This report will review the comprehensive water and sewer rate analyses prepared for City of Folsom. This report has been prepared utilizing generally accepted water and sewer rate setting principles and methodologies and it is consistent with the City's philosophy of establishing cost-based rates. The next section of the report will provide a brief overview of the general rate setting process that was used to analyze and establish the proposed water and sewer rates for the City.

2.0 Overview of Utility Rate Setting Principles

2.1 Introduction

This section of the report provides background information about the water and sewer rate setting process, including descriptions of generally accepted principles, types of utilities, methods of determining a revenue requirement, the cost of service analysis, and rate design. This information is useful for gaining a better understanding of the details presented in the following sections of the report.

In developing and establishing utility rates, there are "generally accepted" principles or guidelines around which rates should be set.

2.2 Generally Accepted Rate Setting Principles

As a practical matter, all utilities should consider setting their rates around some generally accepted or global principles and guidelines. Utility rates should be:

- Cost-based, equitable, and set at a level that meets the utility's full revenue requirement.
- Easy to understand and administer.
- Designed to conform to generally accepted water and sewer rate setting techniques.
- Stable in their ability to provide adequate revenues for meeting the utility's financial, operating, and regulatory requirements.
- Established at a level that is stable from year-to-year from a customer's perspective.
- In compliance with State legal regulations.

These guiding principles were utilized within this study to help develop utility rates that are cost-based and equitable.

2.3 Developing Revenue Requirements

Most public utilities use the cash basis approach for establishing their revenue requirement and setting rates. This approach conforms to most public utility budgetary requirements and the calculation is easy to understand. A public utility totals its cash expenditures for a period of time to determine required revenues. The revenue requirement for a public utility is usually comprised of the following costs or expenses:

- **Total Operating Expenses:** This includes a utility's operation and maintenance (O&M) expenses, plus any applicable taxes or transfer payments. Operation and maintenance expenses include the materials, electricity, labor, supplies, etc., needed to keep the utility functioning.
- **Total Capital Expenses:** Capital expenses are calculated by adding debt service payments (principal and interest) to capital improvements financed with rate revenues. In lieu of including capital improvements financed with rate revenues, a utility sometimes includes depreciation expense to stabilize the annual revenue requirement.

Under the cash basis approach, the sum of the total O&M expenses plus the total capital expenses equals the utility's revenue requirement during any selected period of time (historical

or projected). Table 2-1 may be helpful in providing an overview and summarizing the cash basis revenue requirement methodology.

Table 2-1
Overview of the Cash Basis Revenue Requirement Methodology

+	O&M Expense
+	Taxes or Transfer Payments
+	Capital Improvements Financed with Rate Revenues (≥ Depreciation Exp.)
+	Debt Service (P+I)
=	Total Revenue Requirements
–	Miscellaneous Revenues (Excluding Connection Fees)
=	Balance Required from Rate Revenues

The two portions of the capital expense component (debt service and capital improvements financed from rates) are necessary under the cash basis approach because utilities generally cannot finance all their capital improvements with long-term debt. At the same time, it is often difficult to pay for all capital improvements on a pay-as-you-go basis given that some major capital projects may have significant rate impacts upon a utility, even when financed with long-term debt. Many utilities have found that some combination of pay-as-you-go funding and long-term financing will often lead to minimization of rate increases over time.

For purposes of this discussion, the City has utilized the cash basis methodology for the establishment of their water and sewer total revenue requirements. This is the same revenue requirement methodology as was used in the City's prior water and sewer rate study.

2.4 Analyzing Cost of Service

After the total revenue requirement is determined for each utility, it is then equitably allocated to the users of the water or sewer service. The allocation, usually analyzed through a cost of service analysis, reflects the cost relationships for producing and delivering water services or collecting and treating wastewater. A cost of service analysis requires three analytical steps:

1. Costs are ***functionalized*** or grouped into the various cost categories related to providing service (e.g., for water; supply, distribution, pumping, etc.). This step is largely accomplished by the utility's accounting system.
2. The functionalized costs are then ***allocated*** to specific cost components. Allocation refers to the arrangement of the functionalized data into cost components. For example, a water utility's costs are typically allocated as being related to meeting commodity (total flow), capacity (peak use), customer, or fire protection-related needs. For a sewer utility, costs are typically allocated to volume (total flow), strength and customer related components.
3. Once the costs are allocated into cost components, they are proportionally ***distributed*** to the customer classes of service (residential, non-residential, etc.). The distribution is

based on each customer class' relative contribution to the cost component (i.e., benefits received from and burdens placed on the system and its resources). For example, customer-related costs are distributed to each class of service based on the total number of customers in that class of service. Once costs are distributed, the revenues from each customer class of service required to achieve cost-based rates can be determined.

At the conclusion of the cost of service study, two key pieces of information are provided. First, the cost of service provides an understanding of the total revenues to be collected from each class of service. In other words the water revenue requirement is, for example, $10.0 million and the cost of service provides an equitable method to assign that total cost of $10.0 between the various water customer classes of service (e.g., residential, non-residential). The other important piece of information provided by the cost of service analysis is the average unit costs. Average unit costs are the distributed costs divided by the appropriate consumption (billing) units. This provides an understanding of the cost on a $/customer/month and $/hundred cubic feet (CCF) basis. These average unit costs are cost-based rates and used to establish the proposed rates in the initial rate study year.

Within this study, a cost of service analysis was conducted for both the water and sewer utility systems.

2.5 Designing Rates

The design of the proposed water and sewer rates for adoption by the City concludes the analytical portion of the rate study process. In designing proposed water and sewer rates, the results from both the revenue requirement and cost of service analysis is used to develop rates that achieve the overall goals and objectives of the City. These goals and objectives may include consideration of cost-based rates, but may also consider items such as ability to pay, continuity of past rate philosophy, conservation (efficient use), encouragement of economic development, ease of customer understanding and billing administration, legal requirements, etc. It is important to understand that cost of service is only one goal or objective in designing final water and sewer rates, however, it is an important one, and necessary to meet the proportionality and equity requirements of Proposition 218.

While the general description of the utility rate setting process discussed in this section of the report is greatly simplified and abbreviated, it does however address the basic elements of contemporary regulatory thinking. One of the major justifications for a comprehensive rate study is founded in economic theory. Economic theory suggests that the price of a commodity must roughly equal its cost, if equity among customers is to be maintained. The implications of this statement on utility rate setting are significant. For example, capacity-related costs are usually incurred by a water utility to meet peak use requirements. Thus, the customers causing peak demands should properly pay for the demand-related facilities in proportion to their contribution to maximum demands. Utility regulation and pricing has always focused on this cost-equals-price concept. This approach to pricing provides the basis for much of the subsequent analysis, comment and, ultimately, HDR's rate recommendations.

Economic theory suggests that the price of a commodity must roughly equal its cost, if equity among customers is to be maintained.

2.6 Prudent Financial Planning

In developing revenue requirements, the City's actual revenue and expenses for the period of proposed budget FY 2020 were used as the initial starting point. However, within the development of the revenue requirements, the analysis should also consider prudent financial planning criteria. There are at least three key financial indicators that should be considered in the development of all utility financial plans or revenue requirement analyses. These three financial planning criteria are: establishing minimum funding levels for capital projects funded from rates, establishing a minimum target debt service coverage ratio, and establishing minimum reserve levels. The following discussion provides a brief overview of each of these financial planning indicators.

- **ESTABLISHING A MINIMUM FUNDING LEVEL FOR CAPITAL PROJECTS FUNDED FROM RATES**

  Prudent financial planning dictates that a utility should fund a certain portion of their capital improvement projects from rates on an on-going basis. As facilities become worn out or obsolete, they should be replaced to maintain system integrity. A common general financial guideline often used by utilities is that, at a minimum, a utility should fund an amount equal to or greater than annual depreciation expense. However, there are at least three reasons to increase the level of capital funding through rates above this suggested minimum level of funding. First, funding levels over and above depreciation expense better reflect actual replacement cost. Next, increasing the level of capital funding from rates will help provide cash flow to fund the capital plan in future years, and minimize any long-term borrowing needs. Finally, an increased level of rate funding for capital projects will have the added benefit of strengthening the utility's debt service coverage ratio.

- **ESTABLISHING A MINIMUM TARGET DEBT SERVICE COVERAGE RATIO**

  The debt service coverage ratio is an important financial measure that is reviewed by bond rating agencies and banks to evaluate a utility's ability to make debt service payments. For revenue bonds, there is typically a legal requirement (rate covenant) to meet a minimum debt service coverage ratio. The debt service coverage ratio is calculated by subtracting total O&M and taxes from total revenues. The resulting amount is the balance available for debt service payment. The balance available for debt service is then divided by the annual debt service

Understanding the Relationship between Depreciation and Rates

ACCOUNTING TERMINOLOGY OF DEPRECIATION

Example: A utility purchases a piece of equipment for $10,000 and assumes a 10 year life for accounting purposes.

Annual Depreciation Expense – The annual depreciation expense for income statement purposes would be $1,000 ($10,000 ÷ 10 years = $1,000/year of depreciation expense).

Accumulated Depreciation – The sum of the annual depreciation expense since the equipment item was placed in service. Using the above example, after four (4) years, the accumulated depreciation would be $4,000 ($1,000 x 4 years). Accumulated depreciation is a balance sheet item and not typically a rate item.

DEPRECIATION, CAPITAL IMPROVEMENT FUNDING AND RATES - As a general financial guideline, a utility should fund, at a minimum, an amount within its rates equal to or greater than annual depreciation expense for renewal and replacement capital projects. In the above example, this would imply a minimum funding within the rates of $1,000 per year.

obligations (payments) to determine the debt service coverage ratio. For a revenue bond, most bond covenants require meeting a minimum coverage ratio of 1.25 – 1.30. While the City would have a legal obligation to meet the minimum, for financial planning purposes it is prudent to plan around meeting a debt service coverage ratio that is above the minimum (e.g. 1.50 – 1.75). In that way, if the utility has any negative financial fluctuations (e.g. cool/wet summer, low sales/revenues), they will be much more assured of still meeting the required minimum. At the same time, by planning around a higher debt service coverage ratio, the City will appear financially stronger to the bond rating agencies, which may translate into a higher bond rating and possibly result in lower interest rates on borrowing. Bond rating agencies do not want utilities to financially plan around simply meeting the minimum.

- **ESTABLISHING MINIMUM RESERVE LEVELS**

  Reserve levels are a crucial part of a utility's financial picture. Typically utilities maintain several different types of reserve funds. These may include: an operating reserve, a capital (replacement) reserve, an emergency or contingency reserve, a bond reserve, and a rate stabilization reserve. Each of these reserves has its own financial, operating or legal requirements which may set an established minimum reserve level (e.g. a bond reserve). A key aspect of reviewing reserve levels was determining target minimum levels for the City's current reserves. It is important to remember that when reserves fall below the targeted minimum level, management should review the cause of the declining reserves and determine what action, if any, should be taken. Maintenance of minimum reserve levels should not, on its own, trigger the need for a rate adjustment. However, after two consecutive years of diminishing reserves as a result of under-recovery of costs, rates should be reviewed.

The above key financial planning criteria are main drivers in the City's study. Other prudent financial planning criteria beyond those cited above were used within the City's study. As the study is discussed in more detail, these other financial planning criteria will be discussed at that time.

2.7 Summary

This section of the report has provided a brief introduction to the general principles, techniques, and economic theory used to set utility rates. These principles, techniques, and economic theory were the basis for the rate study and the foundation used to meet the City's key objectives in establishing their water and sewer rates. At the same time, the City has an established set of financial/rate setting policies to aid in adequately and consistently establishing their water and sewer rates.

3.0 Development of the Water Rate Study

3.1 Introduction

This section of the report will discuss the rate analysis developed for the City's water utility. A key objective or goal of a water rate study is to develop water rates which are proportional and equitable and adequately fund the operating and capital requirements of the City's water utility. In the rate study process, the water utility should be viewed on a stand-alone basis, capable of financially supporting its operating and capital needs. Avoidance of subsidies between the City's water and sewer utilities is an important concept given the purpose of an enterprise fund, which the utilities are, and more importantly the requirements of Proposition 218.

A key objective or goal of a water rate study is to develop water rates that are "fair and equitable" and adequately fund the operating and capital requirements of the utility.

In developing the comprehensive water rate study for the City, three interrelated analyses were conducted. First, a revenue requirement analysis was conducted to determine the overall operating and capital funding needs of the water utility. Next, a cost of service analysis was conducted to provide an equitable method of distributing the City's water revenue requirements between the various types of customers (e.g., residential, non-residential, etc.). Finally, given the level of funding required and a method to equitably distribute costs, water rates can be designed to collect the appropriate level of revenues, while considering any other City rate design objectives (e.g. conservation, revenue stability, ease of administration, etc.). This section of the report will review each of the analytical steps of the comprehensive water rate study and discuss the key assumptions, findings and conclusions of each. At the end of this section of the report, the proposed and recommended water rates for FY 2020 through 2025 are provided.

In the development of the water rate analyses, the City assisted in the study by developing the revenue requirements. HDR worked with the City to review and finalize the revenue requirements and then developed the cost of service analysis and rate design analysis.

3.2 Development of the Water Revenue Requirement

The development of revenue requirement is the first step in the rate study process. A revenue requirement analysis determines the adequacy of the overall level of water rates. From this analysis, a determination can be made as to the level of water revenue adjustments needed to provide adequate and prudent funding for both operating and capital needs. This determination includes the development of a rate transition plan to smoothly implement any needed water revenue adjustments.

The City's documents including, water usage data, operating budget, and capital improvements plan were used to complete the revenue requirement. In this process, a number of items were calculated independently. Specifically, these items were the projection of rate revenues, and reserve levels. Provided below is a detailed discussion of the development of the water utility

revenue requirements.

3.2.1 Determination of Time Period and Method of Accumulating Costs

The initial step in calculating the revenue requirement for the water utility was to establish a test period, or time frame of reference for the revenue requirement analysis. For this particular study, the revenue requirements were developed for a six-year projected time period (FY 2020 – FY 2025). This time period captured the City's major capital projects over the next few years. Reviewing a multi-year time period is generally recommended in an attempt to identify any major expenses that may be on the horizon. By anticipating future financial requirements the City can begin planning for these changes sooner, thereby, minimizing short-term water rate impacts and water rates over the long-term.

In developing the City's revenue requirement, a cash basis approach was utilized. This is the same approach or methodology as was used in the City's last comprehensive rate study. Section 2 provided a brief overview of the cash basis approach. This method of establishing the City's water revenue requirements has been used, but tailored to follow the City's system of accounts. While it has been tailored to follow the City's approach, it still contains the four major cost components of the cash basis methodology. Table 3-1 provides a summary of the approach that was used to develop the City's water revenue requirement.

Table 3-1
Overview of the Water Utility Revenue Requirements

+	Operation and Maintenance Expenses
+	Net Debt Service (P+I) Existing and Future
+	Net Capital Improvements Funded From Rates (calculated below) [1]
+	Transfers
=	Total Water Revenue Requirements
	[1] Net Capital Improvements Funded From Rates
+	Total Water Capital Improvement Projects
–	Funding Sources Other Than Rates
	✓ Water Impact Fees
	✓ Reserves
	✓ Grants
	✓ Long Term Debt Issues
=	Net Capital Improvements Funded From Rates [1]

Given a time period around which to develop the revenue requirements, and a method to accumulate the costs, the focus can shift to the projection of revenues and expenses for the City's water utility.

3.2.2 Water Rate and Other Miscellaneous Revenues

The revenue requirement calculation begins with a projection of rate revenues at present rate levels. The revenue at present rates was calculated by reviewing historical rate revenues and adding assumed customer growth. Customer growth was assumed to be approximately 1.5% per

year. The total water rate revenues for FY 2020 are approximately $14.6 million. In total and over time, the rate revenue before any rate adjustments is projected to be approximately $15.4 million in FY 2025.

The water utility also receives a variety of miscellaneous revenues unrelated to the sale of water. These revenues are received from sources such as inspections, service charges, and interest income. Miscellaneous revenues vary by year and in this analysis, they range from approximately $660,000 in FY 2020, and decrease slightly approximately to $605,000 by FY 2025.

In total, the City is projected to receive approximately $15.2 million in revenues in FY 2020 which increases over time to $16.0 million in projected FY 2025.

3.2.3 Projection of Water Operation and Maintenance Expenses

In general, operation and maintenance expenses are grouped into functional areas or services (e.g. operations, meter reading, etc.). Escalation factors were developed for the various types of expenses that the City incurs: power, labor, materials and supplies, equipment, miscellaneous, and depreciation. The escalation factors applied range from 1.0% to 19.4% per year. The higher escalation factor reflected the significantly higher costs associated with PERS benefits in FY 2020 of 19.4%, which decrease to 7.3% in the latter years. The majority of costs were escalated in the range of 2.5% to 5.0% per year, depending upon the specific type of costs. The escalation factors can be found in the Water Technical Appendix in Exhibit 2.

The City's FY 2020 proposed budgeted expenses were used as a starting point to project future O&M expenses. Future year projections were calculated by applying an applicable escalation factor. Total O&M expenses are approximately $11.0 million in FY 2020. With assumed escalation, the O&M expenses are projected to be approximately $14.3 million by FY 2025. It is important to note that the City is projecting to add staff (FTE's) in FY 2020 and FY 2023 in order to accommodate for increased work levels.

3.2.4 Projection of Debt Service Payments

Debt service relates to the principal and interest obligations of the water utility when financing capital projects with a long-term financing. The City currently has two outstanding debt issues: the 2009 Revenue Bond and the 2013 Revenue Bond. Along with debt service, a small amount is included for annual fiscal services. In total in FY 2020, the debt service is approximately $2.0 million and remains flat around this level over the projected time period. The analysis has resulted in no new water-related debt will be issued to fund capital projects during this projected six-year time period.

3.2.5 Projection of Water Capital Improvement Projects and Funding

An important aspect of the water revenue requirements was the funding of capital improvements. The City anticipates approximately $20.0 million in capital expenditures for the water utility over the planning period. There are a number of different methods that may be used for the City's maintenance (i.e., replacement) and growth-related capital projects. Among the methods that may be used to finance these capital improvement projects are grants, water connection (impact) fees, reserves, and rates. It is through the use of a combination of these

financing resources that the City can minimize their rates through time while still providing adequate funding for the water utility's capital projects.

A general financial guideline that can be used to determine proper funding levels for capital improvements from rates is that, at a minimum, a utility should fund an amount equal to or greater than annual depreciation expense. Annual depreciation expense reflects the current investment in plant that is being depreciated or "losing" its useful life. Therefore, this portion of plant investment needs to be replaced (funded) to maintain the existing level of infrastructure. It must be kept in mind that, in theory, annual depreciation expense reflects an investment in infrastructure an average of fifteen (15) years ago, assuming a 30-year useful (depreciable) life. Simply funding an amount equal to annual depreciation expense will not be sufficient to replace the existing or depreciated facility. The City recently set capital re-investment goals and objectives. For this study the capital from rates for water was set in FY 2021, at $2.5 million, with 5% increases annually over the time period. Provided below in Table 3-2 is a summary of the water utility capital improvement projects.

A general financial guideline that can be used to determine proper funding levels for capital improvements from rates is that, at a minimum, a utility should fund an amount equal to or greater than annual depreciation expense.

Table 3-2
Overview of the Water Capital Improvement Plan ($000) [1]

Description	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Total Capital Improvement Projects	$10,144	$2,267	$1,706	$1,656	$1,656	$2,581
(Deferred)/Future Projects	0	622	919	1,100	1,258	458
Total Net CIP	**$10,144**	**$2,889**	**$2,625**	**$2,756**	**$2,894**	**$3,039**
Less: Outside Funding Sources						
Operataing Reserves	$3,494	$0	$0	$0	$0	$0
Capital Reserves	4,449	0	0	0	0	0
Impact Fee	0	0	0	0	0	0
Grants	0	389	0	0	0	0
Rate Funded Capital	**$2,200**	**$2,500**	**$2,625**	**$2,756**	**$2,894**	**$3,309**

[1] – Detail of the water capital improvement projects can be found in the City's 2020 CIP

The City anticipates approximately $16.0 million ($20.0 in projects, less $4.3 future projects) in rate funded capital projects for the water utility over the six-year period of FY 2020 – FY 2025. Funding for the planned water capital improvements is from rates over the review period and no other sources are assumed to be used.

3.2.6 Transfers

Under a typical cash basis revenue requirement, the total revenues are set equal to the total expenses (O&M, debt service, and CIP from rates), and, technically, there is no change in the balance of the maintenance (operating) fund. The change in working capital component can be used to increase reserves for working capital purposes, or they can be drawn down to help mitigate the need for a rate adjustment. In the water study, there are two primary uses of this category. First, it reflects the cost allocation transfers to the water utility based on the City's cost allocation plan. Second, it is used to fund reserves to meet target minimum balances, or used to fund capital improvements or offset annual O&M expenses.

3.2.7 Summary of the Water Revenue Requirements

The above components and projections of the water revenue requirements are summed to develop the overall water revenue requirement for the City. In developing the final revenue requirement, consideration was given to the financial planning criteria of the City. In particular, emphasis was placed on attempting to minimize rates, yet still providing adequate funds to support the City's O&M activities, along with the planned capital projects throughout the projected time period. A summary of the City's projected water revenue requirements is shown below in Table 3-3.

Table 3-3
Summary of the Water Revenue Requirement Analysis ($000)

	Proposed	Projected				
	FY 2020	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**
Revenues						
Rate Revenue	$14,612	$14,831	$14,980	$15,129	$15,281	$15,434
Non-Operating Revenue	660	578	584	589	598	605
Total Revenues	**$15,272**	**$15,409**	**$15,564**	**$15,718**	**$15,879**	**$16,039**
Expenses						
Total Operations & Maintenance	$11,068	$11,837	$12,378	$13,067	$13,768	$14,364
Net Annual Debt Service	2,014	2,005	2,004	2,005	2,004	2,005
Capital Improvements from Rates	2,200	2,500	2,625	2,756	2,894	3,039
Transfers	1,159	1,439	953	2,241	1,608	1,070
Total Expenses	**$16,441**	**$17,782**	**$17,960**	**$20,069**	**$20,274**	**$20,478**
Bal/(Def.) of Funds	($1,169)	($2,373)	($2,396)	($4,351)	($4,395)	($4,439)
Rate Adj. as a % of Rate Rev.	8.0%	16.0%	16.0%	28.8%	28.8%	28.8%
Proposed Revenue Adjustment	**16.0%**	**0.0%**	**0.0%**	**11.0%**	**0.0%**	**0.0%**
Add'l Revenue from Adj.	$1,169	$2,373	$2,396	$4,351	$4,395	$4,439
Total Bal/(Def.) of Funds	$0	$0	$0	$0	$0	$0

In reviewing Table 3-3, it should be noted that the annual deficiencies are cumulative. That is,

any adjustments in the initial years will reduce the deficiency in the latter years. The results of the water revenue requirements indicate a deficiency of funds in FY 2020 and continuing through to FY 2025. The projected deficiency of funds in FY 2020 is approximately $1.1 million or 8.0% of the City's water rate revenue levels. By FY 2025, the deficiency is projected to be approximately $4.4 million or 28.8% of the City's current water rate revenue levels. These increased expenses are slightly offset by the increasing revenues from assumed customer growth on the system. The detailed revenue requirement is provided in Exhibit 3 of the Water Technical Appendix.

3.2.8 Debt Service Coverage

The debt service coverage (DSC) ratio is a financial measure of the utility's ability to repay outstanding debt. A debt service coverage ratio of 1.25 is generally considered the legally acceptable minimum for a revenue bond.[1] Therefore, this implies that the City should have a debt service coverage (DSC) ratio that is greater than 1.25 for all outstanding revenue bonds. Failure to meet this DSC requirement would be considered a technical default on the part of the City, making the revenue bonds callable or payable upon demand. At the present time, the City would not meet the targeted DSC ratio starting in year FY 2024, absent any rate adjustments. However, with the proposed rate adjustments, the DSC ratio is maintained above the target of 1.25. As part of this study, HDR is not acting in a Municipal Advisor role for the City. Should the City require coverage calculations to meet legal bond requirements, the City would need to rely on an independent review by a Municipal Advisor.

3.2.9 Water Rate Transition Plan

The purpose of the rate transition plan was to establish the size and timing of the water revenue adjustments to meet the City's needs, while also attempting to minimize impacts to customers. The proposed rate transition plan developed for the water utility is shown in Table 3-4. To review the customer bill impacts, the proposed revenue adjustments developed in the revenue requirement are applied equally to all components of the City's water rates. However, it should be noted that this bill impact may not reflect the actual individual customer bill as it will vary based on actual customer consumption and the results of the cost of service and rate design analysis as required by Proposition 218.

[1] "Legally" as used herein, refers to the contractual agreement between revenue bondholders and the City to assure repayment of the bonds, and to financially operate the utility in such a manner as to maintain the City's debt service coverage ratio above a specified minimum. This minimum debt service coverage ratio is a specified covenant of the bond resolution for the revenue bond.

Table 3-4
Summary of the Water Rate Transition Plan

	Present	Jan. 1 FY 2020	Jul. 1 FY 2020	Jul. 1 FY 2021	Jul. 1 FY 2022	Jul. 1 FY 2023	Jul. 1 FY 2024
Monthly Residential Water Bill [1]	$32.28						
Monthly Residential Bill		$39.86	$39.86	$39.86	$44.24	$44.24	$44.24
Avg. Monthly Res. Water Bill[2]		$36.07	$39.86	$39.86	$44.24	$44.24	$44.24
$ Change Per Month		3.79	3.79	0.00	4.38	0.00	0.00
Cumulative $ Change Per Month		3.79	7.58	7.58	11.96	11.96	11.96

[1] - Bill was assumed a 1" meter with average usage of 16 hundred cubic feet

[2] - Average bill, for FY 2020, shows 6 months of present bill and 6 months of proposed bill.

As Table 3-4 indicates, the current average residential bill for a City customer is $32.28 / month. The FY 2020 rate adjustment will change the average residential bill to $36.07 or a $3.79 / month. The average bill of $36.07 accounts for a January 1st adjustment and would be six months of the present rate, and six months of the proposed rate. The cumulative impact of the proposed adjustments moves the average monthly bill to $44.24 and is approximately $11.96 / month overall increase over the six year period. It should be noted that the adjustments show in Table 3-4 assume no change to the current rate structure and the relationship between fixed and variable costs. This aspect of the study is discussed in more detail in the cost of service and rate design subsection.

3.2.10 Summary and Recommendations of the Revenue Requirements

Based on the water revenue requirement analysis developed herein, it is projected that the City's water utility will operate at a deficit during the period of FY 2020 – FY 2025. In reviewing the results of the water revenue requirement analysis with the City, it was determined that a water revenue transition plan should be developed for these revenue deficiencies. HDR recommends that the City adopt the proposed water revenue transition plan for FY 2020 through FY 2025 as shown in Table 3-4.

This concludes the discussion and review of the water revenue requirement analysis. Given the findings and recommendations from this analysis, the focus now shifts to the water cost of service analysis.

3.3 Water Cost of Service Analysis

In order to determine the cost to serve each customer class of service on the City's system, a cost of service analysis is conducted. A water cost of service analysis is concerned with the proportional and equitable distribution of the water revenue requirement to the various customer classes of service. There are two primary objectives in conducting a cost of service study. They are as follows:

- Distribute the allocated water revenue requirement among the customer classes of service
- Derive average unit costs for proposed water rate designs

The objectives of the water cost of service analysis are different than the objectives of a revenue requirement analysis. A revenue requirement analysis determines the utility's overall financial needs, while the cost of service study provides an equitable and proportional manner to collect the revenue requirement from the various different types of customers served.

A cost of service analysis utilizes a three-step approach to review costs. These steps take the form of functionalization, allocation, and distribution. Provided below is a detailed discussion of the water cost of service study conducted for the City, the specific steps taken within the analysis, and the findings, conclusions and recommendations from the analysis. The approach used for this study conforms to generally accepted cost of service methodologies as outlined in the AWWA M1 manual.

3.3.1 Customer Classes of Service

One of the first tasks that must be accomplished in the cost of service analysis is to determine the customer classes of service to be reviewed. The objective of this task is to group customers together into similar or homogeneous groups based upon facility requirements and/or flow characteristics. For this study, the following water customer classes of service were utilized:

- Residential
- Non-Residential

In determining classes of service for cost of service purposes, the objective is to group customers together into similar or homogeneous groups based upon similar facility requirements and/or demand characteristics. Currently, the City has a rate structure for each customer class. The proposed customer classes of service reflect the consumption patterns of each customer type. For example, residential customers have a different peaking factor and consumption use characteristics than the non-residential customer class. This is a key aspect of the cost of service analysis that allows for the appropriate and equitable (proportional) distribution of costs to establish the proposed rates for each customer class of

Terminology of a Water Cost of Service Analysis

FUNCTIONALIZATION – The arrangement of the cost data by functional category (e.g. supply, treatment, etc.).

ALLOCATION – The assignment of functionalized costs to cost components (e.g. base, extra-capacity, customer, and fire protection related).

DISTRIBUTION – Distributing the allocated costs to classes of service based upon each class's proportional contribution to that specific cost component.

COMMODITY COSTS – Costs that are classified as commodity related vary with the total flow of water (e.g. chemical use at a treatment plant).

CAPACITY COSTS – Costs classified as capacity related vary with peak usage. Facilities are often designed and sized around meeting peak demands.

FIRE PROTECTION COSTS - Costs that are related to fire protection systems (e.g. hydrants).

CUSTOMER COSTS – Costs classified as customer related vary with the number of customers on the system (e.g. metering costs).

DIRECT ASSIGNMENT – Costs that can be clearly identified as belonging to a specific customer or group of customers.

CUSTOMER CLASSES OF SERVICE – The grouping of customers into similar groups based upon usage characteristics and/or facility requirements.

service.

For example, the residential rate schedule was developed based on the consumption patterns of the City's residential customers. Typically, residential customers peak in the summer due to increased outdoor watering needs. It should also be noted that the consumption patterns of residential customers is assumed to be similar from customer to customer. The non-residential customer class is for those customers that are not residential. These are primarily businesses (restaurants, offices, grocery stores, etc.) and consumption levels can also vary greatly depending on the end use of water. However, the non-residential customers do not peak at the same level as residential customers. Based on these customer classes of service, each with their own unique customer consumption patterns and characteristics, the cost of service can be developed.

3.3.2 Functionalization of Costs

The first analytical step in the water cost of service is called functionalization. Functionalization is the arrangement of expenses and asset (plant) data by major operating functions within the utility (e.g. source of supply, treatment, pumping, transmission, distribution, etc.). Within this study, the functionalization of the water cost data was largely accomplished through the City's system of accounts.

3.3.3 Allocation of Costs

The second analytical step in the water cost of service study is the allocation of costs. Allocation determines why the expenses were incurred or what type of need is being met. The City's plant accounts and revenue requirements were reviewed and allocated according to the following cost classifiers as part of the water utility cost of service study.

- **Commodity Related Costs.** Commodity related costs are those costs that tend to vary with the total quantity of water consumed by a customer. The electric costs associated with pumping water are an example of a commodity-related cost, since these costs tend to vary based upon the total flow of water.
- **Capacity (Demand) Related Costs.** Capacity costs are those costs incurred to meet peak demand conditions. These costs are a function of meeting maximum demand requirements of the customers. Capacity may be defined by the peak period event, but is typically defined as peak day and/or peak hour requirements. Capacity related costs are important since they are related to the sizing of facilities needed to meet peak use requirements. For example, portions of distribution reservoirs and mains (pipes) must be adequately sized to meet peak use demands.
- **Customer Related Costs.** Customer costs are those costs that vary with the number of customers on the water system. They do not vary with system output or consumption levels. These costs are also sometimes referred to as "readiness to serve" or "availability" costs. Customer costs may also sometimes be further classified as either actual or weighted. Actual customer costs vary proportionally, from customer to customer, with the addition or deletion of a customer regardless of the size of customer. In contrast to this, a weighted customer cost reflects a disproportionate (i.e., higher or lower) cost, from customer to customer, with the addition or deletion of a customer.
- **Public Fire Protection Related Costs.** Public fire protection costs are those costs that are

related to the public fire protection function. Usually, such costs are those related to public fire hydrants and the over-sizing of mains and reservoirs for fire protection purposes.

- **Revenue Related Costs.** Certain costs associated with the water utility may vary with the amount of revenue received by the City. An example of a revenue related cost is a tax based upon the gross revenues of the utility.
- **Direct Assignment.** Some costs associated with operating the system may be directly traced to a specific customer or class of service (e.g., bad debt expense). In this case, these costs are then directly assigned to that specific class of service. This assures that other classes of service will not be allocated costs that they do not benefit from, or costs that they did not incur.

For each of the allocated costs noted above, a distribution factor must be developed to distribute each specific type of cost in an equitable manner to the customer classes of service (e.g. residential, non-residential, etc.).

3.3.4 Functionalization and Allocation of Water Plant in Service

The City's historical plant asset records were used in performing the functionalization of water plant in service. The allocation process included reviewing each group of assets and determining which cost classifiers the assets were related to, or what function the asset (facility) provided. Provided below is a brief discussion of the allocation process used for the City's water utility.

Treatment was allocated as 58.6% to commodity and 41.4% to capacity. This reflects the purpose of the treatment facilities, to meet both average day and peak day needs of the system.

Pumping facilities are typically sized around meeting overall customer consumption requirements for both average and peak day needs. Therefore, pumping facilities were allocated in the same manner as treatment at 58.6% commodity related and 41.4% capacity related.

Water transmission and distribution lines (mains) are typically assumed to meet three types of needs on the system; customer-related, capacity-related, and public fire protection-related needs. First, a distribution system is a function of the number of customers that it serves, and must also be in place to meet a customer's minimum requirements for water. This portion of the distribution main plant investment is considered customer-related or a function of the number of customers on the system. Next, a portion of the distribution main investment is considered a function of meeting peak flow demand requirements on the system. Distribution mains must be sized to adequately meet the peak flow (capacity) requirements of the customers. This portion of the distribution main plant investment is considered capacity-related. Finally, even during a peak day or peak hour event, distribution mains must also be over-sized for fire flow requirements. This final portion of over-sizing for distribution main investment is classified as public fire protection-related. The analysis for the City's distribution mains resulted in an allocation of 39.2% capacity-related, 50.0% customer-related, and 10.8% public fire protection related.

A detailed summary of the functionalization and allocation of the water plant in service can be found in Exhibit 12 of the Water Technical Appendix.

3.3.5 Functionalization and Allocation of Water Operating Expenses

Operating expenses are generally functionalized and allocated in a manner similar to the corresponding plant account. For example, maintenance of distribution mains is typically allocated in the same manner (percentages) as the plant account for distribution mains. This approach to allocation of operating expenses has been used for this analysis.

For the City's study, the FY 2021 water revenue requirements were functionalized and allocated utilizing the previously discussed methodology. The FY 2021 revenue requirement was utilities since it would be a full year of costs based on the partial year (Jan. 1, 2020) rate adjustment in FY 2020. A more detailed review of the functionalization and allocation of revenue requirements can be found in the Water Technical Appendix on Exhibit 14.

3.3.6 Distribution of the Revenue Requirements

Once the classes of service have been defined, and the allocation process is complete, the various costs are then distributed to each of the classes of service based on equitable distribution factors. The City's allocated water costs were distributed to the various classes of service using the following allocation factors.

- **Commodity-Related Distribution Factor**. Commodity-related costs vary with the flow of water. Therefore, commodity-related costs were distributed to the various customer classes of service using the City's estimated FY 2021 water sales (consumption). The most recent historical period with sales by customer class of service was utilized for this study. Water sales were projected forward from this historical billed consumption. This information was provided by the City from their billing system.
- **Capacity-Related Distribution Factor**. Capacity-related costs vary with peak use or maximum demands on the system. Accordingly, the capacity distribution factor was developed based upon each classes assumed contribution to the system peak day demand. The City provided detailed consumption by individual customers in order to develop the peaking factors. Peaking factors, by tier, and class of service, were used to estimate the contribution of the each class of service to the peak day event. The peaking factors were calculated (estimated) by taking the ratio of the average month to peak month consumption. This approach is outlined in the AWWA M1 Manual to provide a basis for establishing peaking factors by customer class and tier.
- **Customer Distribution Factors**. Customer costs vary with the number of customers on the system. Two basic types of customer distribution factors were identified - actual and weighted. The distribution factors for actual customers were based upon the projection of the number of customers developed within the revenue requirements. The weighted customer distribution factor is also broken down further into two factors that attempt to reflect the disproportionate costs associated with serving larger water users. The first weighted customer factor is for customer service and accounting. This weighted customer distribution factor takes into account the fact that it may take more time or effort to read a meter and process a bill for a customer with a larger meter. The second weighted customer distribution factor is for meters and services. This factor reflects the capacity differences based on meter sizes and meter equivalency factors for each customer class of service.

- **Public Fire Protection Distribution Factor**. The distribution of public fire protection related costs within the water cost of service analysis involved an analysis of each class of service and the fire flow requirements associated with each. The analysis took into account the gallon per minute flow requirements in the event of a fire, along with the required duration of the flow. The fire flow rates used within the distribution factor were based upon the guidelines in the City's 2016 Water Master Plan. These minimum fire flow requirements are then multiplied by the number of customers in each class of service, and the assumed duration, in minutes, of the required flow, to determine the class's prorated fire flow requirements.
- **Revenue Related Distribution Factor**. The revenue related distribution factor was developed from each customer class' projected annual rate revenues for FY 2021. This same amount of revenue was used in the revenue requirement analysis.

The water utility distribution factors noted above can be found in the Water Technical Appendices, Exhibits 7 – 11. Shown below in Table 3-5 is summary of the distribution of the revenue requirement.

Table 3-5
Summary of the Distribution of the Revenue Requirement ($000's)

	Total	Commodity	Capacity	Actual Customer	Equiv. Meters & Services	Public Fire Protection	Revenue Related	Direct Assign.
Net Revenue Requirement	**$17,204**	**$5,749**	**$5,355**	**$1,994**	**$3,687**	**$418**	**$0**	**$0**

[1] – Summation of table may reflect rounding errors due to decimal places.

3.3.7 Summary of the Water Cost of Service Results

In summary form, the cost of service analysis began by functionalizing the City's revenue requirement. The functionalized revenue requirement was then allocated into the various cost components. The individual allocation totals were then distributed to the various customer classes of service and tiers based on the appropriate distribution factor. The distributed expenses for each customer class were then aggregated to determine each customer class's overall revenue responsibility. A summary of the water cost of service analysis developed for each class of service is shown within Table 3-6.

Table 3-6
Summary of the Water Utility Cost of Service Analysis ($000's)

Classes of Service	Present Rate Revenues	Distributed Costs	$ Difference	% Difference
Residential	$10,700	$12,285	($1,585)	14.8%
Non-Residential	4,131	4,920	(789)	19.1%
Total	**$14,831**	**$17,204**	**($2,373)**	**16.0%**

[1] – Summation of table may reflect rounding errors due to decimal places.

The cost of service study proportionally and equitably distributes the operating and capital costs to each customer class with their respective benefit received from and burdens placed on the water system (proportional allocation). Overall, the cost of service shows only minor cost differences between the customer classes as both are within a reasonable range of the overall system total.

It is important to understand that a cost of service analysis is based on one year's O&M expense data and projected customer usage information. Given this, the results of the cost of service analysis may change from year to year. As the City continues to monitor rates and cost of service results through future studies, future cost of service adjustments may be necessary to reflect costs and customer consumption patterns at that time. While the cost distribution is important to the overall rate setting process, the basis for the proposed rates is the unit costs. The unit costs are the allocated costs, by cost component, then distributed to each class by dividing by the appropriate consumption unit. For example, commodity related costs are divided by the total consumption by customer and tier. Provided in Table 3-7 is a summary of the cost of service unit costs.

Table 3-7
Summary of the Water Unit Costs

	Residential			Non-Residential
	Tier1	Tier 2	Tier 3	
Consumption Related				
Commodity	$0.74	$0.74	$0.74	$0.74
Capacity	0.62	0.71	0.84	0.66
Total	**$1.36**	**$1.45**	**$1.58**	**$1.40**
Customer Related				
RR / FP / DA		$1.25		$0.80
Equiv. Meter		16.85		11.26
Total		**$18.10**		**$12.06**

Given the requirements of Article XIII D, section 6 the results of the cost of service will be used to establish the proposed rate designs for each of the City's customer classes of service. A more detailed discussion of the use of the cost of service results, and unit costs, is provided in the rate design section of this report.

3.3.8 Summary Conclusions and Recommendations of the Cost of Service

This section of the report has provided the recommendations resulting from the cost of service analysis developed for the City's water utility. This analysis was prepared using generally accepted cost of service techniques as provided in the AWWA M1 Manual. The following section of the report will provide a summary of the present and proposed rates for the City's water utility.

It must be kept in mind that a cost of service analysis reflects costs and usage characteristics of a specific point in time, and as time goes on, customer's consumption patterns and usage requirements change. Only over time, and through continual analysis, can one fully understand

the true cost of providing service. Given the results of the water cost of service analysis, the focus will now shift to the development of the proposed water rate designs.

3.4 Water Rate Designs

The final step of the comprehensive water rate study process is the design of water rates to collect the desired level of revenue, based upon the findings and recommendations of the water revenue requirement and cost of service analysis. In reviewing water rate designs, consideration is given to the level of the rates and the structure of the rates. This subsection of the report will review the current and proposed water rate designs for the City.

3.4.1 Rate Design Criteria and Considerations

Prudent rate administration dictates that several criteria must be considered when setting utility rates. Some of these rate design criteria are listed below:

- ✓ Rates which are easy to understand, from the customer's perspective
- ✓ Rates which are easy for the utility to bill and administer
- ✓ Consideration of the customer's ability to pay
- ✓ Continuity, over time, of the rate making philosophy
- ✓ Policy considerations (encourage conservation, economic development, etc.)
- ✓ Provide revenue stability from month to month and year to year
- ✓ Promote efficient allocation and use of the resource
- ✓ Equitable and non-discriminating (cost based)

It is important that the City provide its customers with a proper price signal as to what their consumption or usage is costing. This goal may be approached through a combination of rate *level* and rate *structure*. Level refers to the amount of revenue to be collected from a rate design, and structure refers to the way in which the revenue is collected (e.g., fixed charges, variable charges, minimum bills, etc.). When developing the City's proposed water rate designs, all of the above listed criteria were taken into consideration. However, it should be noted that it is difficult, if not impossible, to design a water rate that meets all of the goals and objectives listed above. For example, it may be difficult to design a low-income rate (i.e., a discounted or subsidized rate) that takes into consideration the customer's ability to pay, and one which is cost-based. In designing rates, there are always trade-offs between the various rate design goals and objectives.

While always a key consideration in developing rates, meeting the legal requirements, and documenting the steps taken to meet the requirements, has been in the forefront with the recent legal challenges in the State of California on water rates. Given this, the City's proposed water rates have been developed to meet the legal requirements of California constitution article XIII D, section 6 (Article XIII D). A key component of Article XIII D is the development of rates which reflect the cost of providing service and are proportionally allocated among the various customer classes of service. HDR would point out that there is no single prescribed methodology for equitably assigning costs to the various customer groups. The American Water Works Association (AWWA) M1 Manual clearly delineates various methodologies which may be used to establish cost-based rates. Article XIII D does not prescribe a particular methodology for establishing cost-based rates; consequently, HDR developed the City's proposed water rates based on the methodologies provided in the AWWA M1 Manual to meet the requirements of Article XIII D and

recent legal decisions to provide an administrative record of the steps taken to establish the City's water rates.

HDR is of the opinion that the proposed rates comply with legal requirements of Article XIII D. HDR reaches this conclusion based upon the following:

- **The revenue derived from water rates does not exceed the funds required to provide the property related service (i.e., water service).** The proposed rates are designed to collect the overall revenue requirement of the City's water utility.
- **The revenues derived from water rates shall not be used for any purpose other than that for which the fee or charge is imposed.** The revenues derived from the City's water rates are used exclusively to operate and maintain the City's water system.
- **The amount of a fee or charge imposed upon a parcel or person as an incident of property ownership shall not exceed the proportional costs of the service attributable to the parcel.** This study has focused almost exclusively on the issue of proportional assignment of costs to customer classes of service. The proposed rates have appropriately grouped customers into customer classes of service that reflect the varying consumption patterns and system requirements of each customer class of service. The grouping of customers and rates into these classes of service creates the equity and fairness expected under Article XIII D by having differing rates by customer classes of service which reflect both the level of revenue to be collected by the utility, but also the manner in which these costs are incurred and equitably assigned to customer classes of service based upon their proportional impacts and burdens on City's the water system.

The City currently has a separate rate structure for each customer classes of service. For residential, that includes a flat monthly service charge and a 3-tiered increasing usage charge on a dollar per hundred cubic feet (CCF) basis. Non-residential customers are charged a monthly service charge based on the meter size and the usage charge is uniform.

