Draft Report

City of Santa Barbara

Wastewater Rate Study Update

April 2022

April 27, 2022

Mr. Joshua Haggmark
Water Resources Manager
City of Santa Barbara – Public Works
630 Garden Street
Santa Barbara, CA 93101

Subject: Wastewater Rate Study Update Draft Report

Dear Mr. Haggmark:

HDR Engineering, Inc. (HDR) is pleased to present to the City of Santa Barbara (City) the draft report for the wastewater rate study update. The City's comprehensive wastewater rate study was developed to provide proposed wastewater rates that generate sufficient revenue to fund the operation and maintenance costs and capital infrastructure needs of the wastewater utility. More specifically, the study was designed to develop cost-based and proportional rates for the City's customers. This report outlines the overall approach used to achieve these objectives, along with our findings, conclusions, and recommendations.

The costs associated with providing wastewater services to the City's customers has been developed based on City specific information and customer characteristics and were key inputs included within the development of the proposed rates. This update was developed utilizing generally accepted rate setting principles and methodologies as outlined in the Water Environment Federation's Manual of Practice No. 27, Financing and Charges for Wastewater Systems to develop proposed rates that reflect the requirements of Proposition 218. This report provides the basis for developing and implementing wastewater rates which are cost-based, equitable, and legally defensible for the City's customers.

We appreciate the assistance provided by the City's project team in the development of this study and written report. More importantly, HDR appreciates the opportunity to provide these technical and professional services to the City of Santa Barbara.

Sincerely yours,
HDR Engineering, Inc.

Shawn Koorn
Associate Vice President

Table of Contents

Executive Summary

Introduction 1
Overview of the Rate Study Process 1
Key Wastewater Rate Study Results 2
Summary of the Wastewater Revenue Requirement Analysis 3
Summary of the Wastewater Cost of Service Analysis 6
Summary of the Wastewater Rate Designs 7
Summary 11

1 Introduction and Overview

1.1 Goals and Objectives 12
1.2 Overview of the Rate Study Process 12
1.3 Organization of the Study 13
1.4 Summary 14

2 Overview of Rate Setting Principles

2.1 Generally Accepted Rate Setting Principles 15
2.2 Determining the Revenue Requirement 15
2.3 Analyzing Cost of Service 16
2.4 Designing Utility Rates 17
2.5 Economic Theory and Rate Setting 17
2.6 Summary 17

3 Revenue Requirement

3.1 Determining the Revenue Requirement 18
3.1.1 Establishing a Time Frame and Approach 18
3.1.2 Projecting Rate and Other Miscellaneous Revenues 19
3.1.3 Projecting Operation and Maintenance Expenses 20
3.1.4 Projecting Capital Funding Needs 20
3.1.5 Projection of Debt Service 23
3.1.6 Reserve Funding 23
3.1.7 Summary of the Wastewater Revenue Requirement 24
3.2 Consultant's Conclusions 26
3.3 Summary 26

4 Cost of Service

4.1 Objectives of a Cost of Service Study 28
4.2 Determining the Customer Classes of Service 28
4.3 General Cost of Service Procedures 29
4.3.1 Functionalization of Costs 29
4.3.2 Allocation of Costs 29
4.3.3 Development of Distribution Factors 30
4.4 Summary of the Wastewater Cost of Service Analysis 32
4.5 Consultant's Conclusions 36
4.6 Summary 36

5 Rate Design

5.1 Introduction 37
5.2 Rate Design Criteria and Considerations 37
5.3 Development of Cost-Based Wastewater Rates 37
5.4 Overview of the Current Wastewater Rate Structure 38
5.5 Development of the Proposed Wastewater Rates 39
5.6 High Strength Surcharge Rates 43
5.7 Summary 43

Technical Appendix

Executive Summary

Introduction

HDR Engineering, Inc. (HDR) was retained by the City of Santa Barbara (City) to conduct a comprehensive wastewater rate study (Study). The main objectives of the Study were:

- Develop a projection of wastewater revenues to support the City's wastewater operating and capital costs
- Develop a proportional and equitable distribution of the costs to provide wastewater service to those customers receiving wastewater service from the City.
- Propose cost-based and equitable rates for a multi-year time period that are compliant with State law

The City owns, operates, and maintains the wastewater system, which provides service to approximately 92,000 customers within the City of Santa Barbara, and an unincorporated portion of the County. The City's wastewater system plays a leading role in the protection of public health and the environment. This complex system includes 256 miles of wastewater (collection) mains, 7 lift stations, 25 creek crossings, over 7,000 access structures (manholes and cleanouts), 2 miles of pressurized force mains, and the El Estero Water Resource Center (El Estero) . Maintaining this system requires a proactive commitment to investing in the capital infrastructure and resources necessary to keep this vital system operating 24 hours a day, 365 days per year. The costs as shown in this Study were based on data and information gathered from several key planning documents including but not limited to approved and proposed budgets, input during public meetings, customer usage characteristics, and the capital improvement plan.

Overview of the Rate Study Process

A comprehensive rate study uses three interrelated analyses to address the adequacy and proportionality of the utility's rates. These three analyses are a revenue requirement analysis, a cost of service analysis, and a rate design analysis. These three analyses are illustrated below in Figure ES – 1.

Figure ES – 1
Overview of the Comprehensive Wastewater Rate Analysis

Revenue Requirement Analysis	***Compares the revenues to the expenses of the utility to determine the overall revenue adjustment required***
Cost of Service Analysis	***Distributes the revenue requirement to the customer classes of service in a proportional manner***
Rate Design Analysis	***Considers both the level and structure of the rate design to reflect the proportional distribution of costs***

The above analytical framework was utilized in the development of the City's comprehensive wastewater rate study. Each of the above analyses was completed for the City's study. The revenue requirement determined the cost-based level of rate revenue to be collected from the City's customers. Next, the cost of service analysis proportionally distributed the FY 2023 revenue requirement to the customer classes of service. Finally, based on the prior two analyses, the proposed rates were developed to collect the overall revenue requirement in a proportional manner. In this way, the total revenue requirement is collected through rates to support the wastewater enterprise fund. Further discussion of each of these analyses is detailed in this report.

Key Wastewater Rate Study Results

The Study's technical analysis and resulting proposed rates was developed based on the operation and maintenance (O&M) and capital costs necessary to provide wastewater services to the City's customers. HDR's analysis of the City's wastewater O&M and capital costs resulted in the following findings, conclusions, and recommendations.

- A revenue requirement analysis was developed for the projected time period of FY 2022 through FY 2032 for the wastewater utility
- The City's adopted FY 2022 wastewater budget was used as the starting point of the analysis
- Operation and maintenance (O&M) expenses are projected to increase at inflationary levels
  - Staffing adjustments are assumed in FY 2023 and again in FY 2026
  - Chemical supply costs were updated and increased substantially in FY 2023 based on current information on needs and cost increases
  - Significant cost inflation for construction materials and supplies

- A cost of service analysis was developed – for test year FY 2023 – to review the cost-basis of the existing wastewater rates and to distribute the revenue requirement equitably and proportionally among the various customer classes of service for the wastewater utility
- The results of the cost of service analyses for FY 2023 provided the average unit costs (i.e., cost basis) which formed the cost-basis to establish the proposed wastewater rates
- The Study has developed proposed wastewater rates, by customer class of service, for a three year period of FY 2023 – FY 2025
- The proposed wastewater rate revenue adjustments (not specific individual customer bill impacts) are 7.0% in FY 2023 and 6.5% in FY 2024 through FY 2025; the proposed wastewater rates are effective July 1 of each year if adopted by the City Council

Summary of the Wastewater Revenue Requirement Analysis

The City's wastewater utility revenue requirement analysis is the first analytical step in the comprehensive wastewater rate study process. The revenue requirement analysis determines the adequacy of the City's current wastewater rates to fund current and future costs related to both O&M and capital expenses. From this analysis, a determination can be made as to the appropriate overall level of wastewater revenue adjustments needed to provide adequate and prudent funding for the wastewater utility.

For this Study, the revenue requirement analysis was developed from the adopted FY 2022 budget and then projected for the ten-year review period of FY 2023 – FY 2032. As a practical matter, a multi-year time frame is recommended in an attempt to identify any major expenses that may be on the horizon. By anticipating future financial requirements, the City may begin planning for these changes sooner, thereby minimizing short-term rate shock and smoothing long-term rate outlook. However, the focus of the City's Study was on the next three-year rate setting period of FY 2023 – FY 2025.

For the City's wastewater revenue requirement analysis, a "cash basis" methodology or approach was utilized. The cash basis approach is the most commonly used methodology by municipal utilities to set their revenue requirement. Under this approach the revenues of the utility must be sufficient to recover all cash needs including O&M expenses, annual debt service payments, rate funded capital (e.g., Pay-Go), and reserve funding. The primary financial inputs in the development of the revenue requirement were the City's FY 2022 adopted budget documents, historical billed customer and consumption data, and the City's wastewater capital improvement plan. The FY 2022 budgeted O&M expenses were projected using estimated escalation, or inflationary, factors for the City's various expenses to provide wastewater collection, conveyance, treatment, and disposal services over the projected review period. These inflationary factors were based on historical City specific increases in costs and planned changes based on City of Santa Barbara planning and financial projection studies and analyses. In addition, a few other key items were updated. First, staffing adjustments were assumed in FY 2023 and again in FY 2026. Next, within the wastewater treatment expenses, chemical supplies were updated for FY 2023 based on current available information on cost increases experienced by the City.

The proper and adequate funding of capital projects is important to help minimize rate increases over time. General financial guidelines state that - at a minimum - a utility should annually fund through rates an amount equal to, or greater than, annual depreciation expense. The annual depreciation expense reflects the current investment in plant facilities in service being depreciated or “losing” their useful life. This portion of plant investment needs to be replaced to maintain the existing level of infrastructure (and service levels). However, it must be kept in mind that simply funding an amount equal to annual depreciation expense will not be sufficient to fund the replacement of an existing or depreciated facility. Therefore, consideration should be given to funding an amount from annual rate revenues at a level greater than the annual depreciation expense for renewals and replacements.

For the Study, the City continued its funding approach as implemented in the prior wastewater rate study to increase the overall level of “pay-as-you-go” funding for the wastewater capital improvement plan. There are a number of significant capital improvement projects at the treatment plant as well as throughout the collection system over the ten year rate review period. Over the rate setting period, the City anticipates funding the capital needs with $37.7 million in debt issuance, $1.5 million in reserves, and $16.3 million in pay-as-you-go funded capital from FY 2023 – FY 2025.

As a point of reference, the City’s annual depreciation expense is approximately $5.5 million (FY 2020). The capital funding analysis has placed the City’s rate funding for capital improvements at $4.2 million in FY 2022 and the level of rate funding increases over time to fund renewal and replacement needs and reflect prudent funding levels. In this capital funding analysis, annual rate funding reaches $5.8 million by FY 2025. In developing this plan, HDR and the City have attempted to minimize rate impacts while funding the necessary capital improvement for the wastewater utility. In developing this capital improvement plan, it is important to note that HDR is not acting in a municipal advisory role for the City, and the analysis is noting the need for additional funding through long-term debt. Provided below in Table ES - 1 is a summary of the amount of rate funded capital over the three-year rate setting period. A more detailed discussion of the capital funding plan is included in Section 3.5 of this report.

Table ES – 1
Summary of the Capital Improvement Plan (000’s)

	FY 2022	FY 2023	FY 2024	FY 2025
Total Capital Projects [1]	**$11,252**	**$23,421**	**$16,702**	**$15,439**
Total Non-Rate Funding Sources	**$7,007**	**$18,621**	**$10,952**	**$9,689**
Total Rate Funded Capital	**$4,245**	**$4,800**	**$5,750**	**$5,750**

[1] Future (FY 2023 – FY 2025) capital projects have been inflated to reflect an average annual historical change in the ENR CCI index

Given a projection of operating and capital expenses, a summary of the wastewater revenue requirement analysis was developed. Provided below in Table ES – 2 is a summary of the revenue requirement analysis for the City's wastewater utility.

Table ES - 2
Summary of the Wastewater Revenue Requirements (000's)

	FY 2022	FY 2023	FY 2024	FY 2025
Revenues				
Rate Revenues	$24,966	$24,784	$24,605	$24,431
Miscellaneous Revenues	303	241	238	251
Total Revenues	**$25,269**	**$25,025**	**$24,843**	**$24,681**
Expenses				
Total O&M	$17,331	$18,314	$18,911	$19,528
Rate Funded Capital	4,245	4,800	5,750	5,750
Debt Service	3,558	3,551	3,552	4,647
Total To/(From) Reserves	135	94	64	(24)
Total Revenue Requirement	**$25,269**	**$26,759**	**$28,277**	**$29,900**
Bal./(Def.) of Funds	$0	($1,735)	($3,434)	($5,219)
Bal. as a % of Rate Rev.	0.0%	7.0%	14.0%	21.4%
Proposed Revenue Adjustment	**0.0%**	**7.0%**	**6.5%**	**6.5%**
Add'l Rev. from Rev Adj	$0	$1,735	$3,434	$5,219
Bal. / (Def.) After Rate Adj.	$0	$0	$0	$0
Debt Service Coverage Ratio				
Before Revenue Adjustment	2.23	1.89	1.67	1.11
After Revenue Adjustment	2.23	2.38	2.64	2.23

As shown above, the revenue requirement is the sum of the O&M expense, rate funded capital, debt service, and reserve funding. The total revenue requirement is then compared to the total sources of funds which include the rate revenues, at present rate levels, and other miscellaneous revenues. From this comparison, a balance or deficiency of funds in each year can be determined. This balance or deficiency of funds is then compared to the current level of rate revenues to determine the level of adjustment needed to meet the revenue requirement. It is important to note the "Bal. / (Def.) of Funds" row is cumulative. That is to say that any rate revenue adjustments in the initial years will reduce the deficiency in the later years. Over the rate setting period of this Study - FY 2023 through FY 2025 - the total deficiency of rate revenue is 21.4%.

Based on the revenue requirement analysis developed herein, HDR has concluded that the City will need to increase the level of wastewater revenues received over the next three fiscal years (FY 2023 – FY 2025). HDR has reached this conclusion for the following reasons:

- Adjustments are necessary to fund the City's capital needs, of which a large portion is driven by the planned issuance of long-term debt to fund the wastewater capital improvement projects

- Adjustments are necessary to maintain prudent funding of annual renewal and replacement capital infrastructure projects of the wastewater utility
- The proposed adjustments maintain the City's strong financial health (e.g., debt service coverage ratios, adequate reserves, etc.) and provide long-term, sustainable funding levels for the City

In reaching this conclusion, HDR would recommend that the City adopt the proposed wastewater rate revenue increase for FY 2023 through FY 2025 to provide sufficient funding for the City's anticipated O&M and capital improvement needs over the next three fiscal years. A detailed discussion of the development of the revenue requirement is provided in Section 3 of this report.

Summary of the Wastewater Cost of Service Analysis

A cost of service analysis determines the proportional distribution of the revenue requirement to the various customer classes of service. The objective of the cost of service analysis is different from determining the revenue requirement. Whereas the revenue requirement analysis determines the utility's overall revenue needs, the cost of service analysis determines the equitable allocation and proportional distribution of the City's O&M and capital costs (e.g., revenue requirement) for the proposed time period. In this case, the revenue requirement for FY 2023 was used for establishing the cost of service analysis.

In summary form, the cost of service analysis began by functionalizing the revenue requirement for the wastewater system. As explained in more detail in Section 4 of this report, the functionalized revenue requirement was then allocated to the various cost components. The individual functional allocation totals were then proportionally distributed to the various customer class of service based upon each customer class's use of or demand placed on the system. The distributed expenses for each customer class were then aggregated to determine each customer class's overall revenue responsibility. Table ES – 3 provides the summary of the cost of service analysis completed for the City's wastewater utility customers.

Table ES - 3
Summary of the Wastewater Cost of Service Analysis ($000)

Class of Service	Current Rate Revenues	Distribution Costs	$ Difference	% Difference
Residential	$19,601	$20,927	($1,326)	6.8%
Commercial	3,667	3,942	(275)	7.5%
Commercial High	1,384	1,507	(123)	8.9%
High Strength Surcharge	133	143	(10)	7.7%
Total	**$24,784**	**$26,519**	**($1,735)**	**7.0%**

The results of the cost of service analysis indicate minor cost differences between the customer classes of service. This is shown by the fact that the cost of service results, specifically the % difference, for each customer class of service is very close to the system overall revenue need (i.e., 7.0%). These customer classes of service reflect the various types of wastewater customers served by the City. Given the requirements of California Constitution Article XIII D, Section 6 (commonly referred to as Proposition 218), the results of the wastewater cost of service analysis are used to establish the proposed rates. As noted in the cost of service section (Section 4) of this report, the implementation of cost of service adjustments will impact the overall customer bill and revenue generation for the wastewater utility. A detailed discussion of the development of the cost of service analysis is provided in Section 4 of this report.

Summary of the Wastewater Rate Designs

The final step of the comprehensive wastewater rate study process is the design of the wastewater rates to collect the desired levels of revenue, based on the results of the revenue requirement and cost of service analyses. The revenue requirement analysis provided a set of recommendations related to the level of annual revenue adjustments whereas the cost of service results are related to implementing interclass adjustments to reflect the proportional distribution of costs.

It is important to understand that each customer class has a separate rate given the different service characteristics for each class as outlined in the cost of service analysis. The City currently has a rate structure for each of the customer classes of service. The Residential customer class includes single-family and multi-family customers. The residential customers are charged a fixed charge and a volumetric charge based on metered water consumption. Volumetric charges are assessed on single family and multi-family 2-4 units for only a portion of their water use. The purpose of limiting the applicable billing units is to recognize that water use above a certain level is likely being used for outdoor watering, which does not flow into the wastewater collection system or receive treatment at El Estero. In this report, the word “cap” refers to the quantity of water, in hundred cubic feet (HCF), after which residential customers are not charged wastewater fees for volumetric use.

For Single Family customers, the rate includes a monthly base fee that is the same for all single-family customers, plus a volume charge for the first 10 HCF of metered water consumption. The 10 HCF reflected the typical water consumption for indoor use, which is used as a surrogate for wastewater volumes discharged to the wastewater collection and treatment system. Multi-Family has two subcategories based on the number of units. The first subcategory for 2 to 4 dwelling units has a fixed charge, plus a volume charge for the first 10 HCF of metered water consumption per dwelling unit per month. As part of the review of consumption data, it is recommended that the City remove the cap for the 2 to 4 unit customers. The second subcategory for 5 or more dwelling units has a fixed charge plus a volume charge for all metered water consumption. Commercial customers are categorized based on two strength levels: Commercial and Commercial High (includes Industrial uses). The applicable commercial rate is the greater of a base fee (i.e., minimum bill), by class, based on the size of meter to reflect a portion of the fixed costs of providing service regardless of water or wastewater consumption, or a volume charge, by class, for all consumption.

After discussion with City staff and Water Commission, and a review of the residential customer consumption patterns, minor rate structure changes are recommended in order to better reflect customer characteristics, system facility requirements, and meet the goals and objectives of the City. Based on a review of the single family customer class consumption data, it is recommended that the cap be lowered to reflect recent and changing consumption characteristics of the single family customer class. It is recommended that the cap be lowered to 8 HCF to reflect continued water conservation based upon the average winter water consumption data. It is recommended that the cap reduction be phased in over two years.

The consumption patterns for the Multi-Family 2-4 Units customer class were also reviewed and analyzed. The data shows that there is a minimal difference is winter and summer use for the Multi Family 2-4 customer class, indicating there is not a strong outdoor irrigation pattern at these properties, and most of the water usage is therefore being used indoors and discharged to the City's wastewater system. Furthermore, based on the review of the data, the vast majority of customers are not reaching the cap of 10 HCF per dwelling unit. Given all this data, it is recommended that the cap be eliminated for the Multi-Family 2-4 Units customer class. If the cap is eliminated all multi-family unit customers, including the Multi-Family 2-4 Units and the Multi-Family 5+ Units classes would be charged in the same manner.

The Commercial and Commercial high customers have no recommended rate structure changes at this time. The last customer class is the High Strength Surcharge. This class is for customers who may exceed the limits on constituent wastewater strength and are charged based on testing for Biological Oxygen Demand (BOD), Total Suspended Solids (TSS), and Ammonia. No proposed changes to the rate structure for High Strength Surcharge rates are recommended at this time.

Given the result of the revenue requirement and cost of service analyses, proposed rates can be developed that reflect the cost based allocation of the costs of providing service. Provided in Table ES – 4 is a summary of the current and proposed Residential class rates.

Table ES – 4
Summary of the Present and Proposed Residential Wastewater Rates

	Present Rates	FY 2023	FY 2024	FY 2025
	$ / Acct or DU			
Base Charge (All Customers)	$22.68	$25.35	$27.00	$28.76
Volume Charge				
Single Family	***$ / HCF***			
0 – 10 HCF	$3.71	--	--	--
Over 10 HCF	0.00	--	--	--
0 – 9 HCF	--	$3.83	--	--
Over 9 HCF	--	0.00	--	--
0 – 8 HCF	--	--	$4.28	$4.62
Over 8 HCF	--	--	0.00	0.00
2 – 4 Dwelling Units				
0 – 10 HCF	$3.71	--	--	--
Over 10 HCF	0.00	--	--	--
All Usage (HCF)	--	$3.83	$4.28	$4.62
5 + Dwelling Units				
All Usage (HCF)	$3.71	$3.83	$4.28	$4.62

As shown above, the billing cap for Single Family customers has been reduced from 10 HCF to 8 HCF over a two year period, and the 10 HCF billing cap for Multi-Family 2-4 units has been removed. The cost-basis for the proposed residential wastewater rates are based on the average unit costs as calculated within the cost of service analysis for the Residential customer class. It is important to note that the cost of service analysis for the single family customer class was based on the current cap of 10 HCF, and the rate design analysis reflects the recommended reduction to the billing cap from 10 HCF to 8 HCF. Therefore, the unit costs were utilized to develop the rates, and the proposed rates adjusted to reflect the change in consumption to target the same revenue levels as outlined in the cost of service analysis.

Provided below in Table ES – 5 is a summary of the current and proposed commercial customer classes rates. While the rate structure, a minimum bill or volumetric bill, was maintained, this Study updated the minimum bill calculation in FY 2024. This was done to allow for a transition of the rates for Commercial customers. Again, the cost-basis for the proposed commercial rates are based on the average unit costs as calculated for the commercial class of service and as developed in the cost of service analysis.

Table ES – 5
Summary of the Present and Proposed Commercial Wastewater Rates

	Present Rates	FY 2023	FY 2024	FY 2025
Commercial				
Minimum Bill	***$ / Meter***			
5/8-inch	$43.39	$46.65	$51.69	$55.05
3/4-inc	65.09	69.98	77.54	82.58
1-inch	75.72	81.41	90.46	96.34
1-1/2-inch	129.97	139.73	129.23	137.63
2-inch	216.68	232.96	206.76	220.20
3-inch	433.20	465.75	387.68	412.88
4-inch	540.67	581.29	646.13	688.13
6-inch	1,082.96	1,164.33	1,292.25	1,376.25
8-inch	1,895.21	2,037.60	2,067.60	2,202.00
10-inch	2,909.10	3,127.67	2,972.18	3,165.38
Volume Charge	***$ / HCF***			
All Consumption	$4.60	$4.94	$5.27	$5.63
Commercial High				
Minimum Bill	***$ / Meter***			
5/8-inch	$56.06	$61.04	$59.70	$63.58
3/4-inc	84.09	91.56	89.55	95.37
1-inch	98.27	107.00	104.48	111.27
1-1/2-inch	160.80	175.08	149.25	158.95
2-inch	280.69	305.62	238.80	254.32
3-inch	561.21	611.06	447.75	476.85
4-inch	701.75	764.09	746.25	794.75
6-inch	1,403.22	1,527.87	1,492.50	1,589.50
8-inch	2,455.57	2,673.71	2,388.00	2,543.20
10-inch	3,858.97	4,201.78	3,432.75	3,655.85
Volume Charge	***$ / HCF***			
All Consumption	$5.73	$6.24	$6.65	$7.08
High Strength	***$ / Lb.***			
BOD – >750 mg/l	$0.32	$0.32	$0.34	$0.36
TSS - >850 mg/l	0.42	0.46	0.48	0.51
Ammonia - > 90 mg/l	0.98	1.10	1.17	1.25

Similar to the residential proposed rates, the commercial rates reflect the collection of the proportional allocation of the revenue requirement through the cost of service analysis. The development of the City's proposed wastewater rate designs, and the cost-basis for them, are discussed in more detail in Section 5 of this report.

Summary

This wastewater rate study is the culmination of technical analyses undertaken for the City's wastewater utility. The recommendations contained within this study are intended to adequately fund and maintain the City's wastewater utility with cost-based and proportional rates.

1 Introduction and Overview

HDR Engineering, Inc. (HDR) was retained by the City of Santa Barbara (City) to conduct a comprehensive wastewater rate study (Study) update. The objective of the Study was to perform a review of the City's operating and capital costs in order to develop proposed rates to meet the proportionality requirements of Proposition 218. HDR's comprehensive wastewater rate Study for the City reviewed the adequacy of the City's existing wastewater rates and provided the analytical framework and cost-basis for the final proposed wastewater rates by customer class of service.

The City owns and operates the wastewater collection and treatment system in Santa Barbara, California. The wastewater system includes the facilities necessary to collect, convey, treat, and dispose of the wastewater flows generated by its customers. The costs associated with providing wastewater services to customers have been developed based on financial and operating data and information provided by the City and this data and information were key inputs in the development of the City's wastewater rate Study.

