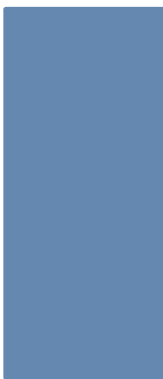


FINAL REPORT



Dublin San Ramon Services District
2017 Regional Sewer Rate Study
June 2017

HDR Engineering, Inc.





June 21, 2017

Ms. Carol Atwood
Administrative Services Manager
Dublin San Ramon Services District
7051 Dublin Blvd.
Dublin, California 94568

Subject: 2017 Comprehensive Regional Sewer Rate Study

Dear Ms. Atwood:

HDR Engineering, Inc. (HDR) is pleased to present to the Dublin San Ramon Service District (District) the final report for the 2017 regional sewer rate study. A key objective of the District's study was to adjust rates to generate sufficient revenue to fund operations and capital needs of the regional sewer system. Ultimately, this study has designed and proposed cost-based and equitable rates among the regional customers of the District.

This report was developed utilizing the District's accounting, operating and management records. HDR has relied upon this cost and planning information to develop the analyses which provided the basis for our findings, conclusions and recommendations. At the same time, this study was developed utilizing industry recognized sewer rate setting principles and methodologies. This report provides the basis for developing and implementing rates which are cost-based, equitable and defensible to the District's regional customers.

We appreciate the assistance provided by the District's management team in the development of this study. More importantly, HDR appreciates the opportunity to provide these technical and professional services to the District.

Sincerely yours,
HDR Engineering, Inc.

A handwritten signature in black ink, appearing to read 'Shawn Koorn', written in a cursive style.

Shawn Koorn
Associate Vice President



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Technical Appendix A – Technical Analysis

Executive Summary

Introduction

HDR Engineering, Inc. (HDR) was retained by the Dublin San Ramon Services District (District) to conduct a regional sewer rate study. The objective of the rate study was to review the District's operating and capital costs in order to establish regional rates at a cost-based level. This study determined the adequacy of the District's existing regional sewer rates and provided the framework for the proposed rate adjustments.

As a part of the 2017 rate setting process, the District intends to change their rate structure for commercial and industrial customers to better reflect their impact on the system and simplify the billing process. Currently the District's rates are based on the business type such as, bakery, carwash, restaurant etc. The proposed rate structure is based on high, medium, and low strength, where strength is an average of Biochemical oxygen demand and total suspended solids on a milligram per liter basis.

Goals and Objectives

The District had a number of key objectives in developing the 2017 regional sewer rate study. These key objectives were as follows:

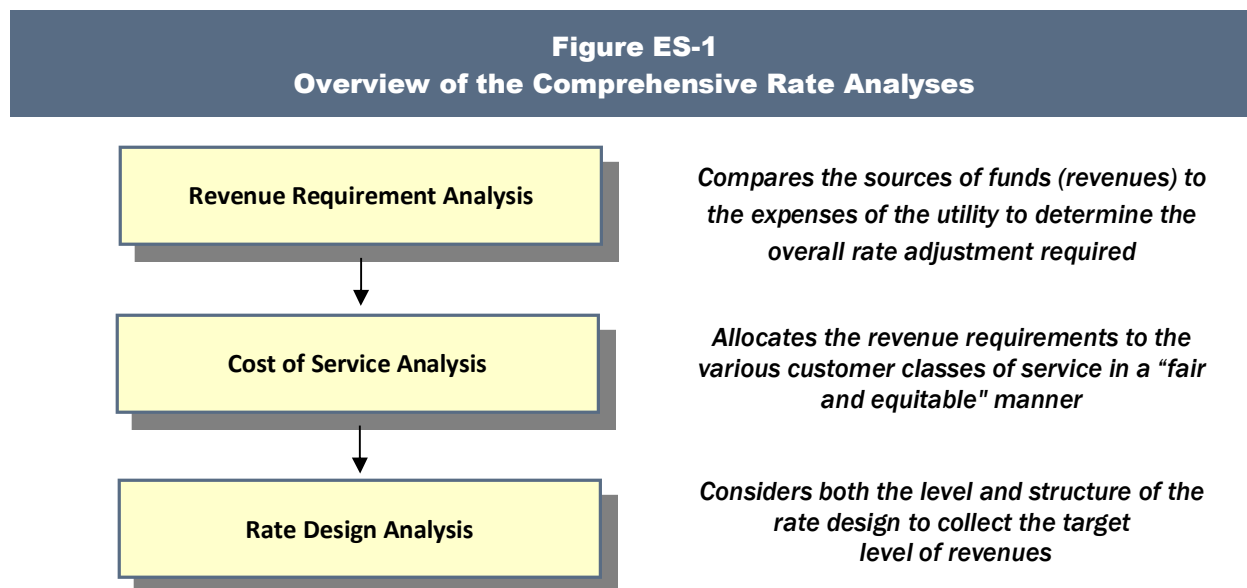
- Develop the study in a manner that is consistent with the principles and methodologies established by the Water Environment Federation (WEF), Manual of Practice No. 27, Financing and Charges for Sewer Systems.
- In establishing the District's regional rates, review and utilize best industry practices, while recognizing and acknowledging the specific and unique characteristics of the District's regional system.
- Utilize the findings, conclusions from the District's 2017 rate study to establish cost-based, equitable and legally defensible rates for FY 2018.
- Provide rates which meet the legal requirements of Proposition 218. Under Proposition 218 requirements, to be legally compliant, a utility must have rates which do not exceed the reasonable cost of providing the service, and do not exceed the proportional cost of providing service to that parcel.