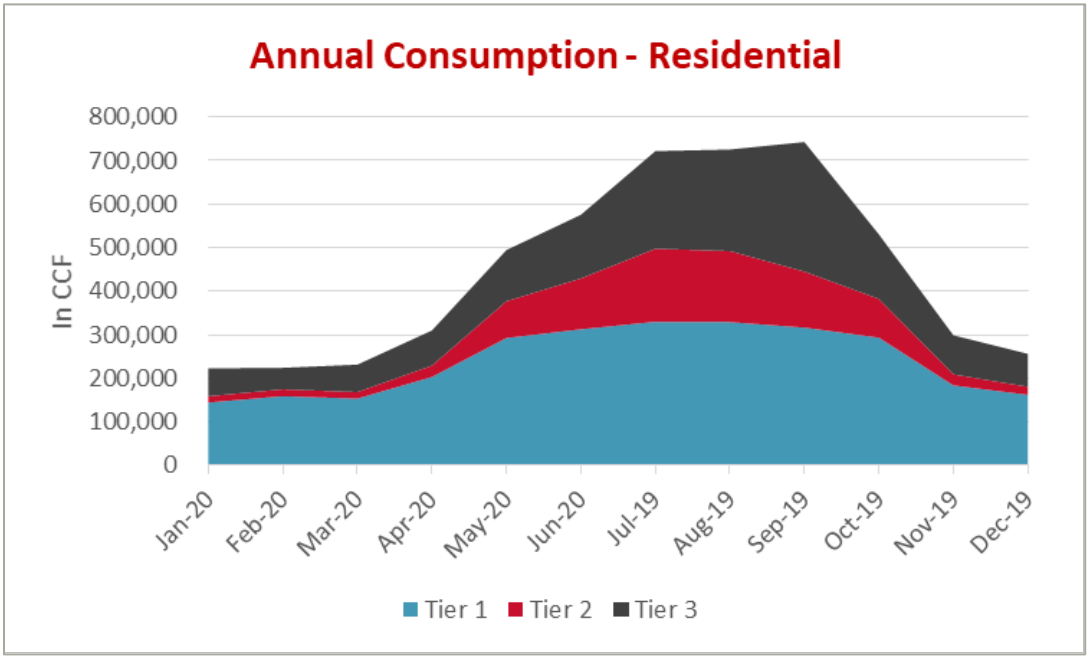
In discussion with the City, it was determined that the current rate structure was appropriate, reflects generally accepted industry approaches, and adequately addressed achieving the City's rate design goals and objectives. The current rate structure - which differentiates between residential and non-residential - has been used when establishing the cost of service analysis and proposed rates. Developing a separate rate for each customer class that reflects the consumption patterns and impacts placed on the system provides the cost-basis and meets the intent of Proposition 218.

As a part of this study, HDR developed a water rate design discussion to clearly demonstrate and support the proposed water rates and tiered pricing. The following discussion provides a more detailed analysis of the costing techniques and methodologies used to support the proposed rate design.

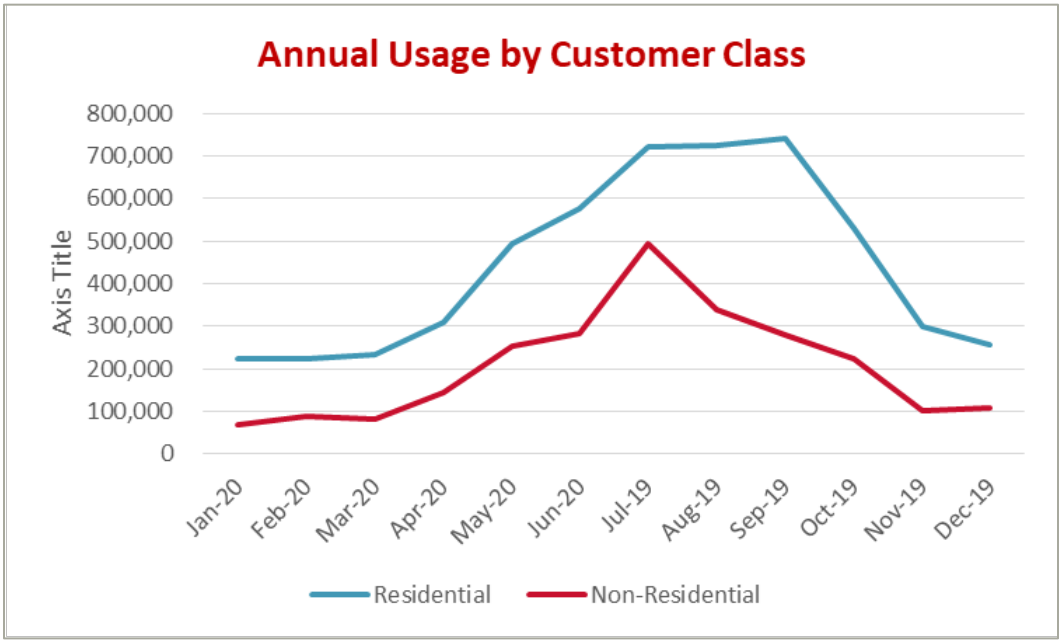
3.4.2 Determination of Sizing and Number of Tiers

The first step in reviewing the City's current, and proposed, tiered rate structure is to identify the

number of tiers and determine the size of the tiers. As noted previously, only residential customers have a tiered rate structure. After reviewing the residential customer consumption patterns, it was determined that the current tier sizes reflect the consumption patterns of the customers. A summary of the monthly consumption by block is shown in the graphic below. As can be seen, the rate structure appears to be working effectively by having the majority of customers in the first block. Then, as the time period shifts into summer, more customers are in the 2nd and 3rd blocks which are designed around the peak summer customer needs.



Given the variability of non-residential customer overall use and the diversity of customer's within the class, it is difficult to develop tiers which reflect the typical customer consumption patterns like is done with the residential customer class. This is due to the fact that residential customers behave in a much more similar manner with their usage patterns. Upon reviewing the residential and non-residential consumption patterns, it appears that the uniform rate structure for the consumption charge is appropriate. As can be seen from the chart below, the residential customers have a much more significant peak on the system than non-residential customers.



3.4.3 Establishing the Cost-Basis for Pricing Tiers

Given past legal decisions regarding water rates, HDR has concluded that utilities have available to them at least three technical approaches to be able to demonstrate (i.e., cost justify) the individual pricing of the tiers. These technical approaches encompass the following areas:

1. Cost differences in water supply (i.e., stacking of water supply resources to tiers).
2. Cost differences from high peak use consumers (relationship of average use to peak use).
3. Direct assignment of costs to specific tiers (conservation program costs, etc.).

In certain cases, the cost differences may be related to the cost of water supply when a utility has more than one source of water supply. Additionally, this water supply approach may also include the cost of alternative water supplies (e.g., recycled or reuse water). For example, reuse water may be assigned to higher tiers to reflect outdoor use or the need for additional/alternative water supply to meet the demands of the high use customers.

The second possible source of cost differences for the pricing of tiers is related to high-peak use (peak demand) customers. Customers that use more water create greater demands and costs on the system. A water supply and distribution system must be sized to meet these peak use requirements. In other words, on the hottest day of the year when everyone is watering their lawn, the supply and distribution system must be sized to meet those peak use demands. Economic theory clearly states that equity is achieved when those that create the demand event, pay for the demand event. In this particular case, this has implications upon the equitable allocation of capacity-related costs to the different usage tiers (low use vs. high peak use).

Finally, certain costs may be directly assigned to specific tiers. For example, a conservation program which focuses on outdoor water use may be directly assigned to the water tiers, or

seasons, which are most directly related to outdoor use. The direct assignment to a specific price tier will create a price differential for that tier.

For the City's study, the focus of the analysis was on the second method of determining the cost impacts and cost differences associated with peak use. The pricing of the tiers, or uniform rate, was developed to provide the cost-basis and meet the intent of Proposition 218.

3.4.4 Development of the Unit Costs for Rate Designs

To begin the assignment of costs related to specific tiers, the results of the cost of service analysis is utilized. As noted earlier, the cost of service analysis allocates the revenue requirement between the various cost components of average use (commodity), peak use (capacity), and customer (actual and weighted). However, the results provided in Table 3-5 which distributed the totals to the various customer classes of service are further distributed between the rate structure components (e.g., service charge, usage charge, tiers). Provided in Table 3–8 is a summary of the distribution of the FY 2021 revenue requirement from the cost of service analysis (same as Table 3-6).

Table 3-8
Summary of the Allocated and Distributed FY 2021 Revenue Requirement
($000's)

Commodity	Capacity	Actual Customer	Equivalent Meters	Public Fire Protection	Total
$5,749	$5,355	$1,995	$3,687	$418	$17,204

[1] – Summation of table may reflect rounding errors due to decimal points.

The total of the above allocated costs, of approximately $17.2 million, is the same as the total costs allocated in Table 3-6 of the cost of service analysis. This allocation of the total revenue requirement for FY 2021 is then distributed to the various customer classes of service. Prior to recent legal decisions, the analyses would have been complete. However, given the legal requirement to provide the cost-basis for each rate, both fixed and variable pricing, the allocated costs are further distributed between the various rate structure components based on the corresponding distribution factors. The distribution factors were discussed for the costs of service section of this report. For example, the commodity costs are divided through by each customer class's consumption from a given tier. Provided below is a discussion of the approach used to allocate the revenue requirement between the various customer classes of service to the various rate components for each customer class of service.

3.4.5 Commodity Distribution Factor

The commodity distribution factor is based on the average annual use for each of the customer classes of service, and more importantly by tier. For the development of the pricing of the proposed rates the following customer class components were used:

- Residential
  - Tier 1
  - Tier 2
  - Tier 3
- Non-Residential

To develop the commodity distribution factor for each customer class, the usage for each class, and tier, was divided by the total usage of the system. This produces the percent of the system that each class is responsible for and, therefore, their contribution to commodity related costs. Provided below in Table 3–9 is a summary of the commodity distribution factor.

Table 3-9
Summary of the Commodity Distribution Factor

Reference Calculation	*A*	*B*	*C* C = A + B	*D*
	FY 2020 Consumption *(CCF)*	**Est. System Losses** *(CCF)*	**Total Annual Use** *(CCF)*	**% of Total**
Residential				
Tier 1	2,883,124	431,027	3,314,151	37.0%
Tier 2	864,258	129,207	993,465	11.1%
Tier 3	1,587,062	237,266	1,824,327	20.4%
Residential Total	**5,334,443**	**797,499**	**6,131,943**	**68.4%**
Non-Residential	**2,460,926**	**367,908**	**2,828,834**	**31.6%**
Total	**7,795,369**	**1,165,408**	**8,960,777**	**100.0%**

[1] – Summation of table may reflect rounding errors due to decimal places.

As can be seen, the development of the commodity distribution factor is fairly straightforward. It is important to note that the distribution factor is based on the actual metered consumption for each class, and tier for residential, plus assumed losses on the system. In this way, those costs allocated to the commodity component can be proportionally distributed to the appropriate customer class and customer class tier. As an example, Tier 1 consumption of the residential class of service represents 37.0% of the total consumption on the system. As a result, 37.0% of the commodity related costs are then distributed to Tier 1 of the residential customers.

This approach is used for each of the customer classes of service for each rate component and tier. Using the costs allocated to the commodity component in the cost of service analysis from Table 3-8, and the commodity distribution factor in Table 3-9, the distribution of costs to each tier or customer class can be developed. The summary of the distributed commodity costs are shown below in Table 3–10.

Table 3-10 Distributed Commodity Costs ($000s)				
Reference	***A***	***B***	***C***	***D***
Calculation				**D = B / C**
	% of Total	**Commodity Costs**	**Water Sales (CCF)**	**Unit Cost ($/CCF)**
Residential				
Tier 1	37.0%	$2,126	2,883,124	$0.74
Tier 2	11.1%	637	864,258	0.74
Tier 3	20.4%	1,171	1,587,062	0.74
Residential Total	**68.4%**	**$3,934**	**5,334,443**	
Non-Residential	**31.6%**	**$1,815**	**2,460,926**	$0.74
Total	**100.0%**	**$5,749**	**7,795,369**	

[1] – Summation of table may reflect rounding errors due to decimal points.

The figures in column A are from column D in Table 3–9. The costs shown in column B are based on the total commodity related costs from column A of Table 3–8. Column C is from column A in Table 3–9, or the actual consumption that is billed to the customers.

From the unit costs developed in Table 3–10 above, the per unit cost basis of the tiered and uniform rates can be determined for the commodity related costs identified in the cost of service analysis (Column D). For example, for the proposed residential tier 1 rate, the commodity component is $0.74 per CCF. This applies to each tier and customer class (e.g., residential and non-residential).

3.4.6 Capacity Distribution Factor

The capacity distribution factor utilizes the same customer classes, and tiers, as has been established for the cost of service study. Whereas commodity costs are related to the volume of water used by each class of service by tier on an annual basis, the capacity costs are related to how the class uses that water in each tier or overall. Customers use water in different ways and at different times, thus creating different usage patterns and resulting in different peaking factors. These usage patterns drive how the City must size the system to meet the peak demands of customers. To determine the distribution by tier or in total, peaking factors need to be developed for each customer class of service tier or season. The peaking factors for each class of service must be estimated due to a lack of specific metered data related to peak day usage by each class of service. One method discussed in the AWWA M1 Manual used to estimate a class's peaking factor is to review the average monthly volume of water consumed and compare it to the maximum monthly usage of water. By dividing the maximum month by the average month, a peak-day factor is calculated. Essentially, this factor provides a seasonal surrogate for the difference between the average use and peak day use in each tier or season. For example, if a customer used 10 CCF per month on average and in the peak month 15 CCF was used, the peaking

factor would be 1.50 (15 / 10 = 1.50). In this example, the peaking factor is stating that the maximum usage in a month is 1.50 time higher than the average usage per month.

For the City's study the consumption patterns of each customer for each class and tier were reviewed and peaking factors were developed for each class and tier. In other words, a peak factor for each customer, by tier, was developed to depending on the amount of water used and the peak demands of those customers within that tier compared to the average customer consumption peak. Shown below in Table 3–11 is a summary of the capacity distribution factor for each customer class.

Table 3-11
Summary of the Capacity Distribution Factor

Reference Calculation	*A*	*B*	*C* C = A * B	*D*
	Average Consumption (MGD)	**Peaking Factors**	**Peak Day Use (MGD)**	**% of Total**
Residential				
Tier 1	6.79	1.72	11.68	33.3%
Tier 2	2.04	1.98	4.03	11.5%
Tier 3	3.74	2.33	8.72	24.9%
Residential Total	**12.57**		**24.43**	**69.8%**
Non-Residential	**5.80**	**1.83**	**10.59**	**30.2%**
Total	**18.36**		**35.02**	**100.0%**

[1] – Summation of table may reflect rounding errors due to decimal places.

Table 3–11 above shows the development of the capacity distribution factor. For example, based on the City's residential customer consumption data, those customers that stayed within Tier 1 for peak use have a peak factor of 1.72. In other words, those customers that stay within Tier 1 for peak use, use 1.72 times more water in the peak period than on average. This is compared to customers in the remaining tiers which show a higher peaking factor based on how the customers in these tiers consume water. These peaking factors were developed around the City's water customers consumption patterns. Similar to the distribution of commodity costs to the tiers or customer classes, the capacity related costs are distributed in the same manner. For example, 33.3% of the capacity costs are allocated to Tier 1 of the residential customers based on column D in Table 3-11. To determine this, the average day use (column A) of each tier or class is multiplied by the peaking factor (column B). The total peak use by tier or class is divided by the system total peak use to develop the proportional distribution.

Table 3–12 provides a summary of the distributed capacity costs to each tier and season.

Table 3-12 Distributed Capacity Costs ($000s)				
Reference **Calculation**	***A***	***B***	***C***	***D*** **D = B / C**
	% of Total	**Capacity Costs**	**Water Sales (CCF)**	**Unit Cost ($/CCF)**
Residential				
Tier 1	33.3%	$1,785	2,883,124	$0.62
Tier 2	11.5%	616	864,258	0.71
Tier 3	24.9%	1,333	1,587,062	0.84
Residential Total	**69.8%**	**$3,735**	**5,334,443**	
Non-Residential	**30.2%**	**$1,619**	**2,460,926**	$0.66
Total	**100.0%**	**$5,354**	**7,795,369**	

[1] – Summation of table may reflect rounding errors due to decimal places.

The figures in column A are from column D in Table3 –11. The costs shown in column B are based on the total capacity related costs from column B of Table 3–8. Column C is from column A in Table 3–9. For example, the proposed rate for Tier 2 includes a capacity component cost of $0.71 per CCF while the Tier 3 capacity cost is $0.84 per CCF. This difference reflects the costs associated with providing consumption at higher tiers and the costs of providing that capacity.

3.4.7 Summary of the Consumption Based Unit Costs

Combining the unit costs from the commodity and capacity unit costs result in the basis of the tiered rate pricing. The summary Table 3–13 below shows the summation of the costs for each tier / rate. This table sums the costs from Table 3–10 column D and Table 3–12 column D.

Table 3-13 Summary of the Unit Costs for Rate Design				
Reference	***A***	***B***	***C***	***D***
	Commodity Costs ($/CCF)	**Capacity Costs ($/CCF)**	**Total Unit Cost ($/CCF)**	**Differential ($/CCF)**
Residential				
Tier 1	$0.74	$0.62	**$1.36**	*$0.00*
Tier 2	0.74	0.71	**$1.45**	*0.09*
Tier 3	0.74	0.84	**$1.58**	*0.13*
Non-Residential	$0.74	$0.66	**$1.40**	*n/a*

The results shown in Table 3–13 above are the basis for the City's consumption pricing for the proposed rates. The analysis and costs shown above have been developed to meet the intent of Proposition 218 and recent legal decisions related to developing cost-based water rates.

3.4.8 Summary of the Customer (Fixed) Costs

It is also important to note that the customer related costs are used to establish the monthly service charge which varies by meter size. As a result, the total customer costs were divided by the number of equivalent meters on the system. An equivalent meter uses the capacity ratio of a 5/8-inch meter to the larger meter sizes to determine the pricing for each meter size. In this way the meter charge reflects the equitable proportion of fixed costs on the system based on the capacity demands the customer can place on the system based on the size of the meter. Shown below in Table 3–14 is a summary of the customer related costs and customer charge development.

Table 3-14
Summary of the Customer Charge for Rate Design

	Current City Ratios	Residential Cost *($ / Acct. / Mo)*	Non-Residential Cost *($ / Acct. / Mo)*
Total Customer Costs		**$4,615,306**	**$1,485,192**
Total 5/8" Meter Equiv. [1]		21,253	10,261
Cost per Equiv. Meter/Month		**$18.10**	**$12.06**
Proposed Rates			
SFR Base	1.00	$18.10	--
Manufactured Home	0.46	8.24	--
Condo	0.63	11.40	--
Com / Res	0.28	5.15	--
5/8"	1.00	--	$12.06
3/4"	1.50	--	18.09
1"	2.50	--	30.15
1.5"	5.00	--	60.30
2"	8.00	--	96.48
3"	15.00	--	180.90
4"	25.00	--	301.50
6"	50.00	--	603.00
8"	80.00	--	964.80
10"	115.00	--	1,386.90
12"	168.75	--	2,035.13

[1] – Based on the AWWA equivalent meter ratios

[2] - The low income rate is funded through the general fund.

3.4.9 Present and Proposed Residential Water Rates

The residential rate is composed of a fixed charge based on the customer subcategory plus a three-tiered, increasing block consumption charge. Provided below in Table 3-15 is a summary

of the present and proposed residential water rates.

Table 3-15
Summary of the Present and Proposed Residential Water Rates

Rate Components	Present Rates	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Monthly Fixed Charge							
SFR (1") Base	$15.00	$18.10	$18.10	$18.10	$20.09	$20.09	$20.09
Manufactured Home	6.83	8.24	8.24	8.24	9.15	9.15	9.15
Condo	9.45	11.40	11.40	11.40	12.66	12.66	12.66
Comm./Residential	4.27	5.15	5.15	5.15	5.72	5.72	5.72
Commodity Charge *($/CCF)*							
0 – 20	$1.08	$1.36	$1.36	$1.36	$1.51	$1.51	$1.51
20 – 40	1.30	1.45	1.45	1.45	1.61	1.61	1.61
40 +	1.60	1.58	1.58	1.58	1.75	1.75	1.75

[1] – CCF of water = One hundred cubic feet of water. 1 CCF of water = 748 gallons

The proposed residential rates will maintain the current rate structure of the fixed monthly charge and the three-tiered increasing block consumption charge. The proposed rates for FY 2020 are based upon the unit costs derived in the cost of service analysis. Thereafter, the rate are adjusted in July 1, 2022 (FY 2023) by 11.0% overall; meaning all components of the rate have been adjusted equally.

3.4.10 Present and Proposed Non-Residential Water Rates

The City's non-residential customers have a fixed charge that varies by service meter size. Additionally, the consumption charge for non-residential customers is a uniform rate on a per CCF basis for all usage. Provided below in Table 3-16 is a summary of the present and proposed non-residential water rates.

Table 3-16
Summary of the Present and Proposed Non-Residential Water Rates

Rate Components	Present Rates	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Monthly Fixed Charge							
5/8"	$12.61	$12.06	$12.06	$12.06	$13.39	$13.39	$13.39
3/4"	16.62	18.09	18.09	18.09	20.08	20.08	20.08
1"	26.88	30.15	30.15	30.15	33.47	33.47	33.47
1.5"	52.68	60.30	60.30	60.30	66.93	66.93	66.93
2"	84.29	96.48	96.48	96.48	107.09	107.09	107.09
3"	156.31	180.90	180.90	180.90	200.80	200.80	200.80
4"	259.82	301.50	301.50	301.50	334.67	334.67	334.67
6"	518.22	603.00	603.00	603.00	669.33	669.33	669.33
8"	828.84	964.80	964.80	964.80	1,070.93	1,070.93	1,070.93
10"	1,191.69	1,386.90	1,386.90	1,386.90	1,539.46	1,539.46	1,539.46
12”	1,712.97	2,035.13	2,035.13	2,035.13	2,258.99	2,258.99	2,258.99
Commodity Charge *($/CCF)*							
All Consumption	$1.12	$1.40	$1.40	$1.40	$1.55	$1.55	$1.55

[1] – CCF of water = One hundred cubic feet of water. 1 CCF of water = 748 gallons

The timing of the proposed rates for the non-residential customer class is the same as the residential rates. Given that, the proposed non-residential rates will also increase in FY 2023.

3.4.11 Folsom Plan Area Surcharge (South of 50) Analysis

The Folsom Plan Area (FPA) for the South of 50 Area is supplied by water from the Golden State Water Company (Golden State). In 1994 an agreement between Golden State and the City was made in which Golden State agreed to transfer up to 5,000 acre feet of their 10,000 acre feet to the City. This is a take-or-pay obligation for the City. The purchase price was set in 1994, and by agreement, the rate per acre foot is annually adjusted by the Engineering News Record Construction Cost Index (ENR CCI), 20-city average, for the last quarter of the previous fiscal year, compared to the previous fiscal year before that fiscal year. The increase in each year is to not exceed five percent based on a five year rolling average. Based on 2018/19 information from the City, the total contract price is $1,783,350.

The City currently has a similar surcharge in place for the East Area, which is based on a flat fee approach for residential and a consumption or volumetric rate for the non-residential customers. This same approach is used for the calculation of the South of 50 Area surcharge.

Table 3-17 Proposed Residential South of 50 Area Surcharge				
Description				
Total Golden State Contract	$1,786,350	[1]		
Residential Portion	53.2%	[2]		
Total $ from Residential	$948,743			
Total $/Residential Customers	8,964	[3]	=	$8.82/Month
Plus: Indirect Costs [4]				0.40/Month
Residential South of 50 Surcharge $ per Month				$9.22/Month
Residential South of 50 Surcharge (rounded)				**$9.20/Month**

[1] – Assumes full purchase of 5,000 acre feet.

[2] – Percent of residential usage based on specific area and SB 610 Water Supply Assessment.

[3] – Number of South of 50 Area customers provided by City.

[4] – Assumes indirect costs of 2.5% for administration and 2% for bill delinquencies.

Table 3-17 shows the calculated South of 50 Area Surcharge for residential customers is $9.20/month. Included within the surcharge is a component for the indirect administrative costs associated with managing these water supply agreements and associated surcharges, along with billing delinquencies.

In contrast to the residential water surcharge the non-residential is based on a consumption basis. Based on planning estimates, the remaining consumption from the total 5,000 acre foot contract was assumed to be non-residential. This equated to an annual amount of 2,340 acre feet or 1,019,301 CCF for non-residential. Provided below in Table 3-18 is the Non-Residential calculations.

Table 3-18 Proposed Non-Residential South of 50 Area Surcharge				
Description				
Total Non-Residential Contract Portion	$834,607	[1]		
Total Non-Residential Usage	1,019,301	[2]	=	$0.82/CCF
Plus: Indirect Costs [3]				0.04/CCF
Residential South of 50 Surcharge $ per Month				$0.86/CCF
Residential South of 50 Surcharge (rounded)				**$0.85/CCF**

1] – Total contract of $1,783,350 less Residential of $948,743 = $834,607 Non-Residential portion.

[2] – Total of 5,000 acre feet contract, less residential portion of 2,660, equals 2,340 acre feet or 1,019,301 CCF.

[3] – Assumes 2.5% for administration and 2% for bill delinquencies.

Provided in Table 3-19 below is a summary of the proposed South of 50 Area Surcharges for the residential and non-residential customers

Table 3-19
Proposed South of 50 Area Surcharges

Class of Service	Proposed Surcharge
Residential	$9.20/Month
Non-Residential	$0.85/CCF

This surcharge is a separate line item on the City bill for all properties within the Folsom Plan Area. The surcharge reflects the cost of the Golden State water contract costs which is estimated to be approximately $1.7 million for 2018/19.

3.5 Summary of the Water Rate Study

This section of the report has discussed the development and results of the comprehensive water rate study conducted for the City. The results of the water rate study indicated that current water revenues, and subsequent water rates, are deficient over the review period. The implementation of the proposed rates are intended and designed to generate a sufficient and appropriate level of revenue needed to meet the City's increased water operating and capital needs, along with the City's financial and rate setting policies.

The water rates, as proposed herein, are cost-based and were developed using generally accepted rate making methodologies and principles to meet the requirements of Proposition 218. The proposed rates should enable the City's water utility to operate in a financially sound and prudent manner. The next section of the report will discuss the development and results of the sewer rate study.

4.0 Development of the Sewer Rate Study

4.1 Introduction

This section of the report will present the comprehensive sewer rate study undertaken for the City. As with the water utility, the objective of a sewer rate study is to determine the adequacy and sufficiency of current sewer rate revenues to cover operating and capital needs along with evaluating the equity of current rates. The City's current budgeted O&M expenses and capital improvement plan was the basis for the development of the sewer rate study.

Similar to the comprehensive water rate study, the comprehensive sewer rate study is comprised of three interrelated analyses. These are a revenue requirement analysis, a cost of service analysis, and the design of proposed sewer rates. This section of the report will review each of these analytical steps contained within the comprehensive sewer rate study and discuss the key assumptions, findings, conclusions and recommendations of each. At the end of this section of the report, the proposed and recommended sewer rates for the projected period are provided.

As with the water utility, the objective of a sewer rate study is to determine the adequacy and sufficiency of current sewer rate revenues to cover operating and capital needs along with evaluating the equity of current rates.

4.2 Development of the Sewer Revenue Requirement

Consistent with the basic philosophy used to analyze the City's water revenue requirements, the City's sewer revenue requirement analysis assumes that the sewer utility must also financially stand on its own, and not be subsidized by the water utility, or any other City fund. The sewer revenue requirement is developed on a stand-alone basis. In developing the revenue requirements for the sewer utility, all the costs that are necessary to maintain and operate the sewer utility in a prudent, sustainable, and financially stable manner were included in the analysis.

4.2.1 Determination of Time Period and Method of Accumulating Costs

The revenue requirement for the sewer utility was developed using the same general framework and similar assumptions as the water utility. The sewer revenue requirements begins with the FY 2020 proposed budget and the review period through FY 2025 is projected. This time period was reviewed in order to maintain consistency between the water and sewer rate study.

The City's sewer system billing records, adopted budget, and capital improvement plan were the major inputs used to develop the revenue requirements. A more detailed discussion of the key assumptions contained within the sewer revenue requirement is provided below.

4.2.2 Sewer Rate and Other Miscellaneous Revenues

The projection of sewer rate revenues was developed for FY 2020 and projected forward based on assumed customer growth. In general, this process involved developing projected billing units for each customer class of service (i.e., residential and non-residential) and then applying (multiplying) those billing units against rates in effect for that year. At the present rates, the City receives approximately $6.5 million in rate revenues in FY 2020. Over time, the City's revenues are projected to increase. This is primarily a function of projected customer growth on the system.

In addition to rate revenues, the sewer utility also has a number of miscellaneous revenues. These miscellaneous revenues are in the form of miscellaneous fees and interest on investments. The miscellaneous revenues are projected to decrease over time, beginning with approximately $197,000 in FY 2020 and gradually declining to approximately $88,000 by FY 2025.

When taken together, the total sewer revenues projected to be received by the City range from $6.7 million in FY 2020 to $7.0 million in FY 2025.

4.2.3 Projection of Sewer Operation and Maintenance Expenses

The City's system of accounts was used to develop current and future projections for O&M expenses. Escalation factors, similar to those developed for the water utility analysis, were developed for the various types of expenses that the sewer utility incurs: labor, benefits, engineering, materials & supplies, equipment, utilities and miscellaneous expenses. The escalation factors ranged from 1.0% to 19.4% per year depending on the specific expense being projected. The higher escalation factor reflected the significantly higher costs associated with PERS benefits in FY 2020 of 19.4%, which decrease to 7.3% in the latter years. The City's FY 2020 sewer utility budget was used as a base to project future year costs from FY 2020 to FY 2025. To project the O&M expenses, the various costs were reviewed and escalated by the most appropriate and applicable escalation method. The City's total sewer O&M costs are approximately $5.0 million in year FY 2020. Over time, the O&M costs are projected to increase to $6.4 million by FY 2025.

4.2.4 Debt Service

The sewer utility currently has no outstanding debt issuances. Furthermore, no new debt issues were assumed during the test period to pay for capital improvement projects.

4.2.5 Projection of Sewer Capital Improvement Projects and Funding

The funding plan for sewer capital improvements included within the sewer revenue requirement analysis has incorporated the City's capital improvement plan. The capital improvement plan developed for this study has been refined by City staff to better reflect the anticipated timing of the projects.

The philosophy of funding the City's capital improvement projects from rates is very similar to that of the water utility. The financial planning guideline of using an amount from rates equal to or greater than annual depreciation expense remains applicable. The City's annual sewer

depreciation expense reflects the current investment in plant that is being depreciated or "losing" its useful life. Therefore, this portion of plant investment needs to be replaced (funded) to maintain the existing level of infrastructure. The City recently set capital re-investment goals and objectives. For this study the capital from rates for sewer was set in FY 2021, at $3.0 million, with 5% increases annually over the time period. Provided below in Table 4-1 is a summary of the sewer capital improvement plan.

Table 4-1
Overview of the Sewer Capital Improvement Plan ($000) [1]

Description	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Total Capital Improvement Projects	$5,203	$7,732	$2,596	$4,036	$3,880	$2320
(Deferred)/Future Projects	0	(2,832)	554	0	(150)	1,327
Total Net CIP	**$5,203**	**$4,900**	**$3,150**	**$4,036**	**$3,730**	**$3,647**
Less: Outside Funding Sources						
Operating Reserves	$3,103	$1,500	$0	$728	$257	$0
Capital Reserves	0	400	0	0	0	0
Impact Fee	0	0	0	0	0	0
Grants	0	0	0	0	0	0
Rate Funded Capital	**$2,100**	**$3,000**	**$3,150**	**$3,308**	**$3,473**	**$3,647**

[1] – Detail of the sewer capital improvement projects can be found in the City's CIP

The City is planning approximately $25.7 million in capital projects for the sewer utility over the projected period (FY 2020 – FY 2025). This averages to approximately $4.2 million per year in capital improvement projects. It is important to note that the City plans to defer an additional $3.0 million in capital during this time period given funding constraints and impacts to sewer rates. Next, the funding plan for the capital projects was developed. The entire capital plan was funded through rates. It is important to note that there are no additional or new long-term debt issuances identified over the review period.

As a point of reference in Table 4-1, the amount of CIP funded from rates is greater than the City's FY 2018 depreciation expense which was approximately $1.7 million. This is a prudent level of funding which complies with financial planning criteria for rate funded capital improvement projects.

4.2.6 Transfers

Transfers or the change in working capital is the final component of a cash basis revenue requirement for the City's sewer utility. Under a typical cash basis revenue requirement, the total revenues are set equal to the total expenses (O&M, taxes, CIP from rates and debt service), and, technically, there is no change in reserve funds included. The transfers can be used to increase reserves for working capital purposes, or they can be drawn down to help mitigate the

need for a rate adjustment. This will help to create a more stable and predictable rate transition for the City's customers over time and reasonably reflects the cash flows of the utility. This also captures the transfer of funds for cost allocations based on the City's cost allocation plan. During the course of the projected time period, the analysis also uses reserves to meet overall funding levels to minimize impacts to rates in the short-term.

4.2.7 Summary of the Sewer Revenue Requirements

Given the above assumptions and the projections of sewer revenues and expenses, the sewer revenue requirement analysis was developed. A summary of the sewer revenue requirements is shown below in Table 4-2.

Table 4-2
Summary of the Sewer Revenue Requirement Analysis ($000)

	Proposed	Projected				
	FY 2020	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**
Revenues						
Rate Revenue	$6,557	$6,676	$6,743	$6,811	$6,879	$6,947
Non-Operating Revenue	197	101	91	86	87	89
Total Revenues	**$6,774**	**$6,777**	**$6,834**	**$6,897**	**$6,966**	**$7,036**
Expenses						
Total Operations & Maintenance	$5,030	$5,362	$5,617	$5,843	$6,081	$6,427
Net Annual Debt Service	0	0	0	0	0	0
Capital Improvements from Rates	2,100	3,000	3,150	3,308	3,473	3,647
Transfers	532	218	(112)	1,661	1,366	955
Total Expenses	**$7,662**	**$8,580**	**$8,655**	**$10,812**	**$10,920**	**$11,029**
Bal/(Def.) of Funds	($888)	($1,803)	($1,821)	($3,915)	($3,954)	($3,993)
Rate Adj. as a % of Rate Rev.	13.5%	27.0%	27.0%	57.5%	57.5%	57.5%
Proposed Revenue Adjustment	**27.0%**	**0.0%**	**0.0%**	**24.0%**	**0.0%**	**0.0%**
Add'l Revenue from Adj.	$888	$1,803	$1,821	$3,915	$3,954	$3,993
Total Bal/(Def.) of Funds	$0	$0	$0	$0	$0	$0

The results of the sewer revenue requirements indicate there are deficiencies in revenues during the review period. In FY 2020 and beyond, the sewer utility is projected to be deficient. These deficiencies range from approximately $888,000 to $3.9 million by FY 2025. This is primarily a function of the escalation of O&M expenses and the increased funding from rates for sewer capital improvement projects. Additionally, there is the addition FTE's in FY 2021, FY 2025, and an additional FTE shared between water and sewer in FY 2022. Detailed exhibits of the sewer revenue requirement analysis can be found in Sewer Technical Appendices.

4.2.8 Debt Service Coverage

The debt service coverage (DSC) calculation is another indicator that is used to judge the financial

status of the sewer utility. As stated in the City's financial policies, the sewer fund should have a minimum debt service coverage ratio of 1.25 on any outstanding revenue bonds. Presently the sewer utility has no outstanding long-term debt issuances. As previously noted, the need for additional long-term issuances was not planned for the City's sewer utility over the review period.

4.2.9 Sewer Rate Transition Plan

The results of the sewer revenue requirement indicate the need for rate adjustments over the review period of FY 2020 – FY 2025. Provided below in Table 4-3 is a summary of the proposed rate transition plan for the sewer rates.

Table 4-3
Summary of the Sewer Rate Transition Plan

	Present	Jan. 1 FY 2020	Jul. 1 FY 2020	Jul. 1 FY 2021	Jul. 1 FY 2022	Jul. 1 FY 2023	Jul. 1 FY 2024
Monthly Residential Sewer Bill [1]	$16.15						
Monthly Residential Sewer Bill		$20.51	$20.51	$20.51	$25.43	$25.43	$25.43
Avg. Monthly Res. Sewer Bill[2]		$18.33	$20.51	$20.51	$25.43	$25.43	$25.43
$ Change Per Month		2.18	2.18	0.00	4.92	0.00	0.00
Cumulative $ Change Per Month		2.18	4.36	4.36	9.28	9.28	9.28

[1] – Flat rate per month.

[2] - Average bill, for FY 2020, shows rate adjustment of 6 months of present bill and 6 months of proposed bill.

As Table 4-3 indicates, the City has proposed revenue adjustments in FY 2020 and FY 2023 to prudently fund the operating and capital needs of the sewer utility.

4.2.10 Summary and Recommendations of the Revenue Requirement

Based upon the sewer revenue requirement analysis developed above, it is projected that the City's sewer utility will have deficiencies in FY 2020 through FY 2025. The total level of deficiency is projected to be approximately $3.9 million in FY 2025. In reviewing the results of the sewer revenue requirement analysis with the City, it was determined that a sewer rate transition plan was necessary to prudently fund these revenue deficiencies. HDR recommends that the City adopt the proposed sewer rate transition plan (i.e., revenue adjustments as shown in Table 4-2.

The above concludes our discussion of the sewer revenue requirements. The revenue requirements, as developed for the City, are intended to allow the utility to operate on a financially sound and prudent basis. The next step in the comprehensive sewer rate study is to develop a sewer cost of service analysis, based on a proportional and equitable distribution of the previously developed revenue requirement analysis.

4.3 Sewer Cost of Service Analysis

In order to determine the cost to serve each customer class of service on the sewer system, an analysis is conducted. As outlined in the WEF MOP #27, the cost of service functionalizes, allocates, and distributes the sewer revenue requirements to each of the classes of service in an equitable manner. Provided below is a detailed discussion of the sewer cost of service study.

In recent years, increasing emphasis has been placed on cost of service studies by government agencies, customers, utility regulatory commissions, and other parties. This interest has been generated in part by continued inflationary trends, increased operating and capital expenditures, and concerns of equity in rates among customers. Following the generally-accepted guidelines and principles of a cost of service analysis will inherently lead to rates which are equitable, cost-based, and not viewed as arbitrary or capricious in nature.

4.3.1 Objectives of a Cost of Service Study

There are two primary objectives in conducting a cost of service study:

- Distribute the allocated the revenue requirement among the customer classes of service
- Derive average unit costs for subsequent rate designs

The objectives of a cost of service analysis are different from determining the revenue requirement. As noted in the previously, a revenue requirement analysis determines the utility's overall financial (revenue) needs, while the cost of service study determines the proportional and equitable manner in which to collect the revenue requirement.

The second rationale for conducting a cost of service analysis is to design the rates such that they properly reflect the costs incurred by the City to provide sewer service. For example, the City may incur costs related to flow or total volume, the strength of the wastewater flow, and customer cost components. Each of these types of costs may be collected in a slightly different manner to allow for the development of a rate that collects costs in the same manner as they are incurred.

In order to determine the cost to serve each customer class on a system, three basic analytical tasks are completed: functionalization, allocation, and distribution of the sewer costs. Each of these steps in the cost of service analysis is discussed in detail below.

4.3.2 Customer Classes of Service

One of the first tasks of a cost of service analysis is determine the classes of service for the analysis. In determining classes of service, the objective is to group customers together into similar or homogeneous groups based upon wastewater flow and strength characteristics and/or sewer facility requirements. Two (2) different classes of service were reviewed for the City's sewer cost of service analysis. These customer classes of service were as follows:

- Residential
- Non-Residential

The residential and non-residential classes of service are also used in the City's current sewer rate schedules.

4.3.3 Functionalization of Costs

The first analytical step of the sewer cost of service study is called functionalization. Functionalization is the arrangement of sewer expenses and asset (plant) data by major operating functions. This is generally accomplished through the utility's system of accounts. In this study, the City's system of accounts was used to functionalize sewer plant assets and operating expenses.

4.3.4 Allocation of Costs

The second analytical task performed is the allocation of the functionalized expenses to cost components. This task reviews each cost and attempts to determine why the sewer cost was incurred and what type of need was being met (e.g. volume, strength, customer etc.). The cost classifiers used for the sewer utility cost of service study are as follows:

- **Volume Related Costs**. Volume-related costs are those that tend to vary according to the quantity of wastewater collected and treated. An example of a volume related cost is electricity for pumping of wastewater.
- **Strength Related Costs**. Strength related costs are those costs associated with the additional handling and treatment of high "strength" wastewater. Strength of wastewater is typically measured in biochemical oxygen demand (BOD) and total suspended solids (SS). Increased levels of BOD or SS generally equate to increased treatment costs. Pre-treatment is generally required if the discharge is known to regularly exceed the typical (i.e. domestic level) waste strength.
- **Customer Related Costs**. Customer-related costs vary with the addition or deletion of a customer. Customer related costs typically include the costs of billing, collecting, and accounting. Customer-related costs may also be further categorized as actual or weighted. The differences in these costs are similar to those noted for the water utility.
- **Revenue Related**. Some costs associated with the sewer utility may vary with the amount of revenue received by the utility. An example of a revenue related cost would be a state utility tax which is based on gross utility revenue.

Terminology of a Cost of Service Analysis

Functionalization – The arrangement of the cost data by functional category (e.g. treatment, collection etc.).

Allocation – The assignment of functionalized costs to cost components (e.g. volume, strength, and customer related).

Distribution – Distributing the allocated costs to each customer class based on the proportional contribution to that specific cost component.

Volume Costs – Costs that are classified as volume related vary with the total flow of sewer (e.g. chemical use at the treatment facility).

Strength Costs – Costs classified as strength related refer to the wastewater treatment function. Typically, strength-related costs are further defined as biochemical oxygen demand (BOD) and suspended solids (SS). Customers with higher wastewater strength characteristics cost more to treat. Facilities are often designed and sized around meeting these costs.

Direct Assignment – Costs that can be clearly identified as belonging to a specific customer class.

- **Direct Assignment**. Certain costs associated with operating the utility may be directly traced to a specific sewer customer or class of service. These costs are then directly assigned to that specific class of service.

A more detailed discussion of the specific cost of service methodology used for the sewer utility is provided below.

4.3.5 Development of Distribution Factors

Once the allocation process is complete, and the customer groups have been defined, the various allocated costs were distributed to all customers. The City's allocated costs were distributed using the following distribution factors:

- **Volume Distribution Factor:** Volume-related costs are generally distributed on the basis of contribution to wastewater flows. In order to develop this distribution factor, some knowledge of the contribution to flows must be determined. The assumed wastewater contribution by customer class for FY 2021 was the basis for the development of the volume allocation factor.
- **Actual Customer Distribution Factor:** Customer costs within the cost of service analysis are distributed to the various customer classes of service based upon their respective customer counts. The actual customer distribution factor assumes that there is no disproportionate cost associated with serving a customer (e.g., postage for bills is the same regardless of the size or usage of the customer).
- **Revenue Related Distribution Factor:** The revenue related distribution factor was developed from the projected rate revenues for FY 2021.

It should be noted that no costs were directly assigned during the development of the cost of service analysis and no costs were allocated on the basis of strength as the City is a collection system only utility and treatment is provided by Regional San.

The development of distribution factors is based on generally accepted principles as developed in the WEF MOP #27. Given the development of the allocation factors, the final step in the cost of service study is to allocate the classified costs to the various customer classes of service.

4.3.6 Functionalization and Allocation of Sewer Revenue Requirement

For the City's study, the revenue requirement for FY 2021 was functionalized, allocated, and distributed. As noted earlier, the City utilized a cash basis revenue requirement, which was comprised of operation and maintenance expenses, debt service, and capital improvements funded from rates. A more detailed review of the allocation of revenue requirements can be found in the Sewer Technical Appendices. Table 4–4 below shows a summary of the cost of service allocation of the revenue requirement.

Table 4-4 Summary of the Allocated FY 2019 Revenue Requirement ($000's)			
Total	**Volume**	**Actual Customer**	**Revenue Related**
$8,479	$8,479	$0	$0

4.3.7 Summary of the Sewer Cost of Service Results

In summary, the cost of service analysis began by functionalizing the City's operating expenses. The functionalized expense accounts were then allocated into their various cost components. The individual allocation totals were then distributed to each customer class based on the appropriate distribution factor. Provided below in Table 4-5 is a summary of the total allocation of costs, by cost component, to the customer classes of service.

Table 4-5 Summary of the Sewer Utility Cost of Service Analysis ($000's)			
	Total	**Residential**	**Non-Residential**
Volume	$8,479	$5,591	$2,887
Total	**$8,479**	**$5,591**	**$2,887**

[1] – Summation of table may reflect rounding errors due to decimal places.

The distributed expenses for each customer group were then aggregated to determine each customer group's overall revenue responsibility. A summary of the sewer cost of service results can be seen in Table 4-6.

Table 4-6 Summary of the Sewer Utility Cost of Service Analysis ($000's)				
Classes of Service	**Present Rate Revenues**	**Distributed Costs**	**$ Difference**	**% Difference**
Residential	$4,403	$5,591	($1,188)	27.0%
Commercial	2,273	2,888	(615)	27.0%
Total	**$6,676**	**$8,479**	**($1,803)**	**27.0%**

[1] – Summation of table may reflect rounding errors due to decimal places.

The cost of service results for the sewer utility shows that there are no cost differences exist between the various customer classes of service. This is due to the allocation of costs on a volume, or equivalent dwelling unit basis. This approach reflects the projected wastewater flows from each customer on an equivalent basis. In other words, each customer is assigned an equivalent value. For single family customers, each customer is one equivalent. Non-residential customers can by multiples of an equivalent based on the customer type and equivalency factors which are based on industry standard conversion rates. This approach is the same approach that is used by the Sacramento County Regional Sanitation District (Regional San) to determine treatment related charges. Given that finding, no interclass rate adjustments are proposed at

this time.

It should also be noted that a cost of service reflects a single point in time, reaching conclusions based on one data point that may or may not reflect customer impacts on the system can result in rates that do not reflect actual customer impacts on the sewer system. This is especially the case with the City since this rate structure is based on a flat rate structure per service unit. It is recommended that the City closely follow the results of subsequent cost of service analyses in order to gauge the effects of these outside forces.

4.3.8 Consultant's Conclusions and Recommendations

The City of Folsom is within the service area of Regional l San and provides collection and conveyance service only. The residential and non-residential customers are based on Equivalent Single Family Dwelling (ESD) units based on flow. The City's current ESD factors were reviewed and reflect industry standard approaches and the Regional San ESD factors. Therefore the existing rate structures will be maintained.

4.3.9 Summary

This section of the study has provided a summary of the cost of service analysis developed for the City. This analysis was prepared using generally accepted cost of service techniques and principles. The next section of the study will review the present and proposed sewer rates for the City.