1.1 Goals and Objectives

The City had a number of key goals and objectives in developing the wastewater cost of service study. These key objectives provided a framework for policy decisions in the analyses that followed. The City's key goals and objectives for this study were:

- Develop the Study in a manner that is consistent with the principles and methodologies established by the Water Environment Federation (WEF), Manual of Practice No. 27, Financing and Charges for Sewer Systems (WEF MOP #27) and the requirements of California Constitution Article XIII D, Section 6 (commonly referred to as Proposition 218)
- In financial planning - and when establishing the City's rates - review and utilize industry best practices, while recognizing and acknowledging the specific and unique characteristics of the City's wastewater system and its customers
- Meet the City's financial planning criteria and goals such as debt service coverage ratios, adequate funding of capital infrastructure replacement, and maintenance of adequate and prudent reserve levels
- Develop a rate transition plan that adequately supports the wastewater utility's infrastructure funding requirements, while attempting to minimize overall impacts to rates

1.2 Overview of the Rate Study Process

User rates must be set at a level where a utility's operation and maintenance (O&M) and capital expenses are met with the revenues received from customers. This is an important point, as failure to achieve this objective may lead to insufficient funds to maintain system integrity. To evaluate the adequacy and equitability of the existing wastewater rates, a comprehensive rate study is often performed. A comprehensive wastewater rate study consists of three interrelated analyses. Figure 1 - 1 provides an overview of these analyses.

Figure 1 – 1
Overview of the Comprehensive Wastewater Rate Analyses

Revenue Requirement Analysis	***Compares the revenues to the expenses of the utility to determine the overall revenue adjustment required***
Cost of Service Analysis	***Distributes the revenue requirement to the customer classes of service in a proportional manner***
Rate Design Analysis	***Considers both the level and structure of the rate design to reflect the proportional distribution of costs***

The above framework for reviewing and evaluating wastewater rates was utilized for the development of the City's comprehensive wastewater rate study. The revenue requirement determines the cost-based level of rate revenue to be collected from the City's customers. Next, the cost of service analysis proportionally distributed the FY 2023 revenue requirement to the customer classes of service. Finally, based on the prior two analyses, the proposed rates were developed to collect the overall revenue requirement in a proportional manner. As noted, as an enterprise fund, the wastewater utility was reviewed on a stand-alone basis. That is, no funding from other City departments funds was assumed in order to determine the adequate and prudent level of funding needed from the wastewater utility's rate revenues to support its operating and capital requirements.

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 analysis or steps used to review and develop the City's proposed wastewater rates. The following sections comprise the City's wastewater cost of service study report:

- **Section 2** – Overview of Rate Setting Principles
- **Section 3** – Revenue Requirement Analysis
- **Section 4** – Cost of Service Analysis
- **Section 5** – Rate Design Analysis

Technical Appendices are attached at the end of this report, which detail the various technical analyses that were undertaken in the preparation of this Study.

1.4 Summary

This report will review the comprehensive wastewater cost of service study prepared for the City. This report has been prepared utilizing generally accepted and industry standard rate setting techniques, while taking into consideration the specific requirements for establishing rates pursuant to the California Constitution.

2 Overview of Rate Setting Principles

This section of the report provides background information about the wastewater rate setting process, including descriptions of generally accepted principles, types of utilities, methods of determining a revenue requirement, cost of service, and rate design. This background information is useful for gaining a better understanding of the details and analysis presented in Sections 3 through 5 of this report.

2.1 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, proportional, and set at a level that meets the utility's full revenue requirement
- Easy to understand and administer
- Designed to conform to generally accepted rate setting techniques
- Stable in their ability to provide adequate revenues for meeting the utility's financial, O&M, and regulatory requirements
- Established at a level that is stable from year-to-year from a customer's perspective

2.2 Determining the Revenue Requirement

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 its 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 (reserve) payments. O&M 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 projects funded from rate revenues. In lieu of including capital projects funded from rate revenues, a utility sometimes includes a 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).

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

Public utilities typically use the cash basis[1] approach to establish their revenue requirements. An exception occurs if a public utility provides service to a major wholesale or contract customer. In this situation, a public utility could use the "utility basis" approach (see Table 2 - 1) regarding earning a fair return on its investment. The City's Study is based on the cash basis approach.

Table 2 – 1
Cash versus Utility Basis Comparison

	Cash Basis		Utility Basis (Accrual)
+	O&M Expenses	+	O&M Expenses
+	Taxes / Transfer Payments	+	Taxes/Transfer Payments
+	Rate Funded Capital (≥ Depr. Expense)	+	Depreciation Expense
+	Debt Service (Principal + Interest)	+	Return on Investment
=	**Total Revenue Requirement**	=	**Total Revenue Requirement**

2.3 Analyzing Cost of Service

After the total revenue requirement is determined, it is equitably allocated and proportionally distributed to the various customers benefitting from the service. The allocation and distribution, as analyzed through a cost of service analysis, reflects the cost relationships for providing wastewater services. A cost of service analysis requires three analytical steps:

1. Costs are ***functionalized*** or grouped into the various cost categories related to providing service. For a wastewater utility, this typically includes collection, pumping, and treatment. 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, wastewater costs are typically classified as volume-[2], strength-(BOD, TSS)[3], and customer-related.[4]
3. Once the costs are allocated to the components, they are proportionally ***distributed*** to each customer class of service. The distribution is based on each customer class's relative

[1] "Cash basis" as used in the context of rate setting is not the same as the terminology used for accounting purposes and the recognition of revenues and expenses. As used for rate setting, "cash basis" simply refers to the specific cost components to be included within the revenue requirement analysis.
[2] "Volume" refers to the amount of wastewater discharged.
[3] "Strength" refers to the level of constituents (biological oxygen demand, or BOD, and total dissolved solids, or TSS) in wastewater discharged.
[4] "Customer-related" refers to such costs as billing and collections.

(proportional) 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 the allocated costs are proportionally distributed to each customer class of service, they can be summed to determine the total distributed cost (i.e., cost of service) for the class of service. Average unit costs are then developed which provides the unit costs needed to develop cost-based rates.

2.4 Designing Utility Rates

Rates that meet the utility's objectives are designed based on both the revenue requirement and the cost of service analysis. This approach results in rates that are strictly cost-based. In designing the final proposed rates, continuity of past rate philosophy, economic development, ease of administration, and customer understanding may be taken into consideration. However, the proposed rates must take into consideration each customer class's proportional share of the costs allocated through the cost of service analysis in order to meet Proposition 218 requirements.

2.5 Economic Theory and Rate Setting

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. This statement's implications on utility rate designs are significant. For example, a wastewater utility incurs additional costs to treat high-strength wastewater. It follows that the customers who create and discharge high-strength wastewater into the system create additional operating costs and should pay for the costs associated with treating higher strength waste and any other maintenance costs associated with their discharges. When costing and pricing techniques are refined, consumers have a more accurate understanding of what the service costs are to collect and treat wastewater. This price-equals-cost concept provides the basis for the subsequent analysis. This is further reflected in the requirements of Proposition 218 which references the need for cost-based and proportional rates.

2.6 Summary

This section of the report has provided a brief introduction to the general principles, techniques, and approach used to develop cost-based wastewater rates. These principles and techniques are the basis for the City's comprehensive wastewater rate study.

3 Revenue Requirement

This section of the report details the development of the revenue requirement analysis for the City's wastewater system. The revenue requirement analysis is the first analytical step in the comprehensive wastewater rate study process. From this analysis, a determination can be made as to the overall level of rate revenue adjustments needed to provide adequate and prudent funding for both O&M and capital needs of the utility. As noted previously, the primary objective of this Study was to develop cost-based and proportional rates that comply with the requirements of Proposition 218.

3.1 Determining the Revenue Requirement

In developing the City's study, the objective of the revenue requirement is for the wastewater utility to financially stand on its own and be properly and adequately funded. That is to say, as an enterprise fund, no revenues are being transferred from other City departments or funds to support the wastewater utility. As a result, the revenue requirement analysis assumes the full and proper funding needed to operate and maintain the wastewater system on a financially sound and prudent basis for the long-term.

3.1.1 Establishing a Time Frame and Approach

To begin calculating the revenue requirement for the City's wastewater utility, a time frame was established for the analysis (i.e., the Study period). The budget year (FY 2022) plus a 10-year review period (FY 2023 – FY 2032) was determined to be an appropriate time frame for the projected revenue requirement analysis. The revenue requirement was based on the City's adopted wastewater budget for FY 2022, which was then projected over a multi-year period based upon projected escalation, or inflationary, factors. Reviewing a multi-year time period is recommended since it attempts 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 potentially minimizing short-term rate impacts and overall long-term rates.

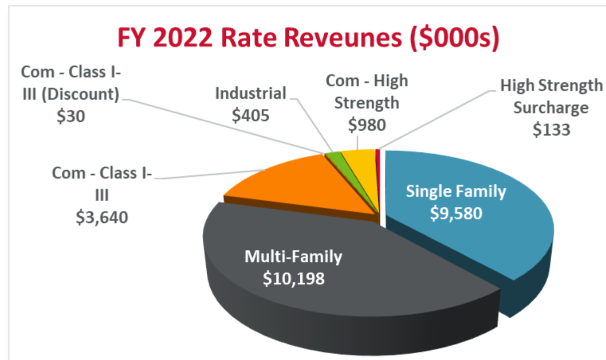
The second step in determining the revenue requirement was to decide on the basis for accumulating costs. As discussed in Section 2 of this report, the revenue requirement analysis was developed using the cash basis methodology or approach. The cash basis approach is the most commonly used methodology by municipal utilities to set their revenue requirement. This is also the methodology that the City has historically used to establish its wastewater revenue requirement.

Given a time period around which to develop the revenue requirement and a method to accumulate the costs, the focus shifts to the development and projection of the revenues and expenses of the City's wastewater utility.

The primary financial inputs in the development of the revenue requirement were the City's adopted FY 2022 budget documents, recent 12-months of customer billing data, historical financial reports, and the City's Capital Improvement Plan (CIP). Presented below is a detailed discussion of the analytical steps and key assumptions contained in the development of the projections of the City's wastewater revenue requirement analysis.

3.1.2 Projecting Rate and Other Miscellaneous Revenues

The first step in developing a projection of the wastewater rate revenues, at present rate levels, was to determine the projected billing units (fixed and volumetric charges) for each customer group (i.e., class of service). The billing units for each customer group were based on the most recent 12-month period to determine the current customer billing and consumption characteristics. These billing units were then multiplied by the applicable current wastewater rates. This method of independently calculating rate revenues links the projected rate revenues used within the analysis to the projected billing units. It also helps to confirm that the billing units used within the Study are reasonable for purposes of projecting future revenues, proportionally distributing costs and, ultimately, establishing proposed cost-based rates. The rate revenues are also shown in Exhibit 3 of the Technical Appendix, under "Rate Revenues" for FY 2022.



As can be seen in the above graph, the majority of the City's rate revenues are derived from Single Family and Multi-Family customers. The City also serves a variety of commercial customers. In total, and at adopted present rate levels, the City's wastewater system is projected to receive approximately $25.0 million in rate revenue in FY 2022. Based on current City planning documents, the Study has assumed no customer account growth with the exception of minor customer growth for multi-family customers. At the same time, billed wastewater volumes for commercial customers are assumed to decrease slightly overtime by -0.2% per year. Residential customers are also assumed to conserve water and reduce wastewater contributions over the next few years, thereby reducing billed wastewater volumes. It is assumed that Residential customer wastewater volumes will decrease by 2.0% per year for FY 2023 through FY 2025 to account for the incoming drought cycle and pending water use reduction (and thus reduction in wastewater flows) mandates from the state. Assuming current rates (i.e., no rate adjustments), the projection of FY 2025 rate revenues is assumed to be approximately $24.4 million based on the conservation assumptions noted above. The detailed calculation of the rate revenues at present rates is shown on Exhibit 6 and the projection of revenues is calculated in Exhibit 7 of the Technical Appendix.

In addition to the rate revenues collected, the City also receives other miscellaneous revenues. These are revenues related to rents and leases, pretreatment analysis, interest income, etc. In total, the City is projected to receive approximately $303,000 in miscellaneous revenues in FY 2022. Miscellaneous revenues were estimated to decrease slightly over the study time period and reach $251,000 by FY 2025.

On a combined basis, taking into account the rate revenues and the miscellaneous revenues, the City's wastewater utility has total projected revenues of approximately $25.3 million in FY 2022 which decreases slightly over time to approximately $24.7 million by FY 2025. This slight decline is a result of the assumptions concerning customer growth and billed volumes of wastewater discussed above. The assumptions used for projecting growth and increases in miscellaneous revenues can be found in Exhibit 2 of the Technical Appendix. The projection of rate and miscellaneous revenues can be found in Exhibit 3 of the Technical Appendix.

3.1.3 Projecting Operation and Maintenance Expenses

Operation and maintenance (O&M) expenses are incurred by the City to maintain the wastewater collection, conveyance, treatment, and disposal system at a consistent service level. The starting point of the projection of O&M expenses was the City's adopted FY 2022 budget. Budgeted O&M expenses were projected over the rate study time period based upon projected escalation, or inflationary, factors. These factors were based upon recent historical cost trends/increases and future projected increases. The escalation factors ranged from 2.0% to 4.5% annually for the various types of expenses (e.g., salaries, benefits, materials & supplies). Within the wastewater treatment expenses, chemical costs were updated for FY 2023 given the recent increase in chemical costs experienced by the City. This increase in chemical costs is projected to an increase $236,000 or 38.4%. Additionally, staffing adjustments are assumed in FY 2023 of $200,000 and again in FY 2026 which increases the total additional staffing adjustments to $415,000.

The total operation and maintenance expenses for the wastewater utility are budgeted to be approximately $17.3 million in FY 2022. Based on the assumed escalation of costs and the additions to O&M, the total O&M expenses are projected to increase to approximately $19.5 million by FY 2025. A summary of the annual O&M expenses is shown as a line item in Table 3 – 2. The detailed projection of the O&M expenses can be found on Exhibit 3 of the technical appendices.

3.1.4 Projecting Capital Funding Needs

A key component in the development of the wastewater revenue requirement was to properly and adequately fund annual capital improvement needs in both the short and long-term. One of the major issues facing many utilities across the U.S. is the amount of deferred capital projects and the funding pressure from regulatory-related improvements. The proper and adequate funding of capital projects is an important issue for all wastewater utilities and not just a local issue or concern of the City. To accomplish this, the City has an adopted Capital Improvement Plan (CIP) to address both the near- and long-term needs of the wastewater utility.

In general, there are three types of capital projects that the City may need to fund. These include the following types:

- Renewal and replacement projects
- Growth/capacity expansion projects
- Regulatory-related projects

A renewal and replacement project is essentially a project to maintain the existing system that is in place today. As existing facilities age, they become worn out, obsolete, etc. The City should continuously be making investments to maintain the integrity of its facilities with renewal and replacement projects. In contrast to a renewal and replacement project, growth / capacity expansion projects are related to providing service (i.e., available capacity) to new customers. This may be through expansion of the existing system or construction of new facilities to provide service to customers within the City's service area. Finally, certain projects may be a function of a regulatory requirement in which the Federal or State government mandates the need for an improvement to the system to meet regulatory standards (e.g., limitations on discharges). Understanding these different types of capital projects is important because it may help to explain why costs are increasing and the cost drivers for any needed rate adjustment.

The way in which projects are funded may also vary by the type of capital project. For example, renewal and replacement projects should be funded through annual rates on a "pay-as-you-go" basis. In contrast to this, growth or capacity expansion projects may be funded through the collection of capacity charges (i.e., growth-related charges) in which new development pays a proportional share of the cost of improvements required as a result of their connection (impact). Finally, regulatory projects may be funded by a variety of different means, which may include one or more sources such as rate revenues, long-term debt, grants, etc.

While the above discussion appears to neatly divide capital projects into three clearly defined categories, the reality of working with specific capital projects may be more complex. For example, a pump may be replaced, but while being replaced, it is up-sized to accommodate the need for greater capacity. There are many projects that share these "joint" characteristics. At the same time, projects may not be "replacement" related, but rather "improvement" related.

As a part of this revenue requirement analysis and capital funding plan the City wanted to maintain a funding approach of "pay-as-you-go" funding as part of the City's capital improvement plan to maintain the wastewater system (e.g., renewal and replacement needs). In addition to the annual renewal and replacement needs, the City is also making very significant upgrades to the El Estero electrical distribution renewal system and the sanitary sewer overflow compliance program. As a result, there are significant capital improvement needs over the next 10-year period. Over the rate setting period - FY 2023 through FY 2025, the City anticipates funding the capital needs with $37.7 million from debt issuance, $16.3 million in rate funding, and $1.5 million in reserve funding.

Provided below in Table 3 – 1 is a summary of the wastewater capital funding analysis for FY 2022 through FY 2025.

Table 3 – 1 Summary of the Capital Improvement Plan (000's)			
	FY 2023	FY 2024	FY 2025
Capital Projects			
El Estero WRC Electrical Dist. Renewal	$9,187	$9,435	$9,689
El Estero WRC Maintenance Program	1,034	2,426	0
El Estero WRC Strategic Plan Implement.	370	116	11
Lift Station Maintenance Program	7,184	1,107	271
Sanitary Sewer Capacity Improv. Prog.	205	527	325
Sanitary Sewer Overflow Compliance Prog.	3,112	3,038	3,228
Sea-Level Rise Adaption Program	257	53	54
Cal-Trans	0	0	0
EEWWTP - CIP08, 09, 10, 11 -Solids Handling	0	0	0
EEWWTP - CIP05 - Primary Treatment	0	0	0
EEWWTP - CIP06 - Thickening	0	0	0
Capital Project Contingency	0	0	0
Future Capital Projects	0	0	0
Transfer to Capital Reserve	2,072	0	1,861
Total Capital Projects	**$23,421**	**$16,702**	**$15,439**
Other Funding Sources			
Operating Fund Reserves	$0	$0	$0
Capital Fund Reserves	0	1,517	0
Carryovers and Encumbrances	0	0	0
Reimbursement	2,250	0	0
Secured Debt (SRF)	16,371	9,435	9,689
Assumed Low Interest Loan	0	0	0
Assumed Revenue Bond	0	0	0
Additional Revenue Bonds	0	0	0
Total Other Funding Sources	**$18,621**	**$10,952**	**$9,689**
Total Rate Funded Capital	**$4,800**	**$5,750**	**$5,750**

Note: FY 2023 – FY 2025 capital projects have been inflated 2.7% / year to reflect the average annual change in the ENR CCI index

While the total amount of capital projects to be funded may vary from year to year, the wastewater capital funding plan has attempted to provide a consistent funding source for the replacement of deteriorating system assets (i.e., renewal and replacement funding). In this case, beginning in FY 2022, the wastewater utility's rates will fund an amount of $4.2 million in projects. Over time, this source of funding is increased to $5.8 million by FY 2025. As a point of reference, the City's annual depreciation expense was approximately $5.5 million in FY 2020. A desirable funding target for rate funded CIP is an amount equal to or greater than annual depreciation expense in order to approximately keep up with the rate of deterioration of the system assets. This level of funding is slightly less than minimum level of rate funded capital based on annual depreciation expenses in the first year. With the proposed rate revenue increases, subsequent year's annual rate funding is greater than projected annual depreciation expense.

It is important to understand that the depreciation expense is not the same as replacement cost. Thus, funding an amount which exceeds the depreciation expense is both prudent and appropriate. As noted, to help establish a prudent level of annual replacement funding through rates, HDR worked with City staff to develop a funding plan for the CIP. In developing this capital funding plan and overall financial plan, HDR and the City have attempted to minimize rate impacts while funding the capital projects identified by the City.

3.1.5 Projection of Debt Service

The City currently has four outstanding long-term debt issues with a total estimated annual payment in FY 2022 of $3.6 million. As noted in the capital funding section, the City is anticipated to issue new (additional) long-term debt to fund necessary capital improvements. Based on this assumption, the annual debt service payment is projected to increase to $4.6 million by FY 2025.

It is important to note that HDR is not advising the City on the terms of any bond issuances but instead identifying the overall funding needs. The City is working with an independent financial advisor, and City financial staff, to develop the overall financing plan to fund the capital improvement projects identified in this Study. Given this, HDR is not acting in a municipal advisor role to the City for the issuance of any long-term borrowing.

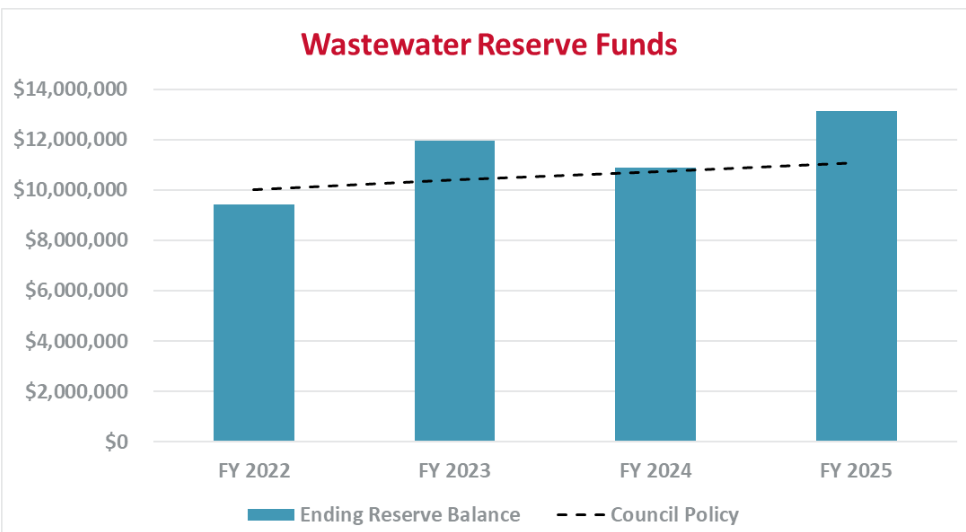
3.1.6 Reserve Funding

The final component of the revenue requirement analysis is reserve funding. This can be described as additional transfers of revenue to reserve funds to maintain prudent ending fund balances or for future funding of specific or unanticipated projects. Additionally, any balance of funds after the expenses are paid is transferred to the operating fund to fund cash flow variances. As will be shown, the proposed rates are at sufficient levels to maintain minimum target levels and to be available for future capital projects.

- **Operating Reserve**: The City does not currently have a designated or segregated operating reserve, per se. However, to aid in the financial modelling, one was created/utilized to better reflect needed reserves to address varying cash flow requirements. While an operating reserve was developed for financial modeling purposes, it acts as a financial buffer to address daily and seasonal cash flow requirements. The use of this fund for financial modeling purposes is to segregate the needed funds for daily operating requirements from those funds/reserves which address capital funding requirements.
- **Capital Fund**: The City's minimum target for the capital fund is set at 5% of the net book value of assets for the City's wastewater utility. In FY 2022, this minimum target was $5.7 million based on the assets used in the plant in service portion of the cost of service analysis. Over the rate setting period, the balance is healthy and continues to remain at or above minimum levels over the time period.

- **Disaster Reserves**: This reserve fund has a target of 15% of O&M expenses and for FY 2022 that equals $2.6 million. This level is met in FY 2022 and remains at the target level for the entire rate setting period with the transfer of funds in future years to reflect target minimums over the rate setting time period.
- **Contingency Reserves**: The reserve fund for contingency is targeted at 10% of O&M expenses which is approximately $1.7 million for FY 2022 and the target is met in the first year. Over the rate setting period, the fund is maintained at the target minimum through transfers of funds in future years to reflect target minimums over the rate setting time period.
- **Debt and Rate Stabilization Reserve:** This fund is to hold an amount aside as a buffer for the outstanding long-term debt issuances as well as to provide emergency funding should wastewater rate revenues be substantially low. There is no target for this reserve fund at this time. There was no additions or uses of funds assumed over the review period and so the balance remained flat.

Provided below is a graphical summary of the ending balances of the reserve funds over the FY 2022 through FY 2025 review period. As can be expected, given the timing and level of capital funding needs the reserve funds vary from year to year. Overall, the Study has maintained minimum reserve levels during the three-year rate setting time period.



3.1.7 Summary of the Wastewater Revenue Requirement

Given the above projections of revenues and expenses, a summary of the wastewater revenue requirement analysis can be developed. In developing the revenue requirement analysis, consideration was given to the financial planning considerations of the City. In particular, emphasis was placed on attempting to minimize rates, yet still provide adequate funds to support the operational activities and capital projects throughout the projected time period. Presented below in Table 3 – 2 is a summary of the City's projected wastewater revenue requirement. Detailed exhibits of this analysis can be found in the Technical Appendix (Exhibits 1 – 7).

Table 3 - 2
Summary of the Wastewater Revenue Requirements (000's)

	FY 2022	FY 2023	FY 2024	FY 2025
Revenues				
Rate Revenues	$24,966	$24,784	$24,605	$24,431
Miscellaneous Revenues	303	241	238	251
Total Revenues	**$25,269**	**$25,025**	**$24,843**	**$24,681**
Expenses				
Total O&M	$17,331	$18,314	$18,911	$19,528
Rate Funded Capital	4,245	4,800	5,750	5,750
Debt Service	3,558	3,551	3,552	4,647
Total To/(From) Reserves	135	94	64	(24)
Total Revenue Requirement	**$25,269**	**$26,759**	**$28,277**	**$29,900**
Bal./(Def.) of Funds	$0	($1,735)	($3,434)	($5,219)
Bal. as a % of Rate Rev.	0.0%	7.0%	14.0%	21.4%
Proposed Revenue Adjustments	**0.0%**	**7.0%**	**6.5%**	**6.5%**
Add'l Rev. from Adjustments	$0	$1,735	$3,434	$5,219
Debt Service Coverage Ratio				
Before Revenue Adjustment	2.23	1.89	1.67	1.11
After Revenue Adjustment	2.23	2.38	2.64	2.23

As shown above, the revenue requirement is the sum of the O&M expense, rate funded capital, debt service, and reserve funding. The total revenue requirement is then compared to the total sources of funds which include the rate revenues, at present rate levels, and other miscellaneous revenues. From this comparison, a balance or deficiency of funds in each year can be determined. This balance or deficiency of funds is then compared to the current level of wastewater rate revenues to determine the level of adjustment needed to meet the revenue requirement. It is important to note the "Bal. / (Def.) of Funds" row is cumulative. That is, any adjustments in the initial years will reduce the deficiency in the later years. The cumulative deficiency in FY 2025 is 21.4% of the rate revenues. On an average annual basis, the overall revenue adjustment needs are driven by approximate increases in inflation (2.7%), impacts of conservation (0.7%), Council minimum reserve policies (0.2%), increased annual debt service (1.3%), and increases in rate funded capital (1.9%).

The revenue requirements developed in Table 3 - 2 have been developed based on industry standard approaches, City specific wastewater utility data, the adopted sewer utility budget, planning information, and reflect the financial planning objectives of the City. More specifically, the City desires to adequately and prudently fund its wastewater operating and capital needs. In doing so, any needed revenue adjustments should avoid large adjustments in any single year.