"This study determined the adequacy of the existing regional sewer rates and provides the framework for any needed future adjustments."

These key objectives provided a framework for the policy decisions in the analysis that follows.

Overview of the Rate Study Process

To evaluate the adequacy of the District’s existing rates, a sewer rate study was performed. Provided below in Figure ES-1 is an overview of the key analyses undertaken.



The above comprehensive framework was used to review the regional sewer system. The regional system was reviewed independently and separately on a “stand-alone” basis.

Key Regional Sewer Rate Study Results

In conducting the comprehensive review of the District’s regional sewer rates, the regional sewer system was evaluated on a “stand alone” basis to determine the level of rates needed to adequately fund both O&M and transfer payments for capital infrastructure. These findings must be balanced against the rate impacts to customers. Based on the technical analysis undertaken as part of this study, the following findings, conclusions, and recommendations were noted for the regional sewer system.

- HDR has worked with the District for many years in development of regional sewer rates. The methodology has been consistent with past studies as well as industry standards.
- As a part of the previous studies conducted for the District, HDR has provided the Excel file to the district. As a starting point for this study District staff updated significant portions of the model.
- In developing the cost of service analysis, the allocation factors were based on data and information provided by the District. Further discussion of these assumption and the resulting allocation factors can be found in the cost of service section later in the report.
- The analysis indicated cost of service differences between the various classes of service. This study proposes cost of service adjustments be made between the various customer classes of service to move towards cost-based rates.

- Based upon the results of the revenue requirement and cost of service study, proposed rates were developed for FY 2018. For this study the various commercial customer class's were reorganized to simplify the customer grouping and better reflect customer usage characteristics. Commercial customers will be placed into high, medium, and low strength rate classes rather than the current classes which are based on business type.
- Individual rate increase were applied to each customer class based on cost of service results.

Provided below is a more detailed summary of the comprehensive regional sewer rate study undertaken for the District.

Summary of the Regional Sewer Revenue Requirement Analysis

The sewer revenue requirement analysis sums the regional sewer system's operating and maintenance and reserve fund transfers used for capital projects and compares it to the total revenues of the system to determine the overall rate adjustment required. District staff updated the revenue requirement based on current budget and customer characteristics. HDR reviewed the revenue requirement as part of the study.

The District provides sewer collection for local customers in the Dublin and South San Ramon area and is the regional provider of wastewater treatment serving Pleasanton in addition to Dublin and South San Ramon. This study is focused on the regional treatment portion of the Districts business, only treatment revenue and expenses are used in the development of rates.

For this study, a revenue requirement analysis was developed for a projected 10-year period of FY 2017 through FY 2026. It has been the Districts policy to conduct regular rate studies to determine the needs for rate adjustments over several years. For the last rate setting period the District adopted inflationary adjustments based on the February Consumer Price Index (All urban Consumers for San Francisco/Oakland/San Jose. The average annual growth rate for that index has been 2.5% over the last 10 years.

For the revenue requirement analysis a "cash basis" approach was utilized to accumulate the District's costs. This methodology conforms to industry standards and is reflective of the methodology used by the District in past studies. The primary financial inputs in the development of the revenue requirement were the District's budget documents and capital improvement plan.

Given a projection of revenues and expenses, the District's revenue requirement analysis can be summarized. Provided below in Table ES-1 is a summary of the revenue requirement analysis as updated by District staff.