4.4 Sewer Rate Designs

The final step of the comprehensive rate study process is the design of sewer rates to collect the desired levels of revenues, based on the results of the revenue requirement and cost of service analysis. In reviewing sewer rate designs, consideration is given to the level of the rates and the structure of the rates.

As with the water rates, several different rate structures can be utilized to collect the appropriate levels of revenue from sewer customers. The City is limited, in part, by the fact that not all sewer customers are water customers of the City. Water consumption is often used as a surrogate for wastewater contributions and used for volumetric billing purposes. Since the water consumption information is not available for all sewer customers, this limits the types of rate structures that may be used, particularly for the City's residential customers.

4.4.1 Rate Design Criteria and Considerations

Prudent rate administration dictates that several criteria must be considered when setting utility rates. Some of these rate design criteria are listed below:

- ✓ Rates which are easy to understand from the customer's perspective
- ✓ Rates which are easy for the utility to administer
- ✓ Consideration of the customer's ability to pay
- ✓ Continuity, over time, of the rate making philosophy
- ✓ Policy considerations (encourage conservation, economic development, etc.)

- ✓ Provide revenue stability from month to month and year to year
- ✓ Promote efficient allocation of the resource
- ✓ Equitable and non-discriminatory (cost-based)

Many contemporary rate economists and regulatory agencies feel the last consideration, cost-based rates, should be of paramount importance and provide the primary guidance to utilities on rate structure and policy as well as meet the intent of Proposition 218.

4.4.2 Development of Cost-Based Sewer Rates

As mentioned, developing cost-based and equitable rates is of paramount importance in developing proposed sewer rates. While always a key consideration in developing rates, meeting the legal requirements, and documenting the steps taken to meet the requirements, has been in the forefront with the recent legal challenges in the State of California on utility rates. Given this, the development of the City's proposed sewer rates have been developed to meet the legal requirements of California Constitution article XIII D, section 6 (Article XIII D). A key component of Article XIII D is the development of rates which reflect the cost of providing service and are proportionally allocated between the various customer classes of service. HDR would point out that there is no single methodology for equitably assigning costs to the various customer groups. The Water Environment Federation Manual of Practice #27 provides various methodologies which may be used to establish cost-based rates. Unfortunately, Article XII D is not prescriptive and does not provide a specific methodology for establishing rates. Given that, HDR developed the City's proposed sewer rates based on generally accepted rate setting methodologies to meet the requirements of Article XIII D.

HDR is of the opinion that the proposed rates meet the legal requirements of Article XIII D. HDR reaches this conclusion based upon the following:

- **The revenue derived from sewer rates does not exceed the funds required to provide the property related service (i.e., sewer service).** The proposed rates are designed to collect the overall revenue requirement of the City's sewer system.
- **The revenues derived from sewer rates shall not be used for any purpose other than that for which the fee or charge is imposed.** The revenues derived from the City's sewer rates are used exclusively to operate and maintain the City's sewer system.
- **The amount of a fee or charge imposed upon a parcel or person as an incident of property ownership shall not exceed the proportional costs of the service attributable to the parcel.** The cost of service analysis has focused exclusively on the issue of proportional assignment of costs to customer classes of service. The proposed rates have appropriately grouped customers into customer classes of service (residential and non-residential) that reflect the varying consumption patterns and system requirements (i.e., the benefits they receive from and burdens they place on the system) of each customer class of service. The grouping of customers and rates into these classes of service creates the equity and fairness expected under Proposition 218 by having differing rates by customer classes of service which reflect both the level of revenue to be collected by the utility, and the manner in which these costs are incurred and equitably assigned to customer classes of service based upon their proportional impacts.

4.4.3 Overview of the Present Sewer Rate Structure

The City currently has a flat monthly fixed charge rate for residential sewer customers. The flat rate provides revenue stability for the City as well as reflects the fact that the majority of the City's costs are fixed. The sewer rate structure for the non-residential customers vary by customer class subcategory. Most customers are charged on a per unit basis for example, per chair for restaurants or per room for hotels.

4.4.4 Present and Proposed Residential Sewer Rates

To develop the proposed rates, the allocated costs in Table 4-6 are divided by the number of equivalent billing units for the City's customers. This results in an equivalent rate of $20.51 per month. For residential customers, each customer is charged one equivalent unit. Presented below in Table 4-8, is the City's present and proposed residential sewer rates.

Table 4-8
Summary of the Present and Proposed Residential Sewer Rates[1]

Rate Components	Present Rates	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Residential	$16.15	$20.51	$20.51	$20.51	$25.43	$25.43	$25.43
Manufactured Home	16.15	20.51	20.51	20.51	25.43	25.43	25.43
Multi-Family	16.15	20.51	20.51	20.51	25.43	25.43	25.43

[1] – The residential, manufactured home are per dwelling. Multi-Family is per unit.

As can be seen, no changes have been made to the current structure of the residential rates. The proposed rates have maintained the fixed monthly charges for all residential customers. The rates for FY 2020 are based on the unit costs from the cost of service analysis from FY 2021, and the rate adjustments have been applied across the board from through FY 2025.

4.4.5 Present and Proposed Non-Residential Sewer Rates

The sewer rates for non-residential will also have the rate structure maintained. Again, all of the subcategories will have no change to their rate structure. All subcategories will continue to be charge on their respective units i.e., per 1,000 sq. ft., per chair, etc. To accomplish this, the equivalent unit is converted to a billing unit (e.g., per 1,000 sq. ft., chair, etc.) based on industry standard ratios. Provided below in Table 4-9 are the present and proposed non-residential sewer rates.

Table 4-9
Summary of the City's Sewer Non-Residential Rates

Class of Service	Unit	Present Rates	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Non-Residential								
AUTO DLR	*sq. ft.*[1]	$3.06	$4.10	$4.10	$4.10	$5.09	$5.09	$5.09
BAKERIES	*sq. ft.*[1]	26.07	38.97	38.97	38.97	48.32	48.32	48.32
BANKS	*sq. ft.*[1]	4.63	6.15	6.15	6.15	7.63	7.63	7.63
SALON	*per chair*	1.53	2.05	2.05	2.05	2.54	2.54	2.54
BARS	*sq. ft.*[1]	10.72	14.36	14.36	14.36	17.80	17.80	17.80
BOWLING ALLEY	*per lane*	6.13	8.20	8.20	8.20	10.17	10.17	10.17
DRY CLEAN	*sq. ft.*[1]	26.07	34.87	34.87	34.87	43.24	43.24	43.24
FIRE STATION	*sq. ft.*[1]	15.28	20.51	20.51	20.51	25.43	25.43	25.43
GARAGES	*per bay*	1.53	2.05	2.05	2.05	2.54	2.54	2.54
HALLS	*sq. ft.*[1]	4.63	6.15	6.15	6.15	7.63	7.63	7.63
HLTH/GYM	*sq. ft.*[1]	4.63	6.15	6.15	6.15	7.63	7.63	7.63
HOTELS-MOTELS	*per room*	4.63	8.20	8.20	8.20	10.17	10.17	10.17
LAUNDRY SELF	*per mach.*	7.69	10.26	10.26	10.26	12.72	12.72	12.72
MRKT w/disp	*sq. ft.*[1]	15.28	34.87	34.87	34.87	43.24	43.24	43.24
MRKT W/O DISP	*sq. ft.*[1]	3.06	4.10	4.10	4.10	5.09	5.09	5.09
MED/DENTAL	*sq. ft.*[1]	6.13	8.20	8.20	8.20	10.17	10.17	10.17
MINI STORAGE	*per fixture*	16.80	21.33	21.33	21.33	26.45	26.45	26.45
MORTUARY	*per room*	19.95	36.92	36.92	36.92	45.78	45.78	45.78
OFFICE	*sq. ft.*[1]	3.06	4.10	4.10	4.10	5.09	5.09	5.09
PARK	*sq. ft.*[1]	15.28	0.82	0.82	0.82	1.02	1.02	1.02
WORSHIP	*sq. ft.*[1]	3.06	4.10	4.10	4.10	5.09	5.09	5.09
REST HOMES	*per bed*	4.63	8.20	8.20	8.20	10.17	10.17	10.17
DINING RM	*sq. ft.*[1]	73.56	104.60	104.60	104.60	129.71	129.71	129.71
TAKE OUT RSTR	*sq. ft.*[1]	61.30	53.33	53.33	53.33	66.12	66.12	66.12
DINE IN/OUT RST.	*sq. ft.*[1]	67.40	86.14	86.14	86.14	106.82	106.82	106.82
RETAIL STORE	*sq. ft.*[1]	3.06	2.05	2.05	2.05	2.54	2.54	2.54
SERVICE STATION	*per pump*	1.53	2.05	2.05	2.05	2.54	2.54	2.54
THEATER	*/100 seats*	4.63	6.15	6.15	6.15	7.63	7.63	7.63
WAREHOUSE	*sq. ft.*[1]	1.53	2.05	2.05	2.05	2.54	2.54	2.54
MULTIFAMILY	*Per unit*	16.15	15.38	15.38	15.38	19.07	19.07	19.07
SCHLS-SECOND.	*/100 Stds*[1]	27.57	51.28	51.28	51.28	63.58	63.58	63.58
SCHOOLS-PRIM.	*/100 Stds*[1]	21.44	20.51	20.51	20.51	25.43	25.43	25.43
COLLEGES[1]	*per 100 gal*	0.12	2.46	2.46	2.46	3.05	3.05	3.05
VACANT	*sq. ft.*[1]	3.23	4.10	4.10	4.10	5.09	5.09	5.09
METERED (Auto, Carwashes, Hosp.)	*per CCF*[1]	0.90	1.14	1.14	1.14	1.41	1.41	1.41

[1] – sq. ft = per 1,000 square feet; Stds = students; CCF = 100 cubic feet of water, Colleges based on winter average.

Table 4-9 shows the proposed non-residential sewer rates have maintained the existing rate

structure. This concludes the discussion of the sewer rate design process.

4.5 Summary of Sewer Rate Study

The City's sewer utility appears to have fair and equitable rates. Over time, these rates will need to be adjusted to collect the appropriate level of revenue and remain cost based. The proposed sewer rates developed herein are designed to achieve that overarching goal of the City.

Technical Appendix A – Water Rate Analyses

Technical Appendix B – Sewer Rate Analyses

Technical Appendix C – Folsom Plan Area Surcharge

Technical Appendix D – Proposition 218 Notification

Technical Appendix A – Water Rate Analyses

City of Folsom
Water Rate Study
Exhibit 1
Revenue Requirement Analysis Summary

	Actual	Adj. Budget	Projected					
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Revenue								
Rate Revenues	$14,183,832	$14,396,589	$14,612,537	$14,831,725	$14,980,042	$15,129,843	$15,281,141	$15,433,953
Non-Operating Revenues	959,350	660,000	660,000	577,340	584,118	588,270	598,648	605,639
Total Revenues	**$15,143,182**	**$15,056,589**	**$15,272,537**	**$15,409,065**	**$15,564,161**	**$15,718,113**	**$15,879,790**	**$16,039,592**
Expenses								
Engineering	$2,345,008	$2,600,140	$2,657,522	$2,870,767	$3,017,726	$3,149,054	$3,287,020	$3,431,976
Distribution	1,327,947	1,322,513	1,448,925	1,526,381	1,602,462	1,678,351	1,900,012	1,991,420
Water Treatment Plant	2,699,075	3,163,809	3,337,985	3,471,488	3,600,743	3,730,509	3,866,216	4,008,178
Water Quality	974,233	1,171,943	1,292,786	1,529,642	1,610,240	1,690,626	1,775,304	1,864,518
Metering	915,615	1,558,964	1,662,102	1,735,293	1,807,473	2,043,811	2,128,179	2,216,702
Conservation	491,600	646,327	669,035	704,166	739,183	774,530	811,723	850,863
Total O&M Expenses	**$8,753,478**	**$10,463,696**	**$11,068,354**	**$11,837,736**	**$12,377,827**	**$13,066,881**	**$13,768,455**	**$14,363,656**
Net Annual Debt Service	**$2,017,306**	**$2,014,855**	**$2,013,702**	**$2,005,103**	**$2,004,516**	**$2,005,405**	**$2,004,118**	**$2,004,848**
Capital Improvements from Rates	**$3,176,132**	**$866,952**	**$2,200,000**	**$2,500,000**	**$2,625,000**	**$2,756,000**	**$2,894,000**	**$3,039,000**
Transfers	**$1,196,266**	**$926,091**	**$1,159,484**	**$1,439,302**	**$953,624**	**$2,241,169**	**$1,608,074**	**$1,070,892**
Total Revenue Requirement	**$15,143,182**	**$14,271,594**	**$16,441,540**	**$17,782,141**	**$17,960,967**	**$20,069,455**	**$20,274,646**	**$20,478,397**
Balance/(Deficiency) of Funds	$0	$0	($1,169,003)	($2,373,076)	($2,396,807)	($4,351,343)	($4,394,856)	($4,438,805)
Bal/(Def.) as a % of Rate Rev.	0.0%	0.0%	8.0%	16.0%	16.0%	28.8%	28.8%	28.8%
			Jan. 1 2020		**Jul. 1 2021**	**Jul. 1 2022**	**Jul. 1 2023**	**Jul. 1 2024**
Proposed Rate Adjustment	**0.0%**	**0.0%**	**16.0%**	**0.0%**	**0.0%**	**11.0%**	**0.0%**	**0.0%**
Add'l Revenue from Adj.	$0	$0	$1,169,003	$2,373,076	$2,396,807	$4,351,343	$4,394,856	$4,438,805
Total Bal/(Def.) of Funds	$0	$0	$0	$0	($0)	$0	$0	$0
Additional Rate Increase Needed	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Average Monthly Residential Bill *								
After Proposed Rate Adjustment	$32.28	$32.28	$39.86	$39.86	$39.86	$44.24	$44.24	$44.24
Monthly $ Change	$0.00	$0.00	$3.79	$3.79	$0.00	$4.38	$0.00	$0.00
Cumulative Change	$0.00	$0.00	$3.79	$7.58	$7.58	$11.96	$11.96	$11.96
Operating Reserve (Fund 520)	$9,848,765	$9,848,765	$6,587,917	$7,054,824	$6,987,432	$8,156,535	$8,638,939	$8,527,879
% of Target Balance		69.0%	40.6%	40.7%	38.8%	43.2%	43.6%	41.4%
Capital Reserve Fund (Fund 521)	$4,553,967	$4,709,389	$974,248	$1,641,239	$2,312,625	$2,857,389	$3,726,875	$4,602,910
Water Impact Fee (Fund 456)	$2,287,548	$2,006,824	$2,042,878	$2,079,113	$2,115,276	$2,119,552	$2,217,550	$2,316,038
Debt Service Coverage Ratio (DSC)								
Before Rate Adjustment	3.17	2.28	2.09	1.78	1.59	1.32	1.05	0.84
After Rate Adjustment	3.17	2.28	2.67	2.96	2.79	3.49	3.25	3.05

City of Folsom
Water Rate Study
Exhibit 2
Escalation Factors

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Revenues [1]								
Residential Growth		1.5%	1.5%	1.5%	1.0%	1.0%	1.0%	1.0%
Nonresidential Growth		1.5%	1.5%	1.5%	1.0%	1.0%	1.0%	1.0%
Flat		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Revenues		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Expenses								
Labor			5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
PERS			19.4%	11.7%	9.0%	7.3%	7.3%	7.3%
Benefits - Medical			3.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Benefits - Other			3.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Materials & Supplies			2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Equipment			3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Miscellaneous			1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Utilities			4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Electricity (SMUD)			3.6%	2.4%	2.0%	2.0%	2.0%	2.0%
San Juan Purchases			9.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Chemicals			1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Flat			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Insurance			3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Interest			0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Connection Fee and Impact Fee								
Number of Units								
Multi-Family Units		310	128	128	127	0	0	0
Single Family Units		200	200	200	200	200	400	400
Connection Fee Rate as of October 2017								
Multi-Family Rate		$2,080	$2,080	$2,080	$2,080	$2,080	$2,080	$2,080
Single Family Rate		$3,199	$3,199	$3,199	$3,199	$3,199	$3,199	$3,199
Impact Fee as of October 2017								
Multi-Family Rate		$505	$505	$505	$505	$505	$505	$505
Single Family Rate		$937	$937	$937	$937	$937	$937	$937

[1] Growth based on 2016 Water Master Plan Update, page 3-1, Table 3-1 and City's interpolation formula to City customer growth.
[2] Electricity based on SMUD projections.

City of Folsom
Water Rate Study
Exhibit 3
Revenue Requirement Analysis

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	*Notes*
Revenues									
Rate Revenues									
Residential	$10,233,042	$10,386,538	$10,542,336	$10,700,471	$10,807,476	$10,915,551	$11,024,706	$11,134,953	As Residential Growth
Nonresidential	3,950,789	4,010,051	4,070,201	4,131,254	4,172,567	4,214,292	4,256,435	4,299,000	As Nonresidential Growth
Total	**$14,183,832**	**$14,396,589**	**$14,612,537**	**$14,831,725**	**$14,980,042**	**$15,129,843**	**$15,281,141**	**$15,433,953**	
Total Rate Revenues	**$14,183,832**	**$14,396,589**	**$14,612,537**	**$14,831,725**	**$14,980,042**	**$15,129,843**	**$15,281,141**	**$15,433,953**	
Non-Operating Revenues									
Gen Gov't / Recovery Of Labor & Benefits	$76,440	$50,000	$50,000	$50,500	$51,005	$51,515	$52,030	$52,551	As Other Revenues
Gen Gov't /Reimbursements	1,963	180,000	180,000	181,800	183,618	185,454	187,309	189,182	As Other Revenues
Water / Equity Buy In	96,950	80,000	80,000	80,800	81,608	82,424	83,248	84,081	As Other Revenues
Delinquent Fees / Turn On-Off	9,818	20,000	20,000	20,200	20,402	20,606	20,812	21,020	As Other Revenues
Water / Backflow Testing	14,565	25,000	25,000	25,250	25,503	25,758	26,015	26,275	As Other Revenues
Temporary / Water Use	245,532	75,000	75,000	75,750	76,508	77,273	78,045	78,826	As Other Revenues
Interest / Interest Earned	86,656	120,000	120,000	32,940	35,274	34,937	40,783	43,195	Calc'd on Reserve Balances
Other Revenue / Sundry Revenue	5,836	10,000	10,000	10,100	10,201	10,303	10,406	10,510	As Other Revenues
Transfers In	421,590	100,000	100,000	100,000	100,000	100,000	100,000	100,000	Flat
Total Non-Operating Revenues	**$959,350**	**$660,000**	**$660,000**	**$577,340**	**$584,118**	**$588,270**	**$598,648**	**$605,639**	
Total Revenues	**$15,143,182**	**$15,056,589**	**$15,272,537**	**$15,409,065**	**$15,564,161**	**$15,718,113**	**$15,879,790**	**$16,039,592**	

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025		*Notes*
Engineering										
Permanent Salaries	$395,980	$471,864	$487,034	$567,515	$606,036	$636,338	$668,155	$701,563	As Labor	'21 1 FTE, '22 Pro 50/50 W & S
Temporary Salaries	0	0	0	0	0	0	0	0	As Labor	
Overtime	2,094	0	0	0	0	0	0	0	As Labor	
Annual Leave Account	10,430	9,094	7,018	7,369	7,737	8,124	8,530	8,957	As Labor	
Uniform Allowance	0	0	0	0	0	0	0	0	As Benefits - Other	
FICA	29,776	36,667	37,646	43,073	46,429	48,750	51,188	53,747	As Labor	'21 1 FTE, '22 Pro 50/50 W & S
Group Insurance	0	0	0	0	0	0	0	0	As Benefits - Other	
Uniform Expense	0	0	0	0	0	0	0	0	As Benefits - Other	
PERS	119,986	157,273	198,715	241,036	269,196	288,847	309,933	332,558	As PERS	'21 1 FTE, '22 Pro 50/50 W & S
HRA	0	0	0	0	0	0	0	0	As Benefits - Other	
Worker's Compensation	0	0	0	0	0	0	0	0	As Benefits - Other	
Deferred Compensation	10,288	11,767	12,033	16,855	18,861	19,615	20,400	21,216	As Benefits - Other	'21 1 FTE, '22 Pro 50/50 W & S
Accrued Leave Current	0	0	0	0	0	0	0	0	As Labor	
Auto Allowance	0	0	1,800	1,872	1,947	2,025	2,106	2,190	As Benefits - Other	
Employee Assistance Program	0	0	0	0	0	0	0	0	As Benefits - Other	
Post Employment Benefits	0	0	0	0	0	0	0	0	As Benefits - Other	
Combined Benefits	88,312	95,402	95,967	108,656	113,002	117,522	122,223	127,112	As Benefits - Other	'21 1 FTE 50/50 W & S
Printing	3,961	0	0	0	0	0	0	0	As Materials & Supplies	
Dues & Publication	119,318	179,000	179,000	181,685	184,410	187,176	189,984	192,834	As Miscellaneous	
Advertising	8,993	500	500	508	515	523	531	539	As Miscellaneous	
Rents	4,178	4,000	4,000	4,060	4,121	4,183	4,245	4,309	As Miscellaneous	
Training & Education	3,127	2,000	2,000	2,030	2,060	2,091	2,123	2,155	As Miscellaneous	
Postage	44,244	32,400	32,400	33,210	34,040	34,891	35,764	36,658	As Materials & Supplies	
Disposal Permit	0	0	0	0	0	0	0	0	As Miscellaneous	
Finance Charges	58,464	30,600	30,600	31,059	31,525	31,998	32,478	32,965	As Miscellaneous	
Telephone	4,398	2,000	2,000	2,080	2,163	2,250	2,340	2,433	As Utilities	
Cellular	1,626	2,500	2,500	2,600	2,704	2,812	2,925	3,042	As Utilities	
Internet	0	0	0	0	0	0	0	0	As Utilities	
Radios	0	0	0	0	0	0	0	0	As Equipment	
Travel & Meetings	6,336	5,000	5,000	5,075	5,151	5,228	5,307	5,386	As Miscellaneous	
Utilities	0	0	0	0	0	0	0	0	As Utilities	
Contracts (San Juan)	737,957	737,324	737,324	774,190	812,900	853,545	896,222	941,033	As San Juan Purchases	
Contracts - Other	347,274	346,976	346,976	360,855	375,289	390,301	405,913	422,149	As Utilities	
Contracts - Project Construct	0	0	0	0	0	0	0	0	As Labor	
Contracts - Temporary Services	11,806	0	0	0	0	0	0	0	As Labor	
Contracts - Legal	198,419	200,000	200,000	210,000	220,500	231,525	243,101	255,256	As Labor	
Contracts - Pre-Employment	0	0	0	0	0	0	0	0	As Labor	
Contracts - Licensing Requirements	0	0	0	0	0	0	0	0	As Labor	
Contracts - Lab Services	0	0	0	0	0	0	0	0	As Labor	
Maintenance - Building	0	0	0	0	0	0	0	0	As Miscellaneous	
Maintenance - Vehicle	623	500	500	518	536	554	574	594	As Equipment	
Maintenance - Equipment	0	0	0	0	0	0	0	0	As Equipment	
Computer - Hardware	10,174	22,000	22,000	22,770	23,567	24,392	25,246	26,129	As Equipment	
Computer - Software	4,943	9,500	9,500	9,833	10,177	10,533	10,901	11,283	As Equipment	
Computers - Software License & Maint	11,392	11,264	14,000	14,490	14,997	15,522	16,065	16,628	As Equipment	
Office Supplies	868	0	0	0	0	0	0	0	As Materials & Supplies	
Departmental Supplies	504	0	0	0	0	0	0	0	As Materials & Supplies	
Petroleum Products	201	0	0	0	0	0	0	0	As Materials & Supplies	
Chemicals	0	0	0	0	0	0	0	0	As Chemicals	
Small Equipment	11	3,500	0	0	0	0	0	0	As Equipment	
Taxes & In Lieu	17	0	0	0	0	0	0	0	As Miscellaneous	
Replacement Charges	0	0	0	0	0	0	0	0	As Miscellaneous	
Unemployment Insurance	0	0	0	0	0	0	0	0	As Benefits - Other	
Liability	16,774	14,009	14,009	14,429	14,862	15,308	15,767	16,240	As Insurance	
Retiree's Insurance	0	0	0	0	0	0	0	0	As Benefits - Other	
Other Expense	0	0	0	0	0	0	0	0	As Miscellaneous	
Other - Bad Debt Expense	0	0	0	0	0	0	0	0	As Miscellaneous	
Capital Outlay - Buildings	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Other Improv	66,933	0	0	0	0	0	0	0	Flat	
Capital Outlay - Vehicles	25,601	215,000	215,000	215,000	215,000	215,000	215,000	215,000	Flat	
Capital Outlay - Equipment	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Hydrants	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Construction	0	0	0	0	0	0	0	0	Flat	
Total Engineering	**$2,345,008**	**$2,600,140**	**$2,657,522**	**$2,870,767**	**$3,017,726**	**$3,149,054**	**$3,287,020**	**$3,431,976**		

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Notes	
Distribution										
Permanent Salaries	$445,012	$458,244	$510,599	$536,129	$562,935	$591,082	$707,688	$743,073	As Labor	'20 Pro, '24 1 FTE
Temporary Salaries	0	0	0	0	0	0	0	0	As Labor	
Overtime	9,801	40,000	40,000	42,000	44,100	46,305	48,620	51,051	As Labor	
Annual Leave Account	10,209	8,595	6,600	6,930	7,277	7,640	8,022	8,423	As Labor	
Uniform Allowance	3,750	3,600	3,600	3,744	3,894	4,050	4,211	4,380	As Benefits - Other	
FICA	34,366	38,980	40,159	42,167	44,275	46,489	53,586	56,265	As Labor	'20 Pro, '24 1 FTE
Group Insurance	0	0	0	0	0	0	0	0	As Benefits - Other	
Uniform Expense	0	0	0	0	0	0	600	624	As Benefits - Other	'24 1 FTE
PERS	134,788	153,658	221,312	247,206	269,454	289,124	335,905	360,426	As PERS	'20 Pro, '24 1 FTE
HRA	0	0	0	0	0	0	0	0	As Benefits - Other	
Worker's Compensation	0	0	0	0	0	0	0	0	As Benefits - Other	
Deferred Compensation	2,100	2,100	8,026	8,347	8,681	9,028	15,432	16,050	As Benefits - Other	'20 Pro, '24 1 FTE
Accrued Leave Current	7,444	0	0	0	0	0	0	0	As Labor	
Auto Allowance	0	0	0	0	0	0	0	0	As Benefits - Other	
Employee Assistance Program	0	0	0	0	0	0	0	0	As Benefits - Other	
Post Employment Benefits	(5,253)	0	0	0	0	0	0	0	As Benefits - Other	
Combined Benefits	155,508	155,608	157,043	163,325	169,858	176,652	201,418	209,475	As Benefits - Other	'24 1 FTE
Printing	0	1,500	1,500	1,538	1,576	1,615	1,656	1,697	As Materials & Supplies	
Dues & Publication	265	2,900	2,900	2,944	2,988	3,032	3,078	3,124	As Miscellaneous	
Advertising	143	0	0	0	0	0	0	0	As Miscellaneous	
Rents	19,151	20,000	20,000	20,300	20,605	20,914	21,227	21,546	As Miscellaneous	
Training & Education	1,360	5,000	5,000	5,075	5,151	5,228	5,307	5,386	As Miscellaneous	
Postage	392	600	600	615	630	646	662	679	As Materials & Supplies	
Disposal Permit	0	0	0	0	0	0	0	0	As Miscellaneous	
Finance Charges	18,178	0	0	0	0	0	0	0	As Miscellaneous	
Telephone	4,114	2,400	2,400	2,496	2,596	2,700	2,808	2,920	As Utilities	
Cellular	3,912	3,600	3,600	3,744	3,894	4,050	4,211	4,380	As Utilities	
Internet	0	0	0	0	0	0	0	0	As Utilities	
Radios	0	2,000	2,000	2,070	2,142	2,217	2,295	2,375	As Equipment	
Travel & Meetings	0	2,000	2,000	2,030	2,060	2,091	2,123	2,155	As Miscellaneous	
Utilities	2,905	2,500	2,591	2,653	2,706	2,760	2,816	2,872	As Electricity (SMUD)	
Contracts	19,113	12,381	10,000	10,500	11,025	11,576	12,155	12,763	As Labor	
Contracts - Project Construct	0	0	0	0	0	0	0	0	As Labor	
Contracts - Temporary Services	0	0	0	0	0	0	0	0	As Labor	
Contracts - Legal	0	0	0	0	0	0	0	0	As Labor	
Contracts - Pre-Employment	70	0	0	0	0	0	0	0	As Labor	
Contracts - Licensing Requirements	544	1,500	1,500	1,575	1,654	1,736	1,823	1,914	As Labor	
Contracts - Lab Services	0	0	0	0	0	0	0	0	As Labor	
Maintenance - Building	0	1,000	1,000	1,015	1,030	1,046	1,061	1,077	As Miscellaneous	
Maintenance - Vehicle	40,836	20,000	25,000	25,875	26,781	27,718	28,688	29,692	As Equipment	
Maintenance - Equipment	193	15,000	10,000	10,350	10,712	11,087	11,475	11,877	As Equipment	
Computer - Hardware	0	0	0	0	0	0	0	0	As Equipment	
Computer - Software	0	0	0	0	0	0	0	0	As Equipment	
Computers - Software License & Maint	0	0	0	0	0	0	0	0	As Equipment	
Office Supplies	855	2,500	2,500	2,563	2,627	2,692	2,760	2,829	As Materials & Supplies	
Departmental Supplies	166,580	110,852	113,000	115,825	118,721	121,689	124,731	127,849	As Materials & Supplies	
Petroleum Products	26,941	40,000	40,000	41,000	42,025	43,076	44,153	45,256	As Materials & Supplies	
Chemicals	0	0	0	0	0	0	0	0	As Chemicals	
Small Equipment	471	0	0	0	0	0	0	0	As Equipment	
Taxes & In Lieu	0	2,000	2,000	2,030	2,060	2,091	2,123	2,155	As Miscellaneous	
Replacement Charges	0	0	0	0	0	0	0	0	As Miscellaneous	
Unemployment Insurance	0	0	0	0	0	0	0	0	As Benefits - Other	
Liability	26,092	21,791	21,791	22,445	23,118	23,812	24,526	25,262	As Insurance	
Retiree's Insurance	198,107	192,204	192,204	199,892	207,888	216,203	224,851	233,846	As Benefits - Other	
Other Expense	0	0	0	0	0	0	0	0	As Miscellaneous	
Other - Bad Debt Expense	0	0	0	0	0	0	0	0	As Miscellaneous	
Capital Outlay - Buildings	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Other Improv	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Vehicles	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Equipment	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Hydrants	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Construction	0	0	0	0	0	0	0	0	Flat	
Total Distribution	**$1,327,947**	**$1,322,513**	**$1,448,925**	**$1,526,381**	**$1,602,462**	**$1,678,351**	**$1,900,012**	**$1,991,420**		

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	*Notes*
Water Treatment Plant									
Permanent Salaries	$541,814	$657,994	$710,487	$746,011	$783,312	$822,478	$863,601	$906,781	As Labor
Temporary Salaries	0	20,000	20,000	21,000	22,050	23,153	24,310	25,526	As Labor
Overtime	46,287	66,700	30,000	31,500	33,075	34,729	36,465	38,288	As Labor
Annual Leave Account	15,493	12,400	9,852	10,345	10,862	11,405	11,975	12,574	As Labor
Uniform Allowance	5,600	6,200	6,200	6,448	6,706	6,974	7,253	7,543	As Benefits - Other
FICA	46,991	56,771	59,987	62,986	66,136	69,442	72,915	76,560	As Labor
Group Insurance	0	0	0	0	0	0	0	0	As Benefits - Other
Uniform Expense	1,923	2,000	2,000	2,080	2,163	2,250	2,340	2,433	As Benefits - Other
PERS	164,696	222,461	290,047	323,982	353,141	378,920	406,581	436,262	As PERS
HRA	0	0	0	0	0	0	0	0	As Benefits - Other
Worker's Compensation	0	0	0	0	0	0	0	0	As Benefits - Other
Deferred Compensation	4,200	4,200	4,200	4,368	4,543	4,724	4,913	5,110	As Benefits - Other
Accrued Leave Current	0	0	0	0	0	0	0	0	As Labor
Auto Allowance	0	0	0	0	0	0	0	0	As Benefits - Other
Employee Assistance Program	0	0	0	0	0	0	0	0	As Benefits - Other
Post Employment Benefits	0	0	0	0	0	0	0	0	As Benefits - Other
Combined Benefits	204,504	201,750	204,040	212,202	220,690	229,517	238,698	248,246	As Benefits - Other
Printing	0	1,200	1,200	1,230	1,261	1,292	1,325	1,358	As Materials & Supplies
Dues & Publication	250	600	600	609	618	627	637	646	As Miscellaneous
Advertising	0	250	250	254	258	261	265	269	As Miscellaneous
Rents	6,236	14,740	9,000	9,135	9,272	9,411	9,552	9,696	As Miscellaneous
Training & Education	6,266	15,000	10,000	10,150	10,302	10,457	10,614	10,773	As Miscellaneous
Postage	249	300	300	308	315	323	331	339	As Materials & Supplies
Disposal Permit	0	0	0	0	0	0	0	0	As Miscellaneous
Finance Charges	0	0	0	0	0	0	0	0	As Miscellaneous
Telephone	19,661	8,400	8,400	8,736	9,085	9,449	9,827	10,220	As Utilities
Cellular	4,186	1,500	1,500	1,560	1,622	1,687	1,755	1,825	As Utilities
Internet	0	1,300	1,300	1,352	1,406	1,462	1,521	1,582	As Utilities
Radios	0	1,000	1,000	1,035	1,071	1,109	1,148	1,188	As Equipment
Travel & Meetings	0	3,000	3,000	3,045	3,091	3,137	3,184	3,232	As Miscellaneous
Utilities (SMUD)	727,668	756,000	783,405	802,337	818,384	834,752	851,447	868,476	As Electricity (SMUD)
Contracts	201,258	47,500	87,500	91,875	96,469	101,292	106,357	111,675	As Labor
Contracts - Project Construct	0	0	0	0	0	0	0	0	As Labor
Contracts - Temporary Services	0	0	0	0	0	0	0	0	As Labor
Contracts - Legal	0	0	0	0	0	0	0	0	As Labor
Contracts - Pre-Employment	2,183	0	0	0	0	0	0	0	As Labor
Contracts - Licensing Requirements	478	1,200	1,200	1,260	1,323	1,389	1,459	1,532	As Labor
Contracts - Lab Services	57,514	50,000	50,000	52,500	55,125	57,881	60,775	63,814	As Labor
Maintenance - Building	7,603	32,500	15,000	15,225	15,453	15,685	15,920	16,159	As Miscellaneous
Maintenance - Vehicle	4,496	8,000	8,000	8,280	8,570	8,870	9,180	9,501	As Equipment
Maintenance - Equipment	179,278	303,521	338,000	349,830	362,074	374,747	387,863	401,438	As Equipment
Computer - Hardware	187	0	0	0	0	0	0	0	As Equipment
Computer - Software	5,279	0	0	0	0	0	0	0	As Equipment
Computers - Software License & Maint	0	0	0	0	0	0	0	0	As Equipment
Office Supplies	1,961	5,000	5,000	5,125	5,253	5,384	5,519	5,657	As Materials & Supplies
Departmental Supplies	52,928	137,545	137,500	140,938	144,461	148,072	151,774	155,569	As Materials & Supplies
Petroleum Products	10,406	16,000	16,000	16,400	16,810	17,230	17,661	18,103	As Materials & Supplies
Chemicals	345,688	420,760	420,000	424,200	428,442	432,726	437,054	441,424	As Chemicals
Small Equipment	245	10,000	10,000	10,350	10,712	11,087	11,475	11,877	As Equipment
Taxes & Permits	0	50,000	65,000	65,975	66,965	67,969	68,989	70,023	As Miscellaneous
Replacement Charges	0	0	0	0	0	0	0	0	As Miscellaneous
Unemployment Insurance	0	0	0	0	0	0	0	0	As Benefits - Other
Liability	33,547	28,017	28,017	28,858	29,723	30,615	31,533	32,479	As Insurance
Retiree's Insurance	0	0	0	0	0	0	0	0	As Benefits - Other
Other Expense	0	0	0	0	0	0	0	0	As Miscellaneous
Other - Bad Debt Expense	0	0	0	0	0	0	0	0	As Miscellaneous
Capital Outlay - Buildings	0	0	0	0	0	0	0	0	Flat
Capital Outlay - Other Improv	0	0	0	0	0	0	0	0	Flat
Capital Outlay - Vehicles	0	0	0	0	0	0	0	0	Flat
Capital Outlay - Equipment	0	0	0	0	0	0	0	0	Flat
Capital Outlay - Hydrants	0	0	0	0	0	0	0	0	Flat
Capital Outlay - Construction	0	0	0	0	0	0	0	0	Flat
Total Water Treatment Plant	**$2,699,075**	**$3,163,809**	**$3,337,985**	**$3,471,488**	**$3,600,743**	**$3,736,509**	**$3,866,216**	**$4,008,178**	

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Notes	
Water Quality										
Permanent Salaries	$426,402	$470,554	$509,594	$636,613	$668,443	$701,866	$736,959	$773,807	As Labor	'20 Pro, '21 1 FTE
Temporary Salaries	0	8,200	0	0	0	0	0	0	As Labor	
Overtime	57,550	20,500	40,000	42,000	44,100	46,305	48,620	51,051	As Labor	
Annual Leave Account	10,047	8,747	6,741	7,078	7,432	7,804	8,194	8,603	As Labor	
Uniform Allowance	2,400	3,000	3,000	3,120	3,245	3,375	3,510	3,650	As Benefits - Other	
FICA	37,071	38,537	44,569	52,587	55,217	57,978	60,877	63,920	As Labor	'20 Pro, '21 1 FTE
Group Insurance	0	0	0	0	0	0	0	0	As Benefits - Other	
Uniform Expense	2,115	0	0	600	624	649	675	702	As Benefits - Other	
PERS	130,305	158,695	213,679	269,830	294,115	315,586	338,623	363,343	As PERS	'20 Pro, '21 1 FTE
HRA	0	0	0	0	0	0	0	0	As Benefits - Other	
Worker's Compensation	0	0	0	0	0	0	0	0	As Benefits - Other	
Deferred Compensation	4,200	4,200	7,131	14,760	15,351	15,965	16,603	17,267	As Benefits - Other	
Accrued Leave Current	0	0	0	0	0	0	0	0	As Labor	
Auto Allowance	0	0	0	0	0	0	0	0	As Benefits - Other	
Employee Assistance Program	0	0	0	0	0	0	0	0	As Benefits - Other	
Post Employment Benefits	0	0	0	0	0	0	0	0	As Benefits - Other	
Combined Benefits	139,968	140,532	141,594	164,958	171,556	178,418	185,555	192,977	As Benefits - Other	'20 Pro, '21 1 FTE
Printing	0	3,000	3,000	3,075	3,152	3,231	3,311	3,394	As Materials & Supplies	
Dues & Publication	953	2,200	2,200	2,233	2,266	2,300	2,335	2,370	As Miscellaneous	
Advertising	0	400	400	406	412	418	425	431	As Miscellaneous	
Rents	6,716	4,500	4,500	4,568	4,636	4,706	4,776	4,848	As Miscellaneous	
Training & Education	1,198	3,000	3,000	3,045	3,091	3,137	3,184	3,232	As Miscellaneous	
Postage	82	500	500	513	525	538	552	566	As Materials & Supplies	
Disposal Permit	0	0	0	0	0	0	0	0	As Miscellaneous	
Finance Charges	0	0	0	0	0	0	0	0	As Miscellaneous	
Telephone	250	500	500	520	541	562	585	608	As Utilities	
Cellular	3,389	3,200	3,200	3,328	3,461	3,600	3,744	3,893	As Utilities	
Internet	0	0	1,500	1,560	1,622	1,687	1,755	1,825	As Utilities	
Radios	0	0	0	0	0	0	0	0	As Equipment	
Travel & Meetings	0	1,000	1,000	1,015	1,030	1,046	1,061	1,077	As Miscellaneous	
Utilities	0	0	0	0	0	0	0	0	As Electricity (SMUD)	
Contracts	33,606	165,000	80,000	84,000	88,200	92,610	97,241	102,103	As Labor	
Contracts - Project Construct	0	0	0	0	0	0	0	0	As Labor	
Contracts - Temporary Services	0	0	0	0	0	0	0	0	As Labor	
Contracts - Legal	0	0	0	0	0	0	0	0	As Labor	
Contracts - Pre-Employment	27	0	0	0	0	0	0	0	As Labor	
Contracts - Licensing Requirements	311	0	0	0	0	0	0	0	As Labor	
Contracts - Lab Services	0	0	0	0	0	0	0	0	As Labor	
Maintenance - Building	2,018	6,000	6,000	6,090	6,181	6,274	6,368	6,464	As Miscellaneous	
Maintenance - Vehicle	13,870	8,000	8,000	8,280	8,570	8,870	9,180	9,501	As Equipment	
Maintenance - Equipment	23,480	41,000	134,500	139,208	144,080	149,123	154,342	159,744	As Equipment	
Computer - Hardware	0	0	0	0	0	0	0	0	As Equipment	
Computer - Software	0	0	0	0	0	0	0	0	As Equipment	
Computers - Software License & Maint	0	0	0	0	0	0	0	0	As Equipment	
Office Supplies	611	1,000	1,500	1,538	1,576	1,615	1,656	1,697	As Materials & Supplies	
Departmental Supplies	37,094	40,000	40,000	41,000	42,025	43,076	44,153	45,256	As Materials & Supplies	
Petroleum Products	15,885	15,000	15,000	15,375	15,759	16,153	16,557	16,971	As Materials & Supplies	
Chemicals	0	3,000	0	0	0	0	0	0	As Chemicals	
Small Equipment	0	3,000	3,000	3,105	3,214	3,326	3,443	3,563	As Equipment	
Taxes & In Lieu	2,320	0	0	0	0	0	0	0	As Miscellaneous	
Replacement Charges	0	0	0	0	0	0	0	0	As Miscellaneous	
Unemployment Insurance	0	0	0	0	0	0	0	0	As Benefits - Other	
Liability	22,365	18,678	18,678	19,238	19,815	20,410	21,022	21,653	As Insurance	
Retiree's Insurance	0	0	0	0	0	0	0	0	As Benefits - Other	
Other Expense	0	0	0	0	0	0	0	0	As Miscellaneous	
Other - Bad Debt Expense	0	0	0	0	0	0	0	0	As Miscellaneous	
Capital Outlay - Buildings	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Other Improv	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Vehicles	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Equipment	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Hydrants	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Construction	0	0	0	0	0	0	0	0	Flat	
Total Water Quality	**$974,233**	**$1,171,943**	**$1,292,786**	**$1,529,642**	**$1,610,248**	**$1,696,626**	**$1,775,304**	**$1,864,518**		

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025		*Notes*
Metering										
Permanent Salaries	$336,922	$393,169	$433,504	$455,179	$477,938	$603,374	$633,543	$665,220	As Labor	'20 Pro, '23 1 FTE
Temporary Salaries	0	0	0	0	0	0	0	0	As Labor	
Overtime	6,878	7,175	7,000	7,350	7,718	8,103	8,509	8,934	As Labor	
Annual Leave Account	8,564	7,203	5,647	5,929	6,226	6,537	6,864	7,207	As Labor	
Uniform Allowance	1,800	2,400	2,400	2,496	2,596	2,700	2,808	2,920	As Benefits - Other	
FICA	25,515	31,315	35,897	37,692	39,576	47,345	49,713	52,198	As Labor	'20 Pro, '23 1 FTE
Group Insurance	0	0	0	0	0	0	0	0	As Benefits - Other	
Uniform Expense	0	0	0	0	0	600	624	649	As Benefits - Other	"23 1 FTE
PERS	97,041	131,521	185,197	206,865	225,483	273,094	293,030	314,421	As PERS	'20 Pro, '23 1 FTE
HRA	0	0	0	0	0	0	0	0	As Benefits - Other	
Worker's Compensation	0	0	0	0	0	0	0	0	As Benefits - Other	
Deferred Compensation	4,200	4,200	7,863	8,178	8,505	16,189	16,836	17,510	As Benefits - Other	'20 Pro, '23 1 FTE
Accrued Leave Current	0	0	0	0	0	0	0	0	As Labor	
Auto Allowance	0	0	0	0	0	0	0	0	As Benefits - Other	
Employee Assistance Program	0	0	0	0	0	0	0	0	As Benefits - Other	
Post Employment Benefits	0	0	0	0	0	0	0	0	As Benefits - Other	
Combined Benefits	118,816	119,244	120,932	125,769	130,800	153,732	159,881	166,277	As Benefits - Other	'23 1 FTE
Printing	170	600	600	615	630	646	662	679	As Materials & Supplies	
Dues & Publication	390	1,100	1,100	1,117	1,133	1,150	1,167	1,185	As Miscellaneous	
Advertising	0	0	0	0	0	0	0	0	As Miscellaneous	
Rents	10,572	20,000	20,000	20,300	20,605	20,914	21,227	21,546	As Miscellaneous	
Training & Education	1,141	7,100	8,000	8,120	8,242	8,365	8,491	8,618	As Miscellaneous	
Postage	799	0	2,500	2,563	2,627	2,692	2,760	2,829	As Materials & Supplies	
Disposal Permit	0	0	0	0	0	0	0	0	As Miscellaneous	
Finance Charges	0	0	0	0	0	0	0	0	As Miscellaneous	
Telephone	455	1,000	1,000	1,040	1,082	1,125	1,170	1,217	As Utilities	
Cellular	3,276	4,680	2,200	2,288	2,380	2,475	2,574	2,677	As Utilities	
Internet	8,803	7,800	10,700	11,128	11,573	12,036	12,517	13,018	As Utilities	
Radios	0	0	0	0	0	0	0	0	As Equipment	
Travel & Meetings	527	2,000	2,000	2,030	2,060	2,091	2,123	2,155	As Miscellaneous	
Utilities	10,591	13,700	14,197	14,540	14,831	15,127	15,430	15,738	As Electricity (SMUD)	
Contracts	2,978	68,392	69,000	72,450	76,073	79,876	83,870	88,063	As Labor	
Contracts - Project Construct	0	0	0	0	0	0	0	0	As Labor	
Contracts - Temporary Services	0	0	0	0	0	0	0	0	As Labor	
Contracts - Legal	0	0	0	0	0	0	0	0	As Labor	
Contracts - Pre-Employment	70	0	0	0	0	0	0	0	As Labor	
Contracts - Licensing Requirements	380	600	600	630	662	695	729	766	As Labor	
Contracts - Lab Services	0	0	0	0	0	0	0	0	As Labor	
Maintenance - Building	699	50,000	50,000	50,750	51,511	52,284	53,068	53,864	As Miscellaneous	
Maintenance - Vehicle	5,276	10,000	6,000	6,210	6,427	6,652	6,885	7,126	As Equipment	
Maintenance - Equipment	94,373	265,000	265,000	274,275	283,875	293,810	304,094	314,737	As Equipment	
Computer - Hardware	75	0	0	0	0	0	0	0	As Equipment	
Computer - Software	0	0	0	0	0	0	0	0	As Equipment	
Computers - Software License & Maint	0	0	0	0	0	0	0	0	As Equipment	
Office Supplies	0	1,000	1,000	1,025	1,051	1,077	1,104	1,131	As Materials & Supplies	
Departmental Supplies	34,947	45,000	45,000	46,125	47,278	48,460	49,672	50,913	As Materials & Supplies	
Petroleum Products	8,412	10,000	10,000	10,250	10,506	10,769	11,038	11,314	As Materials & Supplies	
Chemicals	0	0	0	0	0	0	0	0	As Chemicals	
Small Equipment	3,048	3,000	3,000	3,105	3,214	3,326	3,443	3,563	As Equipment	
Vehicle Add-ons	621	0	0	0	0	0	0	0	As Equipment	
Taxes & Permits	0	1,200	1,200	1,218	1,236	1,255	1,274	1,293	As Miscellaneous	
Replacement Charges	109,639	335,000	335,000	340,025	345,125	350,302	355,557	360,890	As Miscellaneous	
Unemployment Insurance	0	0	0	0	0	0	0	0	As Benefits - Other	
Liability	18,637	15,565	15,565	16,032	16,513	17,008	17,519	18,044	As Insurance	
Retiree's Insurance	0	0	0	0	0	0	0	0	As Benefits - Other	
Other Expense	0	0	0	0	0	0	0	0	As Miscellaneous	
Other - Bad Debt Expense	0	0	0	0	0	0	0	0	As Miscellaneous	
Capital Outlay - Buildings	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Other Improv	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Vehicles	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Equipment	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Hydrants	0	0	0	0	0	0	0	0	Flat	
Capital Outlay - Construction	0	0	0	0	0	0	0	0	Flat	
Total Metering	**$915,615**	**$1,558,964**	**$1,662,102**	**$1,735,293**	**$1,807,473**	**$2,043,811**	**$2,128,179**	**$2,216,702**		