Table 3 – 2 has also included a set of proposed revenue adjustments (blue highlighted band) which are sufficient to meet the total revenue requirements over the projected time period. As noted, the proposed revenue adjustments are a function of assumed inflation / cost escalation over this time period, coupled with the need to increase the capital improvement funding from rates (renewal and replacement funding), meet minimum reserve levels, fund annual debt service payments, and meet legally required debt service coverage ratios. If wastewater rate adjustments are not implemented, the City will have insufficient funding to prudently operate and maintain the wastewater system, or more importantly, meet annual debt service coverage requirements when additional long-term debt is issued. Over the rate setting period, annual deficiencies range from $1.7 million in FY 2023 to $5.2 million in FY 2025. It is important to note that these proposed overall revenue adjustments may not reflect the final rate adjustments, or bill impacts, seen by the City's individual customers. The next analytical step of this rate study is the cost of service analysis which will proportionally distribute the total revenue requirement among the various customer classes. The overall revenue adjustment reflects the needed revenues for the system as a whole. A more detailed revenue requirement is included in Exhibit 3 of the Technical Appendix.

3.2 Consultant's Conclusions

Based on the revenue requirement analysis developed herein, HDR recommends that the City adjust their overall wastewater system rate revenues 7.0% in FY 2023 and 6.5% in FY 2024 and FY 2025. HDR has reached this conclusion for the following reasons:

- Revenue adjustments are necessary to fund the City's capital needs, of which a significant portion is driven by the funding of replacement capital projects, such as improvements at El Estero and the Braemar Lift Station.
- Revenue adjustments are necessary to fund the City's planned issuance of long-term debt to fund a portion of the capital projects. Absent the proposed revenue adjustments, the City will be unable to meet overall debt service coverage ratios and issue additional long-term debt to fund necessary capital projects.
- The revenue adjustments also reflect the need to fund annual inflationary impacts to operation and maintenance of the wastewater utility
- The proposed revenue adjustments maintain the City's strong financial health and provide long-term sustainable funding levels for the City's wastewater utility.

In reaching this conclusion, HDR recommends that the City adopt the proposed revenue adjustments in order to provide sufficient funding for its annual O&M and capital improvement program over the FY 2023 – FY 2025 time period

3.3 Summary

This section of the comprehensive wastewater rate Study report has provided a discussion of the City's wastewater revenue requirement analysis. The revenue requirement analysis determined the overall operating and capital costs of the City's system and developed a revenue transition plan to support the City's needed revenue adjustments. The next section of this report will discuss the cost of service analysis developed for the City's wastewater utility which is the basis for establishing equitable and proportional wastewater rates.

4 Cost of Service

In the previous section, the revenue requirement analysis focused on the total sources and application of funds needed to adequately fund the City's wastewater utility. This section will provide an overview of the cost of service analysis developed for the City's wastewater utility.

The wastewater cost of service analysis is concerned with the proportional distribution of the total revenue requirement among the customer classes of service (e.g., residential, commercial) to meet the requirements of Proposition 218. The previously developed revenue requirement was utilized in the development of the cost of service analysis.

4.1 Objectives of a Cost of Service Study

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

- Proportionally distribute the City's revenue requirement among the customer classes of service; and
- Derive average unit costs (i.e., cost-based rates) for subsequent rate designs.

The primary objective of the cost of service analysis is the proportional manner to collect the revenue requirement from the City's various customer classes of service. The second rationale for conducting a cost of service analysis is to allow for the development of proposed rates that properly reflect the costs incurred by the City and the differing impacts that each customer group places on the wastewater system. For example, a wastewater utility typically incurs costs related to flow (wastewater volumes), strength, and customer cost components. Each of these types of costs may be collected in a slightly different manner to allow for the development of rates that collect costs in the same manner as they are incurred.

4.2 Determining the Customer Classes of Service

The first step in a cost of service analysis is to determine the customer classes of service. The classes of service used within the City's wastewater cost of service analysis are:

- Residential
  - Single Family
  - Multi-Family
- Commercial
- Commercial High
- High Strength Surcharge

In determining the classes of service for cost of service purposes, the objective is to group customers together into similar or homogeneous groups based upon facility requirements and/or flow characteristics. HDR reviewed the current customer characteristics and facility requirements to determine the classes of service. The classes of service used within this cost of service study are the City's current customer (rate) classes and these customer groupings are consistent with typical industry practices.

4.3 General Cost of Service Procedures

In order to determine the proportional cost to serve each customer class of service on the City's wastewater system, a cost of service analysis is conducted. A cost of service analysis utilizes a three-step approach to review costs. This analytical process is outlined in Chapters 6 and 7 of the Water Environment Federation Manual of Practice No. 27 (WEF MOP #27). These steps take the form of functionalization, allocation, and distribution. Provided below is a detailed discussion of the cost of service analysis conducted for the City's wastewater utility, and the specific steps taken within the analysis.

4.3.1 Functionalization of Costs

The first analytical step in the cost of service analysis is called *functionalization*. Functionalization is the arrangement of expenses and asset (plant) data by major operating functions (e.g., collection, pumping, treatment). Within this Study, the City's accounting records functionalized a majority of the expenses and assets. For those costs or assets that were not already functionalized, HDR worked with City staff to review and functionalize the expense or asset

4.3.2 Allocation of Costs

The second analytical task performed in a wastewater cost of service study is the allocation of the costs. Allocation determines why the expenses were incurred or what type of need is being met. The following cost allocators were used to develop the Study:

- ✓ **Volume Related Costs:** Volume related costs are those costs which tend to vary with the total quantity of

Terminology of a Wastewater Cost of Service Analysis

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

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

Distribution – Equitably distributing the allocated costs to each class of service based upon each class's proportional contribution to that specific cost component.

Volume Costs – Costs that are allocated as volume-related vary with the total flow of wastewater (e.g., power for pumping).

Strength Costs – Costs allocated 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). Different types of customers may have high wastewater strength characteristics. High strength wastewater costs more to treat. Treatment facilities are, in part, designed and sized to meet these treatment demands.

Customer Costs – Costs allocated as customer-related vary with the number of customers on the wastewater system, e.g., billing, collecting and accounting costs.

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

wastewater collected and treated. A majority of collection system costs are included in this component. An example of a volume-related cost is electricity used for pumping or treating wastewater.

- ✓ **Strength-Related Costs:** Strength-related costs are those costs associated with the additional handling and the treatment of high "strength" wastewater. For the City's study, strength was differentiated between biochemical oxygen demand[5] (BOD), total suspended solids[6] (TSS), and Ammonia[7] (NH3). These three constituents represent the strength factors that drive the City's treatment related costs. Increased strength levels of BOD, TSS, or NH3 equates to increased treatment costs for wastewater treatment systems.
- ✓ **Customer-Related Costs:** Customer-related costs vary with the addition or deletion of a customer or a cost which is a function of the number of customers served. Customer related costs typically include the costs of billing, collecting, and accounting. Customer related costs can be further defined as "weighted" which reflects a higher per customer cost of providing specific costs such as billing. An example of a weighted approach and as noted in the WEF MOP #27, is a capacity component may be included which reflects the capacity placed on the system by a customer in comparison to a residential equivalent (e.g., flow per account in terms of the number of residential customers).
- ✓ **Revenue-Related Costs:** Some costs associated with the utility may vary with the amount of revenue received by the utility. An example of a revenue related cost would be a utility tax which is based on gross utility revenue.

The basis, or methodology, for the cost allocation process is outlined in the WEF MOP #27. The methodology provided in the manual was then tailored and applied to the City's specific and unique circumstances, customers, costs, and system operation to develop an appropriate and equitable allocation approach.

4.3.3 Development of Distribution Factors

Once the allocation process is complete, and the customer groups have been defined, the various allocated costs were distributed to each customer class of service. The City's allocated costs were proportionally and equitably distributed to the customer classes of service using the following distribution factors.

- ✓ **Volume Distribution Factor:** Volume-related costs are generally distributed on the basis of each class's contribution to total wastewater flows. In order to develop this distribution factor, some knowledge of the contribution to flows must be determined. Wastewater flows were estimated based on billed usage and winter water consumption plus assumed I&I[8] for each class of service for the projected test period, FY 2023. Winter water

---

5 BOD is the amount of dissolved oxygen that must be present in water in order for microorganisms to decompose the organic matter in the wastewater

6 TSS is the entire amount of organic and inorganic particles dispersed in wastewater

7 NH3 is the quantity of elemental nitrogen present in wastewater as ammonia (NH3) and expressed as elemental nitrogen, N, and hydrogen, H.

8 I&I is the inflow and infiltration of water into the wastewater system. This can be from rainwater, groundwater, or other sources of water that make it into the wastewater system.

consumption is used as a surrogate for wastewater flows as wastewater flows are not metered at the individual customer level. Winter water is presumed to reasonably reflect "indoor consumption" and the amount that is discharged into the wastewater system. The calculation of the volume distribution factor is shown in Exhibit 8 of the Technical Appendix.

- ✓ **Customer Distribution Factor:** Customer costs within the cost of service analysis are distributed to the customer classes of service based upon their respective number of customer accounts. Three types of customer distribution factors were developed: actual, weighted customer service and accounting, and capacity demand. The actual customer distribution factor assumes that there is no disproportionate per customer cost associated with serving a customer (e.g., postage for bills is the same regardless of the size or usage of the customer) and a proportional distribution to each class of service is based on the number of accounts in each class. In contrast, a weighted customer distribution factor assumes that there is some disproportionality associated with serving different types of customers. The weighted customer service and accounting distribution factor attempts to estimate the level of cost difference in serving the customers and, in this study, is based on the number of dwelling units as opposed to the number of accounts. Exhibit 9 of the Technical Appendix provides the calculation of the customer allocation factor.
- ✓ **Capacity Demand Distribution Factor:** This factor attempts to reflect the different costs and capacity requirements (i.e., demands) associated with serving customers with larger sized meters. For example, there is a significant cost difference associated with the potential demand (or wastewater flow) of a customer with a 6" water meter as compared to a customer with a 5/8" water meter. This capacity and cost difference is reflected within the distribution factor. The distributed cost reflects an equitable proportion of fixed costs on the system which are distributed based on the capacity demands the customer can place on the system based on the size (i.e., capacity) of their respective meter. This distribution factor is also included in Exhibit 9 of the Technical Appendix and as a customer related component of the analysis.
- ✓ **Strength Distribution Factor:** Strength-related costs are distributed between BOD, TSS, and NH3. These costs are distributed to each of the classes of service based upon their estimated strength levels (i.e., their respective contributions to the strength of the wastewater). Strength levels for residential and commercial customers were estimated based upon industry data / standards, as well as limited data from the City. The strength levels for the high strength customers were based on actual testing of the customers' wastewater. The strength levels in total, for each customer class of service, were utilized to calculate the pounds removed for each constituent. Exhibit 10 in the Technical Appendix provides the calculation of the strength-distribution factor.
- ✓ **Revenue Related Distribution Factor:** The revenue related distribution factor was developed from the projected rate revenues for FY 2023 for each customer class of service as developed in Exhibit 3. A summary of the revenue allocation factor is provided in Exhibit 11 of the Technical Appendix.

The development of the City's distribution factors within this cost of service analysis were based on generally-accepted principles as outlined in the WEF MOP #27 to meet the proportionality requirements of Proposition 218.

4.4 Summary of the Wastewater Cost of Service Analysis

In summary, the cost of service analysis began by functionalizing the City's wastewater assets (infrastructure) and O&M expenses. The functionalized asset and expense accounts were then allocated into their various cost components (e.g., volume, strength, etc.). Provided below in Table 4 - 1 is a summary of the allocation of the City's FY 2023 test period revenue requirement using the methodology outlined in the WEF MOP #27 and the City's specific facility requirements and operations.

Table 4 – 1
Summary of the Allocation of the FY 2023 Revenue Requirement ($000's)

Volume	Strength	Customer	RR / DA	Total
$7,100	$5,588	$13,831	$0	**$26,519**

Based on generally accepted approaches, and the City's specific costs and operation of the wastewater collection and treatment system, the revenue requirement of approximately $26.5 million is equitably allocated between the volume, strength, and customer related components. Detailed exhibits of the allocation of the FY 2023 revenue requirement can be found on Exhibits 13 and 14 of the Technical Appendix.

Once the FY 2023 revenue requirements are allocated to the various cost components, they are then proportionally distributed to the various customer classes of service based on the distribution factors previously developed. The distributed costs are then summed to develop the total distribution of costs to each customer class of service. Provided below in Table 4 – 2 is a summary of the distribution of costs to the customer classes of service.

Table 4 – 2
Summary of the Distribution of the FY 2023 Revenue Requirement ($000's)

	Volume	Strength	Customer	RR / DA	Total
Residential	$5,424	$3,951	$11,552	$0	**$20,927**
Commercial	1,209	880	1,853	0	**3,942**
Commercial High / Industrial	467	614	426	0	**1,507**
High Strength Surcharge	0	143	0	0	**143**
Total	**$7,100**	**$5,588**	**$13,831**	**$0**	**$26,519**

As shown in Table 4 – 1 and 4 – 2 the total revenue requirement for FY 2023 of $26.5 million has been equitably allocated between the various cost components based on generally accepted methodologies. Next, the individual allocation totals were then distributed proportionally to the customer classes of service based on the appropriate distribution factors. For example, volume-related costs were distributed based on each customer class's estimated share of total wastewater contributions (flows). Summing the distributed costs for each class of service provides the total distributed cost for each class of service (e.g., residential = $20.9 million).

The total distributed costs for each class of service are then compared to the current revenues of each class of service to determine the overall change in revenues needed from each class of service to reflect the proportional distribution of costs (i.e., the cost of service). Provided below in Table 4 - 3 is a summary of the cost of service analysis for the City's Study.

Table 4 - 3
Summary of the FY 2023 Wastewater Cost of Service Analysis ($000)

Class of Service	Current Rate Revenues	Distributed Costs	$ Difference [1]	% Difference
Residential	$19,601	$20,927	($1,326)	6.8%
Commercial	3,667	3,942	(275)	7.5%
Commercial High	1,384	1,507	(123)	8.9%
High Strength Surcharge	133	143	(10)	7.7%
Total	**$24,784**	**$26,519**	**($1,735)**	**7.0%**

The results of the cost of service analysis indicate minor cost differences between the customer classes of service. When reviewing the results of the cost of service analysis, it is important to understand that the results will not be "exact" each time the City updates its cost of service analysis. This is due to changing customer wastewater characteristics, external impacts such as drought conditions, and other changes in how the City incurs costs.

To comply with the requirements of article XII D, section 6 (b) of the California Constitution (Proposition 218), HDR recommends that cost of service adjustments be made in accordance with the results of the cost of service analysis. This analysis provides the cost-basis for the proposed rates. To accomplish this, the distributed costs shown in the prior tables are used to develop average unit costs which become the proposed rates. In this way, the proposed rates are proportional, cost-based, and reflect the results of the cost of service analysis.

Provided below in Table 4 – 4 is the development of the Residential average unit costs, for both Single Family and Multi-Family customer classes. As a point of reference, the fixed charges are based on the system average fixed average unit cost calculation which is based on the fixed costs divided by the total number of customers. The Distribution column reflects the proportional share of costs for each customer class based on the distribution factors in Exhibits 8 through 11.

For example, in the table below, the % Distribution of Total for the volume charge reflects the residential proportional share of these allocated costs. The costs shown in Table 4 - 4 were taken from Table 4 – 2. The calculated average unit costs then become the basis for the proposed rates under the rate design section.

Table 4 – 4
Summary of the FY 2023 Residential Unit Costs ($000's)

	% Distribution of Total	Total Costs	Billing Units	Average Unit Cost
Fixed Charge				
Weighted Customer	*100.0%*	$93	45,462	$0.17
Capacity Demand	*100.0%*	13,737	45,462	25.18
Rev. Related	*100.0%*	0	45,462	0.00
Total Fixed		**$13,830**		**$25.35**
Volume Charge				
Volume	*76.4%*	$5,424	2,500,000	$2.17
BOD	*69.7%*	1,024	2,500,000	0.41
TSS	*71.2%*	2,322	2,500,000	0.93
Ammonia	*70.6%*	604	2,500,000	0.24
Total Volume		**$9,375**		**$3.75**

The approach to establishing the average unit costs for the Commercial and Commercial-High customer classes was slightly different. The current and proposed rate structure is based on a minimum bill approach. Under this minimum bill approach, a customer bill reflects the greater of the minimum bill by meter size, or the actual metered water consumption times the wastewater rate. In this way, each customer, by meter size, funds the fixed costs of the system through the cost of service allocations. The development of the minimum bill for a 5/8" meter started with utilizing the average unit cost for the volumetric charge. That figure was then multiplied by the average use of 8 HCF for a 5/8" meter. Subsequent (i.e., larger) meter sizes were adjusted based on a derivative of the American Water Works Association (AWWA) safe operating capacities for water meters. Table 4 – 5 shows the development of the Commercial customer class volume average unit cost calculation. The costs shown in Table 4 - 5 were again taken from Table 4 – 2 and the calculated average unit costs in Table 4 - 5 will become the basis for the Commercial and Commercial-High rate designs.

Table 4 – 5 Summary of the Commercial Unit Costs ($000's)				
Distributed Costs	% Distribution	Total Costs	Billing Units	Average Unit Cost
Fixed Charge				
Volume	*19.0%*	$1,209	344,362	$3.51
BOD	*19.5%*	228	344,362	0.66
TSS	*19.0%*	518	344,362	0.39
AMN	*18.6%*	135	344,362	1.50
		$2,089		**$6.07**

Note: Table may not foot due to rounding.

Similar to how the average volume unit costs for the Commercial customer class was developed, the average unit costs for the Commercial High / Industrial class were calculated in Table 4-6 below.

Table 4 – 6 Summary of the Commercial – High Strength Unit Costs ($000's)				
Distributed Costs	% Distribution	Total Costs	Billing Units	Average Unit Cost
Fixed Charge				
Volume	*4.6%*	$467	154,239	$3.03
BOD	*9.2%*	194	154,239	1.25
TSS	*7.2%*	338	154,239	0.53
AMN	*6.7%*	82	154,239	2.19
		$1,080		**$7.01**

Note: Table may not foot due to rounding.

The development of the high strength surcharges followed the same methodology for distributing costs as outlined in the MOP #27 which is the same approach as with all other customer classes. The development of the high strength surcharge was based on the City's actual treatment process and the total pounds removed from the wastewater for BOD, TSS, and NH3 at the wastewater treatment plant. The costs distributed to the treatment of strength constituents for the High Strength Surcharge was then divided by the pounds removed. A summary of the strength factors is included in Exhibit 10 of the Technical Appendices.

Table 4 – 7 provides a summary of the average unit cost calculation for the Commercial High-Strength customer class. It should be noted that these high strength charges reflect only those pounds greater than the strength included within the rate structure which are 750 mg/l for BOD, 850 mg/l for TSS, and 90 mg/l for NH3. These limits are based on the maximum values

experienced on the City's system for domestic customers as well as industry standard strength levels for domestic customers. All strength discharges below these levels are included within the rates charged for these customers.

Table 4 – 7
Summary of the High Strength Surcharge Unit Costs

	% Distribution of Total	Total Costs ($000s)	Pounds	Ave. Unit Cost ($ / Lb)
BOD >750 mg/l	*1.6%*	$24	75,186	$0.32
TSS >850 mg/l	*2.6%*	84	184,375	0.46
NH3 > 90 mg/l	*4.1%*	35	31,661	1.10
		$143		

In summary, the allocated and distributed costs for each customer class of service are used to develop the proposed rates for the test period, in this case, FY 2023. The total distributed costs for each class of service are divided by the appropriate billing units (e.g., number of customers, volumetric usage, pounds, etc.) to provide average unit costs. The average unit costs are cost-based rates which provide the basis for the proposed rates to be discussed in the next section of the report. The development of the cost of service analysis and average unit costs are provided in Exhibits 15 and 16 of the Technical Appendix.

4.5 Consultant's Conclusions

While the results of the cost of service analysis indicated minor cost differences, the overall distribution of costs between customers generally appears to be reasonable. However, as noted, HDR is recommending that the City implement cost of service adjustments and realign the rate structures at this time. This realignment is a natural progression in designing rates as the results of the calculation may change between analyses based on consumption habits, the manner in which costs are incurred, system design or operation, etc. Given this, the proposed rates in Section 5 will reflect the results of the current cost of service analysis.

4.6 Summary

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

5 Rate Design

5.1 Introduction

The final step of the City's comprehensive wastewater rate Study is the design of proposed wastewater rates to collect the cost-based levels of revenues. These adjustments to rates are based on the results of the revenue requirement and cost of service analyses. In reviewing City's rates, consideration was given to the level of the rates and the structure of the rates.

5.2 Rate Design Criteria and Considerations

Prudent rate administration dictates that several criteria should 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
- Continuity, over time, of the rate making philosophy
- Policy considerations (encourage efficient use, 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)
- Compliance with State law

It is important that the City provide its customers with a proper price signal as to what their usage or volumetric wastewater contributions are costing. This goal may be approached through rate level and structure. When developing the proposed rate designs, all the above-listed criteria were taken into consideration. It should be noted that it is difficult, if not impossible, to design a rate that meets all the rate design goals and objectives listed above. A key component of the cost of service is developing a method to proportionally distribute costs, which in the above goals is noted as equitable and non-discriminatory. For the City, meeting the requirements of Proposition 218 is of paramount importance. Given that, the proposed rates take into consideration the above goals to the greatest extent possible while maintaining the required compliance with State law.

5.3 Development of Cost-Based Wastewater Rates

As mentioned, developing cost-based and proportional rates is of paramount importance in developing the proposed wastewater 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 wastewater 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 and the customers within each class. 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 (WEF MOP #27) provides various methodologies which may be used to establish cost-based and proportional rates. Article XIII D does not provide a specific methodology for establishing rates; instead, it provides a legal test as described in the next paragraph. 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 the City's wastewater rates does not exceed the funds required to provide the property related service (i.e., wastewater service).** The proposed rates are designed to collect the overall revenue requirement of the City's wastewater system.
- ✓ **The revenues derived from wastewater 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 wastewater rates are used exclusively to operate and maintain the City's wastewater 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.** Section 4 of this comprehensive wastewater rate study 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 (e.g., residential, commercial) 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 proportionality 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, and the manner in which these costs are incurred and proportionally assigned to customer classes of service and customers within each class of service based upon their proportional impacts.

5.4 Overview of the Current Wastewater Rate Structure

It is important to understand that each customer class of service has a separate rate given the different characteristics as outlined in the cost of service analysis. The City also uses different rate structures for different customer classes of service.

The residential customers are currently charged a fixed and a volumetric charge. The fixed charge reflects a portion of the fixed costs to provide service to customers. The volumetric charge is based on individually metered water consumption to establish volumetric billing units and recover the remaining costs of providing service; both the remaining fixed costs and the variable costs. Volumetric billings are "capped" for certain residential customers. The purpose of limiting the applicable billing units is to recognize that water use above a certain level is likely being used for outdoor watering, which does not flow into the wastewater collection system or receive treatment at El Estero. In this report, the word “cap” refers to the quantity of water, in HCF, after which residential customers are not charged wastewater fees for volumetric use.

For Single Family residential customers, the rate includes a monthly base fee that is the same for all single-family customers, plus a volume charge for the first 10 HCF of metered water consumption. The 10 HCF reflects the historical water consumption estimate for indoor use of the typical single family customer, which is used as a surrogate for wastewater volumes discharged to the wastewater collection and treatment system. In the case of Multi-Family residential, these customers currently have two subcategories based on the number of dwelling units. The first subcategory for 2 to 4 dwelling units has a fixed charge, plus a volume charge for the first 10 HCF/dwelling unit/month of metered water consumption. The second subcategory for 5 or more dwelling units has a fixed charge plus a volume charge for all metered water consumption per dwelling unit per month.

The current commercial rate schedule has two separate customer classes: Commercial and Commercial High-Strength. The rate structure used for both Commercial and Commercial High Strength are the same, but the rates vary. The structure includes a minimum charge which varies by the size of the customer’s meter, plus a volume charge for all consumption. The Commercial and Commercial High-Strength customers are charged the greater of either the minimum charge or the volume-based charge.

There is also the high strength surcharge category for customers that exceed the limits of strength of waste assumptions included in the commercial rates. These high-strength customers are tested routinely and billed on the pounds over the limit on a $ / pound basis for each constituent which is currently BOD, TSS, and Ammonia.

5.5 Development of the Proposed Wastewater Rates

After reviewing the data, cost of service results, and discussion with City staff, minor rate structure changes are recommended in order to better reflect the goals and objectives of the City and reflect the changing characteristics of the City’s wastewater customers. For the Single Family residential customers, usage over the cap will continue to not be billed. However, the cap will be lowered from 10 HCF to 8 HCF based on the recent winter water consumption data which confirms a trend of declining water usage per capita and has lowered the average use per account for the City’s customers.

For Multi-Family 2-4 Unit customer class, the cap of 10 HCF will be removed and all water consumption will be billed. Again, this is based on the findings drawn from analysis of recent consumption data and the fact that there is very little seasonal variability of water usage. This would suggest that the water consumption for this specific group of customers does not fluctuate due to outdoor water usage in the summer months and is, therefore, likely to be related to indoor usage.

At this time, there are no recommended rate structure changes for any of the commercial rate schedules. However, in reviewing the cost of service results, it is recommended that the minimum charge for commercial customers be updated in FY 2024 to reflect the unit costs as developed in the cost of service results. The adjustment in FY 2024 will allow commercial customers time to transition due to the impacts of the COVID pandemic and changing consumption levels.

As noted previously, the proposed rates are based on the results of the overall revenue needs (revenue requirement) and the proportional distribution of costs (cost of service).

Proposed Residential Wastewater Rates – As noted, the residential rates for single family and multi-family customers are the same given the consumption characteristics and facility requirements. Table 4 - 4 calculated the unit costs resulting from the cost of service study which determine the overall proposed rates. The fixed charge calculated in Table 4-4 is the basis for the proposed FY 2023 rates for residential customers. However, as noted above, the proposed rate structure is reducing the cap from 10 HCF to 8 HCF over the two year period of FY 2023 and FY 2024 to allow for a transition of the rates for the customers. In order to calculate the proposed volume charge for residential customers the billed consumption was revised to reflect the reduction in the cap for single family residential and removal of the cap for Multi-Family residential 2-4 dwelling units. Provided in Table 5 - 1 is a summary of the calculation for the FY 2023 proposed volume charge.