Table ES - 1
Summary of Regional Sewer Revenue Requirements (\$000s)

	Budget		Projected							
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Sources of Funds										
Rate Revenue										
Dublin San Ramon	\$10,574	\$10,839	\$11,449	\$11,727	\$11,938	\$12,200	\$12,351	\$12,495	\$12,636	\$12,818
Pleasanton	10,119	10,242	10,550	10,665	10,781	10,897	11,013	11,129	11,245	11,361
Miscellaneous Revenue	<u>729</u>	<u>996</u>	<u>1,018</u>	<u>1,045</u>	<u>1,093</u>	<u>1,141</u>	<u>1,190</u>	<u>1,239</u>	<u>1,289</u>	<u>1,340</u>
Total Source of Funds	\$21,421	\$22,077	\$23,016	\$23,437	\$23,812	\$24,238	\$24,554	\$24,864	\$25,170	\$25,519
Applications of Funds										
O&M Expenses										
Personnel Services	\$7,390	\$7,122	\$7,452	\$7,816	\$8,366	\$8,905	\$9,329	\$9,783	\$10,268	\$10,789
Material & Services	2,056	2,361	2,421	2,519	2,621	2,727	2,838	2,953	3,074	3,200
Contract Services	645	998	981	1,010	1,040	1,071	1,104	1,137	1,171	1,206
Other Expenses	6,716	6,755	7,019	7,445	7,658	7,878	8,108	8,355	8,597	8,856
Debt Service	0	0	0	0	0	0	0	0	0	0
Capital Replacement	<u>4,616</u>	<u>4,841</u>	<u>3,009</u>	<u>3,219</u>	<u>3,429</u>	<u>3,639</u>	<u>3,849</u>	<u>4,059</u>	<u>4,269</u>	<u>4,479</u>
Total Application of Funds	\$21,421	\$22,077	\$20,881	\$22,008	\$23,114	\$24,220	\$25,228	\$26,287	\$27,380	\$28,530
Balance/(Deficiency) of Funds	\$0	\$0	\$2,135	\$1,429	\$698	\$18	(\$674)	(\$1,423)	(\$2,209)	(\$3,012)
Balance as % of Rev from Rates	0.0%	0.0%	-9.7%	-6.4%	-3.1%	-0.1%	2.9%	6.0%	9.3%	12.5%

The revenue requirement sums the District’s direct and indirect operating expenses, treatment costs, debt service, and capital improvement projects. The total revenue requirement is then compared to the total sources of funds, which includes the rate revenues, at present rate levels, and other miscellaneous revenues. From this comparison a balance or deficiency of funds can be determined. This balance or deficiency of funds is then compared to the rate revenues to determine the level of rate adjustment needed to meet the revenue requirement.

As can be seen, over the time period reviewed, rate adjustments will be necessary to fund the long-term operating and capital needs of the regional sewer system. In reviewing the projections, it is recommended that annual inflationary increases be implemented by the District over the next five-year period. A more detailed discussion of the revenue requirement is provided in Section 3 of this report.

Summary of the Regional Sewer Cost of Service Analysis

A cost of service analysis determines the equitable allocation of the regional sewer revenue requirement to the various customer classes of service. The cost of service takes into account the individual customer classes of service wastewater flows and strength levels to equitably allocate the regional sewer operating and capital costs.

A key aspect of this study was the movement of commercial customers from the current customer type rate structure to the commercial high, medium, low rate structure. To accomplish this, District staff and City of Pleasanton staff, reviewed the customer data and based on industry standard strength factors placed customers into the appropriate commercial rate structure. Given the customer characteristics of each customer class, the previously developed revenue requirement for FY 2018 was allocated to the customer classes of service. A summary of the regional sewer cost of service analysis is shown in Table ES-2.

Table ES - 2				
Summary of the Sewer Cost of Service Results (\$000's)				
	Present Rate	Allocated	\$	%
	Revenue	Costs	Change	Change
Residential	\$15,508	\$15,555	\$48	0.3%
Commercial				
High	150	180	30	20.3%
Medium	1,430	1,626	195	13.7%
Low	1,919	1,601	(318)	-16.6%
Institutional				
School (submetered)	144	164	20	13.8%
School (non-submetered)	88	101	12	13.7%
Industrial	1,828	1,827	(1)	-0.1%
Septic Hauler (per Gallon)	14	11	(3)	-22.0%
Fats Oils and Grease	0	16	16	-
Total	\$21,081	\$21,081	\$0	0.0%

The cost of service analysis results indicate that cost differences exist between the various customer classes of service. Based upon the results of the cost of service analysis it is proposed that cost of service adjustments be made to establish the FY 2018 rates. Section 4 of this report provides a more detailed summary of the development of the cost of service analysis.

Summary of the Regional Sewer Rate Designs

The final step of the District’s sewer rate study is the design of sewer rates to collect the desired levels of revenue, based on the results of the prior analyses. In reviewing the District’s rates, consideration is given to the level of the rates and the structure of the rates. The proposed rates within this report reflect the findings, conclusions and recommendations of the District’s revenue requirement and cost of service analyses.