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	*Notes*
Conservation									
Permanent Salaries	$183,847	$192,912	$199,226	$209,187	$219,647	$230,629	$242,160	$254,268	As Labor
Temporary Salaries	0	30,750	30,750	32,288	33,902	35,597	37,377	39,246	As Labor
Overtime	2,059	5,125	5,000	5,250	5,513	5,788	6,078	6,381	As Labor
Annual Leave Account	4,297	3,612	2,812	2,953	3,100	3,255	3,418	3,589	As Labor
Uniform Allowance	900	900	900	936	973	1,012	1,053	1,095	As Benefits - Other
FICA	14,145	15,803	16,215	17,026	17,877	18,771	19,709	20,695	As Labor
Group Insurance	0	0	0	0	0	0	0	0	As Benefits - Other
Uniform Expense	0	1,000	0	0	0	0	0	0	As Benefits - Other
PERS	54,145	62,414	80,141	89,517	97,574	104,697	112,340	120,541	As PERS
HRA	0	0	0	0	0	0	0	0	As Benefits - Other
Worker's Compensation	0	0	0	0	0	0	0	0	As Benefits - Other
Deferred Compensation	0	0	0	0	0	0	0	0	As Benefits - Other
Accrued Leave Current	0	0	0	0	0	0	0	0	As Labor
Auto Allowance	0	0	0	0	0	0	0	0	As Benefits - Other
Employee Assistance Program	0	0	0	0	0	0	0	0	As Benefits - Other
Post Employment Benefits	0	0	0	0	0	0	0	0	As Benefits - Other
Combined Benefits	59,552	58,872	59,102	61,466	63,925	66,482	69,141	71,907	As Benefits - Other
Printing	2,197	4,700	4,700	4,818	4,938	5,061	5,188	5,318	As Materials & Supplies
Dues & Publication	3,767	25,100	27,700	28,116	28,537	28,965	29,400	29,841	As Miscellaneous
Advertising	14,590	17,890	17,000	17,255	17,514	17,777	18,043	18,314	As Miscellaneous
Rents	9,809	9,000	9,000	9,135	9,272	9,411	9,552	9,696	As Miscellaneous
Training & Education	1,603	5,000	5,000	5,075	5,151	5,228	5,307	5,386	As Miscellaneous
Postage	0	7,500	7,500	7,688	7,880	8,077	8,279	8,486	As Materials & Supplies
Disposal Permit	0	0	0	0	0	0	0	0	As Miscellaneous
Finance Charges	0	0	0	0	0	0	0	0	As Miscellaneous
Telephone	269	1,000	1,000	1,040	1,082	1,125	1,170	1,217	As Utilities
Cellular	1,080	1,700	300	312	324	337	351	365	As Utilities
Internet	0	0	0	0	0	0	0	0	As Utilities
Radios	0	0	0	0	0	0	0	0	As Equipment
Travel & Meetings	63	3,500	3,500	3,553	3,606	3,660	3,715	3,770	As Miscellaneous
Utilities	175	4,000	4,000	4,160	4,326	4,499	4,679	4,867	As Utilities
Contracts	120,602	170,000	170,000	178,500	187,425	196,796	206,636	216,968	As Labor
Contracts - Project Construct	70	0	0	0	0	0	0	0	As Labor
Contracts - Temporary Services	0	0	0	0	0	0	0	0	As Labor
Contracts - Legal	0	0	0	0	0	0	0	0	As Labor
Contracts - Pre-Employment	0	0	0	0	0	0	0	0	As Labor
Contracts - Licensing Requirements	0	0	0	0	0	0	0	0	As Labor
Contracts - Lab Services	0	0	0	0	0	0	0	0	As Labor
Maintenance - Building	601	500	500	508	515	523	531	539	As Miscellaneous
Maintenance - Vehicle	1,620	3,000	3,000	3,105	3,214	3,326	3,443	3,563	As Equipment
Maintenance - Equipment	0	250	250	259	268	277	287	297	As Equipment
Computer - Hardware	37	0	0	0	0	0	0	0	As Equipment
Computer - Software	0	0	0	0	0	0	0	0	As Equipment
Computers - Software License & Maint	0	0	0	0	0	0	0	0	As Equipment
Office Supplies	104	4,100	4,100	4,203	4,308	4,415	4,526	4,639	As Materials & Supplies
Departmental Supplies	1,675	3,360	3,000	3,075	3,152	3,231	3,311	3,394	As Materials & Supplies
Petroleum Products	3,211	5,000	5,000	5,125	5,253	5,384	5,519	5,657	As Materials & Supplies
Chemicals	0	0	0	0	0	0	0	0	As Chemicals
Small Equipment	0	0	0	0	0	0	0	0	As Equipment
Taxes & In Lieu	0	0	0	0	0	0	0	0	As Miscellaneous
Replacement Charges	0	0	0	0	0	0	0	0	As Miscellaneous
Unemployment Insurance	0	0	0	0	0	0	0	0	As Benefits - Other
Liability	11,182	9,339	9,339	9,619	9,908	10,205	10,511	10,826	As Insurance
Retiree's Insurance	0	0	0	0	0	0	0	0	As Benefits - Other
Other Expense	0	0	0	0	0	0	0	0	As Miscellaneous
Other - Bad Debt Expense	0	0	0	0	0	0	0	0	As Miscellaneous
Capital Outlay - Buildings	0	0	0	0	0	0	0	0	Flat
Capital Outlay - Other Improv	0	0	0	0	0	0	0	0	Flat
Capital Outlay - Vehicles	0	0	0	0	0	0	0	0	Flat
Capital Outlay - Equipment	0	0	0	0	0	0	0	0	Flat
Capital Outlay - Hydrants	0	0	0	0	0	0	0	0	Flat
Capital Outlay - Construction	0	0	0	0	0	0	0	0	Flat
Total Conservation	**$491,600**	**$646,327**	**$669,035**	**$704,166**	**$739,183**	**$774,530**	**$811,723**	**$850,863**	

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	*Notes*
Total Operations & Maintenance	**$8,753,478**	**$10,463,696**	**$11,068,354**	**$11,837,736**	**$12,377,827**	**$13,066,881**	**$13,768,455**	**$14,363,656**	
Annual Debt Service									
2009 Water Rev. Refunding Bond ($15.8 mill/2029)	$1,172,345	$1,172,532	$1,169,970	$1,165,501	$1,162,932	$1,163,032	$1,161,732	$1,163,932	Principle & Interest
2013 Water Rev. Refunding Bond ($12.7 mill/2033)	834,961	832,323	833,732	829,602	831,584	832,373	832,386	830,916	Principle & Interest
Debt Service - Fiscal Services	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	
Total Annual Debt Service	$2,017,306	$2,014,855	$2,013,702	$2,005,103	$2,004,516	$2,005,405	$2,004,118	$2,004,848	
Less: From Water Impact Fee (Fund 456)	$0	$0	$0	$0	$0	$0	$0	$0	
Net Annual Debt Service	**$2,017,306**	**$2,014,855**	**$2,013,702**	**$2,005,103**	**$2,004,516**	**$2,005,405**	**$2,004,118**	**$2,004,848**	
Capital Improvements from Rates	**$3,176,132**	**$866,952**	**$2,200,000**	**$2,500,000**	**$2,625,000**	**$2,756,000**	**$2,894,000**	**$3,039,000**	See Exhibit 4
Transfers									
Transfers - Cost Allocation	$854,495	$926,091	$926,091	$972,396	$1,021,015	$1,072,066	$1,125,669	$1,181,953	As Labor
To/(From) Operating Reserve	341,771	0	233,393	466,906	(67,391)	1,169,103	482,404	(111,060)	Balance
To/(From) Fund 456	0	0	0	0	0	0	0	0	
Total Transfers	**$1,196,266**	**$926,091**	**$1,159,484**	**$1,439,302**	**$953,624**	**$2,241,169**	**$1,608,074**	**$1,070,892**	
Total Revenue Requirement	**$15,143,182**	**$14,271,594**	**$16,441,540**	**$17,782,141**	**$17,960,967**	**$20,069,455**	**$20,274,646**	**$20,478,397**	
Bal/(Def.) of Funds			($1,169,003)	($2,373,076)	($2,396,807)	($4,351,343)	($4,394,856)	($4,438,805)	
Rate Adj. as a % of Rate Rev.			**8.0%**	**16.0%**	**16.0%**	**28.8%**	**28.8%**	**28.8%**	
			Jan. 1 2020	***Jan. 2021***	***Jul. 1 2021***	***Jul. 1 2022***	***Jul. 1 2023***	***Jul. 1 2024***	
Proposed Rate Adjustment			**16.0%**	**0.0%**	**0.0%**	**11.0%**	**0.0%**	**0.0%**	
Cumulative Proposed Rate Adj.			**16.0%**	**16.0%**	**16.0%**	**27.0%**	**27.0%**	**27.0%**	
Months of Adjustment			*6*	*6*	*12*	*12*	*12*	*12*	
Add'l Revenue from Adj.			$1,169,003	$2,373,076	$2,396,807	$4,351,343	$4,394,856	$4,438,805	
Total Bal/(Def.) of Funds			$0	$0	($0)	$0	$0	$0	
Additional Rate Increase Needed			**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	
Debt Service Coverage Ratio (DSC)									
# Before Rate Adjustment	3.17	2.28	2.09	1.78	1.59	1.32	1.05	0.84	
After Rate Adjustment	3.17	2.28	2.67	2.96	2.79	3.49	3.25	3.05	
Target	*1.25*	*1.25*	*1.25*	*1.25*	*1.25*	*1.25*	*1.25*	*1.25*	
Monthly Residential Bill (16 ccf average use)	$32.28	$32.28	$39.86	$39.86	$39.86	$44.24	$44.24	$44.24	
Average Monthly Residential Bill *									
After Proposed Rate Adjustment	$32.28	$32.28	$36.07	$39.86	$39.86	$44.24	$44.24	$44.24	
Monthly $ Change	$0.00	$0.00	$3.79	$3.79	$0.00	$4.38	$0.00	$0.00	
Cumulative Change	$0.00	$0.00	$3.79	$7.58	$7.58	$11.96	$11.96	$11.96	

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	*Notes*
Operating Reserve (Fund 520)									
Beginning Balance		**$9,848,765**	**$9,848,765**	**$6,587,917**	**$7,054,824**	**$6,987,432**	**$8,156,535**	**$8,638,939**	
Plus: CIP from Rates		866,952	2,200,000	2,500,000	2,625,000	2,756,000	2,894,000	3,039,000	See Exhibit 4
From Operating (Change in WC)		0	233,393	466,906	(67,391)	1,169,103	482,404	(111,060)	
Less: Uses of Funds - CIP		0	(3,494,241)	0	0	0	0	0	See Exhibit 4
Less: R&R Capital Improvements		(866,952)	(2,200,000)	(2,500,000)	(2,625,000)	(2,756,000)	(2,894,000)	(3,039,000)	See Exhibit 4
Ending Balance	**$9,848,765**	**$9,848,765**	**$6,587,917**	**$7,054,824**	**$6,987,432**	**$8,156,535**	**$8,638,939**	**$8,527,879**	
Target Minimum									
% of Target Balance	**66.5%**	**69.0%**	**40.6%**	**40.7%**	**38.8%**	**43.2%**	**43.6%**	**41.4%**	40% per City Policy
Capital Reserve Fund (Fund 521)	7/1/2018								
Beginning Balance	**$4,553,967**	**$4,553,967**	**$4,709,389**	**$974,248**	**$1,641,239**	**$2,312,625**	**$2,857,389**	**$3,726,875**	
Plus: Connection Fees		642,300	453,020	453,020	451,980	319,900	639,800	639,800	As projected growth. Exhibit 2.
South of 50 Revenues		203,000	206,000	209,100	211,200	213,300	215,400	217,600	As projected growth. Exhibit 2.
Interest		0	23,547	4,871	8,206	11,563	14,287	18,634	Interest Earnings
Less: Growth Capital Improvements		(689,878)	(4,417,708)	0	0	0	0	0	See Exhibit 4
Ending Balance	**$4,553,967**	**$4,709,389**	**$974,248**	**$1,641,239**	**$2,312,625**	**$2,857,389**	**$3,726,875**	**$4,602,910**	

** This fund is only used to expand system to accommodate growth. Includes only North of 50 connection fee revenue.*

Water Impact Fee (Fund 456)	7/1/2018								
Beginning Balance	**$2,287,548**	**$2,287,548**	**$2,006,824**	**$2,042,878**	**$2,079,113**	**$2,115,276**	**$2,119,552**	**$2,217,550**	
Plus: Impact Fees		171,975	126,020	126,020	125,768	93,700	187,400	187,400	As projected growth. Exhibit 2.
Interest		0	10,034	10,214	10,396	10,576	10,598	11,088	Interest Earnings
Less: Capital Improvements		(352,699)	0	0	0	0	0	0	See Exhibit 4
Dry Year		(100,000)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)	
Ending Balance	**$2,287,548**	**$2,006,824**	**$2,042,878**	**$2,079,113**	**$2,115,276**	**$2,119,552**	**$2,217,550**	**$2,316,038**	

** This fund is only used for dry year and metering. Includes only North of 50 impact fee revenues.*

City of Folsom
Water Rate Study
Exhibit 4
Capital Improvement Funding

	Projected								
	FY 2019	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	***Total***	***Notes***
Capital Improvement Projects (CIP) - Fund 520									
Tank System Improvements									
WTP Tank No. 2 Spot Repair and Overcoat	$0	$0	$0	$0	$0	$0	$0	$0	
East Tank No. 1 Recoat	$145,866	$3,600,000	0	0	0	0	0	3,745,866	
Tower Tank SMUD Power to site, Relocate Telemetry	0	0	0	0	0	250,000	0	250,000	
South Tank Recoat (Exterior)	0	0	0	0	0	0	0	0	
Zone 4 Tank Recoat (Exterior)	0	0	0	0	0	0	0	0	
Reoccurring Tank Coating (Interior)	0	0	0	0	0	0	0	0	
Water Line Replacement Program									
Misc. Water System Rehabilitation Project No. 1	122,679	575,000	0	0	0	0	0	697,679	
Misc. Water System Rehabilitation Project No. 2 (6 Pipe Looping)	0	150,000	575,000	0	0	0	0	725,000	
Install RPDAs City Hall, Comm Center, PD, and Senior Center	0	0	0	0	0	0	300,000	300,000	
Perraid Dr/Glen Dr/Avon Waterline Replacement	0	0	35,000	350,000	0	0	0	385,000	
Old Town Water Project No. 1	0	0	0	0	0	0	1,100,000	1,100,000	
Ashland Water Rehab. Project No. 1	0	195,000	1,037,500	0	0	0	0	1,232,500	
Ashland Project No. 2	0	0	120,000	1,200,000	0	0	0	1,320,000	
Ashland Project No. 3	0	0	0	60,000	600,000	0	0	660,000	
Basin 4 Project No. 1	0	0	0	96,000	960,000	0	0	1,056,000	
Basin 4 Project No. 2	0	0	0	0	96,000	960,000	0	1,056,000	
Basin 6 Project No. 1	0	0	0	0	0	96,000	960,000	1,056,000	
Basin 6 Project No. 2	0	0	0	0	0	0	96,000	96,000	
Leak Detection and Repair Project	0	0	0	0	0	0	0	0	
Water System Flow Control Facilities									
Folsom South Control Valve Rehabilitation	0	120,000	80,000	0	0	0	0	200,000	
Glen Drive and Oak Avenue PRV Station	0	0	0	0	0	350,000	0	350,000	
Zone 3/2 and Rainbow Bridge PRV Station Improvements	0	0	0	0	0	0	125,000	125,000	
WTP Improvement Projects									
WTP RBW Increased Backwash Water Volume	0	115,000	420,000	0	0	0	0	535,000	
WTP Actiflo Improvements	226,890	54,360	0	0	0	0	0	281,250	
WTP Polymer Redundancy (75% Redundancy Fund 520)	47,323	562,652	0	0	0	0	0	609,975	
WTP Lime System Upgrades	61,495	322,229	0	0	0	0	0	383,724	
WTP Grading Project	0	0	0	0	0	0	0	0	
Water Supply Reliability	0	0	0	0	0	0	0	0	
Total	$604,253	$5,694,241	$2,267,500	$1,706,000	$1,656,000	$1,656,000	$2,581,000	$16,164,994	
Capital Improvement Projects (CIP) - Fund 456, 536/521									
GSWC Inter-tie Booster Pump Station Project (Fund 456)	$352,699	$0	$0	$0	$0	$0	$0	$352,699	
WTP Lime System Fund 536 (10.18%)	11,056	32,103	0	0	0	0	0	43,159	
WTP Lime System Fund 521 (33.18%)	36,029	214,568	0	0	0	0	0	250,597	
WTP Actiflo Project (100% Fund 521)	450,524	4,203,140	0	0	0	0	0	4,653,664	
WTP Polymer Project (25% Fund 521)	203,325	0	0	0	0	0	0	203,325	
WTP Grading Project WW1702 Fund 521	0	0	0	0	0	0	0	0	
Total	$1,053,633	$4,449,811	$0	$0	$0	$0	$0	$5,503,444	
Total Capital Improvent Projects	**$1,657,885**	**$10,144,052**	**$2,267,500**	**$1,706,000**	**$1,656,000**	**$1,656,000**	**$2,581,000**	**$21,668,437**	
Deferred Projects	$262,700	$0	622,082	919,000	1,100,000	1,238,000	458,000	$4,599,782	
Total Capital Improvement Projects	**$1,920,585**	**$10,144,052**	**$2,889,582**	**$2,625,000**	**$2,756,000**	**$2,894,000**	**$3,039,000**	**$26,268,219**	
Less: Outside Funding Sources									
Operating Reserve (Fund 520)	$0	$3,494,241	$0	$0	$0	$0	$0	$3,494,241	
Capital Reserve Fund (Fund 521)	689,878	4,417,708	0	0	0	0	0	5,107,586	
Fund 536	11,057	32,103	0	0	0	0	0	43,160	
Water Impact Fee (Fund 456)	352,699	0	0	0	0	0	0	352,699	
Grants	0	0	389,582	0	0	0	0	389,582	
Total Outside Funding Sources	**$1,053,634**	**$7,944,052**	**$389,582**	**$0**	**$0**	**$0**	**$0**	**$9,387,268**	
Rate Funded Capital	**$866,952**	**$2,200,000**	**$2,500,000**	**$2,625,000**	**$2,756,000**	**$2,894,000**	**$3,039,000**	**$16,880,952**	FY 2018 Dep. Exp. $3.9 Million

City of Folsom
Water Rate Study
Exhibit 5
Summary of Debt Service Obligations

	2009 Water Revenue Refunding			2012 Water Revenue Refunding			
I. Debt Status:							
Interest Rate							
Principal	**$15,825,000**			**$12,779,582**			
Financing Term							
II. Outstanding Principal Payments:	**Principal**	**Interest**	**Total**	**Principal**	**Interest**	**Total**	**Total Payment**
2017-18	$750,000	$422,345	$1,172,345	$498,395	$336,566	$834,961	$2,007,306
2018-19	775,000	397,532	1,172,532	511,666	320,657	832,323	2,004,855
2019-20	800,000	369,970	1,169,970	529,474	304,258	833,732	2,003,702
2020-21	825,000	340,501	1,165,501	542,224	287,378	829,602	1,995,103
2021-22	855,000	307,932	1,162,932	561,590	269,994	831,584	1,994,516
2022-23	890,000	273,032	1,163,032	580,365	252,008	832,373	1,995,405
2023-24	925,000	236,732	1,161,732	598,952	233,434	832,386	1,994,118
2024-25	965,000	198,932	1,163,932	616,628	214,288	830,916	1,994,848
2025-26	1,000,000	159,007	1,159,007	634,052	194,590	828,642	1,987,649
2026-27	1,040,000	116,542	1,156,542	656,882	174,258	831,140	1,987,682
2027-28	1,085,000	71,646	1,156,646	679,002	153,219	832,221	1,988,867
2028-29	1,130,000	24,295	1,154,295	695,628	131,568	827,196	1,981,491
2029-30	0	0	0	721,112	109,254	830,366	830,366
2030-31	0	0	0	740,970	86,226	827,196	827,196
2031-32	0	0	0	764,787	62,510	827,297	827,297
2032-33	0	0	0	787,667	38,059	825,726	825,726
2033-34	0	0	0	814,404	12,827	827,231	827,231
2034-35	0	0	0	0	0	0	0
2035-36	0	0	0	0	0	0	0
2036-37	0	0	0	0	0	0	0
2037-38	0	0	0	0	0	0	0
2038-39	0	0	0	0	0	0	0
2039-40	0	0	0	0	0	0	0
2040-41	0	0	0	0	0	0	0
Total	**$11,040,000**	**$2,918,466**	**$13,958,466**	**$10,933,798**	**$3,181,094**	**$14,114,892**	**$28,073,358**

Notes:
[1] Debt service schedules provided by City.

City of Folsom
Water Rate Study
Exhibit 6
Revenue at Present Rates

		Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Total
Single Family Residential														
Base rate	**$/Acct**													
SFR (1") Base	$15.00	19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767
		19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767
Total Fixed Charge Revenue		$296,505	$296,505	$296,505	$296,505	$296,505	$296,505	$296,505	$296,505	$296,505	$296,505	$296,505	$296,505	**$3,558,060**
Consumption Charge	**$/ccf**													
0 - 20	$1.08	320,512	319,582	307,464	284,957	178,690	157,556	140,506	154,629	149,224	197,490	284,223	303,704	2,798,538
20 - 40	1.30	162,588	158,230	124,774	86,362	24,504	18,139	14,095	15,311	14,596	25,177	81,975	113,152	838,902
Over 40	1.60	217,291	226,166	288,384	143,637	86,950	73,166	61,775	47,938	61,033	78,414	113,901	141,844	1,540,500
		700,391	703,979	720,621	514,956	290,143	248,861	216,376	217,878	224,853	301,082	480,099	558,700	**5,177,940**
Total Consumption Revenue		$905,184	$912,714	$955,681	$649,843	$363,960	$310,807	$268,911	$263,605	$277,789	$371,483	$595,770	$702,048	**$6,577,794**
Total Single Family Residential		**$1,201,689**	**$1,209,219**	**$1,252,186**	**$946,348**	**$660,465**	**$607,312**	**$565,416**	**$560,110**	**$574,294**	**$667,988**	**$892,275**	**$998,553**	**$10,135,854**
Manufactured Home														
Base rate	**$/Acct**													
Manufactured Home	$6.83	8	8	8	8	8	8	8	8	8	8	8	8	8
		8	8	8	8	8	8	8	8	8	8	8	8	8
Total Fixed Charge Revenue		$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	**$656**
Total Manufactured Home		**$55**	**$55**	**$55**	**$55**	**$55**	**$55**	**$55**	**$55**	**$55**	**$55**	**$55**	**$55**	**$656**
Manufactured Home L.I.														
Base rate	**$/Acct**													
Manufactured Home L.I.	$4.27	1	1	1	1	1	1	1	1	1	1	1	1	1
		1	1	1	1	1	1	1	1	1	1	1	1	1
Total Fixed Charge Revenue		$4	$4	$4	$4	$4	$4	$4	$4	$4	$4	$4	$4	**$51**
Total Manufactured Home L.I.		**$4**	**$4**	**$4**	**$4**	**$4**	**$4**	**$4**	**$4**	**$4**	**$4**	**$4**	**$4**	**$51**

City of Folsom
Water Rate Study
Exhibit 6
Revenue at Present Rates

		Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Total
Condo/Townhome														
Base rate	**$/Acct**													
Condo/Townhome	$9.45	849	849	849	849	849	849	849	849	849	849	849	849	849
		849	849	849	849	849	849	849	849	849	849	849	849	849
Total Fixed Charge Revenue		$8,023	$8,023	$8,023	$8,023	$8,023	$8,023	$8,023	$8,023	$8,023	$8,023	$8,023	$8,023	**$96,277**
Total Condo/Townhome		**$8,023**	**$8,023**	**$8,023**	**$8,023**	**$8,023**	**$8,023**	**$8,023**	**$8,023**	**$8,023**	**$8,023**	**$8,023**	**$8,023**	**$96,277**
Commercial/Residential														
Base rate	**$/Acct**													
Manufactured Home L.I.	$4.27	4	4	4	4	4	4	4	4	4	4	4	4	4
		4	4	4	4	4	4	4	4	4	4	4	4	4
Total Fixed Charge Revenue		$17	$17	$17	$17	$17	$17	$17	$17	$17	$17	$17	$17	**$205**
Total Commercial/Residential		**$17**	**$17**	**$17**	**$17**	**$17**	**$17**	**$17**	**$17**	**$17**	**$17**	**$17**	**$17**	**$205**
Residential Summary														
Customer Accounts														
SFR (1") Base		19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767	19,767
Manufactured Home		8	8	8	8	8	8	8	8	8	8	8	8	8
Manufactured Home L.I.		1	1	1	1	1	1	1	1	1	1	1	1	1
Condo/Townhome		849	849	849	849	849	849	849	849	849	849	849	849	849
Commercial/Residential		4	4	4	4	4	4	4	4	4	4	4	4	4
Total Customers		**20,629**	**20,629**	**20,629**	**20,629**	**20,629**	**20,629**	**20,629**	**20,629**	**20,629**	**20,629**	**20,629**	**20,629**	**20,629**
Consumption (ccf)														
Residential		700,391	703,979	720,621	514,956	290,143	248,861	216,376	217,878	224,853	301,082	480,099	558,700	5,177,940
Total Consumption (CCF)		**700,391**	**703,979**	**720,621**	**514,956**	**290,143**	**248,861**	**216,376**	**217,878**	**224,853**	**301,082**	**480,099**	**558,700**	**5,177,940**
Total Revenue														
Residential		$1,201,689	$1,209,219	$1,252,186	$946,348	$660,465	$607,312	$565,416	$560,110	$574,294	$667,988	$892,275	$998,553	$10,135,854
SFR Low Income		0	0	0	0	0	0	0	0	0	0	0	0	0
Manufactured Home		55	55	55	55	55	55	55	55	55	55	55	55	656
Manufactured Home L.I.		4	4	4	4	4	4	4	4	4	4	4	4	51
Condo/Townhome		8,023	8,023	8,023	8,023	8,023	8,023	8,023	8,023	8,023	8,023	8,023	8,023	96,277
Commercial/Residential		17	17	17	17	17	17	17	17	17	17	17	17	205
Total Residential Revenues		**$1,209,788**	**$1,217,318**	**$1,260,285**	**$954,447**	**$668,564**	**$615,411**	**$573,515**	**$568,209**	**$582,393**	**$676,087**	**$900,374**	**$1,006,653**	**$10,233,042**

City of Folsom
Water Rate Study
Exhibit 6
Revenue at Present Rates

		Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Total
Non-Residential														
Meter Size	**$/Meter**													
5/8"	$12.61	708	708	708	708	708	708	708	708	708	708	708	708	708
3/4"	16.62	100	100	100	100	100	100	100	100	100	100	100	100	100
1"	26.88	666	666	666	666	666	666	666	666	666	666	666	666	666
1.5"	52.68	140	140	140	140	140	140	140	140	140	140	140	140	140
2"	84.29	390	390	390	390	390	390	390	390	390	390	390	390	390
3"	156.31	47	47	47	47	47	47	47	47	47	47	47	47	47
4"	259.82	52	52	52	52	52	52	52	52	52	52	52	52	52
6"	518.22	8	8	8	8	8	8	8	8	8	8	8	8	8
8"	828.84	3	3	3	3	3	3	3	3	3	3	3	3	3
10"	1,191.69	7	7	7	7	7	7	7	7	7	7	7	7	7
12"	1,712.97	1	1	1	1	1	1	1	1	1	1	1	1	1
		2,122	2,122	2,122	2,122	2,122	2,122	2,122	2,122	2,122	2,122	2,122	2,122	2,122
	Total Fixed Charge Revenue	**$106,285**	**$106,285**	**$106,285**	**$106,285**	**$106,285**	**$106,285**	**$106,285**	**$106,285**	**$106,285**	**$106,285**	**$106,285**	**$106,285**	**$1,275,415**
Consumption Charge	**$/ccf**													
Commodity Charge	$1.12	479,478	327,888	270,161	217,508	98,063	104,869	65,676	84,227	79,957	141,174	244,245	275,480	2,388,727
	Total Consumption Revenue	**$537,015**	**$367,235**	**$302,581**	**$243,609**	**$109,831**	**$117,453**	**$73,557**	**$94,335**	**$89,552**	**$158,115**	**$273,554**	**$308,538**	**$2,675,375**
Total Non-Residential Revenues		**$643,300**	**$473,520**	**$408,865**	**$349,893**	**$216,115**	**$223,737**	**$179,842**	**$200,619**	**$195,837**	**$264,399**	**$379,839**	**$414,823**	**$3,950,789**

City of Folsom
Water Rate Study
Exhibit 6
Revenue at Present Rates

		Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Total
	5/8"	3/4"	1"	1.5"	2"	3"	4"	6"	8"	10"	12"	Total	# Customers	
Number of Meters														
Residential	20,629	0	0	0	0	0	0	0	0	0	0	20,629	**20,629**	
Non-Residential	708	100	666	140	390	47	52	8	3	7	1	2,122	**2,122**	
Total Meters	**21,337**	**100**	**666**	**140**	**390**	**47**	**52**	**8**	**3**	**7**	**1**	**22,751**	**22,751**	
Consumption														
Residential														
Tier 1		320,512	319,582	307,464	284,957	178,690	157,556	140,506	154,629	149,224	197,490	284,223	303,704	2,798,538
Tier 2		162,588	158,230	124,774	86,362	24,504	18,139	14,095	15,311	14,596	25,177	81,975	113,152	838,902
Tier 3		217,291	226,166	288,384	143,637	86,950	73,166	61,775	47,938	61,033	78,414	113,901	141,844	1,540,500
Total Residential		700,391	703,979	720,621	514,956	290,143	248,861	216,376	217,878	224,853	301,082	480,099	558,700	5,177,940
Non-Residential		479,478	327,888	270,161	217,508	98,063	104,869	65,676	84,227	79,957	141,174	244,245	275,480	2,388,727
Total Consumption		**1,179,869**	**1,031,867**	**990,783**	**732,463**	**388,206**	**353,730**	**282,053**	**302,106**	**304,810**	**442,256**	**724,344**	**834,181**	**7,566,668**
Summary of Revenue Detail														
Residential														
Residential														
Fixed		$296,505	$296,505	$296,505	$296,505	$296,505	$296,505	$296,505	$296,505	$296,505	$296,505	$296,505	$296,505	**$3,558,060**
Variable		905,184	912,714	955,681	649,843	363,960	310,807	268,911	263,605	277,789	371,483	595,770	702,048	**6,577,794**
Manufactured Home														
Fixed		$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	**$656**
Variable		0	0	0	0	0	0	0	0	0	0	0	0	**0**
Manufactured Home L.I.														
Fixed		4	4	4	4	4	4	4	4	4	4	4	4	**$51**
Variable		0	0	0	0	0	0	0	0	0	0	0	0	0
Condo/Townhome														
Fixed		8,023	8,023	8,023	8,023	8,023	8,023	8,023	8,023	8,023	8,023	8,023	8,023	96,277
Variable		0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial/Residential														
Fixed		17	17	17	17	17	17	17	17	17	17	17	17	205
Variable		0	0	0	0	0	0	0	0	0	0	0	0	0
Total Residential Revenues		$1,209,788	$1,217,318	$1,260,285	$954,447	$668,564	$615,411	$573,515	$568,209	$582,393	$676,087	$900,374	$1,006,653	$10,233,042
Total Non-Residential Revenues		**$643,300**	**$473,520**	**$408,865**	**$349,893**	**$216,115**	**$223,737**	**$179,842**	**$200,619**	**$195,837**	**$264,399**	**$379,839**	**$414,823**	**$3,950,789**
Total Res. and Non-Residential Revenues		**$1,853,087**	**$1,690,838**	**$1,669,150**	**$1,304,340**	**$884,679**	**$839,148**	**$753,357**	**$768,828**	**$778,230**	**$940,486**	**$1,280,213**	**$1,421,475**	**$14,183,832**

Total Fixed Revenue	$4,930,663
Total Variable Revenue	9,253,169
	$14,183,832
FY 2017/18 CAFR	**$14,119,223**
Difference	*$64,609*
Percent	*0.5%*

City of Folsom
Water Rate Study
Exhibit 7
Commodity Distribution Factor

	FY 2021 Consumption (CCF)	15.0% Losses [1]	Net Water Delivered (Flow + Losses)	Average Day (MGD) [2]	% of Total
Residential					
Tier 1	2,883,124	431,027	3,314,151	6.79	37.0%
Tier 2	864,258	129,207	993,465	2.04	11.1%
Tier 3	1,587,062	237,266	1,824,327	3.74	20.4%
Total Residential	5,334,443	797,499	6,131,943	12.57	68.4%
Non-Residential	2,460,926	367,908	2,828,834	5.80	31.6%
Total	**7,795,369**	**1,165,408**	**8,960,777**	**18.36**	**100.0%**
Water Production [3]		**17.35**	**3.0%**	**17.87**	***(COM)***

Notes

[1] - Losses based on produced to sold and a review of City's 2018 AWWA Water Audit Survey.

[2] - Flow plus losses converted to million gallons. (CCF X 748)/1000000/365 = MGD

[3] - Daily average consumption based on 2018 CAFR, page 209, 17.35 MGD. Escalated to FY 2020 based on 1.5% 2019, 1.5% 2020.

City of Folsom
Water Rate Study
Exhibit 8
Capacity Distribution Factor

	Average Day Consumption (MGD)	Peaking Factors [1]	Peak Day Use (MGD)	Component % of Total	Class % of Total
Residential					
Tier 1	6.79	1.72	11.68		33.3%
Tier 2	2.04	1.98	4.03		11.5%
Tier 3	3.74	2.33	8.72		24.9%
Total Residential	12.57		24.43		69.8%
Non-Residential	5.80	1.83	10.59		30.2%
Total	**18.36**		**35.02**		**100.0%**
Historical Peak Day [2]	**29.60**	**3.0%**	**30.49**		***(CAP)***

Notes

[1] - Tier relationship based on the average of peak to average month usage from consumption data.

[2] - Water System Peak Day Data Provided by City. Peak day July 20, 2018 at 29.6 MGD.
Escalated to 2020 based on1.5% 2019, 1.5% 2020.

City of Folsom
Water Rate Study
Exhibit 9A
Customer Distribution Factors

	Actual Customer		*Customer Service & Acctng.*			*Meters & Services*	
	Number of L.U./Accts	**% of Total**	**Weighting Factor**	**Weighted L.U./Accts**	**% of Total**	**Equivalent Meters [1]**	**% of Total**
Residential	21,253	90.7%	1.00	21,253	90.7%	21,253	67.4%
Non-Residential	2,186	9.3%	1.00	2,186	9.3%	10,261	32.6%
Total	**23,439**	**100.0%**		**23,439**	**100.0%**	**31,514**	**100.0%**
	(AC)			***(WCA)***		***(EMS)***	

Notes

[1] Based on number of equivalent meters using AWWA meter equivalency factors.

City of Folsom
Water Rate Study
Exhibit 9B

Development Of Equivalent Meter Distribution Factor

	Number of Meters											
	5/8"	**3/4"**	**1"**	**1.5"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**	**12"**	**Total**
Residential	21,253	0	0	0	0	0	0	0	0	0	0	21,253
Non-Residential	729	103	686	144	402	48	54	8	3	7	1	2,186
Total Meters	**21,982**	**103**	**686**	**144**	**402**	**48**	**54**	**8**	**3**	**7**	**1**	**23,439**
AWWA Meter Equivalencies	**1.00**	**1.50**	**2.50**	**5.00**	**8.00**	**15.00**	**25.00**	**50.00**	**80.00**	**115.00**	**168.75**	

	Equivalent Meters											
	5/8"	**3/4"**	**1"**	**1.5"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**	**12"**	**Total**
Residential	21,253	0	0	0	0	0	0	0	0	0	0	21,253
Non-Residential	729	155	1,715	721	3,214	726	1,339	412	247	829	174	10,261
Total Equivalent Meters	**21,982**	**155**	**1,715**	**721**	**3,214**	**726**	**1,339**	**412**	**247**	**829**	**174**	**31,514**

City of Folsom
Water Rate Study
Exhibit 10
Public Fire Distribution Factor

	Number of Customers	Fire Prot. Requirements (gals/min) [1]	Duration (minutes)	Total FP Requirements (1,000 g/min)	% of Total
Residential	21,253	1,500	120	3,825,540	76.4%
Non-Residential	2,186	3,000	180	1,180,440	23.6%
Total	**23,439**			**5,005,980**	**100.0%**
					(FP)

Notes

[1] Based on City specific fire flow requirements from 2016 Water Master Plan Update, page 2, Table 1.