Table 5 – 1
Calculation of the FY 2023 Proposed Residential Volume Charge

	% Distribution of Total	Total Costs ($000's)	Billing Units	Average Unit Cost
FY 2023 Unit Costs - 10 HCF				
Volume Charge				
Volume	*76.4%*	$5,424	2,500,000	$2.17
BOD	*69.7%*	1,024	2,500,000	0.41
TSS	*71.2%*	2,322	2,500,000	0.93
Ammonia	*70.6%*	604	2,500,000	0.24
Total Volume		**$9,375**		**$3.75**
FY 2023 Revised Unit Costs - 9 HCF				
Volume Charge				
Volume	*76.4%*	$5,424	2,451,419	$2.21
BOD	*69.7%*	1,024	2,451,419	0.42
TSS	*71.2%*	2,322	2,451,419	0.95
Ammonia	*70.6%*	604	2,451,419	0.25
Total Volume		**$9,375**		**$3.83**

As can be seen above in Table 5 - 1, the only change is the amount of billed consumption projected for FY 2023 based on the reduction of the cap from 10 HCF to 9 HCF. The average unit cost developed in Table 5-1 at 9 HCF results in the proposed volume charge for FY 2023. A similar approach was taken for the proposed FY 2024 proposed volume charge for residential customers with the transition from 9 HCF to 8 HCF. As noted, the base charge is based on the unit costs for FY 2023 as calculated in Table 4 - 4.

Provided below in Table 5 – 2 is a summary of the current and proposed residential rates. The proposed rates incorporate the proposed changes in the structure of the rate, along with the overall adjustment to reflect the results of the cost of service analysis for the residential class of service. The residential class of service includes the single-family and multi-family customers.

Table 5 – 2
Summary of the Present and Proposed Residential Wastewater Rates

	Present Rates	FY 2023	FY 2024	FY 2025
Base Charge	***$ / Acct or LU***			
SF & MF	$22.68	$25.35	$27.00	$28.76
Volume Charge				
Single Family	***$ / HCF***			
0 – 10 HCF	$3.71	--	--	--
Over 10 HCF	0.00	--	--	--
0 – 9 HCF	--	$3.83	--	--
Over 9 HCF	--	0.00	--	--
0 – 8 HCF	--	--	$4.28	$4.62
Over 8 HCF	--	--	0.00	0.00
2 – 4 Dwelling Units				
0 – 10 HCF	$3.71	--	--	--
Over 10 HCF	0.00	--	--	--
All Use	--	$3.83	$4.28	$4.62
5 + Dwelling Units				
All Usage	--	$3.83	$4.28	$4.62

As a note, the rates are designed to be implemented at the start of the fiscal year, or July 1 of each year.

Proposed Commercial and Commercial High-Strength Wastewater Rates – Provided below in Table 5 – 3 is a summary of the current and proposed Commercial and Commercial High-Strength rates. The rate structure for these two customer groups remains the same as the present rate structure. The only proposed change to the commercial proposed rates, other than the level of the proposed rates, is for the minimum bill. To calculate the minimum bill, the average unit costs for volume was utilized for each commercial rate schedule in Tables 4 - 5 and 4 - 6. The volume charge for each commercial rate schedule was multiplied by 8 HCF, the average monthly consumption for a commercial or industrial customer with a 5/8-inch meter. In this way, each customer's bill includes the minimum charge for an equivalent connection. The volume charge is then calculated based on generating the target revenues as identified in the cost of service analysis less the minimum bill revenue.

Table 5 – 3
Summary of the Present and Proposed Commercial Wastewater Rates

	Present Rates	FY 2023	FY 2024	FY 2025
Commercial				
Minimum Bill	***$ / Meter***			
5/8-inch	$43.39	$46.65	$51.69	$55.05
3/4-inc	65.09	69.98	77.54	82.58
1-inch	75.72	81.41	90.46	96.34
1-1/2-inch	129.97	139.73	129.23	137.63
2-inch	216.68	232.96	206.76	220.20
3-inch	433.20	465.75	387.68	412.88
4-inch	540.67	581.29	646.13	688.13
6-inch	1,082.96	1,164.33	1,292.25	1,376.25
8-inch	1,895.21	2,037.60	2,067.60	2,202.00
10-inch	2,909.10	3,127.67	2,972.18	3,165.38
Volume Charge	***$ / HCF***			
All Consumption	$4.60	$4.94	$5.27	$5.63
Commercial High / Industrial				
Minimum Bill	***$ / Meter***			
5/8-inch	$56.06	$61.04	$59.70	$63.58
3/4-inc	84.09	91.56	89.55	95.37
1-inch	98.27	107.00	104.48	111.27
1-1/2-inch	160.80	175.08	149.25	158.95
2-inch	280.69	305.62	238.80	254.32
3-inch	561.21	611.06	447.75	476.85
4-inch	701.75	764.09	746.25	794.75
6-inch	1,403.22	1,527.87	1,492.50	1,589.50
8-inch	2,455.57	2,673.71	2,388.00	2,543.20
10-inch	3,858.97	4,201.78	3,432.75	3,655.85
Volume Charge	***$ / HCF***			
All Consumption	$5.73	$6.24	$6.65	$7.08

As noted, the proposed rates maintain the current rate structure and only the level of the rates is adjusted. As noted above, the minimum bill is calculated based on the volume average unit cost as calculated in the cost of service. It is proposed that the minimum bill be implemented in FY 2024 to allow for a transition to commercial customers to "normal" levels given the impacts of COVID on businesses.

5.6 High Strength Surcharge Rates

As noted in the cost of service analysis, the rate study allocated treatment-related costs to three different strength constituents (BOD, TSS and NH3). Given the allocation of treatment costs to each strength constituent, a cost per pound for each strength constituent can be developed. The development of these strength-related costs were calculated in the cost of service analysis and a summary previously provided in Table 4 - 7. Provided in Table 5 - 4 are the high strength surcharges for the three year rate setting period.

Table 5 – 4
Summary of the Present and Proposed High Strength Surcharge - $/Pound

	Present Rates	FY 2023	FY 2024	FY 2025
BOD >750 mg/l	$0.32	$0.32	$0.34	$0.36
TSS >850 mg/l	0.42	0.46	0.48	0.51
Ammonia >90 mg/l	0.98	1.10	1.17	1.25

As noted, these charges, on a dollar per pound basis, will only apply to a limited number of customers and, more specifically, only those wastewater volumes above the limits as established in this study and noted in Table 5 – 4. The rates for all other customers include and reflect the cost of treating domestic strength wastewater volumes.

5.7 Summary

The City's present wastewater rate structures are contemporary in design and reflect the rate structures used by other similar utilities in California, both locally and statewide. Based on the City's facilities, operational costs, and customer characteristics, the proposed wastewater rates appropriately reflect the cost to provide service and are proportional and cost-based to the City's customers. Full and complete technical appendices of the development of the wastewater rate study update and the proposed rate adjustments can be found in appendices of this report.

Technical Appendix

City of Santa Barbara
Wastewater Rate Study
10-Year Financial Plan

	Proposed	*Projected*									
	FY 2022	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**FY 2032**
Revenues											
Rate Revenues	$24,966,114	$24,783,786	$24,605,276	$24,430,510	$24,419,752	$24,409,063	$24,398,444	$24,387,893	$24,377,411	$24,366,998	$24,356,654
Miscellaneous Revenues	302,889	240,723	237,893	250,825	250,095	251,152	253,927	259,131	260,338	263,645	268,958
Add'l Revenue with Rate Adj.	0	1,734,865	3,433,666	5,218,864	7,142,926	9,032,732	11,034,436	13,154,718	15,025,388	16,594,409	18,225,125
Total Revenues	**$25,269,003**	**$26,759,374**	**$28,276,836**	**$29,900,199**	**$31,812,774**	**$33,692,947**	**$35,686,807**	**$37,801,742**	**$39,663,137**	**$41,225,052**	**$42,850,738**
Expenses											
Total Water Resources Management - 4711	$3,341,699	$3,447,085	$3,555,919	$3,668,317	$3,784,398	$3,904,288	$4,028,114	$4,156,010	$4,288,113	$4,424,565	$4,565,514
Total Wastewater Collection - 4721	4,488,273	4,634,716	4,786,017	4,942,340	5,103,854	5,270,734	5,443,163	5,621,328	5,805,424	5,995,652	6,192,219
Total Wastewater Expenses - 4722	1,150,038	1,186,551	1,224,245	1,263,157	1,303,330	1,344,804	1,387,623	1,431,830	1,477,473	1,524,599	1,573,257
Total Wastewater Treatment - 4731	7,472,730	7,939,299	8,202,936	8,475,509	8,757,329	9,048,716	9,350,001	9,661,528	9,983,652	10,316,742	10,661,178
Total Water Resources Laboratory - 4741	878,089	906,544	935,936	966,297	997,658	1,030,054	1,063,519	1,098,089	1,133,801	1,170,693	1,208,806
Total Additional O&M	0	200,000	206,000	212,180	415,000	427,450	440,274	453,482	467,086	481,099	495,532
Total O&M Expenses	**$17,330,829**	**$18,314,196**	**$18,911,053**	**$19,527,800**	**$20,361,569**	**$21,026,046**	**$21,712,693**	**$22,422,267**	**$23,155,549**	**$23,913,350**	**$24,696,506**
Rate Funded Capital	$4,245,000	$4,800,000	$5,750,000	$5,750,000	$5,560,000	$6,200,000	$7,200,000	$9,570,000	$10,500,000	$11,296,000	$11,950,000
Net Debt Service	3,558,337	3,551,087	3,552,087	4,646,743	5,920,461	6,194,674	6,604,394	5,556,086	5,723,727	5,961,329	5,961,329
Reserve Funding	134,837	94,091	63,696	(24,345)	(29,257)	272,227	169,719	253,390	283,861	54,374	242,903
Total Revenue Requirement	**$25,269,003**	**$26,759,374**	**$28,276,836**	**$29,900,199**	**$31,812,774**	**$33,692,947**	**$35,686,807**	**$37,801,742**	**$39,663,137**	**$41,225,052**	**$42,850,738**
Proposed Rate Adjustment	**0.0%**	**7.0%**	**6.5%**	**6.5%**	**6.5%**	**6.0%**	**6.0%**	**6.0%**	**5.0%**	**4.0%**	**4.0%**
Bal. / (Def.) After Rate Adj.	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Ending Reserve Balance *(Not include. Debt/Rate)*	**$9,425,271**	**$11,973,050**	**$10,904,750**	**$13,130,632**	**$12,660,261**	**$12,432,044**	**$12,605,223**	**$13,263,182**	**$13,115,392**	**$13,380,394**	**$14,040,293**
Council Policy Requirement	*$10,003,321*	*$10,419,281*	*$10,743,717*	*$11,078,383*	*$11,472,718*	*$11,830,307*	*$12,199,183*	*$12,579,706*	*$12,972,251*	*$13,377,202*	*$13,794,957*

City of Santa Barbara
Wastewater Rate Study
Escalation Factors
Exhibit 2

	Proposed	*Projected*										
	FY 2022	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**FY 2032**	*Notes*
Revenues												
Customer Growth	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
SF Cust Growth	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
MF Cust Growth	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	
Com Cust Growth	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Ind Cust Growth	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
HS Cust Growth	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Volume Growth	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	
SF Vol Growth	-0.2%	-2.0%	-2.0%	-2.0%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	
MF Vol Growth	-0.2%	-2.0%	-2.0%	-2.0%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	
Com Vol Growth	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	
Ind Vol Growth	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	
HS Vol Growth	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	
Misc. Revenues	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	
Expenses												
Salaries	Budget	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	
Benefits	Budget	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Benefits - Medical	Budget	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	
Benefits - Retirement	Budget	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	
Materials & Supplies	Budget	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	
Equipment	Budget	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	
Miscellaneous	Budget	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Utilities	Budget	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	
Flat	Budget	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
General Expenses	Budget	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Interest	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	
New Debt Service												
Low Interest Loans												
Term in Years	20	20	20	20	20	20	20	20	20	20	20	
Rate	1.25%	1.25%	1.25%	1.25%	1.30%	1.35%	1.50%	1.50%	1.60%	1.70%	1.80%	
Revenue Bond												
Term in Years	20	20	20	20	20	20	20	20	20	20	20	
Rate	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	

City of Santa Barbara
Wastewater Rate Study
Revenue Requirement
Exhibit 3

	Proposed	*Projected*										
	FY 2022	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**FY 2032**	*Notes*
Revenues												
Rate Revenues												
Single Family	$9,580,428	$9,476,776	$9,375,197	$9,275,650	$9,265,894	$9,256,158	$9,246,441	$9,236,744	$9,227,066	$9,217,408	$9,207,769	See Exhibits 6 & 7
Multi-Family	10,197,634	10,123,832	10,051,766	9,981,403	9,985,246	9,989,129	9,993,052	9,997,015	10,001,018	10,005,061	10,009,144	See Exhibits 6 & 7
Commercial	3,639,979	3,636,901	3,633,829	3,630,764	3,627,705	3,624,652	3,621,605	3,618,564	3,615,529	3,612,500	3,609,477	See Exhibits 6 & 7
Commercial (Discount)	30,209	30,183	30,157	30,131	30,105	30,079	30,053	30,028	30,002	29,977	29,951	See Exhibits 6 & 7
Industrial	404,843	404,211	403,580	402,950	402,321	401,694	401,067	400,443	399,819	399,197	398,575	See Exhibits 6 & 7
Com - High Strength	980,497	979,358	978,222	977,088	975,956	974,826	973,699	972,574	971,451	970,331	969,212	See Exhibits 6 & 8
High Strength Surcharge	132,525	132,525	132,525	132,525	132,525	132,525	132,525	132,525	132,525	132,525	132,525	As Flat
Total Rate Revenues	**$24,966,114**	**$24,783,786**	**$24,605,276**	**$24,430,510**	**$24,419,752**	**$24,409,063**	**$24,398,444**	**$24,387,893**	**$24,377,411**	**$24,366,998**	**$24,356,654**	
Other Revenues												
Rents and Leases	$61,072	$61,683	$62,300	$62,923	$63,552	$64,187	$64,829	$65,477	$66,132	$66,794	$67,461	As Misc. Revenues
Water Exams - Other Depts.	5,700	5,757	5,815	5,873	5,931	5,991	6,051	6,111	6,172	6,234	6,296	As Misc. Revenues
Pretreatment Analysis	44,872	45,321	45,774	46,232	46,694	47,161	47,633	48,109	48,590	49,076	49,567	As Misc. Revenues
FOG Disposal Fees	35,000	35,350	35,704	36,061	36,421	36,785	37,153	37,525	37,900	38,279	38,662	As Misc. Revenues
Misc. Revenue - Noc	5,000	5,050	5,101	5,152	5,203	5,255	5,308	5,361	5,414	5,468	5,523	As Misc. Revenues
Interest	151,245	87,563	83,201	94,586	92,294	91,773	92,954	96,548	96,129	97,794	101,449	Calculated
CAP Funding	0	0	0	0	0	0	0	0	0	0	0	As Misc. Revenues
Total Other Revenues	**$302,889**	**$240,723**	**$237,893**	**$250,825**	**$250,095**	**$251,152**	**$253,927**	**$259,131**	**$260,338**	**$263,645**	**$268,958**	
Total Revenues	**$25,269,003**	**$25,024,509**	**$24,843,170**	**$24,681,335**	**$24,669,847**	**$24,660,215**	**$24,652,370**	**$24,647,024**	**$24,637,749**	**$24,630,643**	**$24,625,613**	

City of Santa Barbara
Wastewater Rate Study
Revenue Requirement
Exhibit 3

	Proposed	*Projected*										
	FY 2022	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**FY 2032**	*Notes*
Water Resources Management - 4711												
Salaries-Permanent	$416,882	$429,388	$442,270	$455,538	$469,204	$483,280	$497,779	$512,712	$528,094	$543,936	$560,255	As Salaries
Salaries-Hourly	77,650	79,980	82,379	84,850	87,396	90,018	92,718	95,500	98,365	101,316	104,355	As Salaries
Salaries-Overtime	2,198	2,264	2,332	2,402	2,474	2,548	2,625	2,703	2,784	2,868	2,954	As Salaries
Alloc-Vacation Cashout	2,911	2,998	3,088	3,181	3,276	3,375	3,476	3,580	3,688	3,798	3,912	As Salaries
Alloc-Sick Leave Cashout	2,452	2,526	2,601	2,679	2,760	2,843	2,928	3,016	3,106	3,199	3,295	As Salaries
Benefits - Grp. Insurance	57,223	59,798	62,489	65,301	68,239	71,310	74,519	77,873	81,377	85,039	88,866	As Benefits - Medical
Benefits - Retirement UAL	52,161	54,247	56,417	58,674	61,021	63,462	66,000	68,640	71,386	74,241	77,211	As Benefits - Retirement
Benefits - Workers Comp / Unemp.	98,132	101,567	105,121	108,801	112,609	116,550	120,629	124,851	129,221	133,744	138,425	As Benefits
Medicare	18,101	18,916	19,767	20,656	21,586	22,557	23,572	24,633	25,741	26,900	28,110	As Benefits - Medical
Hourly Ee Retirement	7,282	7,573	7,876	8,191	8,519	8,860	9,214	9,583	9,966	10,365	10,779	As Benefits - Retirement
Hourly Health Care Reimburse	1,009	1,054	1,102	1,151	1,203	1,257	1,314	1,373	1,435	1,499	1,567	As Benefits - Medical
Alloc - Retiree Medical	600	627	655	685	716	748	781	817	853	892	932	As Benefits - Medical
Network / Infrastructure	2,124	2,209	2,297	2,389	2,485	2,584	2,688	2,795	2,907	3,023	3,144	As Equipment
GIS Support	6,114	6,297	6,486	6,681	6,881	7,088	7,300	7,519	7,745	7,977	8,217	As Materials & Supplies
Enterprise Applic Sys	127,233	132,322	137,615	143,120	148,845	154,798	160,990	167,430	174,127	181,092	188,336	As Equipment
Building Maintenance	51,425	52,968	54,557	56,193	57,879	59,616	61,404	63,246	65,144	67,098	69,111	As Materials & Supplies
Planned Maintenance Program	957	986	1,015	1,046	1,077	1,109	1,143	1,177	1,212	1,249	1,286	As Materials & Supplies
Generator Replacements	708	729	751	774	797	821	845	871	897	924	951	As Salaries
Alternative Transportation	373	384	396	408	420	432	445	459	473	487	501	As Materials & Supplies
Telephone Allocated	110	113	117	120	124	128	131	135	139	144	148	As Materials & Supplies
Custodial	8,306	8,555	8,812	9,076	9,348	9,629	9,918	10,215	10,522	10,837	11,163	As Materials & Supplies
Communications	372	383	395	406	419	431	444	458	471	485	500	As Materials & Supplies
Energy Conservation	211	217	224	231	237	245	252	260	267	275	284	As Materials & Supplies
Utilities Allocated	1,700	1,768	1,839	1,912	1,989	2,068	2,151	2,237	2,327	2,420	2,516	As Utilities
Liability Insurance	66,244	67,569	68,920	70,299	71,705	73,139	74,602	76,094	77,615	79,168	80,751	As Miscellaneous
Property Insurance	483,503	493,173	503,037	513,097	523,359	533,826	544,503	555,393	566,501	577,831	589,387	As Miscellaneous
Overhead Allocation	1,250,731	1,294,507	1,339,814	1,386,708	1,435,243	1,485,476	1,537,468	1,591,279	1,646,974	1,704,618	1,764,280	As General Expenses
Office Supplies & Expense	100	103	106	109	113	116	119	123	127	130	134	As Materials & Supplies
Special Supplies and Expense	9,000	9,270	9,548	9,835	10,130	10,433	10,746	11,069	11,401	11,743	12,095	As Materials & Supplies
Profess. Services - Contract	125,000	128,750	132,613	136,591	140,689	144,909	149,257	153,734	158,346	163,097	167,990	As Salaries
Legal Services	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524	6,720	As Salaries
Engineering Service	115,000	118,450	122,004	125,664	129,434	133,317	137,316	141,435	145,679	150,049	154,550	As Salaries
UB System Maintenance	19,430	20,207	21,015	21,856	22,730	23,640	24,585	25,569	26,591	27,655	28,761	As Equipment
Meeting & Travel	7,500	7,650	7,803	7,959	8,118	8,281	8,446	8,615	8,787	8,963	9,142	As Miscellaneous
Pool Car Maintenance	110	113	117	120	124	128	131	135	139	144	148	As Materials & Supplies
Pool Car Replacement	1,225	1,262	1,300	1,339	1,379	1,420	1,463	1,507	1,552	1,598	1,646	As Materials & Supplies
Dues Memberships & License	45,000	46,350	47,741	49,173	50,648	52,167	53,732	55,344	57,005	58,715	60,476	As Materials & Supplies
Training	2,500	2,550	2,601	2,653	2,706	2,760	2,815	2,872	2,929	2,988	3,047	As Miscellaneous
Printing & Binding	200	206	212	219	225	232	239	246	253	261	269	As Materials & Supplies
Postage / Delivery	100	103	106	109	113	116	119	123	127	130	134	As Materials & Supplies
Telephone	1,000	1,040	1,082	1,125	1,170	1,217	1,265	1,316	1,369	1,423	1,480	As Utilities
Pooled Vehicle Conv Fuel	100	103	106	109	113	116	119	123	127	130	134	As Salaries
LAFCO	9,300	9,579	9,866	10,162	10,467	10,781	11,105	11,438	11,781	12,134	12,498	As Materials & Supplies
GASB 45 Actuarial Study	2,045	2,106	2,170	2,235	2,302	2,371	2,442	2,515	2,591	2,668	2,748	As Materials & Supplies
Computer Hardware Under $25000	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305	1,344	As Materials & Supplies
Comp Software Under $25000	500	515	530	546	563	580	597	615	633	652	672	As Materials & Supplies
Phone & VM Upgrade for MSOffic	10,216	10,522	10,838	11,163	11,498	11,843	12,198	12,564	12,941	13,330	13,729	As Materials & Supplies
El Estero Fats Oil Greas (FOG)	73,786	76,000	78,280	80,628	83,047	85,538	88,104	90,747	93,470	96,274	99,162	As Materials & Supplies
El Estero Fats Oil Greas (FOG) [b]	24,375	25,106	25,859	26,635	27,434	28,257	29,105	29,978	30,878	31,804	32,758	As Materials & Supplies
Approp. Reserve (customer assistance program?)	150,000	155,250	160,684	166,308	172,128	178,153	184,388	190,842	197,521	204,435	211,590	As General Expenses
Fiscal Agent Charges	1,500	1,530	1,561	1,592	1,624	1,656	1,689	1,723	1,757	1,793	1,828	As Miscellaneous
Arbitrage Cost Calculation	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219	As Miscellaneous
Total Water Resources Management - 4711	**$3,341,699**	**$3,447,085**	**$3,555,919**	**$3,668,317**	**$3,784,398**	**$3,904,288**	**$4,028,114**	**$4,156,010**	**$4,288,113**	**$4,424,565**	**$4,565,514**	

City of Santa Barbara
Wastewater Rate Study
Revenue Requirement
Exhibit 3

	Proposed	*Projected*										
	FY 2022	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**FY 2032**	*Notes*
Wastewater Collection - 4721												
Salaries - Permanent	$1,463,059	$1,506,951	$1,552,159	$1,598,724	$1,646,686	$1,696,086	$1,746,969	$1,799,378	$1,853,359	$1,908,960	$1,966,229	As Salaries
Salaries - Hourly	60,600	62,418	64,291	66,219	68,206	70,252	72,360	74,530	76,766	79,069	81,441	As Salaries
Salaries - Overtime	64,367	66,298	68,287	70,336	72,446	74,619	76,858	79,163	81,538	83,984	86,504	As Salaries
Alloc - Vacation Cashout	9,978	10,327	10,689	11,063	11,450	11,851	12,266	12,695	13,139	13,599	14,075	As Benefits
Alloc - Sick Leave Cashout	8,403	8,697	9,002	9,317	9,643	9,980	10,329	10,691	11,065	11,452	11,853	As Benefits
Benefits - Grp. Insurance	225,048	232,925	241,077	249,515	258,248	267,286	276,641	286,324	296,345	306,717	317,452	As Benefits
Benefits - Retirement	166,904	173,580	180,523	187,744	195,254	203,064	211,187	219,634	228,420	237,556	247,059	As Benefits - Retirement
Benefits - Retirement UAL	334,330	347,703	361,611	376,076	391,119	406,764	423,034	439,955	457,554	475,856	494,890	As Benefits - Retirement
Benefits - Workers Comp / Unemp.	62,042	64,213	66,461	68,787	71,195	73,686	76,265	78,935	81,697	84,557	87,516	As Benefits
Unemployment Insurance	12,838	13,287	13,752	14,234	14,732	15,248	15,781	16,334	16,905	17,497	18,109	As Benefits
Medicare	23,575	24,636	25,744	26,903	28,114	29,379	30,701	32,082	33,526	35,035	36,611	As Benefits - Medical
Hourly Ee Retirement	788	820	852	886	922	959	997	1,037	1,078	1,122	1,166	As Benefits - Retirement
Hourly Health Care Reimburse	160	167	175	183	191	199	208	218	228	238	248	As Benefits - Medical
Alloc - Retiree Medical	7,279	7,570	7,873	8,188	8,515	8,856	9,210	9,579	9,962	10,360	10,775	As Benefits - Retirement
Network / Infrastructure	58,305	60,637	63,063	65,585	68,209	70,937	73,774	76,725	79,794	82,986	86,306	As Equipment
GIS Support	10,643	11,069	11,511	11,972	12,451	12,949	13,467	14,005	14,566	15,148	15,754	As Equipment
Enterprise Applic Sys	51,696	53,764	55,914	58,151	60,477	62,896	65,412	68,028	70,750	73,580	76,523	As Equipment
Vehicle Replacement	203,597	211,741	220,211	229,019	238,180	247,707	257,615	267,920	278,637	289,782	301,373	As Equipment
Vehicle Maintenance	189,746	195,438	201,302	207,341	213,561	219,968	226,567	233,364	240,365	247,575	255,003	As Materials & Supplies
Alternative Transportation	7,073	7,285	7,504	7,729	7,961	8,200	8,446	8,699	8,960	9,229	9,506	As Materials & Supplies
Custodial	44,025	45,346	46,706	48,107	49,551	51,037	52,568	54,145	55,770	57,443	59,166	As Materials & Supplies
Office Supplies & Expense	11,000	11,330	11,670	12,020	12,381	12,752	13,135	13,529	13,934	14,353	14,783	As Materials & Supplies
Janitorial & Hshld Supplies	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305	1,344	As Materials & Supplies
Uniform Allow & Mntnc	9,800	10,094	10,397	10,709	11,030	11,361	11,702	12,053	12,414	12,787	13,170	As Materials & Supplies
Safety Shoes	4,370	4,501	4,636	4,775	4,918	5,066	5,218	5,375	5,536	5,702	5,873	As Materials & Supplies
Minor Tools	3,000	3,120	3,245	3,375	3,510	3,650	3,796	3,948	4,106	4,270	4,441	As Equipment
Special Supplies and Expense	79,000	81,370	83,811	86,325	88,915	91,583	94,330	97,160	100,075	103,077	106,169	As Materials & Supplies
Motor Veh Expenses	45,000	46,350	47,741	49,173	50,648	52,167	53,732	55,344	57,005	58,715	60,476	As Materials & Supplies
Facilities Maint.	360,000	370,800	381,924	393,382	405,183	417,339	429,859	442,755	456,037	469,718	483,810	As Materials & Supplies
Equipment Repair	49,580	51,067	52,599	54,177	55,803	57,477	59,201	60,977	62,806	64,691	66,631	As Materials & Supplies
Profess. Services-Contract	12,000	12,360	12,731	13,113	13,506	13,911	14,329	14,758	15,201	15,657	16,127	As Salaries
Engineering Services	60,000	61,800	63,654	65,564	67,531	69,556	71,643	73,792	76,006	78,286	80,635	As Salaries
Non-Contractual Services	55,638	57,585	59,601	61,687	63,846	66,080	68,393	70,787	73,265	75,829	78,483	As General Expenses
Meeting & Travel	8,000	8,240	8,487	8,742	9,004	9,274	9,552	9,839	10,134	10,438	10,751	As Materials & Supplies
Pool Car Maintenance	125	129	133	137	141	145	149	154	158	163	168	As Materials & Supplies
Pool Car Replacement	170	175	180	186	191	197	203	209	215	222	228	As Materials & Supplies
Dues Memberships & License	9,500	9,785	10,079	10,381	10,692	11,013	11,343	11,684	12,034	12,395	12,767	As Materials & Supplies
Training	25,000	25,750	26,523	27,318	28,138	28,982	29,851	30,747	31,669	32,619	33,598	As Materials & Supplies
Regulatory Permits and Fees	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002	19,572	20,159	As Materials & Supplies
Advertising	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800	3,914	4,032	As Materials & Supplies
Printing & Binding	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305	1,344	As Materials & Supplies
Postage / Delivery	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305	1,344	As Materials & Supplies
Water	30,000	31,200	32,448	33,746	35,096	36,500	37,960	39,478	41,057	42,699	44,407	As Utilities
Telephone	15,000	15,600	16,224	16,873	17,548	18,250	18,980	19,739	20,529	21,350	22,204	As Utilities
Waste Disposal	5,000	5,200	5,408	5,624	5,849	6,083	6,327	6,580	6,843	7,117	7,401	As Utilities
Vehicle Fuel	50,000	52,000	54,080	56,243	58,493	60,833	63,266	65,797	68,428	71,166	74,012	As Utilities
Pooled Vehicle Fuel	400	416	433	450	468	487	506	526	547	569	592	As Utilities
Equipment Rental	20,000	20,800	21,632	22,497	23,397	24,333	25,306	26,319	27,371	28,466	29,605	As Equipment
Special Projects	500,000	515,000	530,450	546,364	562,754	579,637	597,026	614,937	633,385	652,387	671,958	As Materials & Supplies
Computer Hardware Under $25000	20,000	20,600	21,218	21,855	22,510	23,185	23,881	24,597	25,335	26,095	26,878	As Materials & Supplies
Comp Software Under $25000	25,000	25,750	26,523	27,318	28,138	28,982	29,851	30,747	31,669	32,619	33,598	As Materials & Supplies
Comp Software Over $25000	65,234	67,191	69,207	71,283	73,421	75,624	77,893	80,230	82,636	85,116	87,669	As Materials & Supplies
Total Wastewater Collection - 4721	**$4,488,273**	**$4,634,716**	**$4,786,017**	**$4,942,340**	**$5,103,854**	**$5,270,734**	**$5,443,163**	**$5,621,328**	**$5,805,424**	**$5,995,652**	**$6,192,219**	

	Proposed	*Projected*										
	FY 2022	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**FY 2032**	*Notes*
Wastewater Treatment - 4731												
Salaries - Permanent	$2,231,146	$2,298,080	$2,367,023	$2,438,033	$2,511,174	$2,586,510	$2,664,105	$2,744,028	$2,826,349	$2,911,139	$2,998,474	As Salaries
Salaries - Overtime	61,327	63,167	65,062	67,014	69,024	71,095	73,228	75,424	77,687	80,018	82,418	As Salaries
Alloc - Vacation Cashout	15,350	15,887	16,443	17,019	17,614	18,231	18,869	19,529	20,213	20,920	21,653	As Benefits
Alloc - Sick Leave Cashout	12,926	13,378	13,847	14,331	14,833	15,352	15,889	16,445	17,021	17,617	18,233	As Benefits
Benefits - Grp. Insurance	286,503	296,531	306,909	317,651	328,769	340,276	352,185	364,512	377,270	390,474	404,141	As Benefits
Benefits - Retirement	260,950	271,388	282,244	293,533	305,275	317,486	330,185	343,392	357,128	371,413	386,270	As Benefits - Retirement
Benefits - Retirement UAL	513,998	534,558	555,940	578,178	601,305	625,357	650,371	676,386	703,442	731,579	760,843	As Benefits - Retirement
Benefits - Workers Comp / Unemp.	95,437	98,777	102,235	105,813	109,516	113,349	117,316	121,423	125,672	130,071	134,623	As Benefits
Unemployment Insurance	7,996	8,276	8,566	8,865	9,176	9,497	9,829	10,173	10,529	10,898	11,279	As Benefits
Medicare	33,620	35,133	36,714	38,366	40,092	41,897	43,782	45,752	47,811	49,963	52,211	As Benefits - Medical
Alloc - Retiree Medical	11,197	11,701	12,227	12,778	13,353	13,953	14,581	15,238	15,923	16,640	17,389	As Benefits - Medical
Network / Infrastructure	79,152	82,318	85,611	89,035	92,597	96,301	100,153	104,159	108,325	112,658	117,164	As Equipment
GIS Support	6,059	6,301	6,553	6,816	7,088	7,372	7,667	7,973	8,292	8,624	8,969	As Equipment
Enterprise Applic Sys	520	541	562	585	608	633	658	684	712	740	770	As Equipment
Vehicle Replacement	27,977	28,816	29,681	30,571	31,488	32,433	33,406	34,408	35,440	36,504	37,599	As Materials & Supplies
Vehicle Maintenance	29,522	30,408	31,320	32,259	33,227	34,224	35,251	36,308	37,398	38,520	39,675	As Materials & Supplies
Alternative Transportation	5,153	5,256	5,361	5,468	5,578	5,689	5,803	5,919	6,038	6,158	6,281	As Miscellaneous
Telephone Allocated	7,588	7,816	8,050	8,292	8,540	8,797	9,060	9,332	9,612	9,901	10,198	As Materials & Supplies
Custodial	73,849	76,064	78,346	80,697	83,118	85,611	88,180	90,825	93,550	96,356	99,247	As Materials & Supplies
Communications	36,343	37,433	38,556	39,713	40,904	42,131	43,395	44,697	46,038	47,419	48,842	As Materials & Supplies
Energy Conservation	113,457	116,861	120,367	123,978	127,697	131,528	135,474	139,538	143,724	148,036	152,477	As Materials & Supplies
Office Supplies & Expense	7,500	7,725	7,957	8,195	8,441	8,695	8,955	9,224	9,501	9,786	10,079	As Materials & Supplies
Chemical and Landscape Supplies	615,000	851,368	876,909	903,217	930,313	958,222	986,969	1,016,578	1,047,076	1,078,488	1,110,842	As Materials & Supplies
Uniform Allow & Mntnc	18,500	19,055	19,627	20,215	20,822	21,447	22,090	22,753	23,435	24,138	24,862	As Materials & Supplies
Safety Shoes	6,900	7,107	7,320	7,540	7,766	7,999	8,239	8,486	8,741	9,003	9,273	As Materials & Supplies
Minor Tools	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002	19,572	20,159	As Materials & Supplies
Bank Fees	19,184	19,568	19,959	20,358	20,765	21,181	21,604	22,036	22,477	22,927	23,385	As Miscellaneous
Bank Transport Fees	9,185	9,369	9,556	9,747	9,942	10,141	10,344	10,551	10,762	10,977	11,196	As Miscellaneous
Special Supplies and Expense	60,000	61,800	63,654	65,564	67,531	69,556	71,643	73,792	76,006	78,286	80,635	As Materials & Supplies
Credit Card Fees	50,000	51,000	52,020	53,060	54,122	55,204	56,308	57,434	58,583	59,755	60,950	As Miscellaneous
Facilities Maint.	200,000	206,000	212,180	218,545	225,102	231,855	238,810	245,975	253,354	260,955	268,783	As Materials & Supplies
Staff In-House	150,000	154,500	159,135	163,909	168,826	173,891	179,108	184,481	190,016	195,716	201,587	As Materials & Supplies
Equipment Repair	538,000	554,140	570,764	587,887	605,524	623,689	642,400	661,672	681,522	701,968	723,027	As Materials & Supplies
Profess. Services - Contract	80,000	82,400	84,872	87,418	90,041	92,742	95,524	98,390	101,342	104,382	107,513	As Salaries
Engineering Services	175,000	180,250	185,658	191,227	196,964	202,873	208,959	215,228	221,685	228,335	235,185	As Salaries
Non-Contractual Services	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957	2,016	As Salaries
Meeting & Travel	7,500	7,725	7,957	8,195	8,441	8,695	8,955	9,224	9,501	9,786	10,079	As Materials & Supplies
Pool Car Maintenance	1,241	1,278	1,317	1,356	1,397	1,439	1,482	1,526	1,572	1,619	1,668	As Materials & Supplies
Pool Car Replacement	14,728	15,170	15,625	16,094	16,576	17,074	17,586	18,114	18,657	19,217	19,793	As Materials & Supplies
Dues Memberships & License	7,500	7,725	7,957	8,195	8,441	8,695	8,955	9,224	9,501	9,786	10,079	As Materials & Supplies
Publications	500	515	530	546	563	580	597	615	633	652	672	As Materials & Supplies
Training	8,500	8,755	9,018	9,288	9,567	9,854	10,149	10,454	10,768	11,091	11,423	As Materials & Supplies
Regulatory Permits and Fees	100,000	103,000	106,090	109,273	112,551	115,927	119,405	122,987	126,677	130,477	134,392	As Materials & Supplies
Postage / Delivery	500	515	530	546	563	580	597	615	633	652	672	As Materials & Supplies
Gas	50,000	52,000	54,080	56,243	58,493	60,833	63,266	65,797	68,428	71,166	74,012	As Utilities
Electric	685,922	713,359	741,893	771,569	802,432	834,529	867,910	902,627	938,732	976,281	1,015,332	As Utilities
Water	40,000	41,600	43,264	44,995	46,794	48,666	50,613	52,637	54,743	56,932	59,210	As Utilities
Telephone	15,000	15,600	16,224	16,873	17,548	18,250	18,980	19,739	20,529	21,350	22,204	As Utilities
Waste Disposal	585,000	608,400	632,736	658,045	684,367	711,742	740,212	769,820	800,613	832,637	865,943	As Utilities
Vehicle Fuel	11,000	11,440	11,898	12,374	12,868	13,383	13,919	14,475	15,054	15,656	16,283	As Utilities
Pooled Vehicle Fuel	500	520	541	562	585	608	633	658	684	712	740	As Utilities
Equipment Rental	6,000	6,240	6,490	6,749	7,019	7,300	7,592	7,896	8,211	8,540	8,881	As Equipment
Special Projects	25,000	25,750	26,523	27,318	28,138	28,982	29,851	30,747	31,669	32,619	33,598	As Materials & Supplies
Computer Hardware Under $25000	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002	19,572	20,159	As Materials & Supplies
Comp Software Under $25000	12,000	12,360	12,731	13,113	13,506	13,911	14,329	14,758	15,201	15,657	16,127	As Materials & Supplies
Office	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305	1,344	As Materials & Supplies
Comp Software Over $25000	30,000	30,900	31,827	32,782	33,765	34,778	35,822	36,896	38,003	39,143	40,317	As Materials & Supplies
Total Wastewater Treatment - 4731	**$7,472,730**	**$7,939,299**	**$8,202,936**	**$8,475,509**	**$8,757,329**	**$9,048,716**	**$9,350,001**	**$9,661,528**	**$9,983,652**	**$10,316,742**	**$10,661,178**	

City of Santa Barbara
Wastewater Rate Study
Revenue Requirement
Exhibit 3

	Proposed	*Projected*										
	FY 2022	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**FY 2032**	*Notes*
Water Resources Laboratory - 4741												
Salaries - Permanent	$337,269	$347,387	$357,809	$368,543	$379,599	$390,987	$402,717	$414,798	$427,242	$440,060	$453,261	As Salaries
Salaries - Hourly	28,057	28,899	29,766	30,659	31,578	32,526	33,502	34,507	35,542	36,608	37,706	As Salaries
Salaries - Overtime	5,562	5,729	5,901	6,078	6,260	6,448	6,641	6,841	7,046	7,257	7,475	As Salaries
Alloc - Vacation Cashout	2,370	2,453	2,539	2,628	2,720	2,815	2,913	3,015	3,121	3,230	3,343	As Benefits
Alloc - Sick Leave Cashout	1,995	2,065	2,137	2,212	2,289	2,369	2,452	2,538	2,627	2,719	2,814	As Benefits
Benefits - Grp. Insurance	51,175	52,966	54,820	56,739	58,724	60,780	62,907	65,109	67,388	69,746	72,187	As Benefits
Benefits - Retirement	40,233	41,842	43,516	45,257	47,067	48,950	50,908	52,944	55,062	57,264	59,555	As Benefits - Retirement
Benefits - Retirement UAL	79,392	82,568	85,870	89,305	92,877	96,593	100,456	104,474	108,653	113,000	117,520	As Benefits - Retirement
Benefits - Workers Comp / Unemp.	14,733	15,249	15,782	16,335	16,906	17,498	18,111	18,744	19,401	20,080	20,782	As Benefits
Medicare	5,377	5,619	5,872	6,136	6,412	6,701	7,002	7,317	7,647	7,991	8,350	As Benefits - Medical
Hourly Ee Retirement	365	380	395	411	427	444	462	480	500	520	540	As Benefits - Retirement
Hourly Health Care Reimburse	40	42	44	46	48	50	52	54	57	59	62	As Benefits - Medical
Alloc - Retiree Medical	1,729	1,807	1,888	1,973	2,062	2,155	2,252	2,353	2,459	2,569	2,685	As Benefits - Medical
Network / Infrastructure	21,130	21,975	22,854	23,768	24,719	25,708	26,736	27,806	28,918	30,075	31,278	As Equipment
GIS Support	603	627	652	678	705	734	763	794	825	858	893	As Equipment
Enterprise Applic Sys	375	390	406	422	439	456	474	493	513	534	555	As Equipment
Vehicle Replacement	2,499	2,574	2,651	2,731	2,813	2,897	2,984	3,073	3,166	3,261	3,358	As Materials & Supplies
Vehicle Maintenance	2,723	2,805	2,889	2,975	3,065	3,157	3,251	3,349	3,449	3,553	3,659	As Materials & Supplies
Alternative Transportation	200	206	212	219	225	232	239	246	253	261	269	As Materials & Supplies
Custodial	18,462	19,016	19,586	20,174	20,779	21,403	22,045	22,706	23,387	24,089	24,811	As Materials & Supplies
Office Supplies & Expense	8,000	8,240	8,487	8,742	9,004	9,274	9,552	9,839	10,134	10,438	10,751	As Materials & Supplies
Chemical and Lndscape Supplies	8,000	8,240	8,487	8,742	9,004	9,274	9,552	9,839	10,134	10,438	10,751	As Materials & Supplies
Uniform Allow & Mntnc	3,500	3,605	3,713	3,825	3,939	4,057	4,179	4,305	4,434	4,567	4,704	As Materials & Supplies
Safety Shoes	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305	1,344	As Materials & Supplies
Special Supplies and Expense	80,000	82,400	84,872	87,418	90,041	92,742	95,524	98,390	101,342	104,382	107,513	As Materials & Supplies
Equipment Repair	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002	19,572	20,159	As Materials & Supplies
Profess. Services - Contract	60,000	61,800	63,654	65,564	67,531	69,556	71,643	73,792	76,006	78,286	80,635	As Salaries
Non-Contractual Services	25,000	25,750	26,523	27,318	28,138	28,982	29,851	30,747	31,669	32,619	33,598	As Salaries
COVID-19	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524	6,720	As Materials & Supplies
Meeting & Travel	4,000	4,160	4,326	4,499	4,679	4,867	5,061	5,264	5,474	5,693	5,921	As Equipment
Dues Memberships & License	2,500	2,600	2,704	2,812	2,925	3,042	3,163	3,290	3,421	3,558	3,701	As Equipment
Publications	800	832	865	900	936	973	1,012	1,053	1,095	1,139	1,184	As Equipment
Training	4,000	4,160	4,326	4,499	4,679	4,867	5,061	5,264	5,474	5,693	5,921	As Equipment
Regulatory Permits and Fees	7,000	7,280	7,571	7,874	8,189	8,517	8,857	9,212	9,580	9,963	10,362	As Equipment
Printing & Binding	150	156	162	169	175	182	190	197	205	213	222	As Equipment
Postage / Delivery	1,000	1,040	1,082	1,125	1,170	1,217	1,265	1,316	1,369	1,423	1,480	As Equipment
Telephone	1,450	1,508	1,568	1,631	1,696	1,764	1,835	1,908	1,984	2,064	2,146	As Utilities
Waste Disposal	1,200	1,248	1,298	1,350	1,404	1,460	1,518	1,579	1,642	1,708	1,776	As Utilities
Vehicle Fuel	1,200	1,248	1,298	1,350	1,404	1,460	1,518	1,579	1,642	1,708	1,776	As Utilities
Equipment Under $25000	8,000	8,240	8,487	8,742	9,004	9,274	9,552	9,839	10,134	10,438	10,751	As Materials & Supplies
Computer Hardware Under $25000	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524	6,720	As Materials & Supplies
Comp Software Under $25000	7,000	7,210	7,426	7,649	7,879	8,115	8,358	8,609	8,867	9,133	9,407	As Materials & Supplies
Equipment Over $25000	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002	19,572	20,159	As Materials & Supplies
Total Water Resources Laboratory - 4741	**$878,089**	**$906,544**	**$935,936**	**$966,297**	**$997,658**	**$1,030,054**	**$1,063,519**	**$1,098,089**	**$1,133,801**	**$1,170,693**	**$1,208,806**	
Additional O&M												
Staffing Adjustments	$0	$200,000	$206,000	$212,180	$415,000	$427,450	$440,274	$453,482	$467,086	$481,099	$495,532	As Salaries
Total Additional O&M	**$0**	**$200,000**	**$206,000**	**$212,180**	**$415,000**	**$427,450**	**$440,274**	**$453,482**	**$467,086**	**$481,099**	**$495,532**	
Total O&M Expenses	**$17,330,829**	**$18,314,196**	**$18,911,053**	**$19,527,800**	**$20,361,569**	**$21,026,046**	**$21,712,693**	**$22,422,267**	**$23,155,549**	**$23,913,350**	**$24,696,506**	

	Proposed	*Projected*										
	FY 2022	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**FY 2032**	*Notes*
Rate Funded Capital	**$4,245,000**	**$4,800,000**	**$5,750,000**	**$5,750,000**	**$5,560,000**	**$6,200,000**	**$7,200,000**	**$9,570,000**	**$10,500,000**	**$11,296,000**	**$11,950,000**	$5,494,535 FY 2020 Dep. Exp.
Debt Service												
2004/16 Revenue Bond	$1,165,050	$1,157,800	$1,158,800	$1,157,550	$1,164,050	$1,162,800	$1,164,800	$0	$0	$0	$0	Debt Schedule
CWSRF Loan - FOG	98,161	98,161	98,161	98,161	98,161	98,161	98,161	98,161	98,161	98,161	98,161	Debt Schedule
CWSRF Loan - Headworks	341,981	341,981	341,981	341,981	341,981	341,981	341,981	341,981	341,981	341,981	341,981	Debt Schedule
Aeration Loan	1,953,145	1,953,145	1,953,145	1,953,145	1,953,145	1,953,145	1,953,145	1,953,145	1,953,145	1,953,145	1,953,145	Debt Schedule
Future SRF - Electrical Project	0	0	0	1,095,906	2,191,812	2,191,812	2,191,812	2,191,812	2,191,812	2,191,812	2,191,812	Debt Schedule
Assumed Low Interest Loan	0	0	0	0	171,312	446,774	854,495	970,986	1,138,627	1,376,229	1,376,229	Calc'd @ 1.25% for 20 yrs
Assumed Revenue Bond	0	0	0	0	0	0	0	0	0	0	0	Calc'd @ 4.5% for 20 yrs
Additional Long-Term Debt	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	Calc'd @ 4.5% for 20 yrs
Total Debt Service	$3,558,337	$3,551,087	$3,552,087	$4,646,743	$5,920,461	$6,194,674	$6,604,394	$5,556,086	$5,723,727	$5,961,329	$5,961,329	
LESS: Other Funding												
Connection Fees	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Net Debt Service	**$3,558,337**	**$3,551,087**	**$3,552,087**	**$4,646,743**	**$5,920,461**	**$6,194,674**	**$6,604,394**	**$5,556,086**	**$5,723,727**	**$5,961,329**	**$5,961,329**	
Reserve Funding												
To / (From) Operating Reserve	$134,837	$94,091	$63,696	($24,345)	($29,257)	($27,773)	($30,281)	$253,390	$133,861	$54,374	$242,903	
To / (From) Capital Fund	0	0	0	0	0	300,000	200,000	0	150,000	0	0	
To / (From) Disaster Reserves	0	0	0	0	0	0	0	0	0	0	0	
To / (From) Contingency Reserves	0	0	0	0	0	0	0	0	0	0	0	
To / (From) Debt / Rate Stabilization Reserves	0	0	0	0	0	0	0	0	0	0	0	
Total Reserve Funding	**$134,837**	**$94,091**	**$63,696**	**($24,345)**	**($29,257)**	**$272,227**	**$169,719**	**$253,390**	**$283,861**	**$54,374**	**$242,903**	
Total Revenue Requirement	**$25,269,003**	**$26,759,374**	**$28,276,836**	**$29,900,199**	**$31,812,774**	**$33,692,947**	**$35,686,807**	**$37,801,742**	**$39,663,137**	**$41,225,052**	**$42,850,738**	
Bal. / (Def.) of Funds	$0	($1,734,865)	($3,433,666)	($5,218,864)	($7,142,926)	($9,032,732)	($11,034,436)	($13,154,718)	($15,025,388)	($16,594,409)	($18,225,125)	
Balance a % of Rate Adj. Req'd	0.0%	7.0%	14.0%	21.4%	29.3%	37.0%	45.2%	53.9%	61.6%	68.1%	74.8%	
Proposed Rate Adjustment	**0.0%**	**7.0%**	**6.5%**	**6.5%**	**6.5%**	**6.0%**	**6.0%**	**6.0%**	**5.0%**	**4.0%**	**4.0%**	
Months of Adjustment	*12*	*12*	*12*	*12*	*12*	*12*	*12*	*12*	*12*	*12*	*12*	
Add'l Revenue with Rate Adj.	$0	$1,734,865	$3,433,666	$5,218,864	$7,142,926	$9,032,732	$11,034,436	$13,154,718	$15,025,388	$16,594,409	$18,225,125	
Bal. / (Def.) After Rate Adj.	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Add'l Rate Adj. Req'd	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	
Average Residential Customer Bill												
Customer Bill on Proposed Adjustment	$52.36	$56.03	$59.67	$63.55	$67.68	$71.74	$76.04	$80.60	$84.63	$88.02	$91.54	
Bill Difference - Monthly		3.67	3.64	3.88	4.13	4.06	4.30	4.56	4.03	3.39	3.52	
Cumulative Bill Difference		3.67	7.31	11.19	15.32	19.38	23.68	28.24	32.27	35.66	39.18	
Debt Service Coverage Ratio (all debt)												
Before Rate Adjustment	2.23	1.89	1.67	1.11	0.73	0.59	0.45	0.40	0.26	0.12	0.00	
After Proposed Rate Adjustment	2.23	2.38	2.64	2.23	1.93	2.04	2.12	2.77	2.88	2.90	3.05	