City of Folsom
Water Rate Study
Exhibit 11
Revenue Related Distribution Factor

	Projected FY 2021	% of Total
Residential	$10,700,471	72.1%
Non-Residential	4,131,254	27.9%
	---	---
Total	**$14,831,725**	**100.0%**
		(RR)

City of Folsom
Water Rate Study
Exhibit 12
Functionalization and Allocation of Net Plant In Service

					Customer Related						
			Commodity	Capacity	Actual Customer	Cust. Acctg.	Equivalent Meter & Svs	Public Fire Protection	Revenue Related	Direct Assign.	
			(COMM)	*(CAP)*	*(AC)*	*(WCA)*	***(EMS)***	*(FP)*	*(RR)*	*(DA)*	***Basis of Allocation***
Water Treatment											
Equipment											
020000410001	Pacific Body & Crane Veh # 640	$28,974	$16,982	$11,992	$0	$0	$0	$0	$0	$0	58.6% COMM 41.4% CAP
02000042	Security Fence	12,391	7,263	5,129	0	0	0	0	0	0	58.6% COMM 41.4% CAP
03000076	Water Expansion Phs IV	533,411	312,632	220,779	0	0	0	0	0	0	58.6% COMM 41.4% CAP
03000077	Water Trt Pmp Stn Expansion	202,648	118,772	83,876	0	0	0	0	0	0	58.6% COMM 41.4% CAP
04000002	Multiquip Concrete Saw-Veh# 853	11,681	6,846	4,835	0	0	0	0	0	0	58.6% COMM 41.4% CAP
04000008	Motor Alignment Tool	5,637	3,304	2,333	0	0	0	0	0	0	58.6% COMM 41.4% CAP
05000070	Caterpillar It14G Toolcarrier Veh# 929	100,449	58,873	41,576	0	0	0	0	0	0	58.6% COMM 41.4% CAP
05000102	2005 Bobcat-Versahandler Veh#889	51,498	30,183	21,315	0	0	0	0	0	0	58.6% COMM 41.4% CAP
06000035	Kleentec Top Load Cleaning / Parts Washer	6,691	3,922	2,769	0	0	0	0	0	0	58.6% COMM 41.4% CAP
06000041	2006 Chevy 3/4 Ton Veh#941 /For Water Quality	25,402	14,888	10,514	0	0	0	0	0	0	58.6% COMM 41.4% CAP
06000127	2007 Ford 550 Veh # 952 / Super Duty	33,285	19,509	13,777	0	0	0	0	0	0	58.6% COMM 41.4% CAP
06000190	La Colina Dal Lago-Water Booster	45,000	26,375	18,626	0	0	0	0	0	0	58.6% COMM 41.4% CAP
07000002	Security Sys-16 Channel Processer W/2 Monitors	10,856	6,363	4,493	0	0	0	0	0	0	58.6% COMM 41.4% CAP
07000005	Trav-L-Vac 300 For Valve Maint. Truck	17,221	10,093	7,128	0	0	0	0	0	0	58.6% COMM 41.4% CAP
08000038	2008 F150 Veh# 1044	22,345	13,097	9,249	0	0	0	0	0	0	58.6% COMM 41.4% CAP
Tanks, Reservoir											
96000632	Tank Modifications	23,157	13,573	9,585	0	0	0	0	0	0	58.6% COMM 41.4% CAP
96000656	Reservoir Serv Area 3 Hydrotank	1,214,590	711,871	502,719	0	0	0	0	0	0	58.6% COMM 41.4% CAP
96000658	New Water Tank & H2O Treatment Plant	1,563,708	916,489	647,219	0	0	0	0	0	0	58.6% COMM 41.4% CAP
96000688	Upgrade Serv Area 3 Pump Station	443,291	259,813	183,478	0	0	0	0	0	0	58.6% COMM 41.4% CAP
96000723	Limitorque Valve Actuator	5,900	3,458	2,442	0	0	0	0	0	0	58.6% COMM 41.4% CAP
96000753	Wtr Trtmnt Plan Phase II 9596 CIP Expenditures	2,901,129	1,700,352	1,200,777	0	0	0	0	0	0	58.6% COMM 41.4% CAP
Treatment Plant											
97000255	Water Treatment Plnt Phase III	489,593	286,950	202,643	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550001	99/00 Expenditures	3,484,963	2,042,537	1,442,426	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550002	99/00 Expenditures	73,410	43,026	30,385	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550003	97/98 Expenditures	1,528	896	632	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550004	99/00 Expenditures	579,702	339,763	239,939	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550005	99/00 Expenditures	14,479	8,486	5,993	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550006	00/01 Expenditures	55,194	32,349	22,845	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550007	Water Treatment Plant Pilot	252,378	147,919	104,459	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550008	Water Treatment Plant Phase III	1,147,437	672,513	474,924	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550009	97/98 Expenditures	31,594	18,517	13,077	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550010	97/98 Expenditures	419,436	245,832	173,605	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550011	97/98 Expenditures	230,917	135,340	95,577	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550012	98/99 Expenditures	7,290,327	4,272,861	3,017,466	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550013	98/99 Expenditures	1,637,914	959,981	677,933	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550014	00/01 Expenditures	138,122	80,953	57,168	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550016	01/02 Expenditures	22,661	13,281	9,379	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550017	01/02 Expenditures	30,678	17,980	12,697	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550018	02/03 Expenditures	58,521	34,299	24,222	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550019	Water Storage 02/03	865,692	507,382	358,310	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550020	Peerless Impeller: 20Hp	5,978	3,504	2,474	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550022	Submersible Pump-Krt E 100-251/114X	6,191	3,628	2,562	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550023	0304 Cip Expenditures	1,296,387	759,812	536,575	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550024	04/05 Expenditures	720,009	421,997	298,012	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550025	05/06 Expenditures	123,311	72,272	51,038	0	0	0	0	0	0	58.6% COMM 41.4% CAP
970002550026	06/07 Expenditures	178,170	104,425	73,745	0	0	0	0	0	0	58.6% COMM 41.4% CAP
Equipment											
99000034	1998 John Deere Utl #443 Gator	9,999	5,861	4,139	0	0	0	0	0	0	58.6% COMM 41.4% CAP

City of Folsom
Water Rate Study
Exhibit 12
Functionalization and Allocation of Net Plant In Service

			Commodity (COMM)	Capacity (CAP)	Customer Related: Actual Customer (AC)	Customer Related: Cust. Acctg. (WCA)	Customer Related: Equivalent Meter & Svs (EMS)	Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Allocation
Pump Station											
030000760001	Water Expansion Phs IV	2,068,804	1,212,526	856,278	0	0	0	0	0	0	58.6% COMM 41.4% CAP
030000760002	Water Expansion Phs IV	8,199,829	4,805,920	3,393,909	0	0	0	0	0	0	58.6% COMM 41.4% CAP
030000760003	Water Expansion Phs IV	12,188,349	7,143,591	5,044,757	0	0	0	0	0	0	58.6% COMM 41.4% CAP
030000760004	Water Expansion Phs IV	1,592,652	933,453	659,199	0	0	0	0	0	0	58.6% COMM 41.4% CAP
030000760005	Water Expansion Phs IV	117,146	68,659	48,487	0	0	0	0	0	0	58.6% COMM 41.4% CAP
030000770001	Water Trt Pmp Stn Expansion	46,982	27,536	19,446	0	0	0	0	0	0	58.6% COMM 41.4% CAP
030000770002	Water Trt Pmp Stn Expansion	392,958	230,313	162,645	0	0	0	0	0	0	58.6% COMM 41.4% CAP
030000770003	Water Trt Pmp Stn Expansion	1,017,158	596,156	421,002	0	0	0	0	0	0	58.6% COMM 41.4% CAP
030000770004	Water Trt Pmp Stn Expansion	2,139,094	1,253,723	885,371	0	0	0	0	0	0	58.6% COMM 41.4% CAP
030000770005	Water Trt Pmp Stn Expansion	1,838,479	1,077,533	760,947	0	0	0	0	0	0	58.6% COMM 41.4% CAP
030000770006	Water Trt Pmp Stn Expansion	331,981	194,574	137,407	0	0	0	0	0	0	58.6% COMM 41.4% CAP
Vehicle											
060001270001	2007 Ford 550 Veh # 952 / Super Duty	19,384	11,361	8,023	0	0	0	0	0	0	58.6% COMM 41.4% CAP
Pump Station											
960006880001	Upgrade Serv Area 3 Pump Station	12,462	7,304	5,158	0	0	0	0	0	0	58.6% COMM 41.4% CAP
960006880002	Upgrade Serv Area 3 Pump Station	3,804	2,229	1,574	0	0	0	0	0	0	58.6% COMM 41.4% CAP
TOTAL WATER TREATMENT		**$56,392,938**	**$33,051,901**	**$23,341,037**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	
Water Services											
00000099	1999 Bobcat Loader #501	$18,374	$0	$7,200	$9,187	$0	$0	$1,987	$0	$0	50.0% AC 39.2% CAP 10.8% FP
00000215	99/00 Develop Contrib - Broadstone	1,536,431	0	602,077	768,216	0	0	166,138	0	0	50.0% AC 39.2% CAP 10.8% FP
00000217	99/00 Develop Contrib - Willow Springs	1,566,248	0	613,762	783,124	0	0	169,362	0	0	50.0% AC 39.2% CAP 10.8% FP
00000219	99/00 Develop Contrib - The Foothills Village	300,612	0	117,800	150,306	0	0	32,506	0	0	50.0% AC 39.2% CAP 10.8% FP
00000221	99/00 Develop Contrib - Empire Ranch Village	179,744	0	70,436	89,872	0	0	19,436	0	0	50.0% AC 39.2% CAP 10.8% FP
00000223	99/00 Develop Contrib - Prairie Oaks	107,320	0	42,055	53,660	0	0	11,605	0	0	50.0% AC 39.2% CAP 10.8% FP
00000225	99/00 Develop Contrib - Suncountry Folsom	91,493	0	35,853	45,747	0	0	9,893	0	0	50.0% AC 39.2% CAP 10.8% FP
00000227	99/00 Develop Contrib - Russell Ranch	408,910	0	160,238	204,455	0	0	44,217	0	0	50.0% AC 39.2% CAP 10.8% FP
00000228	99/00 Develop Contrib - Oak Avenue Parkway Lift St	23,000	0	9,013	11,500	0	0	2,487	0	0	50.0% AC 39.2% CAP 10.8% FP
00000246	San Juan Pump Station Upgrade	10,577	0	4,145	5,289	0	0	1,144	0	0	50.0% AC 39.2% CAP 10.8% FP
00000247	Water System Master Plan Imp	2,363,788	0	926,291	1,181,894	0	0	255,603	0	0	50.0% AC 39.2% CAP 10.8% FP
01000081	00/01 Develop Contrib - Silverbrook/Glenn Dr Exten	86,330	0	33,830	43,165	0	0	9,335	0	0	50.0% AC 39.2% CAP 10.8% FP
01000082	00/01 Develop Contrib - Russell Ranch	3,014,455	0	1,181,267	1,507,228	0	0	325,961	0	0	50.0% AC 39.2% CAP 10.8% FP
01000083	00/01 Develop Contrib - Willow Springs	449,922	0	176,310	224,961	0	0	48,651	0	0	50.0% AC 39.2% CAP 10.8% FP
01000084	00/01 Develop Contrib - Broadstone	304,162	0	119,191	152,081	0	0	32,890	0	0	50.0% AC 39.2% CAP 10.8% FP
01000085	00/01 Develop Contrib - Empire Ranch	800,273	0	313,601	400,137	0	0	86,536	0	0	50.0% AC 39.2% CAP 10.8% FP
01000086	00/01 Develop Contrib - Foothills Village	842,595	0	330,186	421,298	0	0	91,112	0	0	50.0% AC 39.2% CAP 10.8% FP
01000087	00/01 Develop Contrib - Cobble Hills	177,710	0	69,639	88,855	0	0	19,216	0	0	50.0% AC 39.2% CAP 10.8% FP
01000088	00/01 Develop Contrib - Am River Cyn No	534,760	0	209,555	267,380	0	0	57,825	0	0	50.0% AC 39.2% CAP 10.8% FP
01000089	00/01 Develop Contrib - Bidwell Center	102,960	0	40,347	51,480	0	0	11,133	0	0	50.0% AC 39.2% CAP 10.8% FP
01000102	Natoma Pipeline Phase II	6,184,329	0	2,423,437	3,092,165	0	0	668,728	0	0	50.0% AC 39.2% CAP 10.8% FP
02000016	Modular Office Building - Wa Dept - 194 Randell Dr	56,873	0	22,287	28,437	0	0	6,150	0	0	50.0% AC 39.2% CAP 10.8% FP
02000080	01/02 Develop Contrib-Broadstone	3,212,291	0	1,258,792	1,606,146	0	0	347,353	0	0	50.0% AC 39.2% CAP 10.8% FP
02000081	01/02 Develop Contrib-Prairie Oaks	178,013	0	69,757	89,007	0	0	19,249	0	0	50.0% AC 39.2% CAP 10.8% FP
02000082	01/02 Develop Contrib-Cobble Ridge	194,350	0	76,159	97,175	0	0	21,016	0	0	50.0% AC 39.2% CAP 10.8% FP
02000083	01/02 Develop Contrib-Canyon Falls Village	312,922	0	122,624	156,461	0	0	33,837	0	0	50.0% AC 39.2% CAP 10.8% FP
02000084	01/02 Develop Contrib-Willow Springs	165,244	0	64,754	82,622	0	0	17,868	0	0	50.0% AC 39.2% CAP 10.8% FP
02000085	01/02 Develop Contrib-Empire Ranch	191,240	0	74,941	95,620	0	0	20,679	0	0	50.0% AC 39.2% CAP 10.8% FP
02000086	01/02 Develop Contrib-Foothills Village	143,179	0	56,107	71,590	0	0	15,482	0	0	50.0% AC 39.2% CAP 10.8% FP
02000091	01/02 Develop Contrib-Golf Links Dr & Broadstone P	454,914	0	178,266	227,457	0	0	49,191	0	0	50.0% AC 39.2% CAP 10.8% FP

					Customer Related								
			Commodity	Capacity	Actual Customer	Cust. Acctg.	Equivalent Meter & Svs	Public Fire Protection	Revenue Related	Direct Assign.	Basis of Allocation		
			(COMM)	(CAP)	(AC)	(WCA)	(EMS)	(FP)	(RR)	(DA)			
03000001	Jack Hammer	7,623	0	2,987	3,812	0	0	824	0	0	50.0% AC	39.2% CAP	10.8% FP
03000002	Stow-A-Crane	5,472	0	2,144	2,736	0	0	592	0	0	50.0% AC	39.2% CAP	10.8% FP
03000040	2003 Partner Hydraulic #695 On Veh #1070	6,895	0	2,702	3,447	0	0	746	0	0	50.0% AC	39.2% CAP	10.8% FP
03000055	Empire Ranch Zn4 Pump Stn	945,000	0	370,315	472,500	0	0	102,185	0	0	50.0% AC	39.2% CAP	10.8% FP
03000058	Broadstone Zn4 Tank & Tran Main	1,376,541	0	539,422	688,271	0	0	148,849	0	0	50.0% AC	39.2% CAP	10.8% FP
03000074	Prv Stations 1 & 2	120,000	0	47,024	60,000	0	0	12,976	0	0	50.0% AC	39.2% CAP	10.8% FP
03000109	Parkshore Plaza Ph3 Pkshr Drv-Wa	147,960	0	57,981	73,980	0	0	15,999	0	0	50.0% AC	39.2% CAP	10.8% FP
03000112	Empire Ranch Village 47-Wa	266,823	0	104,559	133,412	0	0	28,852	0	0	50.0% AC	39.2% CAP	10.8% FP
03000116	Empire Ranch Village 40B1-Wa	108,946	0	42,692	54,473	0	0	11,781	0	0	50.0% AC	39.2% CAP	10.8% FP
03000119	Empire Ranch Village 40B2-Wa	165,454	0	64,836	82,727	0	0	17,891	0	0	50.0% AC	39.2% CAP	10.8% FP
03000122	Empire Ranch Village 49A-Wa	66,579	0	26,090	33,290	0	0	7,199	0	0	50.0% AC	39.2% CAP	10.8% FP
03000126	Empire Ranch Village 49B-Wa	139,638	0	54,720	69,819	0	0	15,099	0	0	50.0% AC	39.2% CAP	10.8% FP
03000129	Sierra Estates Subdivision-Wa	72,664	0	28,475	36,332	0	0	7,857	0	0	50.0% AC	39.2% CAP	10.8% FP
03000132	The Parkway Ph2 Village D1-Wa	158,962	0	62,292	79,481	0	0	17,189	0	0	50.0% AC	39.2% CAP	10.8% FP
03000135	The Parkway Ph2 Village D2-Wa	84,567	0	33,139	42,284	0	0	9,144	0	0	50.0% AC	39.2% CAP	10.8% FP
03000139	Parkway Ph2 Parkway Drive-Wa	320,720	0	125,680	160,360	0	0	34,680	0	0	50.0% AC	39.2% CAP	10.8% FP
03000142	Parkway Ph2 Village E1-Wa	97,514	0	38,213	48,757	0	0	10,544	0	0	50.0% AC	39.2% CAP	10.8% FP
03000145	Parkway Ph2 Village E2-Wa	150,784	0	59,087	75,392	0	0	16,305	0	0	50.0% AC	39.2% CAP	10.8% FP
03000149	Parkway Ph2 Village E3-Wa	188,409	0	73,831	94,205	0	0	20,373	0	0	50.0% AC	39.2% CAP	10.8% FP
03000151	Foothills Village 41-Wa	271,808	0	106,513	135,904	0	0	29,391	0	0	50.0% AC	39.2% CAP	10.8% FP
04000071	Zone 5 Pump Station	593,700	0	232,652	296,850	0	0	64,198	0	0	50.0% AC	39.2% CAP	10.8% FP
04000074	Empire Rnch-E Natoma Sidewalk Gc	2,750	0	1,078	1,375	0	0	297	0	0	50.0% AC	39.2% CAP	10.8% FP
04000077	Zone 5 Water Tank	1,159,469	0	454,358	579,735	0	0	125,376	0	0	50.0% AC	39.2% CAP	10.8% FP
04000101	Water Sampling Stations	5,779	0	2,265	2,890	0	0	625	0	0	50.0% AC	39.2% CAP	10.8% FP
04000104	American River Cnyn N Unit 8A-Wa	37,740	0	14,789	18,870	0	0	4,081	0	0	50.0% AC	39.2% CAP	10.8% FP
04000108	American Rvr Cnyn N Unit 8B-Wa	68,980	0	27,031	34,490	0	0	7,459	0	0	50.0% AC	39.2% CAP	10.8% FP
04000111	Empire Rnch Vil 38-Wa	328,400	0	128,689	164,200	0	0	35,511	0	0	50.0% AC	39.2% CAP	10.8% FP
04000115	The Parkway Village G-Wa	555,316	0	217,610	277,658	0	0	60,048	0	0	50.0% AC	39.2% CAP	10.8% FP
04000118	The Parkway Village F-Wa	256,512	0	100,519	128,256	0	0	27,737	0	0	50.0% AC	39.2% CAP	10.8% FP
04000121	Broadstone Parkway-Wa	712,203	0	279,089	356,102	0	0	77,012	0	0	50.0% AC	39.2% CAP	10.8% FP
04000127	Parkway Drive North-Wa	110,680	0	43,372	55,340	0	0	11,968	0	0	50.0% AC	39.2% CAP	10.8% FP
04000131	Empire Ranch Vil 48-Wa	376,420	0	147,507	188,210	0	0	40,703	0	0	50.0% AC	39.2% CAP	10.8% FP
04000136	Broadstone Crossing-Wa	146,800	0	57,526	73,400	0	0	15,874	0	0	50.0% AC	39.2% CAP	10.8% FP
04000139	The Prkwy -Blu Ravin/Grn Vlly-Wa	65,900	0	25,824	32,950	0	0	7,126	0	0	50.0% AC	39.2% CAP	10.8% FP
04000144	Broadstone Unit 3 Village 2A-Wa	207,875	0	81,459	103,938	0	0	22,478	0	0	50.0% AC	39.2% CAP	10.8% FP
04000148	Empire Ranch Vil 24-Wa	118,009	0	46,244	59,005	0	0	12,761	0	0	50.0% AC	39.2% CAP	10.8% FP
04000151	Empire Ranch Vil 25-Wa	207,865	0	81,456	103,933	0	0	22,477	0	0	50.0% AC	39.2% CAP	10.8% FP
04000154	Empire Ranch Vil 60A-Wa	340,180	0	133,305	170,090	0	0	36,785	0	0	50.0% AC	39.2% CAP	10.8% FP
04000157	Empire Ranch Vil 60B-Wa	273,678	0	107,245	136,839	0	0	29,594	0	0	50.0% AC	39.2% CAP	10.8% FP
04000160	Empire Ranch Vil 54-Wa	295,162	0	115,664	147,581	0	0	31,917	0	0	50.0% AC	39.2% CAP	10.8% FP
04000163	Empire Ranch Vil 58-Wa	300,860	0	117,897	150,430	0	0	32,533	0	0	50.0% AC	39.2% CAP	10.8% FP
04000169	Prairie City Crossing-Wa	35,850	0	14,048	17,925	0	0	3,877	0	0	50.0% AC	39.2% CAP	10.8% FP
04000172	Empire Ranch Vil 50-Wa	238,439	0	93,436	119,220	0	0	25,783	0	0	50.0% AC	39.2% CAP	10.8% FP
04000175	Cobble Ridge-Wa	4,000	0	1,567	2,000	0	0	433	0	0	50.0% AC	39.2% CAP	10.8% FP
05000071	Ashland Pump Stn Const	34,000	0	13,323	17,000	0	0	3,677	0	0	50.0% AC	39.2% CAP	10.8% FP
05000072	Meter Retrofit	148,147	0	58,054	74,074	0	0	16,020	0	0	50.0% AC	39.2% CAP	10.8% FP
05000090	Zone 3 Water Tank	814,600	0	319,215	407,300	0	0	88,085	0	0	50.0% AC	39.2% CAP	10.8% FP
05000106	Broadstone 3 Village 1-Wa	531,550	0	208,297	265,775	0	0	57,478	0	0	50.0% AC	39.2% CAP	10.8% FP
05000109	The Residence At Am River Canyon-Wa	36,084	0	14,140	18,042	0	0	3,902	0	0	50.0% AC	39.2% CAP	10.8% FP
05000112	Am River Canyon North Unit 4A-Wa	87,078	0	34,123	43,539	0	0	9,416	0	0	50.0% AC	39.2% CAP	10.8% FP

					Customer Related								
			Commodity	Capacity	Actual Customer	Cust. Acctg.	Equivalent Meter & Svs	Public Fire Protection	Revenue Related	Direct Assign.	Basis of Allocation		
			(COMM)	(CAP)	(AC)	(WCA)	(EMS)	(FP)	(RR)	(DA)			
05000115	Broadstone Unit 3, Village 3C-Wa	31,600	0	12,383	15,800	0	0	3,417	0	0	50.0% AC	39.2% CAP	10.8% FP
05000118	Empire Ranch 3B Major Roads-Wa	1,764,583	0	691,483	882,292	0	0	190,809	0	0	50.0% AC	39.2% CAP	10.8% FP
05000122	Empire Ranch Village 21-Wa	381,015	0	149,307	190,508	0	0	41,200	0	0	50.0% AC	39.2% CAP	10.8% FP
05000125	Empire Ranch Village 22-Wa	295,060	0	115,624	147,530	0	0	31,906	0	0	50.0% AC	39.2% CAP	10.8% FP
05000128	Empire Ranch Village 61-Wa	116,214	0	45,540	58,107	0	0	12,566	0	0	50.0% AC	39.2% CAP	10.8% FP
05000132	Broadstone 3 / Iron Point Rd Imp-Wa	420,000	0	164,584	210,000	0	0	45,416	0	0	50.0% AC	39.2% CAP	10.8% FP
05000136	Empire Ranch Village 63-Wa	359,005	0	140,682	179,503	0	0	38,820	0	0	50.0% AC	39.2% CAP	10.8% FP
05000139	Empire Ranch Village 27-Wa	204,195	0	80,017	102,098	0	0	22,080	0	0	50.0% AC	39.2% CAP	10.8% FP
06000042	2006 Ford Explorer Veh#942	21,322	0	8,355	10,661	0	0	2,306	0	0	50.0% AC	39.2% CAP	10.8% FP
06000075	Willow Hill Raw Water Line - Second Valve	200,000	0	78,373	100,000	0	0	21,627	0	0	50.0% AC	39.2% CAP	10.8% FP
06000076	Water System Flow Control Station (R'Bow Bridge)	269,877	0	105,756	134,939	0	0	29,183	0	0	50.0% AC	39.2% CAP	10.8% FP
06000077	Water Main Replacement (Stafford Street)	93,614	0	36,684	46,807	0	0	10,123	0	0	50.0% AC	39.2% CAP	10.8% FP
06000099	Empire Ranch Zone 6 Pump Station	593,700	0	232,652	296,850	0	0	64,198	0	0	50.0% AC	39.2% CAP	10.8% FP
06000123	2006 Ford 350 Veh # 948	22,105	0	8,662	11,053	0	0	2,390	0	0	50.0% AC	39.2% CAP	10.8% FP
06000126	2006 Ford 350 Veh # 951	22,105	0	8,662	11,053	0	0	2,390	0	0	50.0% AC	39.2% CAP	10.8% FP
06000131	Sibley Square-Wa	72,880	0	28,559	36,440	0	0	7,881	0	0	50.0% AC	39.2% CAP	10.8% FP
06000134	La Colina Dal Lago-Wa	193,360	0	75,771	96,680	0	0	20,909	0	0	50.0% AC	39.2% CAP	10.8% FP
06000137	Enclave Phase 1-Wa	114,075	0	44,702	57,038	0	0	12,335	0	0	50.0% AC	39.2% CAP	10.8% FP
06000140	Enclave Phase 2-Wa	251,925	0	98,721	125,963	0	0	27,241	0	0	50.0% AC	39.2% CAP	10.8% FP
06000143	Empire Ranch Village 62-Wa	225,605	0	88,407	112,803	0	0	24,395	0	0	50.0% AC	39.2% CAP	10.8% FP
06000146	Parkway - East Natoma Street-Wa	305,734	0	119,807	152,867	0	0	33,060	0	0	50.0% AC	39.2% CAP	10.8% FP
07000086	Iron Point Rd Extension	62,025	0	24,306	31,013	0	0	6,707	0	0	50.0% AC	39.2% CAP	10.8% FP
07000091	Trail Creek Crossing-Wa	64,500	0	25,275	32,250	0	0	6,975	0	0	50.0% AC	39.2% CAP	10.8% FP
07000094	Empire Ranch Village #26-Wa	496,301	0	194,484	248,151	0	0	53,666	0	0	50.0% AC	39.2% CAP	10.8% FP
07000097	Willard Drive Extension-Wa	56,600	0	22,180	28,300	0	0	6,120	0	0	50.0% AC	39.2% CAP	10.8% FP
07000100	Parkway, Lot C-Wa	281,150	0	110,174	140,575	0	0	30,401	0	0	50.0% AC	39.2% CAP	10.8% FP
07000103	Empire Ranch Village 34-Wa	347,455	0	136,156	173,728	0	0	37,571	0	0	50.0% AC	39.2% CAP	10.8% FP
07000106	Broadstone 3 Village 2B-Wa	343,670	0	134,673	171,835	0	0	37,162	0	0	50.0% AC	39.2% CAP	10.8% FP
07000109	Empire Ranch Village 35-Wa	667,515	0	261,577	333,758	0	0	72,180	0	0	50.0% AC	39.2% CAP	10.8% FP
07000112	Parkway Lot D Rivage-Wa	336,650	0	131,922	168,325	0	0	36,403	0	0	50.0% AC	39.2% CAP	10.8% FP
07000119	Parkway Lot A Vizcaya-Wa	209,735	0	82,188	104,868	0	0	22,679	0	0	50.0% AC	39.2% CAP	10.8% FP
07000122	Sutter Ct Offsite Improvements-Wa	26,750	0	10,482	13,375	0	0	2,893	0	0	50.0% AC	39.2% CAP	10.8% FP
08000037	2008 F150 Veh# 1040	22,345	0	8,756	11,173	0	0	2,416	0	0	50.0% AC	39.2% CAP	10.8% FP
08000063	Fieldstone Meadows-Wa	14,083	0	5,519	7,042	0	0	1,523	0	0	50.0% AC	39.2% CAP	10.8% FP
08000067	Residences @ Arc Ph 2-Wa	33,253	0	13,031	16,627	0	0	3,596	0	0	50.0% AC	39.2% CAP	10.8% FP
08000070	Broadstone Park Professional Ctr-Wa	15,000	0	5,878	7,500	0	0	1,622	0	0	50.0% AC	39.2% CAP	10.8% FP
08000072	Union Square Condominiums-Wa	533,780	0	209,171	266,890	0	0	57,719	0	0	50.0% AC	39.2% CAP	10.8% FP
08000075	The Oaks @ Willowsprings Ph 1-Wa	671,205	0	263,023	335,603	0	0	72,579	0	0	50.0% AC	39.2% CAP	10.8% FP
08000078	The Oaks @ Willowsprings Ph 2A-Wa	474,700	0	186,019	237,350	0	0	51,331	0	0	50.0% AC	39.2% CAP	10.8% FP
09000017	Madrone Condo Project-Wa	149,725	0	58,672	74,863	0	0	16,190	0	0	50.0% AC	39.2% CAP	10.8% FP
09000018	Broadstone Xing Parcel 5-Wa	111,800	0	43,811	55,900	0	0	12,089	0	0	50.0% AC	39.2% CAP	10.8% FP
10000002	2001 Chevy #1073 Dump Truck C7500	19,222	0	7,533	9,611	0	0	2,079	0	0	50.0% AC	39.2% CAP	10.8% FP
10000021	Folsom Point-Dev Contrib Water Value	122,000	0	47,808	61,000	0	0	13,192	0	0	50.0% AC	39.2% CAP	10.8% FP
11000018	Outcropping Way (Cal-Iso)	76,250	0	29,880	38,125	0	0	8,245	0	0	50.0% AC	39.2% CAP	10.8% FP
11000020	Folsom Corners-Wa	32,300	0	12,657	16,150	0	0	3,493	0	0	50.0% AC	39.2% CAP	10.8% FP
11000026	The Oaks @ Willow Springs Ph 2D-Wa	432,490	0	169,479	216,245	0	0	46,766	0	0	50.0% AC	39.2% CAP	10.8% FP
12000023	Estacio Estates-Wa	82,700	0	32,407	41,350	0	0	8,943	0	0	50.0% AC	39.2% CAP	10.8% FP

					Customer Related								
			Commodity	Capacity	Actual Customer	Cust. Acctg.	Equivalent Meter & Svs	Public Fire Protection	Revenue Related	Direct Assign.	Basis of Allocation		
			(COMM)	(CAP)	(AC)	(WCA)	(EMS)	(FP)	(RR)	(DA)			
12000026	Palladio Off-Site-Wa	371,410	0	145,543	185,705	0	0	40,162	0	0	50.0% AC	39.2% CAP	10.8% FP
13000018	Morning Walk-Wa	77,925	0	30,536	38,963	0	0	8,426	0	0	50.0% AC	39.2% CAP	10.8% FP
13000021	The Parkside Ph 1-Wa	129,073	0	50,580	64,537	0	0	13,957	0	0	50.0% AC	39.2% CAP	10.8% FP
13000024	The Parkside Ph 2-Wa	25,421	0	9,962	12,711	0	0	2,749	0	0	50.0% AC	39.2% CAP	10.8% FP
14000018	2014 Husq Saw #1155	20,163	0	7,901	10,082	0	0	2,180	0	0	50.0% AC	39.2% CAP	10.8% FP
14000027	Willow Bridge Ph1-Wa	227,572	0	89,178	113,786	0	0	24,608	0	0	50.0% AC	39.2% CAP	10.8% FP
14000030	Folsom Trails (Pkwy Lot I)-Wa	296,704	0	116,269	148,352	0	0	32,083	0	0	50.0% AC	39.2% CAP	10.8% FP
14000031	Empire Ranch Vil #36A-Wa	379,145	0	148,575	189,573	0	0	40,998	0	0	50.0% AC	39.2% CAP	10.8% FP
14000032	Natoma Valley Ph 1&2 (The Knolls)-Wa	294,400	0	115,366	147,200	0	0	31,834	0	0	50.0% AC	39.2% CAP	10.8% FP
14000033	Folsom Meadows (Pkwy Lot J)-Wa	143,144	0	56,093	71,572	0	0	15,479	0	0	50.0% AC	39.2% CAP	10.8% FP
15000029	2015 Ford F550 #1176	143,906	0	56,392	71,953	0	0	15,561	0	0	50.0% AC	39.2% CAP	10.8% FP
15000046	E.R. Village 36B-Water	205,986	0	80,719	102,993	0	0	22,274	0	0	50.0% AC	39.2% CAP	10.8% FP
15000050	Santa Juanita Subdiv-Water	44,610	0	17,481	22,305	0	0	4,824	0	0	50.0% AC	39.2% CAP	10.8% FP
15000053	Fpa Willowhill Pipe Rehab	551,949	0	216,291	275,975	0	0	59,684	0	0	50.0% AC	39.2% CAP	10.8% FP
15000054	WTP Mechanical Dewater	2,489,631	0	975,605	1,244,816	0	0	269,210	0	0	50.0% AC	39.2% CAP	10.8% FP
15000055	WTP Reserv No.1 Rehab	868,503	0	340,338	434,252	0	0	93,913	0	0	50.0% AC	39.2% CAP	10.8% FP
15000056	Prv Station Imprvmts	80,310	0	31,471	40,155	0	0	8,684	0	0	50.0% AC	39.2% CAP	10.8% FP
16000027	2016 Peterbuilt Dump Truck #1213	66,004	0	25,865	33,002	0	0	7,137	0	0	50.0% AC	39.2% CAP	10.8% FP
16000047	Crestridge Lane Watermain Replacement	1,043,029	0	408,729	521,515	0	0	112,785	0	0	50.0% AC	39.2% CAP	10.8% FP
16000048	La Collina Dal Lago Water Tank	224,611	0	88,018	112,306	0	0	24,288	0	0	50.0% AC	39.2% CAP	10.8% FP
16000049	WTP Filter Trough	169,226	0	66,314	84,613	0	0	18,299	0	0	50.0% AC	39.2% CAP	10.8% FP
16000052	Addison Place-Water	128,095	0	50,196	64,048	0	0	13,851	0	0	50.0% AC	39.2% CAP	10.8% FP
16000057	The Islands Phase 1A-Water	136,875	0	53,637	68,438	0	0	14,801	0	0	50.0% AC	39.2% CAP	10.8% FP
Water Mains & Reservoirs													
96000627	Plant Contrib Capital	2,903,124	0	1,137,640	1,451,562	0	0	313,922	0	0	50.0% AC	39.2% CAP	10.8% FP
96000628	Plant & Equip Contrib Capital	375,616	0	147,192	187,808	0	0	40,616	0	0	50.0% AC	39.2% CAP	10.8% FP
96000629	Plant Equip Contrib Capital	175,834	0	68,904	87,917	0	0	19,013	0	0	50.0% AC	39.2% CAP	10.8% FP
96000630	Plant Equip Contrib Capital	9,755	0	3,823	4,878	0	0	1,055	0	0	50.0% AC	39.2% CAP	10.8% FP
96000633	Pump Station Contrib Cpital	55,000	0	21,553	27,500	0	0	5,947	0	0	50.0% AC	39.2% CAP	10.8% FP
96000634	Reservoirs Contrib Capital	1,336,000	0	523,535	668,000	0	0	144,465	0	0	50.0% AC	39.2% CAP	10.8% FP
96000635	Water Mains Contrib Capital	3,694,107	0	1,447,600	1,847,054	0	0	399,453	0	0	50.0% AC	39.2% CAP	10.8% FP
96000636	Water Mains & Reservoirs Contrib Capital	548,002	0	214,744	274,001	0	0	59,257	0	0	50.0% AC	39.2% CAP	10.8% FP
96000637	Water Mains & Reservoirs Contrib Capital	3,076,823	0	1,205,706	1,538,411	0	0	332,705	0	0	50.0% AC	39.2% CAP	10.8% FP
96000638	Water Mains & Reservoirs Contrib Capital	916,000	0	358,951	458,000	0	0	99,049	0	0	50.0% AC	39.2% CAP	10.8% FP
96000639	Water Mains & Reservoirs	3,098,507	0	1,214,204	1,549,254	0	0	335,050	0	0	50.0% AC	39.2% CAP	10.8% FP
96000646	Water Mains	44,364	0	17,385	22,182	0	0	4,797	0	0	50.0% AC	39.2% CAP	10.8% FP
96000647	Transfer Canals	140,789	0	55,170	70,394	0	0	15,224	0	0	50.0% AC	39.2% CAP	10.8% FP
96000649	Various Lands	21,353	0	8,368	10,677	0	0	2,309	0	0	50.0% AC	39.2% CAP	10.8% FP
96000657	Water Main Pinebrook Mobile Home Park	35,340	0	13,849	17,670	0	0	3,821	0	0	50.0% AC	39.2% CAP	10.8% FP
96000668	Lexington Hill Water Lines Gate Valves Hydrants	96,611	0	37,859	48,306	0	0	10,447	0	0	50.0% AC	39.2% CAP	10.8% FP
96000670	(2) Hydrant Water Meters	40,554	0	15,892	20,277	0	0	4,385	0	0	50.0% AC	39.2% CAP	10.8% FP
96000675	New Corp Yard Purch Of Prop 3 Way Spl W/Ss& Cy	410,657	0	160,923	205,329	0	0	44,405	0	0	50.0% AC	39.2% CAP	10.8% FP
96000676	Natomas Ditch Replacement	1,054,982	0	413,413	527,491	0	0	114,078	0	0	50.0% AC	39.2% CAP	10.8% FP
96000677	Mello Roos II Sewer	847,362	0	332,053	423,681	0	0	91,627	0	0	50.0% AC	39.2% CAP	10.8% FP
96000689	Water Well	113,939	0	44,649	56,970	0	0	12,321	0	0	50.0% AC	39.2% CAP	10.8% FP
96000690	Hannaford	312,096	0	122,300	156,048	0	0	33,748	0	0	50.0% AC	39.2% CAP	10.8% FP
96000691	Water Line To Davies Park 407 And 410	41,854	0	16,401	20,927	0	0	4,526	0	0	50.0% AC	39.2% CAP	10.8% FP
96000692	Mello Roos III	417,916	0	163,768	208,958	0	0	45,190	0	0	50.0% AC	39.2% CAP	10.8% FP
96000725	Mello Roos Iv Broadstone See Ss93-11	154,485	0	60,538	77,243	0	0	16,705	0	0	50.0% AC	39.2% CAP	10.8% FP
96000727	Amida Arrow Board #685	5,778	0	2,264	2,889	0	0	625	0	0	50.0% AC	39.2% CAP	10.8% FP
96000729	Zieman Tilt Trailer Split #663	5,350	0	2,096	2,675	0	0	578	0	0	50.0% AC	39.2% CAP	10.8% FP
96000733	Natomas Ditch Willow Creek	12,393	0	4,856	6,197	0	0	1,340	0	0	50.0% AC	39.2% CAP	10.8% FP

			Commodity (COMM)	Capacity (CAP)	Customer Related: Actual Customer (AC)	Customer Related: Cust. Acctg. (WCA)	Customer Related: Equivalent Meter & Svs (EMS)	Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Allocation		
96000735	Generator For Treatment Plant	14,356	0	5,625	7,178	0	0	1,552	0	0	50.0% AC	39.2% CAP	10.8% FP
96000743	Broadstone II Water Infrastr Contrib Capital	267,415	0	104,791	133,708	0	0	28,916	0	0	50.0% AC	39.2% CAP	10.8% FP
96000744	Cobble Hills Water Infrastru Contrib Capital	212,509	0	83,275	106,255	0	0	22,979	0	0	50.0% AC	39.2% CAP	10.8% FP
96000754	Prairie Oaks Water Infrastr	596,850	0	233,886	298,425	0	0	64,539	0	0	50.0% AC	39.2% CAP	10.8% FP
97000266	Parkway Water Facilities Developer Contribution	41,071	0	16,094	20,536	0	0	4,441	0	0	50.0% AC	39.2% CAP	10.8% FP
97000267	Willow Creek Water Facilities Developer Contributi	95,982	0	37,612	47,991	0	0	10,379	0	0	50.0% AC	39.2% CAP	10.8% FP
97000269	Ridgeview Water Facilities Developer Contribution	198,760	0	77,888	99,380	0	0	21,492	0	0	50.0% AC	39.2% CAP	10.8% FP
98000212	Briggs Ranch 2C Water Facilities Developer Contrib	50,000	0	19,593	25,000	0	0	5,407	0	0	50.0% AC	39.2% CAP	10.8% FP
98000214	Broadstone 2, Vlll 4 Water Facilities Devel Contrb	150,740	0	59,070	75,370	0	0	16,300	0	0	50.0% AC	39.2% CAP	10.8% FP
98000216	Broadstone Village Center Water Fac Devel Contrib	23,400	0	9,170	11,700	0	0	2,530	0	0	50.0% AC	39.2% CAP	10.8% FP
98000218	Broadstone Bentley Sq West Water Fac Devel Contrib	129,686	0	50,820	64,843	0	0	14,023	0	0	50.0% AC	39.2% CAP	10.8% FP
98000220	Coventry At Natoma Station Water Fac Devel Contrib	85,132	0	33,360	42,566	0	0	9,206	0	0	50.0% AC	39.2% CAP	10.8% FP
98000222	Folsom Auto Mall, Phase II Water Fac Devel Contrib	179,240	0	70,238	89,620	0	0	19,382	0	0	50.0% AC	39.2% CAP	10.8% FP
98000224	Prairie Oaks Ranch, Unit 7 Water Fac Devel Contrib	65,775	0	25,775	32,888	0	0	7,112	0	0	50.0% AC	39.2% CAP	10.8% FP
98000226	Prairie Oaks Ranch,Ph II,Unit 2 Water Fac Dev Cont	64,950	0	25,452	32,475	0	0	7,023	0	0	50.0% AC	39.2% CAP	10.8% FP
98000228	Prairie Oaks Ranch,Ph II,Unit 5 Water Fac Dev Cont	63,290	0	24,801	31,645	0	0	6,844	0	0	50.0% AC	39.2% CAP	10.8% FP
99000067	1998 Wanco Message Board #444	24,973	0	9,786	12,486	0	0	2,700	0	0	50.0% AC	39.2% CAP	10.8% FP
99000076	1998 Ch&E Pump #449 Portable Trash	19,996	0	7,836	9,998	0	0	2,162	0	0	50.0% AC	39.2% CAP	10.8% FP
99000179	Broadstone Unit 2, Vlll 5 Dev Contrib (Water)	408,374	0	160,028	204,187	0	0	44,159	0	0	50.0% AC	39.2% CAP	10.8% FP
99000181	Bentley Square East Developer Contribs (Water)	103,859	0	40,699	51,930	0	0	11,231	0	0	50.0% AC	39.2% CAP	10.8% FP
99000183	Broadstone Unit 2, Vlll 9-A Dev Contribs (Water)	152,342	0	59,698	76,171	0	0	16,473	0	0	50.0% AC	39.2% CAP	10.8% FP
99000185	Broadstone Unit 2 Vlll 9-B Dev Contribs (Water)	142,094	0	55,682	71,047	0	0	15,365	0	0	50.0% AC	39.2% CAP	10.8% FP
99000187	Broadstone Unit 2 Vlll 8 Developer Cont (Water)	264,690	0	103,723	132,345	0	0	28,622	0	0	50.0% AC	39.2% CAP	10.8% FP
99000189	Broadstone Power Center Developer Contrib (Water)	495,412	0	194,136	247,706	0	0	53,570	0	0	50.0% AC	39.2% CAP	10.8% FP
99000191	Broadstone Corporate Center Developer Cont (Water)	26,865	0	10,528	13,433	0	0	2,905	0	0	50.0% AC	39.2% CAP	10.8% FP
99000193	Cresleigh At Natoma Station Developer Cont (Water)	161,443	0	63,264	80,722	0	0	17,457	0	0	50.0% AC	39.2% CAP	10.8% FP
99000195	Parkway Unit A2-A, A2-B Developer Contribs (Water)	117,420	0	46,013	58,710	0	0	12,697	0	0	50.0% AC	39.2% CAP	10.8% FP
99000197	Parkway Unit B2 Developer Contributions (Water)	85,080	0	33,340	42,540	0	0	9,200	0	0	50.0% AC	39.2% CAP	10.8% FP
99000199	Parkway Unit B3 Developer Contributions (Water)	62,080	0	24,327	31,040	0	0	6,713	0	0	50.0% AC	39.2% CAP	10.8% FP
99000201	Prairie Oaks Unit 2 Phase III Dev Cont (Water)	79,075	0	30,987	39,538	0	0	8,551	0	0	50.0% AC	39.2% CAP	10.8% FP
99000203	Prairie Oaks Unit 4 Developer Contribution (Water)	160,900	0	63,051	80,450	0	0	17,399	0	0	50.0% AC	39.2% CAP	10.8% FP
99000205	Prairie Oaks Unit 5 Phase III Dev Contrib (Water)	89,980	0	35,260	44,990	0	0	9,730	0	0	50.0% AC	39.2% CAP	10.8% FP
99000207	Prairie Oaks Unit 8 Developer Contribution (Water)	49,902	0	19,555	24,951	0	0	5,396	0	0	50.0% AC	39.2% CAP	10.8% FP
99000209	Prairie Oaks Unit 9 Developer Contribution (Water)	178,690	0	70,023	89,345	0	0	19,322	0	0	50.0% AC	39.2% CAP	10.8% FP
99000211	Prairie Oaks Unit 11 Developer Contribs (Water)	36,996	0	14,498	18,498	0	0	4,000	0	0	50.0% AC	39.2% CAP	10.8% FP
99000213	Sun Country Unit II Developer Contribution (Water)	92,354	0	36,191	46,177	0	0	9,986	0	0	50.0% AC	39.2% CAP	10.8% FP
000002460001	San Juan Pump Station Upgrade	39,726	0	39,726	0	0	0	0	0	0	100.0% CAP		
000002460002	San Juan Pump Station Upgrade	3,881	0	3,881	0	0	0	0	0	0	100.0% CAP		
000002460003	San Juan Pump Station Upgrade	76,701	0	76,701	0	0	0	0	0	0	100.0% CAP		
000002460004	San Juan Pump Station Upgrade	47,736	0	47,736	0	0	0	0	0	0	100.0% CAP		
000002460005	San Juan Pump Station Upgrade	1,216	0	1,216	0	0	0	0	0	0	100.0% CAP		
000002470001	Water System Master Plan Imp	297,536	0	116,595	148,768	0	0	32,173	0	0	50.0% AC	39.2% CAP	10.8% FP
000002470002	Water System Master Plan Imp	132,124	0	51,775	66,062	0	0	14,287	0	0	50.0% AC	39.2% CAP	10.8% FP
000002470003	Water System Master Plan Imp	40,281	0	15,785	20,141	0	0	4,356	0	0	50.0% AC	39.2% CAP	10.8% FP
010001020001	Natoma Pipeline Phase Ii	163	0	64	81	0	0	18	0	0	50.0% AC	39.2% CAP	10.8% FP
010001020002	Natoma Pipeline Phase Ii	37,074	0	14,528	18,537	0	0	4,009	0	0	50.0% AC	39.2% CAP	10.8% FP
040001010001	Water Sampling Stations	22,565	0	8,843	11,283	0	0	2,440	0	0	50.0% AC	39.2% CAP	10.8% FP
050000710001	Ashland Pump Stn Const	10,682	0	4,186	5,341	0	0	1,155	0	0	50.0% AC	39.2% CAP	10.8% FP
060000750001	Willow Hill Raw Water Line - Second Valve	106,426	0	41,705	53,213	0	0	11,508	0	0	50.0% AC	39.2% CAP	10.8% FP
060000750002	Willow Hill Raw Water Line - Second Valve	11,323	0	4,437	5,662	0	0	1,224	0	0	50.0% AC	39.2% CAP	10.8% FP
060000760001	Water System Flow Control Station (R'Bow Bridge)	323,474	0	126,759	161,737	0	0	34,978	0	0	50.0% AC	39.2% CAP	10.8% FP
060000760002	Water System Flow Control Station (R'Bow Bridge)	88,523	0	34,689	44,262	0	0	9,572	0	0	50.0% AC	39.2% CAP	10.8% FP

City of Folsom
Water Rate Study
Exhibit 12
Functionalization and Allocation of Net Plant In Service

			Commodity (COMM)	Capacity (CAP)	Customer Related: Actual Customer (AC)	Customer Related: Cust. Acctg. (WCA)	Customer Related: Equivalent Meter & Svs (EMS)	Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Allocation
060000770001	Water Main Replacement (Stafford Street)	811,572	0	318,029	405,786	0	0	87,757	0	0	50.0% AC 39.2% CAP 10.8% FP
060000770002	Water Main Replacement (Stafford Street)	713,046	0	279,419	356,523	0	0	77,103	0	0	50.0% AC 39.2% CAP 10.8% FP
060000770003	Water Main Replacement (Stafford Street)	1,975,417	0	774,102	987,709	0	0	213,607	0	0	50.0% AC 39.2% CAP 10.8% FP
060000770004	Water Main Replacement (Stafford Street)	362,940	0	142,224	181,470	0	0	39,246	0	0	50.0% AC 39.2% CAP 10.8% FP
060001260001	2006 Ford 350 Veh # 951	17,953	0	7,035	8,977	0	0	1,941	0	0	50.0% AC 39.2% CAP 10.8% FP
960007330001	Natomas Ditch Willow Creek	311,481	0	122,059	155,740	0	0	33,681	0	0	50.0% AC 39.2% CAP 10.8% FP
960007330002	Natomas Ditch Willow Creek	36,057	0	14,130	18,029	0	0	3,899	0	0	50.0% AC 39.2% CAP 10.8% FP
990000760001	1998 Ch&E Pump #449 Portable Trash	1,883	0	738	941	0	0	204	0	0	50.0% AC 39.2% CAP 10.8% FP
TOTAL WATER SERVICES		$86,974,325	$0	$34,185,335	$43,402,533	$0	$0	$9,386,457	$0	$0	
Utilities											
06000024	2006 Ford Explorer Veh#932	$21,322	$4,916	$8,555	$6,455	$0	$0	$1,396	$0	$0	As Above Plant in Service
08000036	2008 Ford Escape Veh# 1043	20,532	4,733	8,238	6,216	0	0	1,344	0	0	As Above Plant in Service
TOTAL UTILITIES		$41,854	$9,649	$16,794	$12,671	$0	$0	$2,740	$0	$0	
Water Quality											
05000012	2005 Chevy Truck Veh#820 / 1/2 Ton	$18,595	$4,287	$7,461	$5,629	$0	$0	$1,217	$0	$0	As Above Plant in Service
TOTAL WATER QUALITY		$18,595	$4,287	$7,461	$5,629	$0	$0	$1,217	$0	$0	
TOTAL PLANT BEFORE GENERAL PLANT		**$143,427,712**	**$33,065,837**	**$57,550,627**	**$43,420,833**	**$0**	**$0**	**$9,390,415**	**$0**	**$0**	
Percent Plant Before General Plant		*100.0%*	*23.1%*	*40.1%*	*30.3%*	*0.0%*	*0.0%*	*6.5%*	*0.0%*	*0.0%*	*Factor PBG*
General Plant		$0	$0	$0	$0	$0	$0	$0	$0	$0	As Factor PBG
TOTAL GENERAL PLANT		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	
TOAL PLANT IN SERVICE		**$143,427,712**	**$33,065,837**	**$57,550,627**	**$43,420,833**	**$0**	**$0**	**$9,390,415**	**$0**	**$0**	
% PLANT IN SERVICE		***100.0%***	***23.1%***	***40.1%***	***30.3%***	***0.0%***	***0.0%***	***6.5%***	***0.0%***	***0.0%***	

City of Folsom
Water Rate Study
Exhibit 13
Distribution Storage

Fire Protection

	Max Gal	Max Minutes	Total
Fire Flow Requirements [1]	3,000	180	540,000
Storage Capacity - [2]		34,500,000	34,500,000
% Public Fire Protection			1.6%
% Capacity			98.4%