	Proposed	*Projected*										
	FY 2022	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**FY 2032**	*Notes*
Reserve Funds												
Beginning Reserve Balance	**$11,328,374**	**$11,451,357**	**$13,999,136**	**$12,930,836**	**$15,156,718**	**$14,686,347**	**$14,458,130**	**$14,631,309**	**$15,289,268**	**$15,141,478**	**$15,406,480**	
Operating Reserve												
Beginning Balance	**$1,124,499**	**$1,206,336**	**$1,054,427**	**$969,123**	**$787,778**	**$551,521**	**$310,548**	**$110,268**	**$186,657**	**$136,519**	**$892**	
Plus: Additions	134,837	94,091	63,696	0	0	0	0	253,390	133,861	54,374	242,903	
Ending Fund Balance	0	0	0	0	0	0	0	0	0	0	0	
Less: Uses of Funds	(53,000)	(246,000)	(149,000)	(181,345)	(236,257)	(240,973)	(200,281)	(177,000)	(184,000)	(190,000)	(195,000)	
Ending Balance	**$1,206,336**	**$1,054,427**	**$969,123**	**$787,778**	**$551,521**	**$310,548**	**$110,268**	**$186,657**	**$136,519**	**$892**	**$48,795**	
Capital Fund												
Beginning Balance	**$3,896,979**	**$3,885,125**	**$6,338,813**	**$5,206,818**	**$7,457,044**	**$7,015,929**	**$6,862,686**	**$7,066,146**	**$7,470,715**	**$7,189,063**	**$7,399,692**	
Plus: Additions	0	2,072,413	0	1,861,288	0	300,000	200,000	0	150,000	0	0	
Connection Fees	377,500	381,275	385,088	388,939	392,828	396,756	400,724	404,731	408,778	412,866	416,995	As Misc. Revenues
Less: Uses of Funds	(389,354)	0	(1,517,083)	0	(833,943)	(850,000)	(397,264)	(162)	(840,430)	(202,237)	0	
Ending Balance	**$3,885,125**	**$6,338,813**	**$5,206,818**	**$7,457,044**	**$7,015,929**	**$6,862,686**	**$7,066,146**	**$7,470,715**	**$7,189,063**	**$7,399,692**	**$7,816,687**	
Target: 5% of Capital Assets	*$5,670,614*	*$5,840,732*	*$6,015,954*	*$6,196,433*	*$6,382,326*	*$6,573,795*	*$6,771,009*	*$6,974,140*	*$7,183,364*	*$7,398,865*	*$7,620,831*	
Disaster Reserves												
Beginning Balance	**$2,568,486**	**$2,600,486**	**$2,747,486**	**$2,837,486**	**$2,932,486**	**$3,056,486**	**$3,155,486**	**$3,257,486**	**$3,363,486**	**$3,473,486**	**$3,587,486**	
Plus: Additions	0	0	0	0	0	0	0	0	0	0	0	
Balance: From Operating	32,000	147,000	90,000	95,000	124,000	99,000	102,000	106,000	110,000	114,000	117,000	
Less: Uses of Funds	0	0	0	0	0	0	0	0	0	0	0	
Ending Balance	**$2,600,486**	**$2,747,486**	**$2,837,486**	**$2,932,486**	**$3,056,486**	**$3,155,486**	**$3,257,486**	**$3,363,486**	**$3,473,486**	**$3,587,486**	**$3,704,486**	
Target: 15% of O&M	*$2,599,624*	*$2,747,129*	*$2,836,658*	*$2,929,170*	*$3,054,235*	*$3,153,907*	*$3,256,904*	*$3,363,340*	*$3,473,332*	*$3,587,002*	*$3,704,476*	
Contingency Reserves												
Beginning Balance	**$1,712,324**	**$1,733,324**	**$1,832,324**	**$1,891,324**	**$1,953,324**	**$2,036,324**	**$2,103,324**	**$2,171,324**	**$2,242,324**	**$2,316,324**	**$2,392,324**	
Plus: Additions	0	0	0	0	0	0	0	0	0	0	0	
Balance: From Operating	21,000	99,000	59,000	62,000	83,000	67,000	68,000	71,000	74,000	76,000	78,000	
Less: Uses of Funds	0	0	0	0	0	0	0	0	0	0	0	
Ending Balance	**$1,733,324**	**$1,832,324**	**$1,891,324**	**$1,953,324**	**$2,036,324**	**$2,103,324**	**$2,171,324**	**$2,242,324**	**$2,316,324**	**$2,392,324**	**$2,470,324**	
Target: 10% of O&M	*$1,733,083*	*$1,831,420*	*$1,891,105*	*$1,952,780*	*$2,036,157*	*$2,102,605*	*$2,171,269*	*$2,242,227*	*$2,315,555*	*$2,391,335*	*$2,469,651*	
Debt / Rate Stabilization Reserves												
Beginning Balance	**$2,026,086**	**$2,026,086**	**$2,026,086**	**$2,026,086**	**$2,026,086**	**$2,026,086**	**$2,026,086**	**$2,026,086**	**$2,026,086**	**$2,026,086**	**$2,026,086**	
Plus: Additions	0	0	0	0	0	0	0	0	0	0	0	
Less: Uses of Funds	0	0	0	0	0	0	0	0	0	0	0	
Ending Balance	**$2,026,086**	**$2,026,086**	**$2,026,086**	**$2,026,086**	**$2,026,086**	**$2,026,086**	**$2,026,086**	**$2,026,086**	**$2,026,086**	**$2,026,086**	**$2,026,086**	
Ending Reserve Balance *(Not include. Debt/Rate)*	**$9,425,271**	**$11,973,050**	**$10,904,750**	**$13,130,632**	**$12,660,261**	**$12,432,044**	**$12,605,223**	**$13,263,182**	**$13,115,392**	**$13,380,394**	**$14,040,293**	
Check Council Policies	*$10,003,321*	*$10,419,281*	*$10,743,717*	*$11,078,383*	*$11,472,718*	*$11,830,307*	*$12,199,183*	*$12,579,706*	*$12,972,251*	*$13,377,202*	*$13,794,957*	
	($578,050)	*$1,553,769*	*$161,033*	*$2,052,250*	*$1,187,543*	*$601,737*	*$406,041*	*$683,476*	*$143,141*	*$3,192*	*$245,336*	

City of Santa Barbara
Wastewater Rate Study
Capital Improvement Plan
Exhibit 4

Inflation	2.7%

	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total	*Notes*
Future Capital Projects	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$801,087	**$801,087**	
Transfer to Capital Reserve	$0	$2,072,413	$0	$1,861,288	$0	$0	$0	$0	$0	$0	$0	**$3,933,701**	
Total Capital Improvement Projects	**$11,252,310**	**$23,420,796**	**$16,701,701**	**$15,439,353**	**$9,393,943**	**$11,897,200**	**$14,597,264**	**$11,570,162**	**$14,190,430**	**$15,498,237**	**$11,950,000**	**$155,911,395**	
Less: Outside Funding Sources													
Operating Fund Reserves	$0	$0	$0	$0	$0	$47,200	$0	$0	$0	$0	$0	$47,200	
Capital Fund Reserves	389,354	0	1,517,083	0	833,943	850,000	397,264	162	840,430	202,237	0	5,030,473	
Carriovers and Encumbrances	5,788,323	0	0	0	0	0	0	0	0	0	0	5,788,323	
Reimbursement	0	2,250,000	0	0	0	0	0	0	0	0	0	2,250,000	
Secured Debt (SRF)	829,633	16,370,796	9,434,618	9,689,353	0	0	0	0	0	0	0	36,324,400	
Assumed Low Interest Loan	0	0	0	0	3,000,000	4,800,000	7,000,000	2,000,000	2,850,000	4,000,000	0	23,650,000	
Assumed Revenue Bond	0	0	0	0	0	0	0	0	0	0	0	0	
Additional Revenue Bonds	(0)	(0)	(0)	(0)	0	(0)	(0)	(0)	(0)	(0)	0	(2)	
Total Funding Sources	**$7,007,310**	**$18,620,796**	**$10,951,701**	**$9,689,353**	**$3,833,943**	**$5,697,200**	**$7,397,264**	**$2,000,162**	**$3,690,430**	**$4,202,237**	**$0**	**$73,090,395**	
Rate Funded Capital	**$4,245,000**	**$4,800,000**	**$5,750,000**	**$5,750,000**	**$5,560,000**	**$6,200,000**	**$7,200,000**	**$9,570,000**	**$10,500,000**	**$11,296,000**	**$11,950,000**	**$82,821,000**	

City of Santa Barbara
Wastewater Rate Study
Debt Schedule
Exhibit 5

	2004/16 Revenue Bond	CWSRF Loan - FOG	CWSRF Loan - Headworks	Aeration Loan	Future SRF - Electrical Project	*Total*
FY 2022	$1,165,050	$98,161	$341,981	$1,953,145	$0	**$3,558,337**
FY 2023	1,157,800	98,161	341,981	1,953,145	0	**3,551,087**
FY 2024	1,158,800	98,161	341,981	1,953,145	0	**3,552,087**
FY 2025	1,157,550	98,161	341,981	1,953,145	1,095,906	**4,646,744**
FY 2026	1,164,050	98,161	341,981	1,953,145	2,191,812	**5,749,150**
FY 2027	1,162,800	98,161	341,981	1,953,145	2,191,812	**5,747,900**
FY 2028	1,164,800	98,161	341,981	1,953,145	2,191,812	**5,749,900**
FY 2029	0	98,161	341,981	1,953,145	2,191,812	**4,585,100**
FY 2030	0	98,161	341,981	1,953,145	2,191,812	**4,585,100**
FY 2031	0	98,161	341,981	1,953,145	2,191,812	**4,585,100**
FY 2032	0	98,161	341,981	1,953,145	2,191,812	**4,585,100**
FY 2033	0	98,161	341,981	1,953,145	2,191,812	**4,585,100**
FY 2034	0	98,161	0	1,953,145	2,191,812	**4,243,119**
FY 2035	0	98,161	0	1,953,145	2,191,812	**4,243,119**
Total Debt Service	**$8,130,850**	**$1,374,253**	**$4,103,772**	**$27,344,035**	**$23,014,031**	**$63,966,941**

Source: City provided debt service schedules

City of Santa Barbara
Wastewater Rate Study
Revenues at Present Rates
Exhibit 6

FY 2022 Rates		Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Total
Residential														
Base Fee	***$ / DU***													
Single Family	$22.68	16,159	16,159	16,159	16,159	16,159	16,159	16,159	16,159	16,159	16,159	16,159	16,159	16,159
1 - 4 DU (accts.)	0.00	4,557	4,557	4,557	4,557	4,557	4,557	4,557	4,557	4,557	4,557	4,557	4,557	4,557
# of dwelling units	22.68	7,958	7,958	7,958	7,958	7,958	7,958	7,958	7,958	7,958	7,958	7,958	7,958	7,958
5 + DU (accts.)	0.00	1,979	1,979	1,979	1,979	1,979	1,979	1,979	1,979	1,979	1,979	1,979	1,979	1,979
# of dwelling units	22.68	13,779	13,779	13,779	13,779	13,779	13,779	13,779	13,779	13,779	13,779	13,779	13,779	13,779
Total Base Fee Revenue		$859,481	$859,481	$859,481	$859,481	$859,481	$859,481	$859,481	$859,481	$859,481	$859,481	$859,481	$859,481	$10,313,775
Volume Charge	***$ / HCF***													
Single Family														
0 - 10	$3.71	122,615	124,245	123,184	124,892	118,393	115,794	115,497	107,685	101,032	107,866	117,238	118,485	1,396,926
10 +	0.00	56,473	60,842	58,849	65,792	50,637	42,586	42,947	26,804	18,823	27,984	43,718	47,411	542,865
1 - 4 DU (accts.)														
0 - 10	3.71	40,626	40,592	40,221	40,762	38,118	37,890	36,387	36,264	35,178	36,776	37,848	38,394	459,056
10 +	0.00	2,825	2,703	2,438	2,617	2,250	1,745	1,626	1,479	1,088	1,897	2,047	2,419	25,133
5 + DU (accts.)														
0 - 7	3.71	60,146	60,068	59,777	61,630	57,238	57,384	55,506	55,458	55,500	56,614	57,642	58,076	695,039
7 +	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0
		282,685	**288,450**	**284,469**	**295,693**	**266,636**	**255,399**	**251,963**	**227,690**	**211,620**	**231,136**	**258,492**	**264,785**	**3,119,019**
Total Volume Charge Revenue		$828,768	$834,397	$828,004	$843,225	$793,011	$783,062	$769,416	$739,800	$711,242	$746,658	$789,219	$797,485	$9,464,286
Total Residential Revenue		**$1,688,249**	**$1,693,878**	**$1,687,485**	**$1,702,706**	**$1,652,492**	**$1,642,544**	**$1,628,897**	**$1,599,281**	**$1,570,723**	**$1,606,139**	**$1,648,700**	**$1,656,966**	**$19,778,062**
Commercial														
Base Fee *(Minimum Charge)*	***$ / Acct.***													
5/8"	$43.39	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191
3/4"	65.09	107	107	107	107	107	107	107	107	107	107	107	107	107
1"	75.72	348	348	348	348	348	348	348	348	348	348	348	348	348
1 1/2"	129.97	164	164	164	164	164	164	164	164	164	164	164	164	164
2"	216.68	269	269	269	269	269	269	269	269	269	269	269	269	269
3"	433.20	8	8	8	8	8	8	8	8	8	8	8	8	8
4"	540.67	5	5	5	5	5	5	5	5	5	5	5	5	5
6"	1,082.96	4	4	4	4	4	4	4	4	4	4	4	4	4
8"	1,895.21	0	0	0	0	0	0	0	0	0	0	0	0	0
10"	2,909.10	0	0	0	0	0	0	0	0	0	0	0	0	0
		2,096	2,096	2,096	2,096	2,096	2,096	2,096	2,096	2,096	2,096	2,096	2,096	2,096
Total Base Fee (Minimum Charge) Revenue		$175,095	$175,095	$175,095	$175,095	$175,095	$175,095	$175,095	$175,095	$175,095	$175,095	$175,095	$175,095	$2,101,146
Volume Charge	***$ / HCF***													
Unbilled	$0.00	22,191	21,460	22,080	21,803	17,622	22,665	18,164	18,201	20,541	21,616	20,887	22,716	249,945
Billed	$4.60	32,515	28,093	29,076	25,922	19,846	37,631	20,926	22,372	26,888	28,507	26,476	36,278	334,529
		54,706	49,552	51,156	47,725	37,468	60,296	39,090	40,573	47,428	50,123	47,363	58,994	584,474
Total Volume Charge Revenue		$149,570	$129,226	$133,752	$119,240	$91,292	$173,104	$96,258	$102,909	$123,683	$131,130	$121,787	$166,881	$1,538,833
Total Commercial Revenue		**$324,666**	**$304,322**	**$308,847**	**$294,335**	**$266,387**	**$348,200**	**$271,353**	**$278,005**	**$298,779**	**$306,226**	**$296,883**	**$341,976**	**$3,639,979**

FY 2022 Rates		Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Total
Commercial *(Discount)*														
Base Fee *(Minimum Charge)*	***$ / Acct.***													
5/8"	$39.35	1	1	1	1	1	1	1	1	1	1	1	1	1
3/4"	59.04	0	0	0	0	0	0	0	0	0	0	0	0	0
1"	68.68	0	0	0	0	0	0	0	0	0	0	0	0	0
1 1/2"	117.88	1	1	1	1	1	1	1	1	1	1	1	1	1
2"	196.53	4	4	4	4	4	4	4	4	4	4	4	4	4
3"	392.91	0	0	0	0	0	0	0	0	0	0	0	0	0
4"	490.39	1	1	1	1	1	1	1	1	1	1	1	1	1
6"	982.24	0	0	0	0	0	0	0	0	0	0	0	0	0
8"	1,718.96	0	0	0	0	0	0	0	0	0	0	0	0	0
10"	2,638.55	0	0	0	0	0	0	0	0	0	0	0	0	0
		7	7	7	7	7	7	7	7	7	7	7	7	7
Total Base Fee (Minimum Charge) Revenue		$1,434	$1,434	$1,434	$1,434	$1,434	$1,434	$1,434	$1,434	$1,434	$1,434	$1,434	$1,434	$17,205
Volume Charge	***$ / HCF***													
Unbilled	$0.00	425	386	415	418	239	412	404	414	434	508	491	455	5,001
Billed	$2.60	626	676	378	334	63	714	151	58	122	372	723	821	5,037
		1,051	1,062	793	751	302	1,127	555	471	556	880	1,214	1,276	10,038
Total Volume Charge Revenue		$1,629	$1,756	$982	$868	$163	$1,857	$393	$150	$316	$967	$1,881	$2,134	$13,096
Total Commercial (Discount) Revenue		**$3,062**	**$3,190**	**$2,416**	**$2,302**	**$1,597**	**$3,291**	**$1,826**	**$1,583**	**$1,750**	**$2,401**	**$3,314**	**$3,568**	**$30,301**
Industrial														
Base Fee *(Minimum Charge)*	***$ / Acct.***													
5/8"	$56.06	12	12	12	12	12	12	12	12	12	12	12	12	12
3/4"	84.09	1	1	1	1	1	1	1	1	1	1	1	1	1
1"	98.27	5	5	5	5	5	5	5	5	5	5	5	5	5
1 1/2"	160.80	5	5	5	5	5	5	5	5	5	5	5	5	5
2"	280.69	14	14	14	14	14	14	14	14	14	14	14	14	14
3"	561.21	0	0	0	0	0	0	0	0	0	0	0	0	0
4"	701.75	0	0	0	0	0	0	0	0	0	0	0	0	0
6"	1,403.22	1	1	1	1	1	1	1	1	1	1	1	1	1
8"	2,455.57	0	0	0	0	0	0	0	0	0	0	0	0	0
10"	3,858.97	0	0	0	0	0	0	0	0	0	0	0	0	0
		38	38	38	38	38	38	38	38	38	38	38	38	38
Total Base Fee (Minimum Charge) Revenue		$7,385	$7,385	$7,385	$7,385	$7,385	$7,385	$7,385	$7,385	$7,385	$7,385	$7,385	$7,385	$88,620
Volume Charge	***$ / HCF***													
Unbilled	$0.00	1,261	1,242	1,262	1,214	1,087	1,268	1,130	1,195	1,207	1,238	1,236	1,266	14,604
Billed	5.73	4,993	4,614	5,653	4,886	4,172	5,567	2,555	2,887	3,984	5,223	4,987	5,665	55,187
		6,253	5,856	6,916	6,100	5,259	6,835	3,685	4,082	5,192	6,460	6,223	6,930	69,791
Total Volume Charge Revenue		$28,608	$26,441	$32,394	$27,997	$23,906	$31,901	$14,641	$16,542	$22,829	$29,925	$28,578	$32,460	$316,223
Total Industrial Revenue		**$35,993**	**$33,826**	**$39,779**	**$35,382**	**$31,291**	**$39,286**	**$22,026**	**$23,927**	**$30,214**	**$37,310**	**$35,963**	**$39,845**	**$404,843**

City of Santa Barbara
Wastewater Rate Study
Revenues at Present Rates
Exhibit 6

FY 2022 Rates		Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Total
Com - High Strength														
Base Fee *(Minimum Charge)*														
5/8"	$56.06	153	153	153	153	153	153	153	153	153	153	153	153	153
3/4"	84.09	24	24	24	24	24	24	24	24	24	24	24	24	24
1"	98.27	56	56	56	56	56	56	56	56	56	56	56	56	56
1 1/2"	160.80	27	27	27	27	27	27	27	27	27	27	27	27	27
2"	280.69	31	31	31	31	31	31	31	31	31	31	31	31	31
3"	561.21	1	1	1	1	1	1	1	1	1	1	1	1	1
4"	701.75	1	1	1	1	1	1	1	1	1	1	1	1	1
6"	1,403.22	1	1	1	1	1	1	1	1	1	1	1	1	1
8"	2,455.57	1	1	1	1	1	1	1	1	1	1	1	1	1
10"	3,858.97	0	0	0	0	0	0	0	0	0	0	0	0	0
		295	**295**	**295**	**295**	**295**	**295**	**295**	**295**	**295**	**295**	**295**	**295**	**295**
Total Base Fee (Minimum Charge) Revenue		$34,263	$34,263	$34,263	$34,263	$34,263	$34,263	$34,263	$34,263	$34,263	$34,263	$34,263	$34,263	**411,158**
Volume Charge	***$ / HCF***													
Unbilled	$0.00	5,237	5,158	5,296	5,340	4,231	5,526	4,148	4,312	5,053	5,393	5,184	5,599	60,478
Billed	5.73	9,648	8,436	8,972	8,449	6,700	9,935	4,406	4,966	7,753	9,367	8,876	11,852	99,361
		14,885	13,594	14,268	13,789	10,931	15,462	8,554	9,279	12,805	14,761	14,059	17,452	159,839
Total Volume Charge Revenue		$55,284	$48,339	$51,409	$48,414	$38,389	$56,930	$25,248	$28,457	$44,423	$53,674	$50,857	$67,913	**$569,339**
High Strength Charges														
BOD	$0.32													**0**
TSS	0.42													**0**
Amn	0.98													**0**
		0	0	0	0	0	0	0	0	0	0	0	0	**0**
		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Total Com - High Strength Revenue		**$89,547**	**$82,603**	**$85,672**	**$82,677**	**$72,653**	**$91,193**	**$59,512**	**$62,721**	**$78,687**	**$87,937**	**$85,120**	**$102,176**	**$980,497**
Summary														
Customers														
Residential		22,695	22,695	22,695	22,695	22,695	22,695	22,695	22,695	22,695	22,695	22,695	22,695	22,695
Commercial		2,096	2,096	2,096	2,096	2,096	2,096	2,096	2,096	2,096	2,096	2,096	2,096	2,096
Commercial (Discount)		7	7	7	7	7	7	7	7	7	7	7	7	7
Industrial		38	38	38	38	38	38	38	38	38	38	38	38	38
Com - High Strength		295	295	295	295	295	295	295	295	295	295	295	295	295
Total Number of Customers		**25,131**	**25,131**	**25,131**	**25,131**	**25,131**	**25,131**	**25,131**	**25,131**	**25,131**	**25,131**	**25,131**	**25,131**	**25,131**
Volume														
Residential		282,685	288,450	284,469	295,693	266,636	255,399	251,963	227,690	211,620	231,136	258,492	264,785	3,119,019
Commercial		54,706	49,552	51,156	47,725	37,468	60,296	39,090	40,573	47,428	50,123	47,363	58,994	584,474
Commercial (Discount)		1,051	1,062	793	751	302	1,127	555	471	556	880	1,214	1,276	10,038
Industrial		6,253	5,856	6,916	6,100	5,259	6,835	3,685	4,082	5,192	6,460	6,223	6,930	69,791
Com - High Strength		14,885	13,594	14,268	13,789	10,931	15,462	8,554	9,279	12,805	14,761	14,059	17,452	159,839
Total Consumption		**359,581**	**358,515**	**357,603**	**364,058**	**320,596**	**339,119**	**303,847**	**282,094**	**277,601**	**303,360**	**327,351**	**349,438**	**3,943,162**
Revenues														
Base Fee		$1,077,659	$1,077,659	$1,077,659	$1,077,659	$1,077,659	$1,077,659	$1,077,659	$1,077,659	$1,077,659	$1,077,659	$1,077,659	$1,077,659	$12,931,905
Volume Charge		1,063,858	1,040,160	1,046,541	1,039,743	946,761	1,046,855	905,956	887,858	902,494	962,355	992,322	1,066,872	11,901,776
Total Revenues		**$2,141,517**	**$2,117,819**	**$2,124,200**	**$2,117,402**	**$2,024,420**	**$2,124,513**	**$1,983,614**	**$1,965,517**	**$1,980,153**	**$2,040,013**	**$2,069,981**	**$2,144,531**	**$24,833,681**
													FY 2022 Budgeted	$24,818,919
													Difference	*$14,762*
													Percent	0.1%

City of Santa Barbara
Wastewater Rate Study
Customer Data
Exhibit 7

	RPR	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	
Single Family												
# of Accts.	16,159	16,159	16,159	16,159	16,159	16,159	16,159	16,159	16,159	16,159	16,159	As SF Cust Growth
Volume (CCF)												
Tier 1	1,396,926	1,368,987	1,341,607	1,314,775	1,312,146	1,309,521	1,306,902	1,304,289	1,301,680	1,299,077	1,296,479	As SF Vol Growth
Tier 2	542,865	532,008	521,368	510,940	509,918	508,898	507,881	506,865	505,851	504,839	503,830	As SF Vol Growth
Multi-Family												
# of Accts.	6,536	6,549	6,562	6,575	6,588	6,602	6,615	6,628	6,641	6,655	6,668	As MF Cust Growth
1-4 DU	7,958	7,974	7,990	8,006	8,022	8,038	8,054	8,070	8,086	8,102	8,119	As MF Cust Growth
5+ DU	13,779	13,807	13,834	13,862	13,890	13,917	13,945	13,973	14,001	14,029	14,057	As MF Cust Growth
Volume												
1-4 DU												
Tier 1	459,056	449,875	440,877	432,060	431,196	430,333	429,473	428,614	427,756	426,901	426,047	As MF Vol Growth
Tier 2	25,133	24,631	24,138	23,655	23,608	23,561	23,514	23,467	23,420	23,373	23,326	As MF Vol Growth
5+ DU												
Tier 1	695,039	681,138	667,515	654,165	652,857	651,551	650,248	648,947	647,650	646,354	645,062	As MF Vol Growth
Tier 2	0	0	0	0	0	0	0	0	0	0	0	As MF Vol Growth
Residential												
Accounts	22,695	22,708	22,721	22,734	22,747	22,761	22,774	22,787	22,800	22,814	22,827	
Dwelling Units	24,117	24,133	24,149	24,165	24,181	24,197	24,213	24,229	24,245	24,261	24,278	
Volume	2,423,980	2,375,500	2,327,990	2,281,430	2,276,868	2,272,314	2,267,769	2,263,234	2,258,707	2,254,190	2,249,681	

City of Santa Barbara
Wastewater Rate Study
Customer Data
Exhibit 7

	RPR	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	
Commercial												
Commercial												
5/8"	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	As Com Cust Growth
3/4"	107	107	107	107	107	107	107	107	107	107	107	As Com Cust Growth
1"	348	348	348	348	348	348	348	348	348	348	348	As Com Cust Growth
1 1/2"	164	164	164	164	164	164	164	164	164	164	164	As Com Cust Growth
2"	269	269	269	269	269	269	269	269	269	269	269	As Com Cust Growth
3"	8	8	8	8	8	8	8	8	8	8	8	As Com Cust Growth
4"	5	5	5	5	5	5	5	5	5	5	5	As Com Cust Growth
6"	4	4	4	4	4	4	4	4	4	4	4	As Com Cust Growth
8"	0	0	0	0	0	0	0	0	0	0	0	As Com Cust Growth
10"	0	0	0	0	0	0	0	0	0	0	0	As Com Cust Growth
	2,096	**2,096**	**2,096**	**2,096**	**2,096**	**2,096**	**2,096**	**2,096**	**2,096**	**2,096**	**2,096**	
Commercial (Discount)												
5/8"	1	1	1	1	1	1	1	1	1	1	1	As Com Cust Growth
3/4"	0	0	0	0	0	0	0	0	0	0	0	As Com Cust Growth
1"	0	0	0	0	0	0	0	0	0	0	0	As Com Cust Growth
1 1/2"	1	1	1	1	1	1	1	1	1	1	1	As Com Cust Growth
2"	4	4	4	4	4	4	4	4	4	4	4	As Com Cust Growth
3"	0	0	0	0	0	0	0	0	0	0	0	As Com Cust Growth
4"	1	1	1	1	1	1	1	1	1	1	1	As Com Cust Growth
6"	0	0	0	0	0	0	0	0	0	0	0	As Com Cust Growth
8"	0	0	0	0	0	0	0	0	0	0	0	As Com Cust Growth
10"	0	0	0	0	0	0	0	0	0	0	0	As Com Cust Growth
	7	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	
# of Accts.	**2,103**	**2,103**	**2,103**	**2,103**	**2,103**	**2,103**	**2,103**	**2,103**	**2,103**	**2,103**	**2,103**	
Volume												
Commercial	334,529	333,860	333,192	332,526	331,861	331,197	330,535	329,874	329,214	328,555	327,898	As Com Vol Growth
Commercial - Unbilled	249,945	249,445	248,946	248,449	247,952	247,456	246,961	246,467	245,974	245,482	244,991	As Com Vol Growth
Commercial Total	**584,474**	**583,305**	**582,139**	**580,974**	**579,812**	**578,653**	**577,495**	**576,340**	**575,188**	**574,037**	**572,889**	
Commercial (Discount)	5,037	5,027	5,017	5,007	4,997	4,987	4,977	4,967	4,957	4,947	4,937	As Com Vol Growth
Commercial (Discount) - Unbilled	5,001	4,991	4,981	4,972	4,962	4,952	4,942	4,932	4,922	4,912	4,902	As Com Vol Growth
Commercial (Discount) Total	**10,038**	**10,018**	**9,998**	**9,978**	**9,958**	**9,938**	**9,918**	**9,899**	**9,879**	**9,859**	**9,839**	

	RPR	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	
Industrial												
5/8"	12	12	12	12	12	12	12	12	12	12	12	As Ind Cust Growth
3/4"	1	1	1	1	1	1	1	1	1	1	1	As Ind Cust Growth
1"	5	5	5	5	5	5	5	5	5	5	5	As Ind Cust Growth
1 1/2"	5	5	5	5	5	5	5	5	5	5	5	As Ind Cust Growth
2"	14	14	14	14	14	14	14	14	14	14	14	As Ind Cust Growth
3"	0	0	0	0	0	0	0	0	0	0	0	As Ind Cust Growth
4"	0	0	0	0	0	0	0	0	0	0	0	As Ind Cust Growth
6"	1	1	1	1	1	1	1	1	1	1	1	As Ind Cust Growth
8"	0	0	0	0	0	0	0	0	0	0	0	As Ind Cust Growth
10"	0	0	0	0	0	0	0	0	0	0	0	As Ind Cust Growth
# of Accts.	**38**	**38**	**38**	**38**	**38**	**38**	**38**	**38**	**38**	**38**	**38**	
Volume												
Unbilled	14,604	14,575	14,546	14,517	14,488	14,459	14,430	14,401	14,372	14,343	14,315	As Ind Vol Growth
Billed	55,187	55,077	54,967	54,857	54,747	54,638	54,528	54,419	54,310	54,202	54,093	As Ind Vol Growth
Industrial Total	**69,791**	**69,652**	**69,512**	**69,373**	**69,235**	**69,096**	**68,958**	**68,820**	**68,682**	**68,545**	**68,408**	
Com - High Strength												
5/8"	153	153	153	153	153	153	153	153	153	153	153	As HS Cust Growth
3/4"	24	24	24	24	24	24	24	24	24	24	24	As HS Cust Growth
1"	56	56	56	56	56	56	56	56	56	56	56	As HS Cust Growth
1 1/2"	27	27	27	27	27	27	27	27	27	27	27	As HS Cust Growth
2"	31	31	31	31	31	31	31	31	31	31	31	As HS Cust Growth
3"	1	1	1	1	1	1	1	1	1	1	1	As HS Cust Growth
4"	1	1	1	1	1	1	1	1	1	1	1	As HS Cust Growth
6"	1	1	1	1	1	1	1	1	1	1	1	As HS Cust Growth
8"	1	1	1	1	1	1	1	1	1	1	1	As HS Cust Growth
10"	0	0	0	0	0	0	0	0	0	0	0	As HS Cust Growth
	295	**295**	**295**	**295**	**295**	**295**	**295**	**295**	**295**	**295**	**295**	
Volume												
Unbilled	60,478	60,357	60,236	60,116	59,996	59,876	59,756	59,636	59,517	59,398	59,279	As HS Vol Growth
Billed	99,361	99,162	98,964	98,766	98,569	98,371	98,175	97,978	97,782	97,587	97,392	As HS Vol Growth
Com - High Strength Total	**159,839**	**159,519**	**159,200**	**158,882**	**158,564**	**158,247**	**157,931**	**157,615**	**157,299**	**156,985**	**156,671**	

	RPR	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Revenue Calculation											
Single Family	$9,580,428	$9,476,776	$9,375,197	$9,275,650	$9,265,894	$9,256,158	$9,246,441	$9,236,744	$9,227,066	$9,217,408	$9,207,769
Multi-Family	10,197,634	10,123,832	10,051,766	9,981,403	9,985,246	9,989,129	9,993,052	9,997,015	10,001,018	10,005,061	10,009,144
Commercial	3,639,979	3,636,901	3,633,829	3,630,764	3,627,705	3,624,652	3,621,605	3,618,564	3,615,529	3,612,500	3,609,477
Commercial (Discount)	30,209	30,183	30,157	30,131	30,105	30,079	30,053	30,028	30,002	29,977	29,951
Industrial	404,843	404,211	403,580	402,950	402,321	401,694	401,067	400,443	399,819	399,197	398,575
Com - High Strength	980,497	979,358	978,222	977,088	975,956	974,826	973,699	972,574	971,451	970,331	969,212
	$24,833,589	**$24,651,261**	**$24,472,751**	**$24,297,985**	**$24,287,227**	**$24,276,538**	**$24,265,918**	**$24,255,368**	**$24,244,886**	**$24,234,473**	**$24,224,129**

City of Santa Barbara
Wastewater Rate Study
Exhibit 8
Volume Distribution Factor

	FY 2023 Annual Flow (HCF)	5.0% Inflow and Infiltration [1]	Total Annual Flow at Plant (HCF)	Avg. Daily Flow At Plant (MGD)	% of Total	% of Total
Single Family	1,296,853	64,843	1,361,696	2.79	41.3%	41.3%
Multi-Family	1,099,365	54,968	1,154,333	2.37	35.1%	35.1%
Commercial	533,991	26,700	560,691	1.15	17.0%	17.0%
Industrial	62,687	3,134	65,821	0.13	2.0%	2.0%
Com - High Strength	143,567	7,178	150,746	0.31	4.6%	4.6%
High Strength Surcharge	0	0	0	0.00	0.0%	0.0%
Total	**3,136,463**	**156,823**	**3,293,286**	**6.75**	**100.0%**	**100.0%**
		Actual Flows [2]	**2,825,036**	***5.79***		
					(VOL w/o HSD)	***(VOL)***

Notes

[1] - Estimated
[2] - Provide by City; CY 2020

City of Santa Barbara
Wastewater Rate Study
Exhibit 9
Customer Distribution Factors

	Actual Customer		*Cust. Serv. & Acntg*		*Capacity Demand*		
	Number of Account [1]	% of Total	Dwelling Units [2]	% of Total	Equivalent Meters [3]	% of Total	% of Total
Single Family	16,159	64.0%	16,159	39.9%	16,159	35.5%	35.5%
Multi-Family	6,549	25.9%	21,780	53.8%	21,780	47.9%	47.9%
Commercial	2,147	8.5%	2,147	5.3%	6,116	13.5%	13.5%
Industrial	51	0.2%	51	0.1%	316	0.7%	0.7%
Com - High Strength	357	1.4%	357	0.9%	1,091	2.4%	2.4%
High Strength Surcharge	0	0.0%	0	0.0%	0	0.0%	0.0%
	----------	----------	----------	----------	----------	----------	----------
Total	**25,263**	**100.0%**	**40,494**	**100.0%**	**45,462**	**100.0%**	**100.0%**
		(AC)		***(WCA)***		***(CD w/o HSD)***	***(CD)***

Notes

[1] - Based on FY 2021 Billing Data
[2] - Based on City records
[3] - Based on meter size; HSD based on average flow

City of Santa Barbara
Wastewater Rate Study
Exhibit 10
Strength Distribution Factors

	Biochemical Oxygen Demand				Total Suspended Solids		
	Daily Flow (MGD)	**Avg. Factor** (mg/l)	**Calculated Pounds** [1][2]	**% of Total**	**Avg. Factor** (mg/l)	**Calculated Pounds** [1][2]	**% of Total**
Single Family	2.79	205	1,741,413	37.7%	325	2,760,776	38.5%
Multi-Family	2.37	205	1,476,225	32.0%	325	2,340,357	32.7%
Commercial	1.15	205	717,042	15.5%	325	1,136,774	15.9%
Industrial	0.13	450	184,775	4.0%	550	225,837	3.2%
Com - High Strength	0.31	450	423,180	9.2%	550	517,220	7.2%
High Strength Surcharge			75,186	1.6%		184,375	2.6%
Total	**6.75**		**4,617,822**	**100.0%**		**7,165,339**	**100.0%**
				(BOD)			***(TSS)***

	Ammonia			
	Daily Flow (MGD)	**Avg. Factor** (mg/l)	**Calculated Pounds** [1][2]	**% of Total**
Single Family	2.79	35	297,314	38.2%
Multi-Family	2.37	35	252,038	32.4%
Commercial	1.15	35	122,422	15.7%
Industrial	0.13	55	22,584	2.9%
Com - High Strength	0.31	55	51,722	6.7%
High Strength Surcharge			31,661	4.1%
	6.75		**777,742**	**100.0%**
				(AMN)

Notes

[1] - Calculated Pounds = Daily Flow * Factor * 8.34 (Lbs. / MGD)
[2] - Retail figures based on WRF influent design

City of Santa Barbara
Wastewater Rate Study
Exhibit 11
Revenue Distribution Factor

	Projected FY 2023	% of Total
Single Family	$9,476,776	38.2%
Multi-Family	10,123,832	40.8%
Commercial	3,667,084	14.8%
Industrial	404,211	1.6%
Com - High Strength	979,358	4.0%
High Strength Surcharge	132,525	0.5%
	-----------------	----------
Total	**$24,783,786**	**100.0%**
		(RR)

City of Santa Barbara
Wastewater Rate Study
Exhibit 12.1
Net Plant in Service

	As of	Volume	Volume	Biochemical Oxygen Demand	Ammonia	Total Suspended Solids	Actual Customer	Customer Acct/Svcs	Capacity Demand	Capacity Demand	Revenue	Direct	Basis of Classification
				Strength Related			*Weighted for*						
	06/30/21	*(VOL)*	*(VOL w/o HSD)*	*(BOD)*	*(AMN)*	*(TSS)*	*(AC)*	*(WCA)*	*(CD)*	*(CD w/o HSD)*	*(RR)*	*(DA)*	*Basis of Classification*
Collection	$50,010,667	$0	$42,509,067	$0	$0	$0	$0	$0	$0	$7,501,600	$0	$0	85.0% VOL w/o 15.0% CD
Land	3,508,672	3,508,672	0	0	0	0	0	0	0	0	0	0	100.0% VOL
Lift Station	4,626,366	3,932,411	0	0	0	0	0	0	693,955	0	0	0	85.0% VOL 15.0% CD
Treatment	50,030,107	0	0	7,304,396	4,252,559	16,209,755	0	0	22,263,398	0	0	0	44.5% CD 14.6% BOD 8.5% AMN 32.4% SS
CWIP	0	0	0	0	0	0	0	0	0	0	0	0	44.5% CD 14.6% BOD 8.5% AMN 32.4% SS
Plant Before General Plant	**$108,175,812**	**$7,441,083**	**$42,509,067**	**$7,304,396**	**$4,252,559**	**$16,209,755**	**$0**	**$0**	**$22,957,353**	**$7,501,600**	**$0**	**$0**	
% Plant Before General Plant	***100.0%***	***6.9%***	***39.3%***	***6.8%***	***3.9%***	***15.0%***	***0.0%***	***0.0%***	***21.2%***	***6.9%***	***0.0%***	***0.0%***	*Factor PBGP*
General Plant													
General - Building Improv	$780,894	$53,715	$306,862	$52,729	$30,698	$117,014	$0	$0	$165,723	$54,152	$0	$0	*As Factor PBGP*
General - Buildings	0	0	0	0	0	0	0	0	0	0	0	0	*As Factor PBGP*
General - CWIP	0	0	0	0	0	0	0	0	0	0	0	0	*As Factor PBGP*
General - Equipment	4,042,848	278,095	1,588,689	272,987	158,931	605,806	0	0	857,984	280,357	0	0	*As Factor PBGP*
General - Misc	412,719	28,390	162,183	27,868	16,225	61,844	0	0	87,588	28,621	0	0	*As Factor PBGP*
Total General Plant	**$5,236,461**	**$360,200**	**$2,057,734**	**$353,584**	**$205,853**	**$784,665**	**$0**	**$0**	**$1,111,295**	**$363,130**	**$0**	**$0**	
Net Plant in Service	**$113,412,273**	**$7,801,283**	**$44,566,801**	**$7,657,979**	**$4,458,413**	**$16,994,419**	**$0**	**$0**	**$24,068,648**	**$7,864,730**	**$0**	**$0**	

City of Santa Barbara
Wastewater Rate Study
Exhibit 13.1
Classification of the Revenue Requirement

				Strength Related			*Weighted*							
	Test Year FY 2023	**Volume** *(VOL)*	**Volume Without HSD** *(VOL w/o HSD)*	**Biochemical Oxygen Demand** *(BOD)*	**Ammonia** *(AMN)*	**Total Suspended Solids** *(TSS)*	**Actual Customer** *(AC)*	**Customer Acct/Svcs** *(WCA)*	**Capacity Demand** *(CD)*	**Capacity Demand Without HSD** *(CD w/o HSD)*	**Revenue** *(RR)*	**Direct** *(DA)*		*Basis of Classification*
Water Resources Management - 4711														
Salaries-Permanent	$429,388	$0	$0	$0	$0	$0	$0	$0	$429,388	$0	$0	$0	100.0%	CD
Salaries-Hourly	79,980	0	0	0	0	0	0	0	79,980	0	0	0	100.0%	CD
Salaries-Overtime	2,264	0	0	0	0	0	0	0	2,264	0	0	0	100.0%	CD
Alloc-Vacation Cashout	2,998	0	0	0	0	0	0	0	2,998	0	0	0	100.0%	CD
Alloc-Sick Leave Cashout	2,526	0	0	0	0	0	0	0	2,526	0	0	0	100.0%	CD
Benefits - Grp. Insurance	59,798	0	0	0	0	0	0	0	59,798	0	0	0	100.0%	CD
Benefits - Retirement UAL	54,247	0	0	0	0	0	0	0	54,247	0	0	0	100.0%	CD
Benefits - Workers Comp / Unemp.	101,567	0	0	0	0	0	0	0	101,567	0	0	0	100.0%	CD
Medicare	18,916	0	0	0	0	0	0	0	18,916	0	0	0	100.0%	CD
Hourly Ee Retirement	7,573	0	0	0	0	0	0	0	7,573	0	0	0	100.0%	CD
Hourly Health Care Reimburse	1,054	0	0	0	0	0	0	0	1,054	0	0	0	100.0%	CD
Alloc - Retiree Medical	627	0	0	0	0	0	0	0	627	0	0	0	100.0%	CD
Network / Infrastructure	2,209	0	0	0	0	0	0	0	2,209	0	0	0	100.0%	CD
GIS Support	6,297	0	0	0	0	0	0	0	6,297	0	0	0	100.0%	CD
Enterprise Applic Sys	132,322	0	0	0	0	0	0	0	132,322	0	0	0	100.0%	CD
Building Maintenance	52,968	0	0	0	0	0	0	0	52,968	0	0	0	100.0%	CD
Planned Maintenance Program	986	0	0	0	0	0	0	0	986	0	0	0	100.0%	CD
Generator Replacements	729	0	0	0	0	0	0	0	729	0	0	0	100.0%	CD
Alternative Transportation	384	0	0	0	0	0	0	0	384	0	0	0	100.0%	CD
Telephone Allocated	113	0	0	0	0	0	0	0	113	0	0	0	100.0%	CD
Custodial	8,555	0	0	0	0	0	0	0	8,555	0	0	0	100.0%	CD
Communications	383	0	0	0	0	0	0	0	383	0	0	0	100.0%	CD
Energy Conservation	217	0	0	0	0	0	0	0	217	0	0	0	100.0%	CD
Utilities Allocated	1,768	0	0	0	0	0	0	0	1,768	0	0	0	100.0%	CD
Liability Insurance	67,569	0	0	0	0	0	0	0	67,569	0	0	0	100.0%	CD
Property Insurance	493,173	0	0	0	0	0	0	0	493,173	0	0	0	100.0%	CD
Overhead Allocation	1,294,507	0	0	0	0	0	0	0	1,294,507	0	0	0	100.0%	CD
Office Supplies & Expense	103	0	0	0	0	0	0	0	103	0	0	0	100.0%	CD
Special Supplies and Expense	9,270	0	0	0	0	0	0	0	9,270	0	0	0	100.0%	CD
Profess. Services - Contract	128,750	0	0	0	0	0	0	0	128,750	0	0	0	100.0%	CD
Legal Services	5,150	0	0	0	0	0	0	0	5,150	0	0	0	100.0%	CD
Engineering Service	118,450	0	0	0	0	0	0	0	118,450	0	0	0	100.0%	CD
UB System Maintenance	20,207	0	0	0	0	0	0	0	20,207	0	0	0	100.0%	CD
Meeting & Travel	7,650	0	0	0	0	0	0	0	7,650	0	0	0	100.0%	CD
Pool Car Maintenance	113	0	0	0	0	0	0	0	113	0	0	0	100.0%	CD
Pool Car Replacement	1,262	0	0	0	0	0	0	0	1,262	0	0	0	100.0%	CD
Dues Memberships & License	46,350	0	0	0	0	0	0	0	46,350	0	0	0	100.0%	CD
Training	2,550	0	0	0	0	0	0	0	2,550	0	0	0	100.0%	CD
Printing & Binding	206	0	0	0	0	0	0	0	206	0	0	0	100.0%	CD
Postage / Delivery	103	0	0	0	0	0	0	0	103	0	0	0	100.0%	CD
Telephone	1,040	0	0	0	0	0	0	0	1,040	0	0	0	100.0%	CD
Pooled Vehicle Conv Fuel	103	0	0	0	0	0	0	0	103	0	0	0	100.0%	CD
LAFCO	9,579	0	0	0	0	0	0	0	9,579	0	0	0	100.0%	CD
GASB 45 Actuarial Study	2,106	0	0	0	0	0	0	0	2,106	0	0	0	100.0%	CD
Computer Hardware Under $25000	1,030	0	0	0	0	0	0	0	1,030	0	0	0	100.0%	CD
Comp Software Under $25000	515	0	0	0	0	0	0	0	515	0	0	0	100.0%	CD
Phone & VM Upgrade for MSOffic	10,522	0	0	0	0	0	0	0	10,522	0	0	0	100.0%	CD
El Estero Fats Oil Greas (FOG)	76,000	0	0	0	0	0	0	0	76,000	0	0	0	100.0%	CD
El Estero Fats Oil Greas (FOG) [b]	25,106	0	0	0	0	0	0	0	25,106	0	0	0	100.0%	CD
Approp. Reserve (customer assistance program	155,250	0	0	0	0	0	0	0	155,250	0	0	0	100.0%	CD
Fiscal Agent Charges	1,530	0	0	0	0	0	0	0	1,530	0	0	0	100.0%	CD
Arbitrage Cost Calculation	1,020	0	0	0	0	0	0	0	1,020	0	0	0	100.0%	CD
Total Water Resources Management - 4711	**$3,447,085**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$3,447,085**	**$0**	**$0**	**$0**		

	Test Year	Volume	Volume Without HSD	*Strength Related* Biochemical Oxygen Demand	Ammonia	Total Suspended Solids	*Weighted* Actual Customer	Customer Acct/Svcs	Capacity Demand	Capacity Demand Without HSD	Revenue	Direct	
	FY 2023	*(VOL)*	*(VOL w/o HSD)*	*(BOD)*	*(AMN)*	*(TSS)*	*(AC)*	*(WCA)*	*(CD)*	*(CD w/o HSD)*	*(RR)*	*(DA)*	*Basis of Classification*
Wastewater Collection - 4721													
Salaries - Permanent	$1,506,951	$0	$1,280,908	$0	$0	$0	$0	$0	$0	$226,043	$0	$0	As Collection
Salaries - Hourly	62,418	0	53,055	0	0	0	0	0	0	9,363	0	0	As Collection
Salaries - Overtime	66,298	0	56,353	0	0	0	0	0	0	9,945	0	0	As Collection
Alloc - Vacation Cashout	10,327	0	8,778	0	0	0	0	0	0	1,549	0	0	As Collection
Alloc - Sick Leave Cashout	8,697	0	7,393	0	0	0	0	0	0	1,305	0	0	As Collection
Benefits - Grp. Insurance	232,925	0	197,986	0	0	0	0	0	0	34,939	0	0	As Collection
Benefits - Retirement	173,580	0	147,543	0	0	0	0	0	0	26,037	0	0	As Collection
Benefits - Retirement UAL	347,703	0	295,548	0	0	0	0	0	0	52,155	0	0	As Collection
Benefits - Workers Comp / Unemp.	64,213	0	54,581	0	0	0	0	0	0	9,632	0	0	As Collection
Unemployment Insurance	13,287	0	11,294	0	0	0	0	0	0	1,993	0	0	As Collection
Medicare	24,636	0	20,940	0	0	0	0	0	0	3,695	0	0	As Collection
Hourly Ee Retirement	820	0	697	0	0	0	0	0	0	123	0	0	As Collection
Hourly Health Care Reimburse	167	0	142	0	0	0	0	0	0	25	0	0	As Collection
Alloc - Retiree Medical	7,570	0	6,435	0	0	0	0	0	0	1,136	0	0	As Collection
Network / Infrastructure	60,637	0	51,542	0	0	0	0	0	0	9,096	0	0	As Collection
GIS Support	11,069	0	9,408	0	0	0	0	0	0	1,660	0	0	As Collection
Enterprise Applic Sys	53,764	0	45,699	0	0	0	0	0	0	8,065	0	0	As Collection
Vehicle Replacement	211,741	0	179,980	0	0	0	0	0	0	31,761	0	0	As Collection
Vehicle Maintenance	195,438	0	166,123	0	0	0	0	0	0	29,316	0	0	As Collection
Alternative Transportation	7,285	0	6,192	0	0	0	0	0	0	1,093	0	0	As Collection
Custodial	45,346	0	38,544	0	0	0	0	0	0	6,802	0	0	As Collection
Office Supplies & Expense	11,330	0	9,631	0	0	0	0	0	0	1,700	0	0	As Collection
Janitorial & Hshld Supplies	1,030	0	876	0	0	0	0	0	0	155	0	0	As Collection
Uniform Allow & Mntnc	10,094	0	8,580	0	0	0	0	0	0	1,514	0	0	As Collection
Safety Shoes	4,501	0	3,826	0	0	0	0	0	0	675	0	0	As Collection
Minor Tools	3,120	0	2,652	0	0	0	0	0	0	468	0	0	As Collection
Special Supplies and Expense	81,370	0	69,165	0	0	0	0	0	0	12,206	0	0	As Collection
Motor Veh Expenses	46,350	0	39,398	0	0	0	0	0	0	6,953	0	0	As Collection
Facilities Maint.	370,800	0	315,180	0	0	0	0	0	0	55,620	0	0	As Collection
Equipment Repair	51,067	0	43,407	0	0	0	0	0	0	7,660	0	0	As Collection
Profess. Services-Contract	12,360	0	10,506	0	0	0	0	0	0	1,854	0	0	As Collection
Engineering Services	61,800	0	52,530	0	0	0	0	0	0	9,270	0	0	As Collection
Non-Contractual Services	57,585	0	48,948	0	0	0	0	0	0	8,638	0	0	As Collection
Meeting & Travel	8,240	0	7,004	0	0	0	0	0	0	1,236	0	0	As Collection
Pool Car Maintenance	129	0	109	0	0	0	0	0	0	19	0	0	As Collection
Pool Car Replacement	175	0	149	0	0	0	0	0	0	26	0	0	As Collection
Dues Memberships & License	9,785	0	8,317	0	0	0	0	0	0	1,468	0	0	As Collection
Training	25,750	0	21,888	0	0	0	0	0	0	3,863	0	0	As Collection
Regulatory Permits and Fees	15,450	0	13,133	0	0	0	0	0	0	2,318	0	0	As Collection
Advertising	3,090	0	2,627	0	0	0	0	0	0	464	0	0	As Collection
Printing & Binding	1,030	0	876	0	0	0	0	0	0	155	0	0	As Collection
Postage / Delivery	1,030	0	876	0	0	0	0	0	0	155	0	0	As Collection
Water	31,200	0	26,520	0	0	0	0	0	0	4,680	0	0	As Collection
Telephone	15,600	0	13,260	0	0	0	0	0	0	2,340	0	0	As Collection
Waste Disposal	5,200	0	4,420	0	0	0	0	0	0	780	0	0	As Collection
Vehicle Fuel	52,000	0	44,200	0	0	0	0	0	0	7,800	0	0	As Collection
Pooled Vehicle Fuel	416	0	354	0	0	0	0	0	0	62	0	0	As Collection
Equipment Rental	20,800	0	17,680	0	0	0	0	0	0	3,120	0	0	As Collection
Special Projects	515,000	0	437,750	0	0	0	0	0	0	77,250	0	0	As Collection
Computer Hardware Under $25000	20,600	0	17,510	0	0	0	0	0	0	3,090	0	0	As Collection
Comp Software Under $25000	25,750	0	21,888	0	0	0	0	0	0	3,863	0	0	As Collection
Comp Software Over $25000	67,191	0	57,112	0	0	0	0	0	0	10,079	0	0	As Collection
Total Wastewater Collection - 4721	**$4,634,716**	**$0**	**$3,939,509**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$695,207**	**$0**	**$0**	