[1] Max gallon and minutes from 2016 Water Master Plan Update, page 2, Table 1.
[2] 2016 Water Master Plan Update, page 4-7, Table 4-4

Source of Supply

Capacity/Commodity			
Average Day (MGD)	17.87	COMM	58.6%
Peak Day (MGD)	30.49	(1-COMM)=CAP	41.4%

Distribution Main Analysis

Main Size	Length (ft)	Replcmt $	Total
Pre 1999 - 6"	182,672	$120.00	$21,920,611
Pre 1999 - 8"	889,742	160.00	142,358,758
4"	1,045	80.00	83,600
6"	34,575	120.00	4,149,000
8"	168,405	160.00	26,944,800
10"	47,505	200.00	9,501,000
12"	112,616	240.00	27,027,840
14"	21,101	320.00	6,752,320
16"	23,979	360.00	8,632,440
18"	1,241	400.00	496,400
18"	22,467	480.00	10,784,160
24"	5,291	600.00	3,174,600
Total 1" - 12"	**1,510,639**		**$261,825,529**

Customer %

(1) Total pipe @ 4" Equivalent	$114,924,800	
	50.0%	

Capacity %

(2) Cost for 8" through 10"	$178,804,558	
(3) Larger at 12" cost	$27,027,840	
1+2-3/4	**39.2%**	

Fire Protection

1-comm-cap	**10.8%**

City of Folsom
Water Rate Study
Exhibit 14
Functionalization and Allocation of the Revenue Requirement

				Customer Related						
					Weighted for -					
	FY 2021	Commodity *(COM)*	Capacity *(CAP)*	Actual Customer *(AC)*	Cust. Acctg. *(WCA)*	Equivalent Meter & Svs *(EMS)*	Public Fire Protection *(FP)*	Revenue Related *(RR)*	Direct Assign. *(DA)*	Basis of Allocation
Engineering										
Permanent Salaries	$567,515	$130,835	$227,716	$171,808	$0	$0	$37,156	$0	$0	As Plant in Service
Temporary Salaries	0	0	0	0	0	0	0	0	0	As Plant in Service
Overtime	0	0	0	0	0	0	0	0	0	As Plant in Service
Annual Leave Account	7,369	1,699	2,957	2,231	0	0	482	0	0	As Plant in Service
Uniform Allowance	0	0	0	0	0	0	0	0	0	As Plant in Service
FICA	43,073	9,930	17,283	13,040	0	0	2,820	0	0	As Plant in Service
Group Insurance	0	0	0	0	0	0	0	0	0	As Plant in Service
Uniform Expense	0	0	0	0	0	0	0	0	0	As Plant in Service
PERS	241,036	55,568	96,716	72,970	0	0	15,781	0	0	As Plant in Service
HRA	0	0	0	0	0	0	0	0	0	As Plant in Service
Worker's Compensation	0	0	0	0	0	0	0	0	0	As Plant in Service
Deferred Compensation	16,855	3,886	6,763	5,103	0	0	1,104	0	0	As Plant in Service
Accrued Leave Current	0	0	0	0	0	0	0	0	0	As Plant in Service
Auto Allowance	1,872	432	751	567	0	0	123	0	0	As Plant in Service
Employee Assistance Program	0	0	0	0	0	0	0	0	0	As Plant in Service
Post Employment Benefits	0	0	0	0	0	0	0	0	0	As Plant in Service
Combined Benefits	108,656	25,049	43,598	32,894	0	0	7,114	0	0	As Plant in Service
Printing	0	0	0	0	0	0	0	0	0	As Plant in Service
Dues & Publication	181,685	41,886	72,901	55,003	0	0	11,895	0	0	As Plant in Service
Advertising	508	117	204	154	0	0	33	0	0	As Plant in Service
Rents	4,060	936	1,629	1,229	0	0	266	0	0	As Plant in Service
Training & Education	2,030	468	815	615	0	0	133	0	0	As Plant in Service
Postage	33,210	0	0	33,210	0	0	0	0	0	100.0% AC
Disposal Permit	0	0	0	0	0	0	0	0	0	As Plant in Service
Finance Charges	31,059	0	0	31,059	0	0	0	0	0	100.0% AC
Telephone	2,080	480	835	630	0	0	136	0	0	As Plant in Service
Cellular	2,600	599	1,043	787	0	0	170	0	0	As Plant in Service
Internet	0	0	0	0	0	0	0	0	0	As Plant in Service
Radios	0	0	0	0	0	0	0	0	0	As Plant in Service
Travel & Meetings	5,075	1,170	2,036	1,536	0	0	332	0	0	As Plant in Service
Utilities	0	0	0	0	0	0	0	0	0	100.0% COMM
Contracts (San Juan) [1]	774,190	453,753	320,437	0	0	0	0	0	0	0.0% EMS | 58.6% COMM 41.4% CAP
Contracts - Other [1]	360,855	211,497	149,358	0	0	0	0	0	0	0.0% EMS | 58.6% COMM 41.4% CAP
Contracts - Project Construct	0	0	0	0	0	0	0	0	0	58.6% COMM 41.4% CAP
Contracts - Temporary Services	0	0	0	0	0	0	0	0	0	As Plant in Service
Contracts - Legal	210,000	210,000	0	0	0	0	0	0	0	100.0% COMM
Contracts - Pre-Employment	0	0	0	0	0	0	0	0	0	As Plant in Service
Contracts - Licensing Requirements	0	0	0	0	0	0	0	0	0	As Plant in Service
Contracts - Lab Services	0	0	0	0	0	0	0	0	0	As Plant in Service
Maintenance - Building	0	0	0	0	0	0	0	0	0	As Plant in Service
Maintenance - Vehicle	518	119	208	157	0	0	34	0	0	As Plant in Service
Maintenance - Equipment	0	0	0	0	0	0	0	0	0	As Plant in Service
Computer - Hardware	22,770	5,249	9,137	6,893	0	0	1,491	0	0	As Plant in Service
Computer - Software	9,833	2,267	3,945	2,977	0	0	644	0	0	As Plant in Service
Computers - Software License & Maint	14,490	3,341	5,814	4,387	0	0	949	0	0	As Plant in Service
Office Supplies	0	0	0	0	0	0	0	0	0	As Plant in Service
Departmental Supplies	0	0	0	0	0	0	0	0	0	As Plant in Service
Petroleum Products	0	0	0	0	0	0	0	0	0	As Plant in Service
Chemicals	0	0	0	0	0	0	0	0	0	100.0% COMM
Small Equipment	0	0	0	0	0	0	0	0	0	As Plant in Service
Taxes & In Lieu	0	0	0	0	0	0	0	0	0	As Plant in Service
Replacement Charges	0	0	0	0	0	0	0	0	0	As Plant in Service
Debt Service - Principal	0	0	0	0	0	0	0	0	0	As Plant in Service
Debt Service - Interest	0	0	0	0	0	0	0	0	0	As Plant in Service
Debt Service - Fiscal Services	0	0	0	0	0	0	0	0	0	As Plant in Service
Debt Service - Cost of Issuance	0	0	0	0	0	0	0	0	0	As Plant in Service
Unemployment Insurance	0	0	0	0	0	0	0	0	0	As Plant in Service
Liability	14,429	3,327	5,790	4,368	0	0	945	0	0	As Plant in Service
Retiree's Insurance	0	0	0	0	0	0	0	0	0	As Plant in Service
Other Expense	0	0	0	0	0	0	0	0	0	As Plant in Service
Other - Bad Debt Expense	0	0	0	0	0	0	0	0	0	As Plant in Service
Capital Outlay - Buildings	0	0	0	0	0	0	0	0	0	As Plant in Service
Capital Outlay - Other Improv	0	0	0	0	0	0	0	0	0	As Plant in Service
Capital Outlay - Vehicles	215,000	49,566	86,269	65,088	0	0	14,076	0	0	As Plant in Service
Capital Outlay - Equipment	0	0	0	0	0	0	0	0	0	As Plant in Service
Capital Outlay - Hydrants	0	0	0	0	0	0	0	0	0	As Plant in Service
Capital Outlay - Construction	0	0	0	0	0	0	0	0	0	As Plant in Service
Transfers	0	0	0	0	0	0	0	0	0	As Plant in Service
Total Engineering	$2,870,767	$1,212,173	$1,056,206	$506,704	$0	$0	$93,283	$0	$0	

				Customer Related						
					Weighted for -					
	FY 2021	Commodity *(COM)*	Capacity *(CAP)*	Actual Customer *(AC)*	Cust. Acctg. *(WCA)*	Equivalent Meter & Svs *(EMS)*	Public Fire Protection *(FP)*	Revenue Related *(RR)*	Direct Assign. *(DA)*	Basis of Allocation
Distribution										
Permanent Salaries	$536,129	$0	$210,726	$267,543	$0	$0	$57,860	$0	$0	As Water Services Plant
Temporary Salaries	0	0	0	0	0	0	0	0	0	As Water Services Plant
Overtime	42,000	0	16,508	20,959	0	0	4,533	0	0	As Water Services Plant
Annual Leave Account	6,930	0	2,724	3,458	0	0	748	0	0	As Water Services Plant
Uniform Allowance	3,744	0	1,472	1,868	0	0	404	0	0	As Water Services Plant
FICA	42,167	0	16,574	21,042	0	0	4,551	0	0	As Water Services Plant
Group Insurance	0	0	0	0	0	0	0	0	0	As Water Services Plant
Uniform Expense	0	0	0	0	0	0	0	0	0	As Water Services Plant
PERS	247,206	0	97,164	123,362	0	0	26,679	0	0	As Water Services Plant
HRA	0	0	0	0	0	0	0	0	0	As Water Services Plant
Worker's Compensation	0	0	0	0	0	0	0	0	0	As Water Services Plant
Deferred Compensation	8,347	0	3,281	4,165	0	0	901	0	0	As Water Services Plant
Accrued Leave Current	0	0	0	0	0	0	0	0	0	As Water Services Plant
Auto Allowance	0	0	0	0	0	0	0	0	0	As Water Services Plant
Employee Assistance Program	0	0	0	0	0	0	0	0	0	As Water Services Plant
Post Employment Benefits	0	0	0	0	0	0	0	0	0	As Water Services Plant
Combined Benefits	163,325	0	64,195	81,503	0	0	17,626	0	0	As Water Services Plant
Printing	1,538	0	604	767	0	0	166	0	0	As Water Services Plant
Dues & Publication	2,944	0	1,157	1,469	0	0	318	0	0	As Water Services Plant
Advertising	0	0	0	0	0	0	0	0	0	As Water Services Plant
Rents	20,300	0	7,979	10,130	0	0	2,191	0	0	As Water Services Plant
Training & Education	5,075	0	1,995	2,533	0	0	548	0	0	As Water Services Plant
Postage	615	0	0	615	0	0	0	0	0	100.0% AC
Disposal Permit	0	0	0	0	0	0	0	0	0	As Water Services Plant
Finance Charges	0	0	0	0	0	0	0	0	0	As Water Services Plant
Telephone	2,496	0	981	1,246	0	0	269	0	0	As Water Services Plant
Cellular	3,744	0	1,472	1,868	0	0	404	0	0	As Water Services Plant
Internet	0	0	0	0	0	0	0	0	0	As Water Services Plant
Radios	2,070	0	814	1,033	0	0	223	0	0	As Water Services Plant
Travel & Meetings	2,030	0	798	1,013	0	0	219	0	0	As Water Services Plant
Utilities	2,653	2,653	0	0	0	0	0	0	0	100.0% COMM
Contracts	10,500	0	4,127	5,240	0	0	1,133	0	0	As Water Services Plant
Contracts - Project Construct	0	0	0	0	0	0	0	0	0	As Water Services Plant
Contracts - Temporary Services	0	0	0	0	0	0	0	0	0	As Water Services Plant
Contracts - Legal	0	0	0	0	0	0	0	0	0	As Water Services Plant
Contracts - Pre-Employment	0	0	0	0	0	0	0	0	0	As Water Services Plant
Contracts - Licensing Requirements	1,575	0	619	786	0	0	170	0	0	As Water Services Plant
Contracts - Lab Services	0	0	0	0	0	0	0	0	0	As Water Services Plant
Maintenance - Building	1,015	0	399	507	0	0	110	0	0	As Water Services Plant
Maintenance - Vehicle	25,875	0	10,170	12,912	0	0	2,792	0	0	As Water Services Plant
Maintenance - Equipment	10,350	0	4,068	5,165	0	0	1,117	0	0	As Water Services Plant
Computer - Hardware	0	0	0	0	0	0	0	0	0	As Water Services Plant
Computer - Software	0	0	0	0	0	0	0	0	0	As Water Services Plant
Computers - Software License & Maint	0	0	0	0	0	0	0	0	0	As Water Services Plant
Office Supplies	2,563	0	1,007	1,279	0	0	277	0	0	As Water Services Plant
Departmental Supplies	115,825	0	45,525	57,800	0	0	12,500	0	0	As Water Services Plant
Petroleum Products	41,000	0	16,115	20,460	0	0	4,425	0	0	As Water Services Plant
Chemicals	0	0	0	0	0	0	0	0	0	100.0% COMM
Small Equipment	0	0	0	0	0	0	0	0	0	As Water Services Plant
Taxes & In Lieu	2,030	0	798	1,013	0	0	219	0	0	As Water Services Plant
Replacement Charges	0	0	0	0	0	0	0	0	0	As Water Services Plant
Debt Service - Principal	0	0	0	0	0	0	0	0	0	As Water Services Plant
Debt Service - Interest	0	0	0	0	0	0	0	0	0	As Water Services Plant
Debt Service - Fiscal Services	0	0	0	0	0	0	0	0	0	As Water Services Plant
Debt Service - Cost of Issuance	0	0	0	0	0	0	0	0	0	As Water Services Plant
Unemployment Insurance	0	0	0	0	0	0	0	0	0	As Water Services Plant
Liability	22,445	0	8,822	11,201	0	0	2,422	0	0	As Water Services Plant
Retiree's Insurance	199,892	0	78,568	99,752	0	0	21,573	0	0	As Water Services Plant
Other Expense	0	0	0	0	0	0	0	0	0	As Water Services Plant
Other - Bad Debt Expense	0	0	0	0	0	0	0	0	0	As Water Services Plant
Capital Outlay - Buildings	0	0	0	0	0	0	0	0	0	As Water Services Plant
Capital Outlay - Other Improv	0	0	0	0	0	0	0	0	0	As Water Services Plant
Capital Outlay - Vehicles	0	0	0	0	0	0	0	0	0	As Water Services Plant
Capital Outlay - Equipment	0	0	0	0	0	0	0	0	0	As Water Services Plant
Capital Outlay - Hydrants	0	0	0	0	0	0	0	0	0	As Water Services Plant
Capital Outlay - Construction	0	0	0	0	0	0	0	0	0	As Water Services Plant
Transfers	0	0	0	0	0	0	0	0	0	As Water Services Plant
Total Distribution	$1,526,381	$2,653	$598,661	$760,689	$0	$0	$164,378	$0	$0	

		Customer Related								
					Weighted for -					
	FY 2021	Commodity *(COM)*	Capacity *(CAP)*	Actual Customer *(AC)*	Cust. Acctg. *(WCA)*	Equivalent Meter & Svs *(EMS)*	Public Fire Protection *(FP)*	Revenue Related *(RR)*	Direct Assign. *(DA)*	Basis of Allocation
Water Treatment Plant										
Permanent Salaries	$746,011	$437,237	$308,774	$0	$0	$0	$0	$0	$0	As Water Treatment Plant
Temporary Salaries	21,000	12,308	8,692	0	0	0	0	0	0	As Water Treatment Plant
Overtime	31,500	18,462	13,038	0	0	0	0	0	0	As Water Treatment Plant
Annual Leave Account	10,345	6,063	4,282	0	0	0	0	0	0	As Water Treatment Plant
Uniform Allowance	6,448	3,779	2,669	0	0	0	0	0	0	As Water Treatment Plant
FICA	62,986	36,916	26,070	0	0	0	0	0	0	As Water Treatment Plant
Group Insurance	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Uniform Expense	2,080	1,219	861	0	0	0	0	0	0	As Water Treatment Plant
PERS	323,982	189,886	134,096	0	0	0	0	0	0	As Water Treatment Plant
HRA	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Worker's Compensation	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Deferred Compensation	4,368	2,560	1,808	0	0	0	0	0	0	As Water Treatment Plant
Accrued Leave Current	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Auto Allowance	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Employee Assistance Program	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Post Employment Benefits	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Combined Benefits	212,202	124,371	87,830	0	0	0	0	0	0	As Water Treatment Plant
Printing	1,230	721	509	0	0	0	0	0	0	As Water Treatment Plant
Dues & Publication	609	357	252	0	0	0	0	0	0	As Water Treatment Plant
Advertising	254	149	105	0	0	0	0	0	0	As Water Treatment Plant
Rents	9,135	5,354	3,781	0	0	0	0	0	0	As Water Treatment Plant
Training & Education	10,150	5,949	4,201	0	0	0	0	0	0	As Water Treatment Plant
Postage	308	180	127	0	0	0	0	0	0	As Water Treatment Plant
Disposal Permit	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Finance Charges	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Telephone	8,736	5,120	3,616	0	0	0	0	0	0	As Water Treatment Plant
Cellular	1,560	914	646	0	0	0	0	0	0	As Water Treatment Plant
Internet	1,352	792	560	0	0	0	0	0	0	As Water Treatment Plant
Radios	1,035	607	428	0	0	0	0	0	0	As Water Treatment Plant
Travel & Meetings	3,045	1,785	1,260	0	0	0	0	0	0	As Water Treatment Plant
Utilities (SMUD)	802,337	470,250	332,087	0	0	0	0	0	0	As Water Treatment Plant
Contracts	91,875	53,848	38,027	0	0	0	0	0	0	As Water Treatment Plant
Contracts - Project Construct	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Contracts - Temporary Services	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Contracts - Legal	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Contracts - Pre-Employment	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Contracts - Licensing Requirements	1,260	738	522	0	0	0	0	0	0	As Water Treatment Plant
Contracts - Lab Services	52,500	30,770	21,730	0	0	0	0	0	0	As Water Treatment Plant
Maintenance - Building	15,225	8,923	6,302	0	0	0	0	0	0	As Water Treatment Plant
Maintenance - Vehicle	8,280	4,853	3,427	0	0	0	0	0	0	As Water Treatment Plant
Maintenance - Equipment	349,830	205,035	144,795	0	0	0	0	0	0	As Water Treatment Plant
Computer - Hardware	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Computer - Software	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Computers - Software License & Maint	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Office Supplies	5,125	3,004	2,121	0	0	0	0	0	0	As Water Treatment Plant
Departmental Supplies	140,938	82,603	58,334	0	0	0	0	0	0	As Water Treatment Plant
Petroleum Products	16,400	9,612	6,788	0	0	0	0	0	0	As Water Treatment Plant
Chemicals	424,200	248,624	175,576	0	0	0	0	0	0	As Water Treatment Plant
Small Equipment	10,350	6,066	4,284	0	0	0	0	0	0	As Water Treatment Plant
Taxes & Permits	65,975	38,668	27,307	0	0	0	0	0	0	As Water Treatment Plant
Replacement Charges	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Debt Service - Principal	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Debt Service - Interest	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Debt Service - Fiscal Services	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Debt Service - Cost of Issuance	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Unemployment Insurance	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Liability	28,858	16,913	11,944	0	0	0	0	0	0	As Water Treatment Plant
Retiree's Insurance	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Other Expense	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Other - Bad Debt Expense	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Capital Outlay - Buildings	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Capital Outlay - Other Improv	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Capital Outlay - Vehicles	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Capital Outlay - Equipment	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Capital Outlay - Hydrants	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Capital Outlay - Construction	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Transfers	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Total Water Treatment Plant	$3,471,488	$2,034,639	$1,436,849	$0	$0	$0	$0	$0	$0	

	FY 2021	Commodity (COM)	Capacity (CAP)	Customer Related: Actual Customer (AC)	Customer Related: Weighted for - Cust. Acctg. (WCA)	Customer Related: Weighted for - Equivalent Meter & Svs (EMS)	Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Allocation
Water Quality										
Permanent Salaries	$636,613	$373,119	$263,494	$0	$0	$0	$0	$0	$0	As Water Treatment Plant
Temporary Salaries	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Overtime	42,000	24,616	17,384	0	0	0	0	0	0	As Water Treatment Plant
Annual Leave Account	7,078	4,148	2,930	0	0	0	0	0	0	As Water Treatment Plant
Uniform Allowance	3,120	1,829	1,291	0	0	0	0	0	0	As Water Treatment Plant
FICA	52,587	30,822	21,766	0	0	0	0	0	0	As Water Treatment Plant
Group Insurance	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Uniform Expense	600	352	248	0	0	0	0	0	0	As Water Treatment Plant
PERS	269,830	158,148	111,683	0	0	0	0	0	0	As Water Treatment Plant
HRA	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Worker's Compensation	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Deferred Compensation	14,760	8,651	6,109	0	0	0	0	0	0	As Water Treatment Plant
Accrued Leave Current	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Auto Allowance	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Employee Assistance Program	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Post Employment Benefits	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Combined Benefits	164,958	96,682	68,276	0	0	0	0	0	0	As Water Treatment Plant
Printing	3,075	1,802	1,273	0	0	0	0	0	0	As Water Treatment Plant
Dues & Publication	2,233	1,309	924	0	0	0	0	0	0	As Water Treatment Plant
Advertising	406	238	168	0	0	0	0	0	0	As Water Treatment Plant
Rents	4,568	2,677	1,890	0	0	0	0	0	0	As Water Treatment Plant
Training & Education	3,045	1,785	1,260	0	0	0	0	0	0	As Water Treatment Plant
Postage	513	300	212	0	0	0	0	0	0	As Water Treatment Plant
Disposal Permit	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Finance Charges	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Telephone	520	305	215	0	0	0	0	0	0	As Water Treatment Plant
Cellular	3,328	1,951	1,377	0	0	0	0	0	0	As Water Treatment Plant
Internet	1,560	914	646	0	0	0	0	0	0	As Water Treatment Plant
Radios	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Travel & Meetings	1,015	595	420	0	0	0	0	0	0	As Water Treatment Plant
Utilities	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Contracts	84,000	49,232	34,768	0	0	0	0	0	0	As Water Treatment Plant
Contracts - Project Construct	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Contracts - Temporary Services	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Contracts - Legal	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Contracts - Pre-Employment	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Contracts - Licensing Requirements	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Contracts - Lab Services	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Maintenance - Building	6,090	3,569	2,521	0	0	0	0	0	0	As Water Treatment Plant
Maintenance - Vehicle	8,280	4,853	3,427	0	0	0	0	0	0	As Water Treatment Plant
Maintenance - Equipment	139,208	81,590	57,618	0	0	0	0	0	0	As Water Treatment Plant
Computer - Hardware	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Computer - Software	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Computers - Software License & Maint	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Office Supplies	1,538	901	636	0	0	0	0	0	0	As Water Treatment Plant
Departmental Supplies	41,000	24,030	16,970	0	0	0	0	0	0	As Water Treatment Plant
Petroleum Products	15,375	9,011	6,364	0	0	0	0	0	0	As Water Treatment Plant
Chemicals	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Small Equipment	3,105	1,820	1,285	0	0	0	0	0	0	As Water Treatment Plant
Taxes & In Lieu	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Replacement Charges	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Debt Service - Principal	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Debt Service - Interest	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Debt Service - Fiscal Services	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Debt Service - Cost of Issuance	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Unemployment Insurance	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Liability	19,238	11,276	7,963	0	0	0	0	0	0	As Water Treatment Plant
Retiree's Insurance	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Other Expense	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Other - Bad Debt Expense	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Capital Outlay - Buildings	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Capital Outlay - Other Improv	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Capital Outlay - Vehicles	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Capital Outlay - Equipment	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Capital Outlay - Hydrants	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Capital Outlay - Construction	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Transfers	0	0	0	0	0	0	0	0	0	As Water Treatment Plant
Total Water Quality	$1,529,642	$896,523	$633,119	$0	$0	$0	$0	$0	$0	

		Customer Related								
					Weighted for -					
	FY 2021	Commodity *(COM)*	Capacity *(CAP)*	Actual Customer *(AC)*	Cust. Acctg. *(WCA)*	Equivalent Meter & Svs *(EMS)*	Public Fire Protection *(FP)*	Revenue Related *(RR)*	Direct Assign. *(DA)*	Basis of Allocation
Metering										
Permanent Salaries	$455,179	$0	$0	$0	$0	$455,179	$0	$0	$0	100.0% EMS
Temporary Salaries	0	0	0	0	0	0	0	0	0	100.0% EMS
Overtime	7,350	0	0	0	0	7,350	0	0	0	100.0% EMS
Annual Leave Account	5,929	0	0	0	0	5,929	0	0	0	100.0% EMS
Uniform Allowance	2,496	0	0	0	0	2,496	0	0	0	100.0% EMS
FICA	37,692	0	0	0	0	37,692	0	0	0	100.0% EMS
Group Insurance	0	0	0	0	0	0	0	0	0	100.0% EMS
Uniform Expense	0	0	0	0	0	0	0	0	0	100.0% EMS
PERS	206,865	0	0	0	0	206,865	0	0	0	100.0% EMS
HRA	0	0	0	0	0	0	0	0	0	100.0% EMS
Worker's Compensation	0	0	0	0	0	0	0	0	0	100.0% EMS
Deferred Compensation	8,178	0	0	0	0	8,178	0	0	0	100.0% EMS
Accrued Leave Current	0	0	0	0	0	0	0	0	0	100.0% EMS
Auto Allowance	0	0	0	0	0	0	0	0	0	100.0% EMS
Employee Assistance Program	0	0	0	0	0	0	0	0	0	100.0% EMS
Post Employment Benefits	0	0	0	0	0	0	0	0	0	100.0% EMS
Combined Benefits	125,769	0	0	0	0	125,769	0	0	0	100.0% EMS
Printing	615	0	0	0	0	615	0	0	0	100.0% EMS
Dues & Publication	1,117	0	0	0	0	1,117	0	0	0	100.0% EMS
Advertising	0	0	0	0	0	0	0	0	0	100.0% EMS
Rents	20,300	0	0	0	0	20,300	0	0	0	100.0% EMS
Training & Education	8,120	0	0	0	0	8,120	0	0	0	100.0% EMS
Postage	2,563	0	0	0	0	2,563	0	0	0	100.0% EMS
Disposal Permit	0	0	0	0	0	0	0	0	0	100.0% EMS
Finance Charges	0	0	0	0	0	0	0	0	0	100.0% EMS
Telephone	1,040	0	0	0	0	1,040	0	0	0	100.0% EMS
Cellular	2,288	0	0	0	0	2,288	0	0	0	100.0% EMS
Internet	11,128	0	0	0	0	11,128	0	0	0	100.0% EMS
Radios	0	0	0	0	0	0	0	0	0	100.0% EMS
Travel & Meetings	2,030	0	0	0	0	2,030	0	0	0	100.0% EMS
Utilities	14,540	0	0	0	0	14,540	0	0	0	100.0% EMS
Contracts	72,450	0	0	0	0	72,450	0	0	0	100.0% EMS
Contracts - Project Construct	0	0	0	0	0	0	0	0	0	100.0% EMS
Contracts - Temporary Services	0	0	0	0	0	0	0	0	0	100.0% EMS
Contracts - Legal	0	0	0	0	0	0	0	0	0	100.0% EMS
Contracts - Pre-Employment	0	0	0	0	0	0	0	0	0	100.0% EMS
Contracts - Licensing Requirements	630	0	0	0	0	630	0	0	0	100.0% EMS
Contracts - Lab Services	0	0	0	0	0	0	0	0	0	100.0% EMS
Maintenance - Building	50,750	0	0	0	0	50,750	0	0	0	100.0% EMS
Maintenance - Vehicle	6,210	0	0	0	0	6,210	0	0	0	100.0% EMS
Maintenance - Equipment	274,275	0	0	0	0	274,275	0	0	0	100.0% EMS
Computer - Hardware	0	0	0	0	0	0	0	0	0	100.0% EMS
Computer - Software	0	0	0	0	0	0	0	0	0	100.0% EMS
Computers - Software License & Maint	0	0	0	0	0	0	0	0	0	100.0% EMS
Office Supplies	1,025	0	0	0	0	1,025	0	0	0	100.0% EMS
Departmental Supplies	46,125	0	0	0	0	46,125	0	0	0	100.0% EMS
Petroleum Products	10,250	0	0	0	0	10,250	0	0	0	100.0% EMS
Chemicals	0	0	0	0	0	0	0	0	0	100.0% EMS
Small Equipment	3,105	0	0	0	0	3,105	0	0	0	100.0% EMS
Taxes & Permits	1,218	0	0	0	0	1,218	0	0	0	100.0% EMS
Replacement Charges	340,025	0	0	0	0	340,025	0	0	0	100.0% EMS
Debt Service - Principal	0	0	0	0	0	0	0	0	0	100.0% EMS
Debt Service - Interest	0	0	0	0	0	0	0	0	0	100.0% EMS
Debt Service - Fiscal Services	0	0	0	0	0	0	0	0	0	100.0% EMS
Debt Service - Cost of Issuance	0	0	0	0	0	0	0	0	0	100.0% EMS
Unemployment Insurance	0	0	0	0	0	0	0	0	0	100.0% EMS
Liability	16,032	0	0	0	0	16,032	0	0	0	100.0% EMS
Retiree's Insurance	0	0	0	0	0	0	0	0	0	100.0% EMS
Other Expense	0	0	0	0	0	0	0	0	0	100.0% EMS
Other - Bad Debt Expense	0	0	0	0	0	0	0	0	0	100.0% EMS
Capital Outlay - Buildings	0	0	0	0	0	0	0	0	0	100.0% EMS
Capital Outlay - Other Improv	0	0	0	0	0	0	0	0	0	100.0% EMS
Capital Outlay - Vehicles	0	0	0	0	0	0	0	0	0	100.0% EMS
Capital Outlay - Equipment	0	0	0	0	0	0	0	0	0	100.0% EMS
Capital Outlay - Hydrants	0	0	0	0	0	0	0	0	0	100.0% EMS
Capital Outlay - Construction	0	0	0	0	0	0	0	0	0	100.0% EMS
Transfers	0	0	0	0	0	0	0	0	0	100.0% EMS
Total Metering	$1,735,293	$0	$0	$0	$0	$1,735,293	$0	$0	$0	

		Customer Related								
					Weighted for -					
	FY 2021	Commodity *(COM)*	Capacity *(CAP)*	Actual Customer *(AC)*	Cust. Acctg. *(WCA)*	Equivalent Meter & Svs *(EMS)*	Public Fire Protection *(FP)*	Revenue Related *(RR)*	Direct Assign. *(DA)*	Basis of Allocation
Conservation										
Permanent Salaries	$209,187	$0	$209,187	$0	$0	$0	$0	$0	$0	100.0% CAP
Temporary Salaries	32,288	0	32,288	0	0	0	0	0	0	100.0% CAP
Overtime	5,250	0	5,250	0	0	0	0	0	0	100.0% CAP
Annual Leave Account	2,953	0	2,953	0	0	0	0	0	0	100.0% CAP
Uniform Allowance	936	0	936	0	0	0	0	0	0	100.0% CAP
FICA	17,026	0	17,026	0	0	0	0	0	0	100.0% CAP
Group Insurance	0	0	0	0	0	0	0	0	0	100.0% CAP
Uniform Expense	0	0	0	0	0	0	0	0	0	100.0% CAP
PERS	89,517	0	89,517	0	0	0	0	0	0	100.0% CAP
HRA	0	0	0	0	0	0	0	0	0	100.0% CAP
Worker's Compensation	0	0	0	0	0	0	0	0	0	100.0% CAP
Deferred Compensation	0	0	0	0	0	0	0	0	0	100.0% CAP
Accrued Leave Current	0	0	0	0	0	0	0	0	0	100.0% CAP
Auto Allowance	0	0	0	0	0	0	0	0	0	100.0% CAP
Employee Assistance Program	0	0	0	0	0	0	0	0	0	100.0% CAP
Post Employment Benefits	0	0	0	0	0	0	0	0	0	100.0% CAP
Combined Benefits	61,466	0	61,466	0	0	0	0	0	0	100.0% CAP
Printing	4,818	0	4,818	0	0	0	0	0	0	100.0% CAP
Dues & Publication	28,116	0	28,116	0	0	0	0	0	0	100.0% CAP
Advertising	17,255	0	17,255	0	0	0	0	0	0	100.0% CAP
Rents	9,135	0	9,135	0	0	0	0	0	0	100.0% CAP
Training & Education	5,075	0	5,075	0	0	0	0	0	0	100.0% CAP
Postage	7,688	0	7,688	0	0	0	0	0	0	100.0% CAP
Disposal Permit	0	0	0	0	0	0	0	0	0	100.0% CAP
Finance Charges	0	0	0	0	0	0	0	0	0	100.0% CAP
Telephone	1,040	0	1,040	0	0	0	0	0	0	100.0% CAP
Cellular	312	0	312	0	0	0	0	0	0	100.0% CAP
Internet	0	0	0	0	0	0	0	0	0	100.0% CAP
Radios	0	0	0	0	0	0	0	0	0	100.0% CAP
Travel & Meetings	3,553	0	3,553	0	0	0	0	0	0	100.0% CAP
Utilities	4,160	0	4,160	0	0	0	0	0	0	100.0% CAP
Contracts	178,500	0	178,500	0	0	0	0	0	0	100.0% CAP
Contracts - Project Construct	0	0	0	0	0	0	0	0	0	100.0% CAP
Contracts - Temporary Services	0	0	0	0	0	0	0	0	0	100.0% CAP
Contracts - Legal	0	0	0	0	0	0	0	0	0	100.0% CAP
Contracts - Pre-Employment	0	0	0	0	0	0	0	0	0	100.0% CAP
Contracts - Licensing Requirements	0	0	0	0	0	0	0	0	0	100.0% CAP
Contracts - Lab Services	0	0	0	0	0	0	0	0	0	100.0% CAP
Maintenance - Building	508	0	508	0	0	0	0	0	0	100.0% CAP
Maintenance - Vehicle	3,105	0	3,105	0	0	0	0	0	0	100.0% CAP
Maintenance - Equipment	259	0	259	0	0	0	0	0	0	100.0% CAP
Computer - Hardware	0	0	0	0	0	0	0	0	0	100.0% CAP
Computer - Software	0	0	0	0	0	0	0	0	0	100.0% CAP
Computers - Software License & Maint	0	0	0	0	0	0	0	0	0	100.0% CAP
Office Supplies	4,203	0	4,203	0	0	0	0	0	0	100.0% CAP
Departmental Supplies	3,075	0	3,075	0	0	0	0	0	0	100.0% CAP
Petroleum Products	5,125	0	5,125	0	0	0	0	0	0	100.0% CAP
Chemicals	0	0	0	0	0	0	0	0	0	100.0% CAP
Small Equipment	0	0	0	0	0	0	0	0	0	100.0% CAP
Taxes & In Lieu	0	0	0	0	0	0	0	0	0	100.0% CAP
Replacement Charges	0	0	0	0	0	0	0	0	0	100.0% CAP
Debt Service - Principal	0	0	0	0	0	0	0	0	0	100.0% CAP
Debt Service - Interest	0	0	0	0	0	0	0	0	0	100.0% CAP
Debt Service - Fiscal Services	0	0	0	0	0	0	0	0	0	100.0% CAP
Debt Service - Cost of Issuance	0	0	0	0	0	0	0	0	0	100.0% CAP
Unemployment Insurance	0	0	0	0	0	0	0	0	0	100.0% CAP
Liability	9,619	0	9,619	0	0	0	0	0	0	100.0% CAP
Retiree's Insurance	0	0	0	0	0	0	0	0	0	100.0% CAP
Other Expense	0	0	0	0	0	0	0	0	0	100.0% CAP
Other - Bad Debt Expense	0	0	0	0	0	0	0	0	0	100.0% CAP
Capital Outlay - Buildings	0	0	0	0	0	0	0	0	0	100.0% CAP
Capital Outlay - Other Improv	0	0	0	0	0	0	0	0	0	100.0% CAP
Capital Outlay - Vehicles	0	0	0	0	0	0	0	0	0	100.0% CAP
Capital Outlay - Equipment	0	0	0	0	0	0	0	0	0	100.0% CAP
Capital Outlay - Hydrants	0	0	0	0	0	0	0	0	0	100.0% CAP
Capital Outlay - Construction	0	0	0	0	0	0	0	0	0	100.0% CAP
Transfers	0	0	0	0	0	0	0	0	0	100.0% CAP
Total Conservation	$704,166	$0	$704,166	$0	$0	$0	$0	$0	$0	
Total Operations & Maintenance	**$11,837,736**	**$4,145,989**	**$4,429,000**	**$1,267,393**	**$0**	**$1,735,293**	**$0**	**$0**	**$0**	

City of Folsom
Water Rate Study
Exhibit 14
Functionalization and Allocation of the Revenue Requirement

	FY 2021	Commodity (COM)	Capacity (CAP)	Customer Related: Actual Customer (AC)	Customer Related: Weighted for - Cust. Acctg. (WCA)	Customer Related: Weighted for - Equivalent Meter & Svs (EMS)	Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Allocation
Annual Debt Service										
2009 Water Rev. Refunding Bond ($15.8 mill/2029)	$1,165,501	$0	$0	$0	$0	$1,165,501	$0	$0	$0	100.0% EMS
2013 Water Rev. Refunding Bond ($12.7 mill/2033)	829,602	0	0	0	0	829,602	0	0	0	100.0% EMS
Debt Service - Fiscal Services	10,000	0	0	0	0	10,000	0	0	0	100.0% EMS
Total Annual Debt Service	$2,005,103	$0	$0	$0	$0	$2,005,103	$0	$0	$0	
Less: From Water Impact Fee (Fund 456)	0	0	0	0	0	0	0	0	0	100.0% EMS
Net Annual Debt Service	$2,005,103	$0	$0	$0	$0	$2,005,103	$0	$0	$0	
Capital Improvements from Rates	$2,500,000	$576,350	$1,003,129	$756,842	$0	$0	$163,679	$0	$0	As Plant in Service
Transfers										
Transfers - Cost Allocation	$972,396	$972,396	$0	$0	$0	$0	$0	$0	$0	100.0% COMM
To/(From) Operating Reserve	466,906	466,906	0	0	0	0	0	0	0	100.0% COMM
To/(From) Fund 456	0	0	0	0	0	0	0	0	0	100.0% COMM
6-month Rate Implementation Adjustment		0	0	0	0	0	0	0	0	100.0% COMM
Total Transfers	$1,439,302	$1,439,302	$0	$0	$0	$0	$0	$0	$0	
Total Revenue Requirement	**$17,782,141**	**$6,161,641**	**$5,432,129**	**$2,024,235**	**$0**	**$3,740,396**	**$423,739**	**$0**	**$0**	
Less: Non-Operating Revenues										
Federal Grant / Other Federal Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	As Total Revenue Requirement
State Grants / Other State Grants	0	0	0	0	0	0	0	0	0	As Total Revenue Requirement
Gen Gov't / Recovery Of Labor & Benefits	50,500	17,499	15,427	5,749	0	10,622	1,203	0	0	As Total Revenue Requirement
Gen Gov't / Sale Of Documents	0	0	0	0	0	0	0	0	0	As Total Revenue Requirement
Gen Gov't / Recovery Of Damages	0	0	0	0	0	0	0	0	0	As Total Revenue Requirement
Gen Gov't /Reimbursements	181,800	62,995	55,537	20,695	0	38,241	4,332	0	0	As Total Revenue Requirement
Reimbursement of Prior Expense	0	0	0	0	0	0	0	0	0	As Total Revenue Requirement
Water / Equity Buy In	80,800	80,800	0	0	0	0	0	0	0	100.0% COMM
Delinquent Fees / Turn On-Off	20,200	6,999	6,171	2,299	0	4,249	481	0	0	As Total Revenue Requirement
Delinquent Fees / Penalties	0	0	0	0	0	0	0	0	0	As Total Revenue Requirement
Water / Backflow Testing	25,250	25,250	0	0	0	0	0	0	0	100.0% COMM
Temporary / Water Service	0	0	0	0	0	0	0	0	0	As Total Revenue Requirement
Temporary / Water Use	75,750	75,750	0	0	0	0	0	0	0	100.0% COMM
Fines / Penalty	0	0	0	0	0	0	0	0	0	As Total Revenue Requirement
Interest / Interest Earned	32,940	32,940	0	0	0	0	0	0	0	100.0% COMM
Gains On Investments / Unrealized Gain/Loss	0	0	0	0	0	0	0	0	0	100.0% COMM
Other Revenue / Sundry Revenue	10,100	10,100	0	0	0	0	0	0	0	100.0% COMM
Capital / Contributions	0	0	0	0	0	0	0	0	0	100.0% COMM
Transfers In	100,000	100,000	0	0	0	0	0	0	0	100.0% COMM
Proceeds Of Financing	0	0	0	0	0	0	0	0	0	100.0% COMM
Total Non-Operating Revenues	**$577,340**	**$412,333**	**$77,134**	**$28,743**	**$0**	**$53,112**	**$6,017**	**$0**	**$0**	
Net Revenue Requirement	**$17,204,801**	**$5,749,308**	**$5,354,995**	**$1,995,492**	**$0**	**$3,687,284**	**$417,723**	**$0**	**$0**	
Total Revenue Requirement Percentage	***100.0%***	***33.4%***	***31.1%***	***11.6%***	***0.0%***	***21.4%***	***2.4%***	***0.0%***	***0.0%***	

[1] Water purchases based on the fixed and variable portion of the San Juan contract. The total split 56.0% fixed/demand is allocated to EMS and 44.0% variable or volume to 53.2% Commodity and 46.8% Capacity.

City of Folsom
Water Rate Study
Exhibit 15A
Distribution of Revenue Requirement - Commodity and Capacity

		Residential				
	FY 2021	**Tier 1**	**Tier 2**	**Tier 3**	**Non-Residential**	***Factor***
Commodity	$5,749,308	$2,126,386	$637,415	$1,170,503	$1,815,003	*(COM)*
Capacity	5,354,995	1,785,037	616,286	1,333,810	1,619,861	*(CAP)*
Net Revenue Requirement	**$11,104,303**	**$3,911,423**	**$1,253,702**	**$2,504,314**	**$3,434,864**	

City of Folsom
Water Rate Study
Exhibit 15B
Distribution of Revenue Requirement

	FY 2021	Residential	Non-Residential	*Factor*
Commodity	$5,749,308	$3,934,305	$1,815,003	*(COM)*
Capacity	$5,354,995	$3,735,134	$1,619,861	*(CAP)*
Customer				
Actual Customer	$1,995,492	$1,809,386	$186,106	*(AC)*
Cust. Acctg.	0	0	0	*(WCA)*
Equivalent Meter & Svs	3,687,284	2,486,699	1,200,584	*(EMS)*
Total Customer	$5,682,775	$4,296,085	$1,386,691	
Public Fire Protection	$417,723	$319,221	$98,501	*(FP)*
Revenue Related	$0	$0	$0	*(RR)*
Direct Assign.	$0	$0	$0	*(DA)*
Net Revenue Requirement	**$17,204,801**	**$12,284,745**	**$4,920,057**	

City of Folsom
Water Rate Study
Exhibit 16
Summary of Cost of Service

	FY 2021	Residential	Non-Residential
Revenues at Present Rates (1)	$14,831,725	$10,700,471	$4,131,254
Net Revenue Requirement (1)	$17,204,801	$12,284,745	$4,920,057
Bal/(Def) of Funds	**($2,373,076)**	**($1,584,274)**	**($788,802)**
Required % Change in Rates (year)	**16.0%**	**14.8%**	**19.1%**

(1) Does not include East Area Surcharges.