City of Santa Barbara
Wastewater Rate Study
Exhibit 13.1
Classification of the Revenue Requirement

				Strength Related			*Weighted*						
	Test Year **FY 2023**	**Volume** *(VOL)*	**Volume Without HSD** *(VOL w/o HSD)*	**Biochemical Oxygen Demand** *(BOD)*	**Ammonia** *(AMN)*	**Total Suspended Solids** *(TSS)*	**Actual Customer** *(AC)*	**Customer Acct/Svcs** *(WCA)*	**Capacity Demand** *(CD)*	**Capacity Demand Without HSD** *(CD w/o HSD)*	**Revenue** *(RR)*	**Direct** *(DA)*	*Basis of Classification*
Wastewater Treatment - 4731													
Salaries - Permanent	$2,298,080	$0	$0	$335,520	$195,337	$744,578	$0	$0	$1,022,646	$0	$0	$0	As Treatment
Salaries - Overtime	63,167	0	0	9,222	5,369	20,466	0	0	28,109	0	0	0	As Treatment
Alloc - Vacation Cashout	15,887	0	0	2,320	1,350	5,147	0	0	7,070	0	0	0	As Treatment
Alloc - Sick Leave Cashout	13,378	0	0	1,953	1,137	4,335	0	0	5,953	0	0	0	As Treatment
Benefits - Grp. Insurance	296,531	0	0	43,293	25,205	96,076	0	0	131,956	0	0	0	As Treatment
Benefits - Retirement	271,388	0	0	39,623	23,068	87,930	0	0	120,768	0	0	0	As Treatment
Benefits - Retirement UAL	534,558	0	0	78,045	45,437	173,197	0	0	237,878	0	0	0	As Treatment
Benefits - Workers Comp / Unemp.	98,777	0	0	14,421	8,396	32,004	0	0	43,956	0	0	0	As Treatment
Unemployment Insurance	8,276	0	0	1,208	703	2,681	0	0	3,683	0	0	0	As Treatment
Medicare	35,133	0	0	5,129	2,986	11,383	0	0	15,634	0	0	0	As Treatment
Alloc - Retiree Medical	11,701	0	0	1,708	995	3,791	0	0	5,207	0	0	0	As Treatment
Network / Infrastructure	82,318	0	0	12,018	6,997	26,671	0	0	36,632	0	0	0	As Treatment
GIS Support	6,301	0	0	920	536	2,042	0	0	2,804	0	0	0	As Treatment
Enterprise Applic Sys	541	0	0	79	46	175	0	0	241	0	0	0	As Treatment
Vehicle Replacement	28,816	0	0	4,207	2,449	9,336	0	0	12,823	0	0	0	As Treatment
Vehicle Maintenance	30,408	0	0	4,440	2,585	9,852	0	0	13,531	0	0	0	As Treatment
Alternative Transportation	5,256	0	0	767	447	1,703	0	0	2,339	0	0	0	As Treatment
Telephone Allocated	7,816	0	0	1,141	664	2,532	0	0	3,478	0	0	0	As Treatment
Custodial	76,064	0	0	11,105	6,465	24,645	0	0	33,849	0	0	0	As Treatment
Communications	37,433	0	0	5,465	3,182	12,128	0	0	16,658	0	0	0	As Treatment
Energy Conservation	116,861	0	0	17,062	9,933	37,863	0	0	52,003	0	0	0	As Treatment
Office Supplies & Expense	7,725	0	0	1,128	657	2,503	0	0	3,438	0	0	0	As Treatment
Chemical and Landscape Supplies	851,368	0	0	124,300	72,366	275,843	0	0	378,859	0	0	0	As Treatment
Uniform Allow & Mntnc	19,055	0	0	2,782	1,620	6,174	0	0	8,479	0	0	0	As Treatment
Safety Shoes	7,107	0	0	1,038	604	2,303	0	0	3,163	0	0	0	As Treatment
Minor Tools	15,450	0	0	2,256	1,313	5,006	0	0	6,875	0	0	0	As Treatment
Bank Fees	19,568	0	0	2,857	1,663	6,340	0	0	8,708	0	0	0	As Treatment
Bank Transport Fees	9,369	0	0	1,368	796	3,035	0	0	4,169	0	0	0	As Treatment
Special Supplies and Expense	61,800	0	0	9,023	5,253	20,023	0	0	27,501	0	0	0	As Treatment
Credit Card Fees	51,000	0	0	7,446	4,335	16,524	0	0	22,695	0	0	0	As Treatment
Facilities Maint.	206,000	0	0	30,076	17,510	66,744	0	0	91,670	0	0	0	As Treatment
Staff In-House	154,500	0	0	22,557	13,133	50,058	0	0	68,753	0	0	0	As Treatment
Equipment Repair	554,140	0	0	80,904	47,102	179,541	0	0	246,592	0	0	0	As Treatment
Profess. Services - Contract	82,400	0	0	12,030	7,004	26,698	0	0	36,668	0	0	0	As Treatment
Engineering Services	180,250	0	0	26,317	15,321	58,401	0	0	80,211	0	0	0	As Treatment
Non-Contractual Services	1,545	0	0	226	131	501	0	0	688	0	0	0	As Treatment
Meeting & Travel	7,725	0	0	1,128	657	2,503	0	0	3,438	0	0	0	As Treatment
Pool Car Maintenance	1,278	0	0	187	109	414	0	0	569	0	0	0	As Treatment
Pool Car Replacement	15,170	0	0	2,215	1,289	4,915	0	0	6,751	0	0	0	As Treatment
Dues Memberships & License	7,725	0	0	1,128	657	2,503	0	0	3,438	0	0	0	As Treatment
Publications	515	0	0	75	44	167	0	0	229	0	0	0	As Treatment
Training	8,755	0	0	1,278	744	2,837	0	0	3,896	0	0	0	As Treatment
Regulatory Permits and Fees	103,000	0	0	15,038	8,755	33,372	0	0	45,835	0	0	0	As Treatment
Postage / Delivery	515	0	0	75	44	167	0	0	229	0	0	0	As Treatment
Gas	52,000	0	0	7,592	4,420	16,848	0	0	23,140	0	0	0	As Treatment
Electric	713,359	0	0	104,150	60,636	231,128	0	0	317,445	0	0	0	As Treatment
Water	41,600	0	0	6,074	3,536	13,478	0	0	18,512	0	0	0	As Treatment
Telephone	15,600	0	0	2,278	1,326	5,054	0	0	6,942	0	0	0	As Treatment
Waste Disposal	608,400	0	0	88,826	51,714	197,122	0	0	270,738	0	0	0	As Treatment
Vehicle Fuel	11,440	0	0	1,670	972	3,707	0	0	5,091	0	0	0	As Treatment
Pooled Vehicle Fuel	520	0	0	76	44	168	0	0	231	0	0	0	As Treatment
Equipment Rental	6,240	0	0	911	530	2,022	0	0	2,777	0	0	0	As Treatment
Special Projects	25,750	0	0	3,760	2,189	8,343	0	0	11,459	0	0	0	As Treatment
Computer Hardware Under $25000	15,450	0	0	2,256	1,313	5,006	0	0	6,875	0	0	0	As Treatment
Comp Software Under $25000	12,360	0	0	1,805	1,051	4,005	0	0	5,500	0	0	0	As Treatment
Office	1,030	0	0	150	88	334	0	0	458	0	0	0	As Treatment
Comp Software Over $25000	30,900	0	0	4,511	2,627	10,012	0	0	13,751	0	0	0	As Treatment
Total Wastewater Treatment - 4731	**$7,939,299**	**$0**	**$0**	**$1,159,138**	**$674,840**	**$2,572,333**	**$0**	**$0**	**$3,532,988**	**$0**	**$0**	**$0**	

	Test Year FY 2023	Volume (VOL)	Volume Without HSD (VOL w/o HSD)	*Strength Related* Biochemical Oxygen Demand (BOD)	Ammonia (AMN)	Total Suspended Solids (TSS)	*Weighted* Actual Customer (AC)	Customer Acct/Svcs (WCA)	Capacity Demand (CD)	Capacity Demand Without HSD (CD w/o HSD)	Revenue (RR)	Direct (DA)	*Basis of Classification*	
Water Resources Laboratory - 4741														
Salaries - Permanent	$347,387	$0	$0	$0	$0	$0	$0	$0	$347,387	$0	$0	$0	100.0%	CD
Salaries - Hourly	28,899	0	0	0	0	0	0	0	28,899	0	0	0	100.0%	CD
Salaries - Overtime	5,729	0	0	0	0	0	0	0	5,729	0	0	0	100.0%	CD
Alloc - Vacation Cashout	2,453	0	0	0	0	0	0	0	2,453	0	0	0	100.0%	CD
Alloc - Sick Leave Cashout	2,065	0	0	0	0	0	0	0	2,065	0	0	0	100.0%	CD
Benefits - Grp. Insurance	52,966	0	0	0	0	0	0	0	52,966	0	0	0	100.0%	CD
Benefits - Retirement	41,842	0	0	0	0	0	0	0	41,842	0	0	0	100.0%	CD
Benefits - Retirement UAL	82,568	0	0	0	0	0	0	0	82,568	0	0	0	100.0%	CD
Benefits - Workers Comp / Unemp.	15,249	0	0	0	0	0	0	0	15,249	0	0	0	100.0%	CD
Medicare	5,619	0	0	0	0	0	0	0	5,619	0	0	0	100.0%	CD
Hourly Ee Retirement	380	0	0	0	0	0	0	0	380	0	0	0	100.0%	CD
Hourly Health Care Reimburse	42	0	0	0	0	0	0	0	42	0	0	0	100.0%	CD
Alloc - Retiree Medical	1,807	0	0	0	0	0	0	0	1,807	0	0	0	100.0%	CD
Network / Infrastructure	21,975	0	0	0	0	0	0	0	21,975	0	0	0	100.0%	CD
GIS Support	627	0	0	0	0	0	0	0	627	0	0	0	100.0%	CD
Enterprise Applic Sys	390	0	0	0	0	0	0	0	390	0	0	0	100.0%	CD
Vehicle Replacement	2,574	0	0	0	0	0	0	0	2,574	0	0	0	100.0%	CD
Vehicle Maintenance	2,805	0	0	0	0	0	0	0	2,805	0	0	0	100.0%	CD
Alternative Transportation	206	0	0	0	0	0	0	0	206	0	0	0	100.0%	CD
Custodial	19,016	0	0	0	0	0	0	0	19,016	0	0	0	100.0%	CD
Office Supplies & Expense	8,240	0	0	0	0	0	0	0	8,240	0	0	0	100.0%	CD
Chemical and Lndscape Supplies	8,240	0	0	0	0	0	0	0	8,240	0	0	0	100.0%	CD
Uniform Allow & Mntnc	3,605	0	0	0	0	0	0	0	3,605	0	0	0	100.0%	CD
Safety Shoes	1,030	0	0	0	0	0	0	0	1,030	0	0	0	100.0%	CD
Special Supplies and Expense	82,400	0	0	0	0	0	0	0	82,400	0	0	0	100.0%	CD
Equipment Repair	15,450	0	0	0	0	0	0	0	15,450	0	0	0	100.0%	CD
Profess. Services - Contract	61,800	0	0	0	0	0	0	0	61,800	0	0	0	100.0%	CD
Non-Contractual Services	25,750	0	0	0	0	0	0	0	25,750	0	0	0	100.0%	CD
COVID-19	5,150	0	0	0	0	0	0	0	5,150	0	0	0	100.0%	CD
Meeting & Travel	4,160	0	0	0	0	0	0	0	4,160	0	0	0	100.0%	CD
Dues Memberships & License	2,600	0	0	0	0	0	0	0	2,600	0	0	0	100.0%	CD
Publications	832	0	0	0	0	0	0	0	832	0	0	0	100.0%	CD
Training	4,160	0	0	0	0	0	0	0	4,160	0	0	0	100.0%	CD
Regulatory Permits and Fees	7,280	0	0	0	0	0	0	0	7,280	0	0	0	100.0%	CD
Printing & Binding	156	0	0	0	0	0	0	0	156	0	0	0	100.0%	CD
Postage / Delivery	1,040	0	0	0	0	0	0	0	1,040	0	0	0	100.0%	CD
Telephone	1,508	0	0	0	0	0	0	0	1,508	0	0	0	100.0%	CD
Waste Disposal	1,248	0	0	0	0	0	0	0	1,248	0	0	0	100.0%	CD
Vehicle Fuel	1,248	0	0	0	0	0	0	0	1,248	0	0	0	100.0%	CD
Equipment Under $25000	8,240	0	0	0	0	0	0	0	8,240	0	0	0	100.0%	CD
Computer Hardware Under $25000	5,150	0	0	0	0	0	0	0	5,150	0	0	0	100.0%	CD
Comp Software Under $25000	7,210	0	0	0	0	0	0	0	7,210	0	0	0	100.0%	CD
Equipment Over $25000	15,450	0	0	0	0	0	0	0	15,450	0	0	0	100.0%	CD
Total Water Resources Laboratory - 4741	**$906,544**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$906,544**	**$0**	**$0**	**$0**		

City of Santa Barbara
Wastewater Rate Study
Exhibit 13.1
Classification of the Revenue Requirement

				Strength Related			*Weighted*						
	Test Year FY 2023	**Volume** (VOL)	**Volume Without HSD** (VOL w/o HSD)	**Biochemical Oxygen Demand** (BOD)	**Ammonia** (AMN)	**Total Suspended Solids** (TSS)	**Actual Customer** (AC)	**Customer Acct/Svcs** (WCA)	**Capacity Demand** (CD)	**Capacity Demand Without HSD** (CD w/o HSD)	**Revenue** (RR)	**Direct** (DA)	*Basis of Classification*
Total O&M Expenses	**$18,314,196**	**$0**	**$4,948,077**	**$1,159,138**	**$674,840**	**$2,572,333**	**$0**	**$0**	**$8,086,617**	**$873,190**	**$0**	**$0**	
Rate Funded Capital	**$4,800,000**	**$330,177**	**$1,886,221**	**$324,112**	**$188,695**	**$719,263**	**$0**	**$0**	**$1,018,669**	**$332,863**	**$0**	**$0**	As Net Plant
Debt Service													
2004/16 Revenue Bond	$1,157,800	$0	$0	$0	$0	$0	$0	$0	$1,157,800	$0	$0	$0	100.0% CD
CWSRF Loan - FOG	98,161	0	0	0	0	0	0	0	98,161	0	0	0	100.0% CD
CWSRF Loan - Headworks	341,981	0	0	0	0	0	0	0	341,981	0	0	0	100.0% CD
Aeration Loan	1,953,145	0	0	0	0	0	0	0	1,953,145	0	0	0	100.0% CD
Future SRF - Electrical Project	0	0	0	0	0	0	0	0	0	0	0	0	100.0% CD
Assumed Low Interest Loan	0	0	0	0	0	0	0	0	0	0	0	0	100.0% CD
Assumed Revenue Bond	0	0	0	0	0	0	0	0	0	0	0	0	100.0% CD
Additional Long-Term Debt	(0)	0	0	0	0	0	0	0	(0)	0	0	0	100.0% CD
Total Debt Service	$3,551,087	$0	$0	$0	$0	$0	$0	$0	$3,551,087	$0	$0	$0	
LESS: Other Funding													
Connection Fees	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	100.0% WCA
Net Debt Service	**$3,551,087**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$3,551,087**	**$0**	**$0**	**$0**	
Reserve Funding													
To / (From) Operating Reserve	$94,091	$0	$0	$0	$0	$0	$0	$94,091	$0	$0	$0	$0	100.0% WCA
To / (From) Capital Fund	0	0	0	0	0	0	0	0	0	0	0	0	100.0% WCA
To / (From) Disaster Reserves	0	0	0	0	0	0	0	0	0	0	0	0	100.0% WCA
To / (From) Contingency Reserves	0	0	0	0	0	0	0	0	0	0	0	0	100.0% WCA
To / (From) Debt / Rate Stabilization Reserves	0	0	0	0	0	0	0	0	0	0	0	0	100.0% WCA
Total Reserve Funding	**$94,091**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$94,091**	**$0**	**$0**	**$0**	**$0**	
Total Revenue Requirement	**$26,759,374**	**$330,177**	**$6,834,299**	**$1,483,250**	**$863,536**	**$3,291,596**	**$0**	**$94,091**	**$12,656,373**	**$1,206,053**	**$0**	**$0**	
Less: Non-Operating Revenue													
Rents and Leases	$61,683	$761	$15,754	$3,419	$1,991	$7,587	$0	$217	$29,174	$2,780	$0	$0	As Revenue Requirement
Water Exams - Other Depts.	5,757	71	1,470	319	186	708	0	20	2,723	259	0	0	As Revenue Requirement
Pretreatment Analysis	45,321	559	11,575	2,512	1,463	5,575	0	159	21,435	2,043	0	0	As Revenue Requirement
FOG Disposal Fees	35,350	436	9,028	1,959	1,141	4,348	0	124	16,719	1,593	0	0	As Revenue Requirement
Misc. Revenue - Noc	5,050	62	1,290	280	163	621	0	18	2,388	228	0	0	As Revenue Requirement
Interest	87,563	1,080	22,363	4,854	2,826	10,771	0	308	41,415	3,946	0	0	As Revenue Requirement
Total Other Revenues	**$240,723**	**$2,970**	**$61,480**	**$13,343**	**$7,768**	**$29,611**	**$0**	**$846**	**$113,855**	**$10,849**	**$0**	**$0**	
Net Revenue Requirement	**$26,518,651**	**$327,207**	**$6,772,818**	**$1,469,907**	**$855,768**	**$3,261,985**	**$0**	**$93,244**	**$12,542,518**	**$1,195,203**	**$0**	**$0**	

City of Santa Barbara
Wastewater Rate Study
Exhibit 14
Distribution of Total Revenue Requirement

	FY 2023 Expenses	Residential	Commercial	Commercial High / Industrial	High Strength Surcharge	*Basis of Allocation*
Volume Related	$327,207	$249,982	$55,708	$21,517	$0	*(VOL)*
Volume w/o HSD Related	6,772,818	5,174,348	1,153,090	445,381	0	*(VOL w/o HS*
Total Volume Related	**$7,100,025**	$5,424,330	$1,208,798	$466,898	$0	
Strength Related						
Biochemical Oxygen Demand	$1,469,907	$1,024,212	$228,243	$193,519	$23,933	*(BOD)*
Ammonia	855,768	604,466	134,704	81,760	34,838	*(AMN)*
Total Suspended Solids	3,261,985	2,322,266	517,511	338,273	83,936	*(TSS)*
Total Strength Related	**$5,587,659**	$3,950,943	$880,457	$613,553	$142,706	
Customer Related						
Actual Customer	$0	$0	$0	$0	$0	*(AC)*
Weighted Customer	93,244	87,361	4,944	939	0	*(WCA)*
Capacity Demand	12,542,518	10,466,997	1,687,344	388,177	0	*(CD)*
Capacity Demand w/o HSD	1,195,203	997,422	160,791	36,990	0	*(CD w/o HSD*
Total Customer Related	**$13,830,966**	$11,551,780	$1,853,079	$426,107	$0	
Revenue Related	$0	$0	$0	$0	$0	*(RR)*
Direct Assignment	$0	$0	$0	$0	$0	*(DA)*
Total Revenue Requirements	**$26,518,651**	**$20,927,053**	**$3,942,334**	**$1,506,558**	**$142,706**	

City of Santa Barbara
Wastewater Rate Study
Exhibit 15
Cost of Service Analysis Summary

	FY 2023	Single Family	Multi-Family	Commercial	Com - High Strength	High Strength Surcharge
Revenues at Present Rates	**$24,783,786**	$9,476,776	$10,123,832	$3,667,084	$1,383,569	$132,525
Distributed Revenue Requirement	**$26,518,651**	$9,994,116	$10,932,937	$3,942,334	$1,506,558	$142,706
Balance / (Deficiency) of Funds	**($1,734,865)**	**($517,340)**	**($809,105)**	**($275,250)**	**($122,989)**	**($10,181)**
Required % Change in Rates	**7.0%**	**5.5%**	**8.0%**	**7.5%**	**8.9%**	**7.7%**

City of Santa Barbara
Wastewater Rate Study
Exhibit 16
Unit Costs Summary

	System Average	Single Family	Multi-Family	Commercial	Com - High Strength	High Strength Surcharge
Volume Charge						
Volume Costs - $ / HCF	$2.37	$2.14	$2.20			$0.00
BOD Costs - $ / HCF	0.49	0.40	0.42			0.00
SS Costs - $ / HCF	0.29	0.24	0.25			0.00
Ammonia Costs - $ / HCF	1.09	0.92	0.94			0.00
Direct Assgn. - $ / HCF	0.00	0.00	0.00			0.00
Total	**$4.23**	**$3.71**	**$3.80**	**$6.07**	**$7.01**	**$0.00**
	Current Rates	*$3.71*	*$3.71*	*$4.60*	*$5.73*	
Base Fee						
Actual Customer - $ / DW / Eqv Mtr	$0.00	$0.00	$0.00			$0.00
Weighted Customer - $ / Eq. Mtrs	0.17	0.19	0.19			0.00
Capacity Demand - $ / Eq. Mtrs	25.18	25.18	25.18			0.00
Revenue Related - $ / Eq. Mtrs	0.00	0.00	0.00			0.00
Total	**$25.35**	**$25.37**	**$25.37**	**$37.92**	**$47.80**	**$0.00**
	Current Rates	*$22.68*	*$22.68*	*$43.39*	*$56.06*	
Basic Data						
Billed Volumes - HCF	2,998,601	1,368,987	1,131,013	344,362	154,239	
Unbilled Volumes - HCF	880,523	532,008	24,631	248,953	74,932	
Distribution Factor	3,136,463	1,296,853	1,099,365	533,991	206,254	
Number of Accounts	25,263	16,159	6,549	2,147	408	
Number of Eqv Mtr - All	45,462	16,159	21,780	6,116	1,407	
Number of Eqv Mtr - Min Bill	44,673	16,159	21,780	5,639	1,095	
Number of Living Units	40,494	16,159	21,780	2,147	408	

City of Santa Barbara
Wastewater Rate Study
Unit Costs - Pounds

		Single Family	Multi-Family	Commercial	Commercial High/Industrial	High Strength Surcharge
Surcharge per Pounds						
BOD Costs - $ / lbs	$0.32	$0.32	$0.32	$0.32	$0.32	$0.32
TSS Costs - $ / lbs	0.46	0.46	0.46	0.46	0.46	0.46
Ammonia Costs - $ / lbs	1.10	1.10	1.10	1.10	1.10	1.10
	$1.87	**$1.87**	**$1.87**	**$1.87**	**$1.87**	**$1.87**
Limits						
BOD		N/A	N/A	< 300	300 - 750	> 750
TSS		N/A	N/A	< 400	400 - 850	> 850
Ammonia		N/A	N/A	< 60	60 - 90	> 90

City of Santa Barbara
Wastewater Rate Study
Single Family Rates - Alternative

	Present Rates	FY 2023	FY 2024	FY 2025
Base Fee	***$/Acct.***			
Per Account	$22.68	$25.35	$27.00	$28.76
Volume Charge	***$ / HCF***			
0 - 10	$3.71	--	--	--
10 +	0.00	--	--	--
0 - 9	--	$3.83	--	--
9 +	--	0.00	--	--
0 - 8	--	--	$4.28	$4.62
8 +	--	--	0.00	0.00

City of Santa Barbara
Wastewater Rate Study
Multi-Family Rates - Alternative

	Present Rates	**FY 2023**	**FY 2024**	**FY 2025**
Fixed Charge	***$ / DU***			
1 - 4 DU	$22.68	$25.35	$27.00	$28.76
5+ DU	22.68	25.35	27.00	28.76
Volume				
1 - 4 DU	***$ / HCF***			
0 - 10	$3.71	--	--	--
10 +	0.00	--	--	--
All Consumption	--	$3.83	$4.28	$4.62
5+ DU				
All Usage	$3.71	$3.83	$4.28	$4.62

City of Santa Barbara
Wastewater Rate Study
Commercial Rates

	Present Rates	FY 2023	FY 2024	FY 2025
Minimum Bill	***$/Acct.***			
5/8"	$43.39	$46.65	$51.69	$55.05
3/4"	65.09	69.98	77.54	82.58
1"	75.72	81.41	90.46	96.34
1 1/2"	129.97	139.73	129.23	137.63
2"	216.68	232.96	206.76	220.20
3"	433.20	465.75	387.68	412.88
4"	540.67	581.29	646.13	688.13
6"	1,082.96	1,164.33	1,292.25	1,376.25
8"	1,895.21	2,037.60	2,067.60	2,202.00
10"	2,909.10	3,127.67	2,972.18	3,165.38
Volume Charge	***$ / HCF***			
Billed	$4.60	$4.94	$5.27	$5.63

City of Santa Barbara
Wastewater Rate Study
Commercial - High Rates

	Present Rates	FY 2023	FY 2024	FY 2025
Minimum Bill	***$/Acct.***			
5/8"	$56.06	$61.04	$59.70	$63.58
3/4"	84.09	91.56	89.55	95.37
1"	98.27	107.00	104.48	111.27
1 1/2"	160.80	175.08	149.25	158.95
2"	280.69	305.62	238.80	254.32
3"	561.21	611.06	447.75	476.85
4"	701.75	764.09	746.25	794.75
6"	1,403.22	1,527.87	1,492.50	1,589.50
8"	2,455.57	2,673.71	2,388.00	2,543.20
10"	3,858.97	4,201.78	3,432.75	3,655.85
Volume Charge	***$ / HCF***			
Billed	$5.73	$6.24	$6.65	$7.08

City of Santa Barbara
Wastewater Rate Study
High Strength Surcharge Rates

	Present Rates	**FY 2023**	**FY 2024**	**FY 2025**
Strength Charge	***$ / Lb.***			
BOD	$0.32	$0.32	$0.34	$0.36
TSS	0.42	0.46	0.48	0.51
Ammonia	0.98	1.10	1.17	1.25