City of Folsom
Water Rate Study
Exhibit 17
Summary of Unit Costs

		Residential			
	FY 2021	**Tier 1**	**Tier 2**	**Tier 3**	**Non-Residential**
Yearly					
Consumption Related					
Commodity - $/CCF	$0.74	$0.74	$0.74	$0.74	$0.74
Capacity - $/CCF	0.69	0.62	0.71	0.84	0.66
Total	**$1.42**	**$1.36**	**$1.45**	**$1.58**	**$1.40**
Customer Related					
RR/FP/DA - $/Equiv. Meter/Month	$1.10	$1.25			$0.80
$/Equiv. Meter/Month	15.03	16.85			11.26
	$16.13	**$18.10**			**$12.06**
Current Rates					
Consumption Charge $/CCF		$1.08	$1.30	$1.60	$1.12
Meter Charge $/Month		Per Account $15.00			$12.61
Basic Data					
Consumption (ccf)	7,795,369	2,883,124	864,258	1,587,062	2,460,926
# of Accounts	23,439	21,253			2,186

Technical Appendix B – Sewer Rate Analyses

City of Folsom
Sewer Rate Study
Exhibit 1
Revenue Requirement Analysis Summary

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Revenue								
Rate Revenues	$6,448,865	$6,512,833	$6,577,760	$6,676,426	$6,743,191	$6,810,623	$6,878,729	$6,947,516
Non-Operating Revenues	106,797	197,200	197,200	101,172	91,157	86,810	87,500	88,874
Total Revenues	**$6,555,662**	**$6,710,033**	**$6,774,960**	**$6,777,599**	**$6,834,348**	**$6,897,433**	**$6,966,229**	**$7,036,390**
Expenses								
Engineering	$1,239,772	$1,791,083	$1,864,692	$2,037,994	$2,137,389	$2,208,319	$2,282,725	$2,360,801
Sewer Operating	1,764,501	1,957,201	2,151,065	2,255,024	2,357,089	2,458,804	2,565,619	2,775,597
Sewer Maintenance	700,709	983,379	1,014,302	1,069,272	1,122,950	1,176,237	1,232,335	1,291,403
Total O&M Expenses	**$3,704,982**	**$4,731,663**	**$5,030,059**	**$5,362,290**	**$5,617,427**	**$5,843,360**	**$6,080,679**	**$6,427,802**
Net Annual Debt Service	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Capital Improvements from Rates (See Exhibit 4)	**$2,343,090**	**$952,621**	**$2,100,000**	**$3,000,000**	**$3,150,000**	**$3,308,000**	**$3,473,000**	**$3,647,000**
Transfers	**$507,590**	**$1,025,748**	**$532,899**	**$217,944**	**($112,418)**	**$1,660,819**	**$1,366,443**	**$955,021**
Total Revenue Requirement	**$6,555,662**	**$6,710,032**	**$7,662,958**	**$8,580,234**	**$8,655,009**	**$10,812,178**	**$10,920,122**	**$11,029,822**
Balance/(Deficiency) of Funds	($0)	$0	($887,998)	($1,802,635)	($1,820,661)	($3,914,746)	($3,953,893)	($3,993,432)
Bal/(Def.) as a % of Rate Rev.	0.0%	0.0%	13.5%	27.0%	27.0%	57.5%	57.5%	57.5%
			Jan. 1 2020		**Jul. 1 2021**	**Jul. 1 2022**	**Jul. 1 2023**	**Jul. 1 2024**
Proposed Rate Adjustment	**0.0%**	**0.0%**	**27.0%**	**0.0%**	**0.0%**	**24.0%**	**0.0%**	**0.0%**
Add'l Revenue from Adj.	$0	$0	$887,998	$1,802,635	$1,820,661	$3,914,746	$3,953,893	$3,993,432
Total Bal/(Def.) of Funds	$0	$0	$0	$0	$0	($0)	$0	$0
Additional Rate Increase Needed	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Average Monthly Residential Bill *	**$16.15**	**$16.15**	**$18.33**	**$20.51**	**$20.51**	**$25.43**	**$25.43**	**$25.43**
Operating Reserve (Fund 530)	$9,712,192	$10,051,320	$6,794,438	$4,791,431	$3,922,015	$4,059,985	$4,334,837	$4,413,537
Percentage of Target Balance		*157.8%*	*86.9%*	*52.8%*	*41.2%*	*40.8%*	*41.7%*	*40.3%*
Capital Reserve (Fund 531)	$540,662	$766,452	$919,624	$1,472,796	$1,625,569	$1,727,669	$1,931,869	$2,136,069
Debt Service Coverage Ratio (DSC)								
Before Rate Adjustment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
After Rate Adjustment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

City of Folsom
Sewer Rate Study
Exhibit 2
Escalation Factors

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Revenues [1]								
Residential Growth		1.5%	1.5%	1.5%	1.0%	1.0%	1.0%	1.0%
Nonresidential Growth		1.5%	1.5%	1.5%	1.0%	1.0%	1.0%	1.0%
Flat		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Revenues		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Expenses								
Labor			5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
PERS			19.4%	11.7%	9.0%	7.3%	7.3%	7.3%
Benefits - Medical			3.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Benefits - Other			3.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Materials & Supplies			2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Equipment			3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Miscellaneous			1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Utilities			4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Electricity (SMUD)			3.6%	2.4%	2.0%	2.0%	2.0%	2.0%
Chemicals			1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Flat			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Insurance			3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Interest			0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Connection Fee and Impact Fee								
Number of Units								
Multi-Family Units	570	310	128	128	127	0	0	0
Single Family Units	200	200	200	200	200	200	400	400
Connection Fee Rate as of October 2017								
Multi-Family Rate	$798	$798	$798	$798	$798	$798	$798	$798
Single Family Rate	$1,021	$1,021	$1,021	$1,021	$1,021	$1,021	$1,021	$1,021

[1] Growth based on 2016 Water Master Plan Update, page 3-1, Table 3-1 and City's interpolation formula to City customer growth.
[2] Electricity based on SMUD projections.

City of Folsom
Sewer Rate Study
Exhibit 3
Revenue Requirement Analysis

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	*Notes*
Revenues									
Rate Revenues									
Residential	$4,210,402	$4,273,558	$4,337,661	$4,402,726	$4,446,753	$4,491,221	$4,536,133	$4,581,495	As Residential Growth
Commercial	2,238,463	2,239,275	2,240,099	2,273,700	2,296,437	2,319,402	2,342,596	2,366,022	As Nonresidential Growth
Total	**$6,448,865**	**$6,512,833**	**$6,577,760**	**$6,676,426**	**$6,743,191**	**$6,810,623**	**$6,878,729**	**$6,947,516**	
Non-Operating Revenues									
Gen Gov't Charges / Sale Of Documents (Prison)	$33,600	$67,200	$67,200	$67,200	$67,200	$67,200	$67,200	$67,200	As Flat
Interest / Interest Earned	73,197	130,000	130,000	33,972	23,957	19,610	20,300	21,674	Calc'd on Reserve Balances
Total Non-Operating Revenues	**$106,797**	**$197,200**	**$197,200**	**$101,172**	**$91,157**	**$86,810**	**$87,500**	**$88,874**	
Total Revenues	**$6,555,662**	**$6,710,033**	**$6,774,960**	**$6,777,599**	**$6,834,348**	**$6,897,433**	**$6,966,229**	**$7,036,390**	

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	*Notes*
Engineering									
Permanent Salaries	$353,470	$449,884	$463,225	$542,515	$579,787	$608,776	$639,215	$671,176	As Labor '21 1 FTE, '22 Pro 50/50 W & S
Temporary Salaries	0	0	0	0	0	0	0	0	As Labor
Overtime	343	0	0	0	0	0	0	0	As Labor
Annual Leave Account	9,445	8,680	6,700	7,035	7,387	7,756	8,144	8,551	As Labor
Uniform Allowance	0	0	0	0	0	0	0	0	As Benefits - Other
FICA	26,440	34,965	35,812	41,148	44,407	46,627	48,959	51,407	As Labor '21 1 FTE, '22 Pro 50/50 W & S
Group Insurance	0	0	0	0	0	0	0	0	As Benefits - Medical
Uniform Expense	0	0	0	0	0	0	0	0	As Benefits - Other
PERS	107,098	149,947	189,287	230,505	257,717	276,530	296,717	318,377	As PERS '21 1 FTE, '22 Pro 50/50 W & S
HRA	0	0	0	0	0	0	0	0	As Benefits - Other
Worker's Compensation	0	0	0	0	0	0	0	0	As Labor
Deferred Compensation	10,288	11,767	12,033	16,976	19,156	20,114	21,119	22,175	As Labor '21 1 FTE, '22 Pro 50/50 W & S
Accrued Leave Current	0	0	0	0	0	0	0	0	As Labor
Auto Allowance	0	0	1,800	1,872	1,947	2,025	2,106	2,190	As Benefits - Other
Employee Assistance Program	0	0	0	0	0	0	0	0	As Benefits - Other
Post Employment Benefits	0	0	0	0	0	0	0	0	As Benefits - Other
Combined Benefits	79,054	90,841	91,400	103,906	108,062	112,385	116,880	121,555	As Benefi '21 1 FTE 50/50 W & S
Printing	3,263	2,500	2,500	2,563	2,627	2,692	2,760	2,829	As Materials & Supplies
Dues & Publication	17,068	4,100	4,100	4,162	4,224	4,287	4,352	4,417	As Miscellaneous
Advertising	734	0	0	0	0	0	0	0	As Miscellaneous
Rents	3,847	0	0	0	0	0	0	0	As Miscellaneous
Training & Education	867	0	0	0	0	0	0	0	As Miscellaneous
Postage	44,244	32,400	32,400	33,210	34,040	34,891	35,764	36,658	As Materials & Supplies
Disposal Permit	0	0	0	0	0	0	0	0	As Miscellaneous
Finance Charges	57,457	30,600	30,600	31,059	31,525	31,998	32,478	32,965	As Miscellaneous
Telephone	1,225	4,000	4,000	4,160	4,326	4,499	4,679	4,867	As Utilities
Cellular	0	0	0	0	0	0	0	0	As Utilities
Internet	0	0	0	0	0	0	0	0	As Utilities
Radios	0	0	0	0	0	0	0	0	As Equipment
Travel & Meetings	657	1,000	1,000	1,015	1,030	1,046	1,061	1,077	As Miscellaneous
Utilities	0	0	0	0	0	0	0	0	As Utilities
Contracts	333,217	654,300	679,000	689,185	699,523	710,016	720,666	731,476	As Miscellaneous
Contracts - Project Construct	4,360	0	0	0	0	0	0	0	As Miscellaneous
Contracts - Temporary Services	0	0	0	0	0	0	0	0	As Miscellaneous
Contracts - Legal Services	0	0	0	0	0	0	0	0	As Miscellaneous
Contracts - Pre-Employment	0	0	0	0	0	0	0	0	As Miscellaneous
Contracts - Licensing Requirements	0	0	0	0	0	0	0	0	As Miscellaneous
Maintenance - Building	0	0	0	0	0	0	0	0	As Miscellaneous
Maintenance - Vehicle	0	750	750	776	803	832	861	891	As Equipment
Maintenance - Equipment	500	0	0	0	0	0	0	0	As Equipment
Computer - Hardware	3,776	12,000	12,000	12,180	12,363	12,548	12,736	12,927	As Miscellaneous
Computer - Software	4,086	7,500	5,000	5,075	5,151	5,228	5,307	5,386	As Miscellaneous
Computers - Software Lic & Maint	10,017	11,264	12,000	12,180	12,363	12,548	12,736	12,927	As Miscellaneous
Office Supplies	271	4,000	4,000	4,100	4,203	4,308	4,415	4,526	As Materials & Supplies
Departmental Supplies	930	2,500	2,500	2,563	2,627	2,692	2,760	2,829	As Materials & Supplies
Petroleum Products	0	750	750	769	788	808	828	849	As Materials & Supplies
Chemicals	0	0	0	0	0	0	0	0	As Chemicals
Small Equipment	43	3,500	0	0	0	0	0	0	As Equipment
Taxes & In Lieu	0	861	861	874	887	900	914	928	As Miscellaneous
Replacement Charges	0	0	0	0	0	0	0	0	As Miscellaneous
Capital Leases	0	0	0	0	0	0	0	0	As Equipment
Unemployment Insurance	0	0	0	0	0	0	0	0	As Benefits - Other
Liability	14,910	12,452	12,452	12,826	13,210	13,607	14,015	14,435	As Insurance
Retiree's Insurance	47,137	45,522	45,522	47,343	49,237	51,206	53,254	55,384	As Benefits - Other
Other Expense	0	0	0	0	0	0	0	0	As Miscellaneous
Capital Outlay - Other Improv	0	0	0	0	0	0	0	0	As Miscellaneous
Capital Outlay - Vehicles	0	215,000	215,000	230,000	240,000	240,000	240,000	240,000	As Miscellaneous
Capital Outlay - Equipment	105,025	0	0	0	0	0	0	0	As Miscellaneous
Capital Outlay - Construction	0	0	0	0	0	0	0	0	As Miscellaneous
Transfers	0	0	0	0	0	0	0	0	As Miscellaneous
Total Engineering	**$1,239,772**	**$1,791,083**	**$1,864,692**	**$2,037,994**	**$2,137,389**	**$2,208,319**	**$2,282,725**	**$2,360,801**	

City of Folsom
Sewer Rate Study
Exhibit 3
Revenue Requirement Analysis

	Actual	Adj. Budget	Proposed	Projected					
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	*Notes*
Sewer Operating									
Permanent Salaries	$618,182	$571,634	$676,899	$710,744	$746,281	$783,595	$822,775	$939,005	As Labor '20 Pro; '25 new
Temporary Salaries	0	0	0	0	0	0	0	0	As Labor
Overtime	38,681	45,000	0	0	0	0	0	0	As Labor
Annual Leave Account	14,762	10,735	8,343	8,760	9,198	9,658	10,141	10,648	As Labor
Uniform Allowance	4,200	3,600	3,600	3,744	3,894	4,050	4,211	4,380	As Benefits - Other
FICA	50,258	48,224	55,561	58,339	61,256	64,319	67,535	71,492	As Labor '20 Pro; '25 new
Group Insurance	0	0	0	0	0	0	0	0	As Benefits - Medical
Uniform Expense	5,370	5,000	0	0	0	0	0	600	As Benefit '25 new
PERS	188,479	192,813	293,012	327,294	356,751	382,794	410,738	443,846	As PERS '20 Pro; '25 new
HRA	0	0	0	0	0	0	0	0	As Benefits - Other
Worker's Compensation	0	0	0	0	0	0	0	0	As Labor
Deferred Compensation	3,525	3,600	13,903	14,598	15,328	16,094	16,899	18,428	As Labor '20 Pro; '25 new
Accrued Leave Current	1,873	0	0	0	0	0	0	0	As Labor
Auto Allowance	0	0	0	0	0	0	0	0	As Benefits - Other
Employee Assistance Program	0	0	0	0	0	0	0	0	As Benefits - Other
Post Employment Benefits	(1,153)	0	0	0	0	0	0	0	As Benefits - Other
Combined Benefits	213,094	186,958	188,830	196,383	204,239	212,408	220,904	247,441	As Benefit '20 Pro; '25 new
Printing	592	1,000	1,000	1,025	1,051	1,077	1,104	1,131	As Materials & Supplies
Dues & Publication	34,745	10,900	10,900	11,064	11,229	11,398	11,569	11,742	As Miscellaneous
Advertising	3,043	5,600	5,600	5,684	5,769	5,856	5,944	6,033	As Miscellaneous
Rents	21,816	20,800	20,800	21,112	21,429	21,750	22,076	22,408	As Miscellaneous
Training & Education	1,918	10,000	6,000	6,090	6,181	6,274	6,368	6,464	As Miscellaneous
Postage	66	4,000	4,000	4,100	4,203	4,308	4,415	4,526	As Materials & Supplies
Disposal Permit	0	0	0	0	0	0	0	0	As Miscellaneous
Finance Charges	17,710	0	0	0	0	0	0	0	As Miscellaneous
Telephone	14,258	7,320	7,400	7,696	8,004	8,324	8,657	9,003	As Utilities
Cellular	6,166	7,000	7,000	7,280	7,571	7,874	8,189	8,517	As Utilities
Internet	0	6,000	1,000	1,040	1,082	1,125	1,170	1,217	As Utilities
Radios	0	0	0	0	0	0	0	0	As Equipment
Travel & Meetings	0	2,000	4,000	4,060	4,121	4,183	4,245	4,309	As Miscellaneous
Utilities	69,583	52,500	75,000	78,000	81,120	84,365	87,739	91,249	As Utilities
Contracts	49,897	50,500	50,000	50,750	51,511	52,284	53,068	53,864	As Miscellaneous
Contracts - Project Construct	70	0	0	0	0	0	0	0	As Miscellaneous
Contracts - Temporary Services	0	0	0	0	0	0	0	0	As Miscellaneous
Contracts - Legal Services	0	4,000	4,000	4,060	4,121	4,183	4,245	4,309	As Miscellaneous
Contracts - Pre-Employment	1,125	0	500	508	515	523	531	539	As Miscellaneous
Contracts - Licensing Requirements	688	1,700	1,700	1,726	1,751	1,778	1,804	1,831	As Miscellaneous
Maintenance - Building	9,592	10,000	12,000	12,180	12,363	12,548	12,736	12,927	As Miscellaneous
Maintenance - Vehicle	40,403	41,000	41,000	42,435	43,920	45,457	47,048	48,695	As Equipment
Maintenance - Equipment	167,573	253,000	264,000	273,240	282,803	292,702	302,946	313,549	As Equipment
Computer - Hardware	20	0	0	0	0	0	0	0	As Miscellaneous
Computer - Software	22,957	0	0	0	0	0	0	0	As Miscellaneous
Computers - Software Lic & Maint	1,600	0	0	0	0	0	0	0	As Miscellaneous
Office Supplies	501	5,000	5,000	5,125	5,253	5,384	5,519	5,657	As Materials & Supplies
Departmental Supplies	24,476	169,300	169,000	173,225	177,556	181,995	186,544	191,208	As Materials & Supplies
Petroleum Products	37,336	40,000	40,000	41,000	42,025	43,076	44,153	45,256	As Materials & Supplies
Chemicals	29,221	150,000	130,000	131,300	132,613	133,939	135,279	136,631	As Chemicals
Small Equipment	33,737	0	13,000	13,455	13,926	14,413	14,918	15,440	As Equipment
Vehicle Add-ons	4,590	0	0	0	0	0	0	0	As Equipment
Taxes & Permits	0	10,000	10,000	10,150	10,302	10,457	10,614	10,773	As Miscellaneous
Replacement Charges	0	0	0	0	0	0	0	0	As Miscellaneous
Capital Leases	0	0	0	0	0	0	0	0	As Equipment
Unemployment Insurance	0	0	0	0	0	0	0	0	As Benefits - Other
Liability	33,547	28,017	28,017	28,858	29,723	30,615	31,533	32,479	As Insurance
Retiree's Insurance	0	0	0	0	0	0	0	0	As Benefits - Other
Other Expense	0	0	0	0	0	0	0	0	As Miscellaneous
Capital Outlay - Other Improv	0	0	0	0	0	0	0	0	As Miscellaneous
Capital Outlay - Vehicles	0	0	0	0	0	0	0	0	As Miscellaneous
Capital Outlay - Equipment	0	0	0	0	0	0	0	0	As Miscellaneous
Capital Outlay - Construction	0	0	0	0	0	0	0	0	As Miscellaneous
Transfers	0	0	0	0	0	0	0	0	As Miscellaneous
Total Sewer Operating	**$1,764,501**	**$1,957,201**	**$2,151,065**	**$2,255,024**	**$2,357,089**	**$2,458,804**	**$2,565,619**	**$2,775,597**	

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	*Notes*
Sewer Maintenance									
Permanent Salaries	$318,079	$421,268	$421,977	$443,076	$465,230	$488,491	$512,916	$538,561	As Labor
Temporary Salaries	0	0	0	0	0	0	0	0	As Labor
Overtime	1,284	2,000	2,000	2,100	2,205	2,315	2,431	2,553	As Labor
Annual Leave Account	8,467	7,983	5,907	6,202	6,512	6,838	7,180	7,539	As Labor
Uniform Allowance	2,400	3,600	3,600	3,744	3,894	4,050	4,211	4,380	As Benefits - Other
FICA	24,602	33,197	33,093	34,748	36,485	38,309	40,225	42,236	As Labor
Group Insurance	0	0	0	0	0	0	0	0	As Benefits - Medical
Uniform Expense	2,045	3,000	0	0	0	0	0	0	As Benefits - Other
PERS	96,136	141,251	172,311	192,471	209,794	225,109	241,542	259,174	As PERS
HRA	0	0	0	0	0	0	0	0	As Benefits - Other
Worker's Compensation	0	0	0	0	0	0	0	0	As Labor
Deferred Compensation	2,100	2,100	2,100	2,205	2,315	2,431	2,553	2,680	As Labor
Accrued Leave Current	0	0	0	0	0	0	0	0	As Labor
Auto Allowance	0	0	0	0	0	0	0	0	As Benefits - Other
Employee Assistance Program	0	0	0	0	0	0	0	0	As Benefits - Other
Post Employment Benefits	0	0	0	0	0	0	0	0	As Benefits - Other
Combined Benefits	131,536	154,144	153,817	159,970	166,368	173,023	179,944	187,142	As Benefits - Other
Printing	0	1,300	1,300	1,333	1,366	1,400	1,435	1,471	As Materials & Supplies
Dues & Publication	1,361	1,380	1,500	1,523	1,545	1,569	1,592	1,616	As Miscellaneous
Advertising	143	0	0	0	0	0	0	0	As Miscellaneous
Rents	10,805	20,000	20,000	20,300	20,605	20,914	21,227	21,546	As Miscellaneous
Training & Education	459	10,641	10,000	10,150	10,302	10,457	10,614	10,773	As Miscellaneous
Postage	0	0	0	0	0	0	0	0	As Materials & Supplies
Disposal Permit	0	0	0	0	0	0	0	0	As Miscellaneous
Finance Charges	0	0	0	0	0	0	0	0	As Miscellaneous
Telephone	0	0	0	0	0	0	0	0	As Utilities
Cellular	0	0	0	0	0	0	0	0	As Utilities
Internet	0	0	0	0	0	0	0	0	As Utilities
Radios	0	0	0	0	0	0	0	0	As Equipment
Travel & Meetings	0	400	400	406	412	418	425	431	As Miscellaneous
Utilities	0	0	0	0	0	0	0	0	As Utilities
Contracts	305	2,900	3,000	3,045	3,091	3,137	3,184	3,232	As Miscellaneous
Contracts - Project Construct	0	0	0	0	0	0	0	0	As Miscellaneous
Contracts - Temporary Services		0	4,982	5,057	5,133	5,210	5,288	5,367	As Miscellaneous
Contracts - Legal Services	0	0	0	0	0	0	0	0	As Miscellaneous
Contracts - Pre-Employment	187	0	0	0	0	0	0	0	As Miscellaneous
Contracts - Licensing Requirements	230	0	0	0	0	0	0	0	As Miscellaneous
Maintenance - Building	0	750	750	761	773	784	796	808	As Miscellaneous
Maintenance - Vehicle	1,179	0	5,000	5,175	5,356	5,544	5,738	5,938	As Equipment
Maintenance - Equipment	0	10,000	5,000	5,175	5,356	5,544	5,738	5,938	As Equipment
Computer - Hardware	0	0	0	0	0	0	0	0	As Miscellaneous
Computer - Software	0	0	0	0	0	0	0	0	As Miscellaneous
Computers - Software Lic & Maint	0	0	0	0	0	0	0	0	As Miscellaneous
Office Supplies	588	1,900	2,000	2,050	2,101	2,154	2,208	2,263	As Materials & Supplies
Departmental Supplies	79,889	150,000	150,000	153,750	157,594	161,534	165,572	169,711	As Materials & Supplies
Petroleum Products	0	0	0	0	0	0	0	0	As Materials & Supplies
Chemicals	0	0	0	0	0	0	0	0	As Chemicals
Small Equipment	277	0	0	0	0	0	0	0	As Equipment
Taxes & In Lieu	0	0	0	0	0	0	0	0	As Miscellaneous
Replacement Charges	0	0	0	0	0	0	0	0	As Miscellaneous
Capital Leases	0	0	0	0	0	0	0	0	As Equipment
Unemployment Insurance	0	0	0	0	0	0	0	0	As Benefits - Other
Liability	18,637	15,565	15,565	16,032	16,513	17,008	17,519	18,044	As Insurance
Retiree's Insurance	0	0	0	0	0	0	0	0	As Benefits - Other
Other Expense	0	0	0	0	0	0	0	0	As Miscellaneous
Capital Outlay - Other Improv	0	0	0	0	0	0	0	0	As Miscellaneous
Capital Outlay - Vehicles	0	0	0	0	0	0	0	0	As Miscellaneous
Capital Outlay - Equipment	0	0	0	0	0	0	0	0	As Miscellaneous
Capital Outlay - Construction	0	0	0	0	0	0	0	0	As Miscellaneous
Transfers	0	0	0	0	0	0	0	0	As Miscellaneous
Total Sewer Maintenance	**$700,709**	**$983,379**	**$1,014,302**	**$1,069,272**	**$1,122,950**	**$1,176,237**	**$1,232,335**	**$1,291,403**	

City of Folsom
Sewer Rate Study
Exhibit 3
Revenue Requirement Analysis

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	*Notes*
Total Operations & Maintenance	**$3,704,982**	**$4,731,663**	**$5,030,059**	**$5,362,290**	**$5,617,427**	**$5,843,360**	**$6,080,679**	**$6,427,802**	
Annual Debt Service									
Debt	$0	$0	$0	$0	$0	$0	$0	$0	Principle & Interest
Debt Service - Fiscal Services	0	0	0	0	0	0	0	0	
Net Annual Debt Service	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	
Capital Improvements from Rates (See Exhibit 4)	**$2,343,090**	**$952,621**	**$2,100,000**	**$3,000,000**	**$3,150,000**	**$3,308,000**	**$3,473,000**	**$3,647,000**	FY 2018 Dep. Exp. $1.7 Million
Transfers									
Transfers - Cost Allocation	$715,352	$686,620	$686,620	$720,951	$756,999	$794,848	$834,591	$876,320	As Labor
To/(From) Operating Reserve	(207,762)	339,128	(153,721)	(503,007)	(869,417)	865,970	531,852	78,700	
Total Transfers	**$507,590**	**$1,025,748**	**$532,899**	**$217,944**	**($112,418)**	**$1,660,819**	**$1,366,443**	**$955,021**	
Total Revenue Requirement	**$6,555,662**	**$6,710,032**	**$7,662,958**	**$8,580,234**	**$8,655,009**	**$10,812,178**	**$10,920,122**	**$11,029,822**	
Bal/(Def.) of Funds	($0)	$0	($887,998)	($1,802,635)	($1,820,661)	($3,914,746)	($3,953,893)	($3,993,432)	
Rate Adj. as a % of Rate Rev.	**0.0%**	**0.0%**	**13.5%**	**27.0%**	**27.0%**	**57.5%**	**57.5%**	**57.5%**	
			Jan. 1 2020	***Jan. 1 2021***	***Jul. 1 2021***	***Jul. 1 2022***	***Jul. 1 2023***	***Jul. 1 2024***	
Proposed Rate Adjustment			**27.0%**	**0.0%**	**0.0%**	**24.0%**	**0.0%**	**0.0%**	
Cumulative Proposed Rate Adj.			**27.0%**	**27.0%**	**27.0%**	**51.0%**	**51.0%**	**51.0%**	
Months of Adjustment			*6*	*6*	*12*	*12*	*12*	*12*	
Add'l Revenue from Adj.			$887,998	$1,802,635	$1,820,661	$3,914,746	$3,953,893	$3,993,432	
Total Bal/(Def.) of Funds			$0	$0	$0	($0)	$0	$0	
Additional Rate Increase Needed			**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	
Debt Service Coverage Ratio (DSC)									
Before Rate Adjustment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
After Rate Adjustment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Target Minimum	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	
Monthly Residential Bill (Flat)	$16.15	$16.15	$20.51	$20.51	$20.51	$25.43	$25.43	$25.43	
Average Monthly Residential Bill *									
After Proposed Rate Adjustment	$16.15	$16.15	$18.33	$20.51	$20.51	$25.43	$25.43	$25.43	
Monthly $ Change	0.00	0.00	2.18	2.18	0.00	4.92	0.00	0.00	
Cumulative Change	0.00	0.00	2.18	4.36	4.36	9.28	9.28	9.28	

City of Folsom
Sewer Rate Study
Exhibit 3
Revenue Requirement Analysis

	Actual FY 2018	Adj. Budget FY 2019	Proposed FY 2020	Projected FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	*Notes*
Operating Reserve (Fund 530)									
Beginning Balance		**$9,712,192**	**$10,051,320**	**$6,794,438**	**$4,791,431**	**$3,922,015**	**$4,059,985**	**$4,334,837**	
Plus: CIP from Rates		952,621	2,100,000	3,000,000	3,150,000	3,308,000	3,473,000	3,647,000	See Exhibit 4
From Operating (Change in WC)		339,128	(153,721)	(503,007)	(869,417)	865,970	531,852	78,700	
Less: Uses of Funds - CIP		0	(3,103,160)	(1,500,000)	0	(728,000)	(257,000)	0	See Exhibit 4
Less: R&R Capital Improvements		(952,621)	(2,100,000)	(3,000,000)	(3,150,000)	(3,308,000)	(3,473,000)	(3,647,000)	See Exhibit 4
Ending Balance	**$9,712,192**	**$10,051,320**	**$6,794,438**	**$4,791,431**	**$3,922,015**	**$4,059,985**	**$4,334,837**	**$4,413,537**	
Target Minimum									
Percentage of Target Balance		**157.8%**	**86.9%**	**52.8%**	**41.2%**	**40.8%**	**41.7%**	**40.3%**	40% per City Policy
Capital Reserve (Fund 531)	7/1/2018								
Beginning Balance	**$540,662**	**$540,662**	**$766,452**	**$919,624**	**$1,472,796**	**$1,625,569**	**$1,727,669**	**$1,931,869**	
Plus: Connection Fees		225,790	153,172	153,172	152,773	102,100	204,200	204,200	As projected growth. Exhibit 2.
Less: Uses of Funds		0	0	(400,000)	0	0	0	0	
Ending Balance	**$540,662**	**$766,452**	**$919,624**	**$1,472,796**	**$1,625,569**	**$1,727,669**	**$1,931,869**	**$2,136,069**	

** Includes only North of 50 connection fee revenues.*

City of Folsom
Sewer Rate Study
Exhibit 4
Capital Improvement Funding

	Projected								
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	*Total*	*Notes*
Capital Improvement Projects (CIP)									
Manhole Modifications									
ARC Sewer Access Road Project	$235,112	$2,422,500	$0	$0	$0	$0	$0	$2,657,612	
Annual Sewer Systems Improvements									
Folsom Zoo Sewer Line Project	2,800	0	0	0	0	0	0	2,800	
WTP Grading and P.S. No. 1 Basin Reuse Project	0	0	0	0	0	0	0	0	
Natoma Alley R&R Project	51,752	28,160	2,740,075	0	0	0	0	2,819,987	
Sewer Lateral R&R Project	0	0	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000	
Greenback Sewer and PS No. 3 Project	401,286	2,252,500	0	0	0	0	0	2,653,786	
Old Town Pipeline R & R Proj No. 2 (5,500 feet) - 8 Inch	0	0	132,000	1,320,000	0	0	0	1,452,000	
Basin 4 Project No. 3 (9,000 ft - 8 Inch Pipe)	0	0	0	216,000	2,160,000	0	0	2,376,000	
Basin 4 Project No. 4 (9,000 ft - 8 Inch Pipe)	0	0	0	0	216,000	2,160,000	0	2,376,000	
Basin 6 Project No. 1 (5,000 ft - 8 Inch Pipe)	0	0	0	0	0	120,000	1,200,000	1,320,000	
Basin 6 Project No. 2 (5,000 ft - 8 Inch Pipe)	0	0	0	0	0	0	120,000	120,000	
Sewer Master Plan Improvements									
Basin 6 Sewer Diversion Phase 2	0	0	0	0	0	0	0	0	
SECAP Phase 1 Project (Folsom Blvd Sewer Capacity)	128,400	400,000	3,200,000	0	0	0	0	3,728,400	
Oak Ave PS PWWF Parallel Pipe (Relieve 1 MGD)	0	100,000	660,000	0	0	0	0	760,000	
Pump Station Upgrades									
Oak Avenue Pump Station Project	0	0	0	0	0	0	0	0	
Pump Station No. 2 Odor Control Project	64,967	0	0	0	0	0	0	64,967	
Orangevale Ave P.S. Upgrades	0	0	0	60,000	600,000	0	0	660,000	
Mountain Oak P.S. Upgrades	0	0	0	0	60,000	600,000	0	660,000	
Total	**$884,317**	**$5,203,160**	**$7,732,075**	**$2,596,000**	**$4,036,000**	**$3,880,000**	**$2,320,000**	**$26,651,552**	
Deferred Capital Projects	**$68,304**	**($0)**	**(2,832,075)**	**554,000**	**0**	**(150,000)**	**1,327,000**	$719,000	
Total Capital Improvement Projects	**$952,621**	**$5,203,160**	**$4,900,000**	**$3,150,000**	**$4,036,000**	**$3,730,000**	**$3,647,000**	**$27,370,552**	
Less: Outside Funding Sources									
Operating Reserve (Fund 530)	$0	$3,103,160	$1,500,000	$0	$728,000	$257,000	$0	$5,588,160	
Capital Reserve (Fund 531)	0	0	400,000	0	0	0	0	400,000	
Grants	0	0	0	0	0	0	0	0	
New Low Interest Loans	0	0	0	0	0	0	0	0	
New Revenue Bonds	0	0	0	0	0	0	0	0	
Total Outside Funding Sources	**$0**	**$3,103,160**	**$1,900,000**	**$0**	**$728,000**	**$257,000**	**$0**	**$5,988,160**	
Rate Funded Capital (CRP)	**$952,621**	**$2,100,000**	**$3,000,000**	**$3,150,000**	**$3,308,000**	**$3,473,000**	**$3,647,000**	**$19,630,621**	FY 2018 Dep. Exp. $1.7 Million

City of Folsom
Sewer Rate Study
Exhibit 5
Projection Of Sewer Revenues At Present Rates

					Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Total
	NUMBER UNITS	***# of Cust.***	***ESD Eq. Factor***							***NUMBER UNITS***							
	Residential																
SEMH	SEWER-Manufactured Home	590	1.00	Per dwelling	590	585	587	590	587	589	585	586	590	589	588	590	590
SEML	SEWER-Manufactured Home Low Income	2	1.00	Per dwelling	2	2	2	2	4	3	2	2	3	3	3	2	2
SESR	SEWER-Senior (Age Restricted)	148	1.00	Per dwelling	148	150	148	149	150	149	148	148	148	146	147	148	148
RSRS	SEWER-Residential	0	1.00	Per dwelling	0	0	0	0	0	0	0	0	0	0	0	0	0
SERL	SEWER-Residential Low Income	269	1.00	Per dwelling	294	295	292	292	291	290	298	295	280	278	270	269	269
SERS	SEWER-Residential	20,718	1.00	Per dwelling	20,693	20,690	20,695	20,694	20,694	20,696	20,689	20,692	20,707	20,711	20,718	20,718	20,718
	Total Residential Units	**21,727**			21,727	21,722	21,724	21,727	21,726	21,727	21,722	21,723	21,728	21,727	21,726	21,727	21,727
	Commercial	***# of Cust.***	***ESD Eq. Factor***														
10	SWR-AUTO DLR	2	0.20	per 1,000 sq. ft.	84	84	84	84	84	84	84	84	84	84	84	84	84
20	SWR-BAKERIES	15	1.90	per 1,000 sq. ft.	35	35	35	35	35	35	35	35	35	35	35	35	35
30	SWR-BANKS	26	0.30	per 1,000 sq. ft.	118	118	118	118	118	118	118	118	118	118	118	118	118
40	SWR-SALON	75	0.10	per chair	633	633	648	639	639	653	684	600	633	640	651	616	616
50	SWR-BARS	10	0.70	per 1,000 sq. ft.	20	20	20	20	20	20	20	20	20	20	24	23	23
60	SWR-BOWLING ALLEY	1	0.40	per lane	16	16	16	16	16	16	16	16	16	16	16	16	16
~~METERED~~	~~SWR-CARE WASH AUTOMATIC~~	~~0~~	~~0.13~~	~~per 100 gal. of water~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
~~70~~	~~SWR-CAR WASH SELF SERVICE~~	~~0~~	~~0.70~~	~~per stall~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
80	SWR-DRY CLEAN	7	1.70	per 1,000 sq. ft.	12	12	12	12	12	12	12	12	12	7	9	9	9
90	SWR-FIRE STATION	4	1.00	per 1,000 sq. ft.	13	13	13	13	13	13	13	13	13	13	13	13	13
100	SWR-GARAGES	13	0.10	per bay	77	77	77	77	77	77	77	77	77	77	77	83	83
110	SWR-HALLS	8	0.30	per 1,000 sq. ft.	64	64	64	64	74	74	74	74	74	74	74	233	233
120	SWR-HLTH/GYM	50	0.30	per 1,000 sq. ft.	503	518	510	514	512	521	518	518	518	518	491	601	601
~~METERED~~	~~SWR-HOSPITALS~~	~~0~~	~~0.12~~	~~per 100 gal. of water~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
130	SWR-HOTELS-MOTELS	9	0.40	per room	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	929	929
140	SWR-LAUNDRY SELF SERVE	1	0.50	per machine	15	15	15	15	15	15	15	15	15	15	15	15	15
~~METERED~~	~~SWR-LAUNDRY COMMERCIAL~~	~~0~~	~~0.27~~	~~per 100 gal. of water~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~		~~0~~	~~0~~	~~0~~	~~0~~	0
150	SWR-MRKT w/disp	11	1.70	per 1,000 sq. ft.	89	89	119	99	99	99	99	99	99	99	99	99	99
160	SWR-MRKT W/O DISP	21	0.20	per 1,000 sq. ft.	596	596	659	619	618	618	627	596	613	613	613	624	624
170	SWR-MED/DENTAL	121	0.40	per 1,000 sq. ft.	765	787	777	781	779	773	777	777	777	774	788	799	799
175	SWR-MINI STORAGE	5	1.04	per fixture	9	9	9	9	9	9	9	9	9	11	10	10	10
180	SWR-MORTUARY	6	1.80	per slumber room	3	3	3	3	3	3	3	3	3	3	5	4	4
190	SWR-OFFICE	308	0.20	per 1,000 sq. ft.	5,518	5,457	5,464	5,463	5,420	5,426	3,802	7,112	5,433	5,430	5,349	5,343	5,343
200	SWR-PARK	26	0.04	per 1,000 sq. ft.	23	23	23	23	23	23	28	24	24	24	24	24	24
210	SWR-WORSHIP	25	0.20	per 1,000 sq. ft.	304	304	304	304	304	304	304	304	304	304	313	313	313
~~220~~	~~SWR-PUBLIC AGENCIES~~	~~0~~	~~9.22~~	~~per 1,000 sq. ft.~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
230	SWR-REST HOMES	7	0.40	per bed	528	574	574	574	574	574	574	574	574	574	574	574	574
240	SWR-DINING ROOM RESTAURANT	22	5.10	per 1,000 sq. ft.	32	29	31	46	40	40	40	40	42	42	67	115	115
250	SWR-TAKE OUT RESTAURANT	16	2.60	per 1,000 sq. ft.	34	34	34	34	34	30	29	29	29	29	29	28	28
260	SWR-DINE IN/TAKE OUT RESTAURANT	140	4.20	per 1,000 sq. ft.	515	533	519	531	522	508	513	516	532	512	478	499	499
270	SWR-RETAIL STORE	280	0.10	per 1,000 sq. ft.	3,808	3,651	3,664	3,668	3,676	3,676	3,734	3,643	3,710	3,753	3,850	3,669	3,669
300	SWR-SERVICE STATIION	10	0.10	per pump	99	99	99	99	99	99	99	99	99	99	99	99	99
310	SWR-THEATER	2	0.30	per 100 seats	32	32	32	32	32	32	32	32	32	32	32	32	32
	~~SWR-USED CAR LOTS~~	~~0~~		~~Per 10 fixture Unit~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
330	SWR-WAREHOUSE	17	0.10	per 1,000 sq. ft.	403	403	403	403	403	403	383	422	403	403	403	415	415
SEMF	SW-MULTIFAMILY	518	0.75	per unit	5,255	5,255	5,255	5,270	5,259	5,259	5,259	5,259	5,259	5,259	5,259	5,259	5,259
SCHS	SCHOOLS-SECONDARY	6	2.50	per 100 students	64	64	64	64	64	64	64	64	64	64	64	69	69
SCHP	SWR-SCHOOL/PRIMARY	38	1.00	per 100 students	85	85	85	85	85	85	85	85	85	85	86	77	77
METERED	SWR-Colleges (winter average)	1	0.12	per 100 gal. of water	636	636	636	636	636	636	636	636	636	636	636	636	7,630
~~METERED~~	~~SWR-OTHER COMMERCIAL~~	~~0~~	~~0.12~~	~~per 100 gal. of water~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
~~METERED~~	~~SWR-INDUSTRIAL~~	~~0~~	~~0.12~~	~~per 100 gal. of water~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
OVAC	SWR-VACANT	4	0.20	per 1,000 sq. ft.	0	0	0	0	0	0	0	0	0	0	0	55	55
SM	SWR-METERED (CCF) Auto Carwashes and Hospitals	15	0.8976	per CCF of water	6,244	6,421	7,663	6,592	6,263	4,921	3,319	3,366	3,389	3,242	3,722	5,146	60,290
	TOTAL COMMERCIAL UNITS	**1,820**															

City of Folsom
Sewer Rate Study
Exhibit 5
Projection Of Sewer Revenues At Present Rates

		# of Units	Rate /Month		Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Total
					REVENUE DOLLARS												
	Residential																
SEMH	SEWER-Manufactured Home	590	$16.15	Per dwelling	$9,529	$9,448	$9,480	$9,529	$9,480	$9,512	$9,448	$9,464	$9,529	$9,512	$9,496	$9,529	$113,954
SEML	SEWER-Manufactured Home Low Income	2	$16.15	Per dwelling	32	32	32	32	65	48	32	32	48	48	48	32	485
SESR	SEWER-Senior (Age Restricted)	148	$16.15	Per dwelling	2,390	2,423	2,390	2,406	2,423	2,406	2,390	2,390	2,390	2,358	2,374	2,390	28,731
RSRS	SEWER-Residential	0	$16.15	Per dwelling	0	0	0	0	0	0	0	0	0	0	0	0	0
SERL	SEWER-Residential Low Income	269	$16.15	Per dwelling	4,748	4,764	4,716	4,716	4,700	4,684	4,813	4,764	4,522	4,490	4,361	4,344	55,621
SERS	SEWER-Residential	20,718	$16.15	Per dwelling	334,192	334,144	334,224	334,208	334,208	334,240	334,127	334,176	334,418	334,483	334,596	334,596	4,011,612
	Total Residential Revenues	**21,727**			**$350,891**	**$350,810**	**$350,843**	**$350,891**	**$350,875**	**$350,891**	**$350,810**	**$350,826**	**$350,907**	**$350,891**	**$350,875**	**$350,891**	**$4,210,402**
	Commercial																
10	SWR-AUTO DLR	2	$3.06	per 1,000 sq. ft.	$258	$258	$258	$258	$258	$258	$258	$258	$258	$258	$258	$258	$3,092
20	SWR-BAKERIES	15	$26.07	per 1,000 sq. ft.	902	902	902	902	902	902	902	902	902	902	902	902	10,825
30	SWR-BANKS	26	$4.63	per 1,000 sq. ft.	546	546	546	546	546	546	546	546	546	546	546	546	6,550
40	SWR-SALON	75	$1.53	per chair	968	968	991	978	978	1,000	1,046	918	968	979	996	942	11,733
50	SWR-BARS	10	$10.72	per 1,000 sq. ft.	214	214	214	214	214	214	214	214	214	214	257	242	2,641
60	SWR-BOWLING ALLEY	1	$6.13	per lane	98	98	98	98	98	98	98	98	98	98	98	98	1,177
~~METERED~~	~~SWR-CARE WASH AUTOMATIC~~	0	~~$0.13~~	~~per 100 gal. of water~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
~~70~~	~~SWR-CAR WASH SELF SERVICE~~	0	~~$10.72~~	~~per stall~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
80	SWR-DRY CLEAN	7	$26.07	per 1,000 sq. ft.	315	315	315	315	315	315	315	315	315	173	244	244	3,492
90	SWR-FIRE STATION	4	$15.28	per 1,000 sq. ft.	199	199	199	199	199	199	199	199	199	199	199	199	2,384
100	SWR-GARAGES	13	$1.53	per bay	117	117	117	117	117	117	117	117	117	117	117	127	1,419
110	SWR-HALLS	8	$4.63	per 1,000 sq. ft.	297	297	297	297	341	343	343	343	343	343	343	1,078	4,662
120	SWR-HLTH/GYM	50	$4.63	per 1,000 sq. ft.	2,330	2,396	2,362	2,378	2,370	2,413	2,397	2,397	2,397	2,397	2,275	2,782	28,893
~~METERED~~	~~SWR-HOSPITALS~~	0	~~$0.12~~	~~per 100 gal. of water~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
130	SWR-HOTELS-MOTELS	9	$4.63	per room	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	4,303	61,854
140	SWR-LAUNDRY SELF SERVE	1	$7.69	per machine	115	115	115	115	115	115	115	115	115	115	115	115	1,384
~~METERED~~	~~SWR-LAUNDRY COMMERCIAL~~	0	~~$0.27~~	~~per 100 gal. of water~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
150	SWR-MRKT w/disp	11	$15.28	per 1,000 sq. ft.	1,353	1,353	1,816	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	18,071
160	SWR-MRKT W/O DISP	21	$3.06	per 1,000 sq. ft.	1,823	1,823	2,016	1,893	1,890	1,890	1,919	1,824	1,876	1,876	1,876	1,909	22,615
170	SWR-MED/DENTAL	121	$6.13	per 1,000 sq. ft.	4,688	4,827	4,761	4,785	4,777	4,739	4,766	4,762	4,762	4,744	4,830	4,897	57,338
175	SWR-MINI STORAGE	5	$16.80	per fixture	151	151	151	151	151	151	151	151	151	188	168	168	1,885
180	SWR-MORTUARY	6	$19.95	per slumber room	60	60	60	60	60	60	60	60	60	60	100	80	778
190	SWR-OFFICE	308	$3.06	per 1,000 sq. ft.	16,884	16,698	16,720	16,717	16,584	16,604	11,633	21,761	16,626	16,616	16,367	16,350	199,561
200	SWR-PARK	26	$15.28	per 1,000 sq. ft.	345	345	345	345	345	345	434	360	360	360	360	360	4,307
210	SWR-WORSHIP	25	$3.06	per 1,000 sq. ft.	929	929	929	929	929	929	929	929	929	929	957	957	11,210
~~220~~	~~SWR-PUBLIC AGENCIES~~	0	~~$9.22~~	~~per 1,000 sq. ft.~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
230	SWR-REST HOMES	7	$4.63	per bed	2,445	2,658	2,658	2,658	2,658	2,658	2,658	2,658	2,658	2,658	2,658	2,658	31,678
240	SWR-DINING ROOM RESTAURANT	22	$73.56	per 1,000 sq. ft.	2,370	2,099	2,292	3,389	2,913	2,913	2,913	2,913	3,112	3,112	4,921	8,458	41,405
250	SWR-TAKE OUT RESTAURANT	16	$61.30	per 1,000 sq. ft.	2,054	2,054	2,054	2,054	2,054	1,853	1,778	1,778	1,778	1,778	1,778	1,705	22,720
260	SWR-DINE IN/TAKE OUT RESTAURANT	140	$67.40	per 1,000 sq. ft.	34,717	35,953	34,984	35,766	35,152	34,260	34,555	34,768	35,864	34,541	32,201	33,631	416,393
270	SWR-RETAIL STORE	280	$3.06	per 1,000 sq. ft.	11,654	11,171	11,212	11,225	11,248	11,248	11,427	11,149	11,353	11,484	11,781	11,228	136,179
300	SWR-SERVICE STATIION	10	$1.53	per pump	151	151	151	151	151	151	151	151	151	151	151	151	1,818
310	SWR-THEATER	2	$4.63	per 100 seats	148	148	148	148	148	148	148	148	148	148	148	148	1,779
	~~SWR-USED CAR LOTS~~	0	~~$2.76~~	~~Per 10 fixture Unit~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
330	SWR-WAREHOUSE	17	$1.53	per 1,000 sq. ft.	616	616	616	616	616	616	587	645	616	616	616	635	7,411
SEMF	SW-MULTIFAMILY	518	$16.15	per unit	84,869	84,869	84,868	85,118	84,933	84,933	84,933	84,931	84,933	84,931	84,933	84,933	1,019,184
SCHS	SCHOOLS-SECONDARY	6	$27.57	per 100 students	1,752	1,752	1,752	1,752	1,752	1,752	1,752	1,752	1,752	1,752	1,752	1,904	21,171
SCHP	SWR-SCHOOL/PRIMARY	38	$21.44	per 100 students	1,821	1,821	1,821	1,821	1,821	1,821	1,821	1,821	1,821	1,821	1,844	1,656	21,714
METERED	SWR-Colleges (winter average)	1	$0.12	per 100 gal. of water	571	571	571	571	571	571	571	571	571	571	571	571	6,848
~~METERED~~	~~SWR-OTHER COMMERCIAL~~	0	~~$0.12~~	~~per 100 gal. of water~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
~~METERED~~	~~SWR-INDUSTRIAL~~	0	~~$0.12~~	~~per 100 gal. of water~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
OVAC	SWR-VACANT	4	$3.23	per 1,000 sq. ft.	0	0	0	0	0	0	0	0	0	0	0	176	176
SM	SWR-METERED (CCF) Auto Carwashes and Hospitals	15	$0.8976	per CCF of water	5,605	5,764	6,878	5,917	5,622	4,417	2,980	3,021	3,042	2,910	3,341	4,619	54,116
	Total Commercial Revenues	**1,820**			**$186,598**	**$187,471**	**$188,450**	**$189,222**	**$187,566**	**$185,316**	**$179,454**	**$189,313**	**$185,772**	**$184,325**	**$184,440**	**$190,536**	**$2,238,463**
	Total Sewer Revenues				**$537,489**	**$538,282**	**$539,292**	**$540,113**	**$538,441**	**$536,207**	**$530,264**	**$540,140**	**$536,679**	**$535,216**	**$535,315**	**$541,428**	**$6,448,865**

Revenue	**FY 2017/18**
Residential	$4,210,402
Non-Residential	2,238,463
Total	**$6,448,865**
BILLING SYSTEM	**$6,394,749**
Difference	$54,116
Percent	0.8%

City of Folsom
Sewer Rate Study
Exhibit 9
Functionalization and Allocation of the Revenue Requirement

	FY 2021
Engineering	
Permanent Salaries	$542,515
Temporary Salaries	0
Overtime	0
Annual Leave Account	7,035
Uniform Allowance	0
FICA	41,148
Group Insurance	0
Uniform Expense	0
PERS	230,505
HRA	0
Worker's Compensation	0
Deferred Compensation	16,976
Accrued Leave Current	0
Auto Allowance	1,872
Employee Assistance Program	0
Post Employment Benefits	0
Combined Benefits	103,906
Printing	2,563
Dues & Publication	4,162
Advertising	0
Rents	0
Training & Education	0
Postage	33,210
Disposal Permit	0
Finance Charges	31,059
Telephone	4,160
Cellular	0
Internet	0
Radios	0
Travel & Meetings	1,015
Utilities	0
Contracts	689,185
Contracts - Project Construct	0
Contracts - Temporary Services	0
Contracts - Legal Services	0
Contracts - Pre-Employment	0
Contracts - Licensing Requirements	0
Maintenance - Building	0
Maintenance - Vehicle	776
Maintenance - Equipment	0
Computer - Hardware	12,180
Computer - Software	5,075
Computers - Software Lic & Maint	12,180
Office Supplies	4,100
Departmental Supplies	2,563
Petroleum Products	769
Chemicals	0
Small Equipment	0
Taxes & In Lieu	874
Replacement Charges	0
Capital Leases	0
Unemployment Insurance	0
Liability	12,826
Retiree's Insurance	47,343
Other Expense	0
Capital Outlay - Other Improv	0
Capital Outlay - Vehicles	230,000
Capital Outlay - Equipment	0
Capital Outlay - Construction	0
Transfers	0
Total Engineering	$2,037,994

City of Folsom
Sewer Rate Study
Exhibit 9
Functionalization and Allocation of the Revenue Requirement

	FY 2021
Sewer Operating	
Permanent Salaries	$710,744
Temporary Salaries	0
Overtime	0
Annual Leave Account	8,760
Uniform Allowance	3,744
FICA	58,339
Group Insurance	0
Uniform Expense	0
PERS	327,294
HRA	0
Worker's Compensation	0
Deferred Compensation	14,598
Accrued Leave Current	0
Auto Allowance	0
Employee Assistance Program	0
Post Employment Benefits	0
Combined Benefits	196,383
Printing	1,025
Dues & Publication	11,064
Advertising	5,684
Rents	21,112
Training & Education	6,090
Postage	4,100
Disposal Permit	0
Finance Charges	0
Telephone	7,696
Cellular	7,280
Internet	1,040
Radios	0
Travel & Meetings	4,060
Utilities	78,000
Contracts	50,750
Contracts - Project Construct	0
Contracts - Temporary Services	0
Contracts - Legal Services	4,060
Contracts - Pre-Employment	508
Contracts - Licensing Requirements	1,726
Maintenance - Building	12,180
Maintenance - Vehicle	42,435
Maintenance - Equipment	273,240
Computer - Hardware	0
Computer - Software	0
Computers - Software Lic & Maint	0
Office Supplies	5,125
Departmental Supplies	173,225
Petroleum Products	41,000
Chemicals	131,300
Small Equipment	13,455
Taxes & Permits	10,150
Replacement Charges	0
Capital Leases	0
Unemployment Insurance	0
Liability	28,858
Retiree's Insurance	0
Other Expense	0
Capital Outlay - Other Improv	0
Capital Outlay - Vehicles	0
Capital Outlay - Equipment	0
Capital Outlay - Construction	0
Transfers	0
Total Sewer Operating	$2,255,024

City of Folsom
Sewer Rate Study
Exhibit 9
Functionalization and Allocation of the Revenue Requirement

	FY 2021
Sewer Maintenance	
Permanent Salaries	$443,076
Temporary Salaries	0
Overtime	2,100
Annual Leave Account	6,202
Uniform Allowance	3,744
FICA	34,748
Group Insurance	0
Uniform Expense	0
PERS	192,471
HRA	0
Worker's Compensation	0
Deferred Compensation	2,205
Accrued Leave Current	0
Auto Allowance	0
Employee Assistance Program	0
Post Employment Benefits	0
Combined Benefits	159,970
Printing	1,333
Dues & Publication	1,523
Advertising	0
Rents	20,300
Training & Education	10,150
Postage	0
Disposal Permit	0
Finance Charges	0
Telephone	0
Cellular	0
Internet	0
Radios	0
Travel & Meetings	406
Utilities	0
Contracts	3,045
Contracts - Project Construct	0
Contracts - Temporary Services	5,057
Contracts - Legal Services	0
Contracts - Pre-Employment	0
Contracts - Licensing Requirements	0
Maintenance - Building	761
Maintenance - Vehicle	5,175
Maintenance - Equipment	5,175
Computer - Hardware	0
Computer - Software	0
Computers - Software Lic & Maint	0
Office Supplies	2,050
Departmental Supplies	153,750
Petroleum Products	0
Chemicals	0
Small Equipment	0
Taxes & In Lieu	0
Replacement Charges	0
Capital Leases	0
Unemployment Insurance	0
Liability	16,032
Retiree's Insurance	0
Other Expense	0
Capital Outlay - Other Improv	0
Capital Outlay - Vehicles	0
Capital Outlay - Equipment	0
Capital Outlay - Construction	0
Transfers	0
Total Sewer Maintenance	$1,069,272

City of Folsom
Sewer Rate Study
Exhibit 9
Functionalization and Allocation of the Revenue Requirement

	FY 2021
Total Operations & Maintenance	**$5,362,290**
Annual Debt Service	
Debt	$0
Debt Service - Fiscal Services	0
Net Annual Debt Service	$0
Capital Improvements from Rates (See Exhibit 4)	$3,000,000
Transfers	
Transfers - Cost Allocation	$720,951
To/(From) Operating Reserve	(503,007)
Total Transfers	$217,944
Total Revenue Requirement	**$8,580,234**
Less: Non-Operating Revenues	
Gen Gov't Charges / Sale Of Documents (Prison)	$67,200
Interest / Interest Earned	33,972
Other Financing Sources / Transfers In	0
Total Non-Operating Revenues	**$101,172**
Net Revenue Requirement	**$8,479,062**
Total Equivalent Units	**34,450**
Total Units Cost per Equivalent Unit	**$20.51**

Technical Appendix C – Folsom Plan Area Surcharge

October 9, 2019

Mr. Marcus Yasutake
City of Folsom
50 Natoma Street
Folsom, California 95630

Subject: Folsom Plan Area (South of 50) Surcharge Rate Study for City of Folsom

Dear Mr. Yasutake:

HDR Engineering, Inc. (HDR) was retained by the City of Folsom (City) to provide a comprehensive water and sewer rate study. As part of this rate study the City has requested technical assistance for the Folsom Plan Area (FPA), South of 50 Area, for sale of water to that area. This paper provides an overview of the South of 50 water supply costs and the needed rates to fairly reflect this transaction to residential and non-residential customers.

HDR has developed this technical paper based upon the understanding of the City's current water supply for the South of 50 Area. The final rate decisions for this area should be closely reviewed by the City and their legal counsel to confirm the approach as presented in this paper and that the approach reflects the agreement between the parties, is compliant with any Proposition 218 requirements, and California law.

We appreciate the assistance provided by City staff in the development of this paper. If you have any questions about this paper, please call me directly.

Sincerely yours,
HDR Engineering, Inc.

Shawn Koorn
Project Manager and Associate Vice President

hdrinc.com 929 108th Avenue NE, Suite 1300, Bellevue, WA 98004-4361
(425) 450-6200

Development of the South of 50 Area Surcharge

Service and Water Supply for the South of 50 Area

The Folsom Plan Area (FPA) for the South of 50 Area is supplied by water from the Golden State Water Company (Golden State). Golden State has a 10,000 acre feet water contract with the United States Bureau of Reclamation (Bureau). In 1994 an agreement between Golden State and the City was made in which Golden State agreed to transfer up to 5,000 acre feet of their 10,000 acre feet to the City. This is referred to as Reallocated Water under the agreement and is a "take or pay" obligation for the City. The purchase price was set back in 1994, and by agreement, the rate per acre foot is annually adjusted by the Engineering News Record Construction Cost Index (ENR CCI), 20-city average, for the last quarter of the previous fiscal year, compared to the previous fiscal year before that fiscal year. The increase in each year is to not exceed five percent based on a five year rolling average. Based on 2018/19 information from the City, the price for 2018/19 is $356.67 per acre foot.

Table 1
Summary of the Estimated FY 2018/19 Golden State Water Purchases [1]

Contract	Acre Feet	Estimated Rate $/Acre Ft	Total Est. Annual Cost
Golden State Contract	5,000	$356.07	$1,783,350

[1] Source: City of Folsom

The City does not have a surcharge in place for the South of 50 Area. Since the contract is based on a take or pay contract with Golden State a surcharge needs to be put in place for the residential and non-residential customers in the area. The surcharge needs to reflect the cost of the Golden State water contract costs which is estimated to be approximately $1.7 million for 2018/19.

Development of the South of 50 Area Surcharges

The City currently has a similar surcharge in place for the East Area, which is based on a flat fee approach for residential and a consumption or volumetric rate for the non-residential customers. This same approach is used for the South of 50 Area surcharge.

The City provided the number of customers for the South of 50 Area. Along with the customer information, the usage was calculated based on the specific area of South of 50, and information in the SB 610 Water Supply Assessment which was approved in June 2011.. Table 2 below illustrates this calculation. The results of this calculation show 53.2% of the water usage is projected to be residential.

Table 2 Development of the Proposed South of 50 Area Surcharge				
Description	**Number of Customers**	**Annual Usage (CCF)**	**Annual Usage (Acre Feet)**	**% of Usage**
Residential	8,964	1,158,696	2,660	53.2%
Non-Residential	325	1,019,301	2,340	46.8%
Total	**9,289**	**2,177,997**	**5,000**	**100.0%**

Residential

Based on this analysis 53.2% of the Golden State contract will be allocated to residential. A flat rate approach will be calculated for residential. The advantages of a flat rate approach is that it conforms to the existing approach for the East Area surcharges, it is administratively easy to implement within the City's billing system, and most importantly it is cost based and easy for the customer to understand. Table 3 illustrates the residential South of 50 Area surcharge calculation.

Table 3 Proposed Residential South of 50 Area Surcharge				
Description				
Total Golden State Contract	$1,783,350	[1]		
Residential Portion	53.2%	[2]		
Total $ from Residential	$948,743			
Total $/Residential Customers	8,964	[3]	=	$8.82/Month
Plus: Indirect Costs [4]				0.40/Month
Residential South of 50 Surcharge $ per Month				$9.22/Month
Residential South of 50 Surcharge (rounded)				**$9.20/Month**

[1] – Assumes full purchase of 5,000 acre feet. See Table 2.

[2] – Percent of residential usage based on specific area and SB 610 Water Supply Assessment. See Table 2.

[3] – Number of South of 50 Area customers provided by City.

[4] – Assumes indirect costs of 2.5% for administration and 2% for bill delinquencies.

Table 3 shows the calculated South of 50 Area Surcharge for residential customers is $9.20/month. Included within the surcharge is a component for the indirect administrative costs associated with managing these water supply agreements and associated surcharges, along with billing delinquencies.

Non-Residential

In contrast to the residential water surcharge the non-residential will be based on a consumption or volumetric surcharge. The remaining consumption from the total 5,000 acre foot contract was assumed to be non-residential. This equated to an annual amount of 2,340 acre feet or 1,019,301 CCF for non-residential. Provided below in Table 4 is the Non-Residential calculations.

Table 4
Proposed Non-Residential South of 50 Area Surcharge

Description				
Total Non-Residential Contract Portion	$834,607	[1]		
Total Non-Residential Usage	1,019,301	[2]	=	$0.82/CCF
Plus: Indirect Costs [3]				0.04/CCF
Residential South of 50 Surcharge $ per Month				$0.86/CCF
Residential South of 50 Surcharge (rounded)				**$0.85/CCF**

1] – Total contract of $1,783,350 less Residential of $948,743 = $834,607 Non-Residential portion. See Table 3.

[2] – Total of 5,000 acre feet contract, less residential portion of 2,660, equals 2,340 acre feet or 1,019,301 CCF. See Table 2.

[3] – Assumes 2.5% for administration and 2% for bill delinquencies.

Provided in Table 5 below is a summary of the proposed South of 50 Area Surcharges for the residential and non-residential customers

Table 5
Proposed South of 50 Area Surcharges

Class of Service	Proposed Surcharge
Residential	$9.20/Month
Non-Residential	$0.85/CCF

Summary

The Golden State rate per acre foot is annually adjusted by the Engineering News Record Construction Cost Index (ENR CCI), 20-city average, for the last quarter of the previous fiscal year, compared to the previous fiscal year before that fiscal year. The proposed South of 50 Area Surcharges should be updated annually based on the ENR Cost Index as described in the Folsom and Golden State Water Contract agreement.

The surcharges and implementation of the surcharges developed and presented in this paper are based on City specific information and generally accepted ratemaking principles. Adoption and implementation of the proposed surcharges should be reviewed by the City management and staff, along with the City's legal counsel to ensure compliance with California State law.

Technical Appendix

City of Folsom
Summary of Proposed South of 50 Surcharge

#1	Description	2017/18	
	Total Golden State Water Company Acre Feet - Annual	5,000	[1]
	Price per acre-foot	$356.67	[2]
	Total Golden State Water Company Cost	$1,783,350	[3]

#2	Account Type	Number of Customers [4]	Annual Usage CCF [5]	Annual Usage in Acre Feet	% of Usage
	Single Family/Condo/Townhome	8,964	1,158,696	2,660	53.2%
	Non-Residential	325	1,019,301	2,340	46.8%
	Total	**9,289**	**2,177,997**	**5,000**	100.0%

#3	**Residential**		
	Total contract	$1,783,350	
	Residential percentage	53.2%	
	Total Residential portion	$948,743	
	Total Residential Number of Customers	8,964	Residential Customers
	Total $ per Residential Customer - Water Cost	$8.82	/ Month
	Plus: Total $ per Customer - Indirect Costs [6]	$0.40	/ Month [6]
	Total South of 50 Surcharge - $ per Customer/ Month	$9.22	/ Month
	Total South of 50 Surcharge - $ per Customer/ Month - Rounded [7]	**$9.20**	**/ Month**

#4	**Non-Residential portion of contract**	$834,607	
	Remaining usage to 5,000 acre feet for Non-Residential consumption	1,019,301	ccf
	Total $ per Non-Residential Customer - Water Cost	0.82	$/ccf
	Plus: Total $ per Customer - Indirect Costs [6]	0.04	/ Month [6]
	Total South of 50 Surcharge - $ / ccf	0.86	$/ccf
	Total South of 50 Surcharge - $ / ccf - Rounded [7]	**0.85**	**$/ccf**

Notes

[1] Analysis assumes full purchase of 5,000 A.F. each fiscal year (July 1 - June 30), at $356.07 per acre-foot.
[2] For 2018/19 price is $356.07 per acre-foot. The price of water may be increased by Engineering News Record Construction Cost Index, 20-City average, for the last quarter of previous fiscal year, compared to the same index of the previous fiscal year before that fiscal year. The increase in any year shall not exceed five percent, applied to a five-year rolling average index.
[3] Payment is due in two equal installments due on the last day of December and June of the fiscal year.
[4] Total number of South of 50 Customers provided by City.
[5] Annual usage provided by the City specific for the area and based on the SB 610 Water Supply Assessment, approved June 2011.
[6] Assumes 2.5% for administration and 2% for bill delinquencies.
[7] The fee has been rounded to the nearest 0.05 cents for administrative ease.

Technical Appendix D – Proposition 218 Notification

CITY OF
FOLSOM
DISTINCTIVE BY NATURE

PROPOSITION 218 NOTIFICATION

PROPOSED RATE INCREASE FOR WATER, WASTEWATER, AND SOLID WASTE SERVICES

The City of Folsom is proposing a water, wastewater, and solid waste rate increase for residential and non-residential customers. You are receiving this notice in compliance with Proposition 218, which requires the city to inform property owners and the customer of record that proposed rate increases are being considered; the amount of the proposed rate increase; the basis on which the rates are calculated; and the reason for the proposed increase.

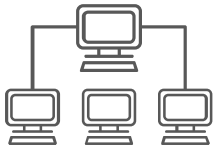
THE CITY HAS NOT MADE COMPREHENSIVE ADJUSTMENTS TO
SOLID WASTE RATES SINCE 2004,
WASTEWATER RATES SINCE 2008, AND WATER RATES SINCE 2011.

The city provides water, wastewater (sewer), and solid waste (trash) service to more than 22,000 residential and non-residential customers. Monthly water, wastewater, and solid waste rates paid by customers are the primary source of revenue for the city's Water, Wastewater, and Solid Waste Divisions. Rates fund utilities operations and maintenance, including but not limited to replacement of utility vehicles, equipment and supplies, compliance with changing State regulations, repair and replacement of existing and aging utility infrastructure, and debt service for previous capital improvements to the city's water treatment plant and facilities.

Reason for Proposed Increases

The City of Folsom is committed to providing safe, reliable, high-quality water, wastewater, and solid waste services for our customers. Proposed rate increases are needed to meet current and future requirements for:

Ongoing operation and maintenance of existing utility services and infrastructure upgrades.



Technology upgrades to comply with State regulations and enhance service efficiency and reliability.

Equipment and supplies necessary to comply with changing State regulations and unfunded mandates.

Repair and replacement of specialized solid waste collection vehicles and trash containers.

Continued recycling efforts under State mandate with substantially reduced recycling revenue and increased processing cost due to an unprecedented crash in recycling markets.

A reasonable and responsible financial reserve for unexpected contingencies.

Please Join Us at an Open House to Learn More

WEDNESDAY, NOVEMBER 6, 2019, 5:30-7 P.M.

The city will host a public open house on Wednesday, November 6 to share information about the rate study and proposed rate increases and to answer customer questions.
The open house will take place at the Folsom Community Center located at 52 Natoma Street in Folsom.
For more information, including a list of Frequently Asked Questions, visit www.folsom.ca.us/utilityrates.

Rates Fund the Utility Infrastructure and Projects That Help Our Community Thrive

Water treatment and reliability projects will ensure the city is able to continue delivering reliable, high-quality water to homes and businesses.

- Upgrades to aging and undersized water infrastructure throughout the city to improve service to customers. These projects will provide better pressure and fire flow to residents and businesses.
- Develop plans and studies, and implement projects, that will serve as a backup water supply during drought and emergency conditions.

Sewer pipeline and replacement projects will minimize annual maintenance costs and the risks of sewer overflows, as well as ensure the city meets requirements of the State's Waste Discharge Requirement Order.

- Upgrades to aging and undersized sewer infrastructure throughout the city to minimize the risk of sewer overflows.
- Upgrades to sewer pump stations to improve pump efficiency (energy savings) and provide backup power in case of power outages.

Solid Waste vehicle replacements and recycling programs will ensure the city is able to continue providing reliable solid waste collection services while the meeting State's recycling requirements.

- Replacement of the city's aging waste collection vehicles will ensure the delivery of reliable trash and recycling services to all customers.
- Recyclable materials will continue to be collected and recycled in compliance with California State law and kept out of landfills.

You can learn more about the city's plan for improving and maintaining its water and wastewater infrastructure in the Water and Wastewater Master Plans at www.folsom.ca.us/WaterandWastewaterMasterPlans

Reducing Costs, Optimizing Savings

Utility managers consistently seek opportunities to reduce costs or optimize savings for providing water, wastewater, and solid waste services. Some recent actions have included:

WATER

- *Implementing a 24-hour shift schedule at the water treatment plant to reduce overtime and standby pay.*
- *Participating in regional efforts to purchase supplies and materials in larger quantities to reduce per-unit costs to the city.*

WASTEWATER

- *Investing in pipeline inspection equipment that can simultaneously clean and inspect the pipeline.*
- *Using alternate project delivery methods to reduce construction costs associated with rehabilitating and/or replacing sewer pipelines (e.g. trenchless technology versus open-cut techniques).*

SOLID WASTE

- *Implementing a swing shift in the Fleet Division to provide vehicle maintenance outside of operating hours.*
- *Improving efficiency and access to service information, and reducing costs of printed material and return services through electronic collection schedules, reminders, and service notices.*

Written protests must be received by the City Clerk at 50 Na
prior to the close of the public hearing on December 10, 2019 in order to be conside

This is a written protest against the proposed utility rate increase to be considered at the December 10, 2019 City Council meeting.

How Proposed Increases Were Calculated

Independent Rate Study and Consultation with the Utility Commission

The City of Folsom conducted a comprehensive Rate Study of all city-provided utilities, including water, wastewater, and solid waste. The Rate Study, prepared by an independent third-party expert, provided a detailed review of the city's utility costs and the rate structure needed to meet those costs to support the delivery of safe, reliable, and high-quality utility services.

The Rate Study recommends that the City of Folsom increase utility rates in order to meet the ongoing operational and capital expenses of each utility, as well as create a surcharge for customers in the Folsom Plan Area south of Highway 50 for the cost of the water supply to serve these customers.

In addition to the Rate Study, city staff briefed and sought the input of the city's Utility Commission on cost drivers and revenue requirements for each utility, a cost-of-service analysis, and the current and proposed rate design for each utility.

Instructions for Written Protests

Property Owners and customers of record receiving City of Folsom water, wastewater, and solid waste service may protest the 2020-2024 rate increase by submitting a written protest by mail or delivering in-person to the City Clerk's Office at 50 Natoma Street, Folsom, CA 95630. To be deemed valid, protests must be in writing, signed, and contain the following information:

1. A statement that the proposed rate that is the subject of the hearing is being protested.
2. Name of the property owner or customer of record who is submitting the protest.
3. The assessor's parcel number and/or street address of the parcel with respect to which the protest is made.
4. Original, wet signature and legibly printed name of the property owner or customer of record who is submitting the protest.
5. Date the protest was signed.
6. A statement by the named property owner or customer of record affirming the contents of the protest are true and correct.

NOTE THAT PROTESTS SUBMITTED BY EMAIL, FAX, OR PHOTOCOPY DO NOT COUNT AS FORMAL WRITTEN PROTESTS.

Only one written protest per identified parcel will be counted for purposes of determining whether there is a majority protest. The City Clerk, or her designee, will tabulate the protests, and any member of the public may observe the tabulation. All protests are public records and will be retained for a minimum of two years.

must be received by the City Clerk at 50 Natoma Street, Folsom, CA 95630
on December 10, 2019 in order to be considered valid and to be counted in the protest tabulation.

Your Name:

_____

I Am The: *Please check appropriate box(s).*

- ☐ Property Owner
- ☐ Customer of Record

Assessor's Parcel Number and/or Street Address:

_____

_____

Which Rate Increase Are You Protesting?

- ☐ Water
- ☐ Wastewater
- ☐ Solid Waste

By Signing Below, I Certify That the Contents of This Protest Are True and Correct.

Your Signature and Date This Protest Was Signed:

_____

Your Printed Name:

_____

Water Residential Rates – Current Rates & Proposed Adjustment

RESIDENTIAL							
	Present	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Monthly Fixed Charge							
SFR (1") Base	$15.00	$18.10	$18.10	$18.10	$20.09	$20.09	$20.09
SFR Low Income*	$9.45	$11.40	$11.40	$11.40	$12.65	$12.65	$12.65
Manufactured Home	$6.83	$8.24	$8.24	$8.24	$9.15	$9.15	$9.15
Manufactured Home L.I.*	$4.27	$5.15	$5.15	$5.15	$5.72	$5.72	$5.72
Condo	$9.45	$11.40	$11.40	$11.40	$12.66	$12.66	$12.66
Commercial/Residential	$4.27	$5.15	$5.15	$5.15	$5.72	$5.72	$5.72
Commodity ($/CCF)							
0 - 20 CCF	$1.08	$1.36	$1.36	$1.36	$1.51	$1.51	$1.51
20 - 40 CCF	$1.30	$1.45	$1.45	$1.45	$1.61	$1.61	$1.61
Over 40 CCF	$1.60	$1.58	$1.58	$1.58	$1.75	$1.75	$1.75
1 CCF = 748 gallons							

Water Non-Residential Rates – Current Rates & Proposed Adjustment

NON-RESIDENTIAL							
	Present	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Monthly Fixed Charge							
5/8"	$12.61	$12.06	$12.06	$12.06	$13.39	$13.39	$13.39
3/4"	$16.62	$18.09	$18.09	$18.09	$20.08	$20.08	$20.08
1"	$26.88	$30.15	$30.15	$30.15	$33.47	$33.47	$33.47
1.5"	$52.68	$60.30	$60.30	$60.30	$66.93	$66.93	$66.93
2"	$84.29	$96.48	$96.48	$96.48	$107.09	$107.09	$107.09
3"	$156.31	$180.90	$180.90	$180.90	$200.80	$200.80	$200.80
4"	$259.82	$301.50	$301.50	$301.50	$334.67	$334.67	$334.67
6"	$518.22	$603.00	$603.00	$603.00	$669.33	$669.33	$669.33
8"	$828.84	$964.80	$964.80	$964.80	$1,070.93	$1,070.93	$1,070.93
10"	$1,191.69	$1,386.90	$1,386.90	$1,386.90	$1,539.46	$1,539.46	$1,539.46
12"	$1,712.97	$2,035.13	$2,035.13	$2,035.13	$2,258.99	$2,258.99	$2,258.99
Consumption Charge							
All Consumption	$1.12	$1.40	$1.40	$1.40	$1.55	$1.55	$1.55
Folsom Plan Area Surcharge							
Residential	$9.20 per month						
Non-Residential	$0.85 per CCF						

The FPA surcharge is a reimbursement of costs for water supplies made available to serve the Folsom Plan Area.

The proposed FPA surcharge will be updated annually based on the Engineering News Record Construction Cost Index (ENR CCI), 20-city average.

Wastewater Residential Rates – Current Rates & Proposed Adjustment

RESIDENTIAL							
	Present	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Monthly Fixed Charge							
Residential per dwelling	$16.15	$20.51	$20.51	$20.51	$25.43	$25.43	$25.43
Manufactured Home per dwelling	$16.15	$20.51	$20.51	$20.51	$25.43	$25.43	$25.43
Multi-Family per unit	$16.15	$20.51	$20.51	$20.51	$25.43	$25.43	$25.43

Wastewater Non-Residential Rates – Current Rates & Proposed Adjustment

NON-RESIDENTIAL								
	Per Unit Of	Present	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
AUTO DLR	per 1,000 sq. ft.	$3.06	$4.10	$4.10	$4.10	$5.09	$5.09	$5.09
BAKERIES	per 1,000 sq. ft.	$26.07	$38.97	$38.97	$38.97	$48.32	$48.32	$48.32
BANKS	per 1,000 sq. ft.	$4.63	$6.15	$6.15	$6.15	$7.63	$7.63	$7.63
SALON	per chair	$1.53	$2.05	$2.05	$2.05	$2.54	$2.54	$2.54
BARS	per 1,000 sq. ft.	$10.72	$14.36	$14.36	$14.36	$17.80	$17.80	$17.80
BOWLING ALLEY	per lane	$6.13	$8.20	$8.20	$8.20	$10.17	$10.17	$10.17
DRY CLEAN	per 1,000 sq. ft.	$26.07	$34.87	$34.87	$34.87	$43.24	$43.24	$43.24
FIRE STATION	per 1,000 sq. ft.	$15.28	$20.51	$20.51	$20.51	$25.43	$25.43	$25.43
GARAGES	per bay	$1.53	$2.05	$2.05	$2.05	$2.54	$2.54	$2.54
HALLS	per 1,000 sq. ft.	$4.63	$6.15	$6.15	$6.15	$7.63	$7.63	$7.63
HLTH/GYM	per 1,000 sq. ft.	$4.63	$6.15	$6.15	$6.15	$7.63	$7.63	$7.63
HOTELS-MOTELS	per room	$4.63	$8.20	$8.20	$8.20	$10.17	$10.17	$10.17
LAUNDRY SELF SERVE	per machine	$7.69	$10.26	$10.26	$10.26	$12.72	$12.72	$12.72
MRKT w/disp	per 1,000 sq. ft.	$15.28	$34.87	$34.87	$34.87	$43.24	$43.24	$43.24
MRKT W/O DISP	per 1,000 sq. ft.	$3.06	$4.10	$4.10	$4.10	$5.09	$5.09	$5.09
MED/DENTAL	per 1,000 sq. ft.	$6.13	$8.20	$8.20	$8.20	$10.17	$10.17	$10.17
MINI STORAGE	per fixture	$16.80	$21.33	$21.33	$21.33	$26.45	$26.45	$26.45
MORTUARY	per slumber room	$19.95	$36.92	$36.92	$36.92	$45.78	$45.78	$45.78
OFFICE	per 1,000 sq. ft.	$3.06	$4.10	$4.10	$4.10	$5.09	$5.09	$5.09
PARK	per 1,000 sq. ft.	$15.28	$0.82	$0.82	$0.82	$1.02	$1.02	$1.02
WORSHIP	per 1,000 sq. ft.	$3.06	$4.10	$4.10	$4.10	$5.09	$5.09	$5.09
REST HOMES	per bed	$4.63	$8.20	$8.20	$8.20	$10.17	$10.17	$10.17
DINING ROOM RESTAURANT	per 1,000 sq. ft.	$73.56	$104.60	$104.60	$104.60	$129.71	$129.71	$129.71
TAKE OUT RESTAURANT	per 1,000 sq. ft.	$61.30	$53.33	$53.33	$53.33	$66.12	$66.12	$66.12
DINE IN/TAKE OUT RESTAURANT	per 1,000 sq. ft.	$67.40	$86.14	$86.14	$86.14	$106.82	$106.82	$106.82
RETAIL STORE	per 1,000 sq. ft.	$3.06	$2.05	$2.05	$2.05	$2.54	$2.54	$2.54

Wastewater Non-Residential Rates – Continued

SERVICE STATIION	per pump	$1.53	$2.05	$2.05	$2.05	$2.54	$2.54	$2.54
THEATER	per 100 seats	$4.63	$6.15	$6.15	$6.15	$7.63	$7.63	$7.63
WAREHOUSE	per 1,000 sq. ft.	$1.53	$2.05	$2.05	$2.05	$2.54	$2.54	$2.54
MULTIFAMILY	per unit	$16.15	$15.38	$15.38	$15.38	$19.07	$19.07	$19.07
SCHOOLS-SECONDARY	per 100 students	$27.57	$51.28	$51.28	$51.28	$63.58	$63.58	$63.58
SCHOOL PRIMARY	per 100 students	$21.44	$20.51	$20.51	$20.51	$25.43	$25.43	$25.43
COLLEGES (winter average)	per 100 gal. of water	$0.12	$2.46	$2.46	$2.46	$3.05	$3.05	$3.05
VACANT	per 1,000 sq. ft.	$3.23	$4.10	$4.10	$4.10	$5.09	$5.09	$5.09
METERED (CCF) Auto Carwashes, Hospitals	per CCF of water	$0.90	$1.14	$1.14	$1.14	$1.41	$1.41	$1.41

Solid Waste Residential Rates – Current Rates & Proposed Adjustment

RESIDENTIAL						
	Present	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Monthly Fixed Charge (Trash can, up to Two Recycle Cans and Two Green Waste Cans)						
64 Gallon Trash	$22.50	$26.00	$30.00	$34.50	$39.75	$45.75
96 Gallon Trash	$25.50	$29.50	$34.00	$39.25	$45.25	$52.25
64 Gallon Low-Income*	$14.50	$18.00	$22.00	$26.50	$31.75	$37.75
96 Gallon Low-Income*	$17.50	$21.50	$26.00	$31.25	$37.25	$44.25
64 Gallon Mobile Home	$18.00	$21.50	$25.50	$30.00	$35.25	$41.25
96 Gallon Mobile Home	$21.00	$25.00	$29.50	$34.75	$40.75	$47.75
64 Gallon Mobile Low-Income*	$9.95	$13.50	$17.50	$22.00	$27.25	$33.25
96 Gallon Mobile Low-Income*	$12.95	$17.00	$21.50	$26.75	$32.75	$39.75
Additional Services (Monthly Charge)						
Extra Trash Can (64 Gallon)	$19.05	$22.50	$25.50	$29.00	$33.25	$38.25
Extra Trash Can (96 Gallon)	$19.05	$26.00	$29.50	$33.75	$38.75	$44.75
Extra Recycle or Green Waste	$1.50	$1.75	$2.25	$2.75	$3.25	$3.75
Additional Charges (Per Occurrence)						
Extra Pickup (Any Can)	$15.00	$30.00	$35.00	$40.00	$46.00	$53.00
Can Cleaning	$20.00	$23.00	$26.00	$30.00	$35.00	$40.00
Can Replacement (Other Than Normal Wear & Tear)	$55.00	$65.00	$75.00	$86.00	$99.00	$114.00
Temporary Three Yard Dumpster	$55.00	$63.00	$72.00	$83.00	$95.00	$109.00
Extra Pickup - Three Yard Dumpster	$31.00	$36.00	$41.00	$47.00	$54.00	$62.00

*Low income rates are subsidized by revenues outside the utility revenues and not by regular rate payers.

Proposed Rate Increases Match Costs to Provide Service

Per the requirements of Proposition 218, utilities may not charge more in rates than the actual cost to provide service. That means proposed rate increases match the costs of providing water, wastewater, and solid waste services to City of Folsom customers from now to fiscal year 2024.

Solid Waste Non-Residential Rates – Current Rates & Proposed Adjustment

NON-RESIDENTIAL						
	Present	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Monthly Fixed Charge						
2 Yard Trash or Green Waste	$87	$114	$120	$126	$132	$136
3 Yard Trash or Green Waste	$115	$129	$135	$142	$149	$153
4 Yard Trash or Green Waste	$138	$144	$151	$159	$167	$172
6 Yard Trash or Green Waste	$174	$173	$182	$191	$201	$207
3 Yard Trash Compactor	$240	$238	$250	$263	$276	$284
4 Yard Trash Compactor	$291	$290	$305	$320	$336	$346
3 - 6 Yard Commingled Recycling	$40	$85	$89	$93	$98	$101
3 - 6 Yard Cardboard Recycling	$30	$77	$81	$85	$89	$92
8 Yard Cardboard Recycling	$45	$92	$97	$102	$107	$110
2 Yard Food Scraps	$260	$342	$360	$378	$396	$408
Additional Services (Monthly Charge)						
Recycle 96 Gallon (Up to 2 Cans, Serviced Every Other Week)	$7.50	$43	$45	$47	$49	$51
Green Waste 96 Gallon (Up to 2 Cans, Serviced Every Other Week)	$7.50	$43	$45	$47	$49	$51
Recycling Compliance Fee (Waived if Use City Recycling Service)	N/A	$30	$32	$34	$36	$37
Sunday Service Premium	N/A	$30	$32	$34	$36	$38
Additional Charges (Per Occurrence)						
Dumpster Switch Out (Any Size)	$70	$74	$78	$82	$86	$90
Dumpster Service Return	$20	$21	$22	$23	$24	$25
Standby Service (per 5 minutes)	$25	$26	$27	$28	$29	$30
Lock Replacement	N/A	$15	$16	$17	$18	$19
Extra Pickup 2 Yard (Any Material)	$27	$33	$35	$36	$38	$39
Extra Pickup 3 Yard (Any Material)	$31	$37	$39	$41	$43	$44
Extra Pickup 4 Yard (Any Material)	$35	$42	$44	$46	$48	$50
Extra Pickup 6 Yard (Any Material)	$43	$50	$53	$55	$58	$60
Extra Pickup Compactor 3 Yard	$90	$90	$95	$100	$105	$110
Extra Pickup Compactor 4 Yard	$90	$90	$95	$100	$105	$110
Bulky Waste Pickup	N/A	$50	$53	$55	$58	$60

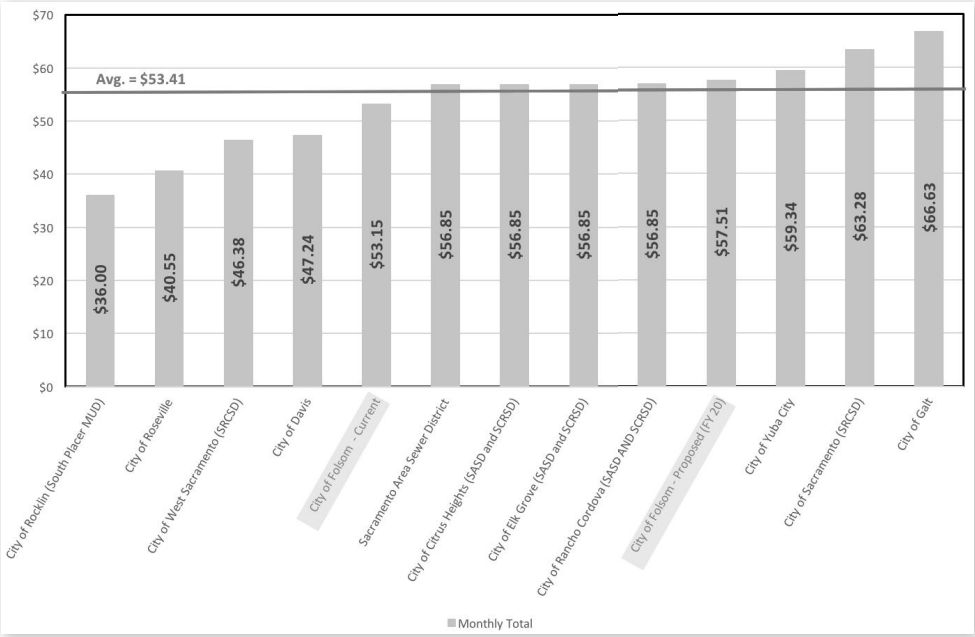
Exceptions to Proposed Rate Increases

The proposed rate increases for water service do not apply to select City of Folsom customers who receive a water bill from San Juan Water District, and the rate increases for wastewater do not apply to customers who receive wastewater collection services from the Sacramento Area Sewer District.

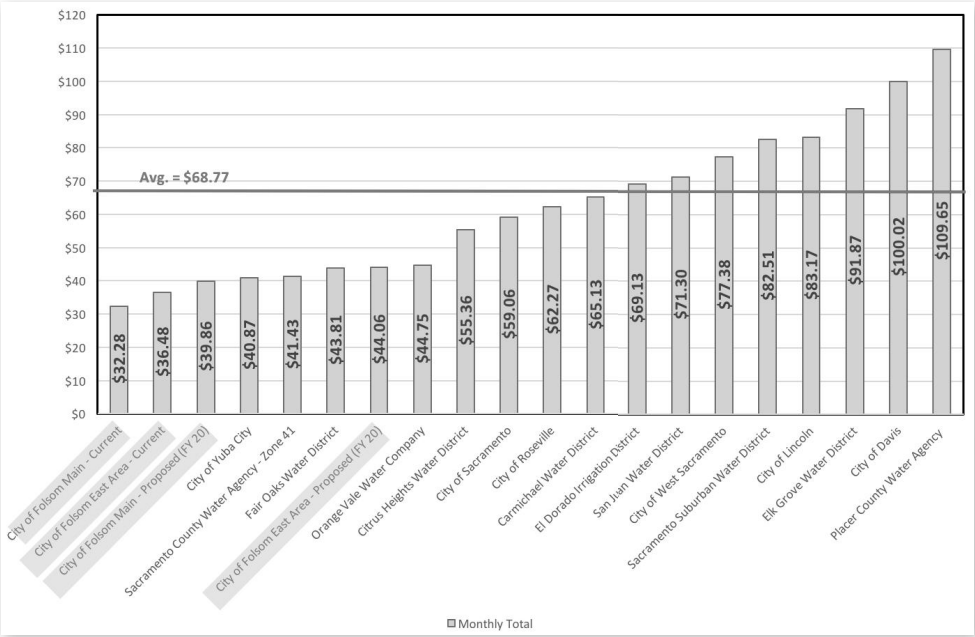
IF APPROVED, RATE INCREASES would take effect on February 1, 2020

Folsom's Rates Are Among The Lowest in the Sacramento Region

Regional SFR – Wastewater Rate Comparisons

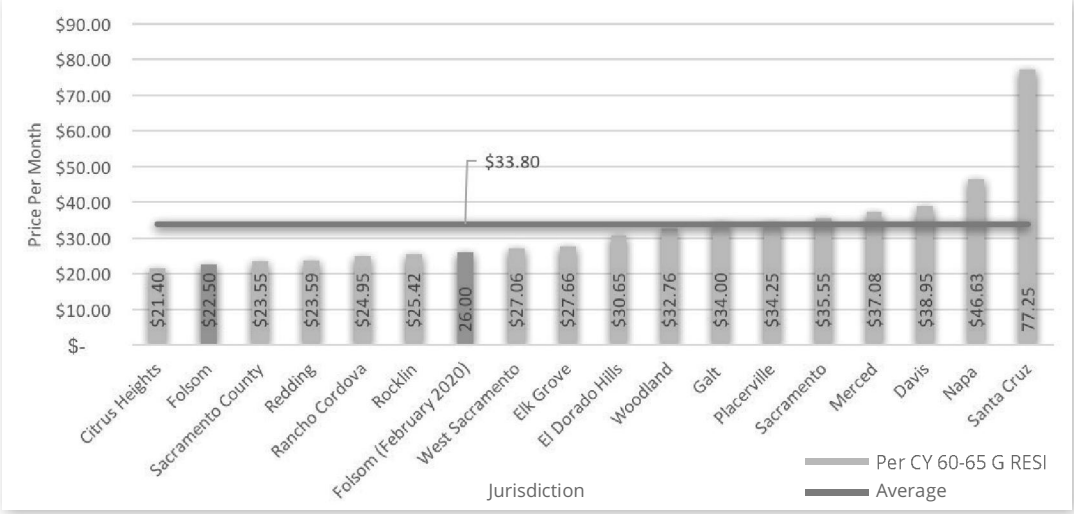


Regional SFR – Water Rate Comparisons



*Based on a residential use of 16 ccf/month.

Residential 64-Gallon Solid Waste Rate Comparisons



CITY OF
FOLSOM
DISTINCTIVE BY NATURE

City of Folsom
50 Natoma Street
Folsom, CA 95630

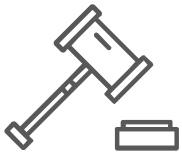
CUSTOMER NOTIFICATION OF PROPOSED RATE INCREASES FOR WATER, WASTEWATER, AND SOLID WASTE SERVICES

Public Hearing on Proposed Rate Increase

TUESDAY, DECEMBER 10, 2019 AT 6:30 P.M.

City of Folsom Council Chambers, 50 Natoma Street, Folsom, CA 95630

The City of Folsom City Council will conduct a public hearing to consider increases to solid waste, wastewater and water rates in the calendar years 2020 through 2024. All property owners and customers of record receiving City of Folsom water, wastewater, and solid waste service, and all other interested persons, may appear at the public hearing to make comments regarding the proposed increases.



INSTRUCTIONS FOR SUBMITTING A WRITTEN PROTEST ARE INCLUDED IN THIS DOCUMENT

Written protests must be received by the City Clerk at 50 Natoma Street, Folsom, CA 95630 prior to the close of the public hearing on December 10, 2019 in order to be considered valid and to be counted in the protest tabulation.

For More Information about Rates and Services

WATER AND WASTEWATER

Contact Environmental and Water Resources Director Marcus Yasutake
at 916-461-6161 or myasutake@folsom.ca.us.

SOLID WASTE

Contact Public Works Director Dave Nugen
at (916) 461-6708 or dnugen@folsom.ca.us.