Table ES-3 provides the regional rates for residential customers. The residential regional rate structure is currently a fixed charge per two months. Based on the cost of service analysis, the residential customer’s rates reflect the overall costs placed on the system. Given this, no changes in the residential rate structure were proposed and the current rate structure and rate levels were maintained.

Table ES - 3				
Current and Proposed Residential Regional Sewer Rates				
	Current	Change In Rate	Proposed	
Bi-Monthly Base Charge - Residential				
Single Family Home	\$52.09	\$0.00	\$52.09	Bi-Monthly
Condominium	\$34.65	0.00	\$34.65	Bi-Monthly
Multi-Family	\$28.99	0.00	\$28.99	Bi-Monthly

The commercial customer rate structure review was a key aspect of this study. In prior studies the District had discussed alternative rate structures to simplify the commercial customer classes while still maintaining equitable rates for the various customer types. In the development of the study, it was determined that a commercial high, medium, and low rate structure would be developed and customers would be placed in the appropriate class based on wastewater strength levels to reflect the cost differences of serving customers at varying strength levels. To establish the strength levels, the low commercial reflects strength levels of up to 300 mg/L of BOD and TSS, medium strength are those customers with 300 – 600 mg/L of BOD and TSS, and high strength is 600 – 800 mg/L of BOD and TSS. Based on these strength categories, District staff and City of Pleasanton staff, determined the appropriate rate class for each commercial customer.

The institutional customer class was also revised, regrouping the All Other Institutional into the commercial low rate class leaving the sub metered and non-sub metered schools in the institutional class. The two school customer classes are necessary as the rate varies depending

on the school having a separate irrigation meter given the use of water consumption for sewer billing purposes.

Septic haulers, previously included in the industrial customer class, were separated creating a new customer class due to the unique characteristics of septic haulers usage. Table ES-4 provides the current and proposed rates for the commercial, institutional, and septic hauler customer classes.

Table ES - 4 Summary of the Proposed Commercial Regional Sewer Rates				
	Current	Change In Rate	Proposed	
Commercial				
High - 600 to 800 mg/L	N/A	N/A	\$6.63	\$/CCF
Medium - 300 to 600 mg/L	N/A	N/A	4.75	\$/CCF
Low - < 300 mg/L	N/A	N/A	2.37	\$/CCF
Institutional				
School (submetered)	\$2.29	\$0.08	\$2.37	\$/CCF
School (non-submetered)	1.75	0.06	1.81	\$/CCF
Septic Hauler	N/A	N/A	\$0.056	\$/Gallon

The industrial class of service includes those customers with higher than commercial strength loadings as well as other testing requirements due to their waste stream characteristics. Currently, industrial customers are being charged a volume and loading rate. However, these customers are hand billed as the billing data is provided through testing results. Given this, the District was interested in moving to a volume based billing, similar to other commercial customers, to simplify the billing and include it in the billing system. To accomplish this, the proposed industrial rate was separated into three categories reflecting strength levels and billing on a water consumption basis. Provided in Table E-5 is a summary of the proposed industrial regional sewer rates.

Table ES - 5 Summary of Proposed Industrial Regional Sewer Rates				
	Current	Change In Rate	Proposed	
Industrial				
A - < 1,000 mg/L	N/A	N/A	\$8.14	\$/CCF
B - 1,000 to 1,500 mg/L	N/A	N/A	10.23	\$/CCF
C - > 1,500 mg/L	N/A	N/A	12.33	\$/CCF

The regional sewer rates, as proposed herein, are cost-based and were developed using “generally accepted” rate making methods and principles. The proposed rates should enable the District’s regional sewer system to operate in a financially sound and prudent manner. A more

detailed discussion of the development of the proposed rates is included in Section 5 of this report.

Summary of the Rate Study

The above summary of the rate study is the culmination of an extensive effort by the Dublin San Ramon Services District and HDR Engineering to develop a comprehensive review of the regional sewer rates. The recommendations and proposed rates contained herein are intended to provide a prudent level of funding for the regional system while providing equitable and cost-based rates to the regional sewer customers.

1. Introduction and Overview

1.1 Introduction

HDR Engineering, Inc. (HDR) was retained by the Dublin San Ramon Services District (District) to conduct a regional sewer rate study. The objective of the rate study was to review the District's operating and capital costs in order to establish rates at a cost-based level. This study determined the overall adequacy of the District's existing sewer rates and provided the framework for the proposed cost-based rates.

1.2 Goals and Objectives

The District had a number of key objectives in developing the 2017 regional sewer rate study. These key objectives were as follows:

- 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.
- In establishing the District's regional rates, review and utilize best industry practices, while recognizing and acknowledging the specific and unique characteristics of the District's regional system.
- Utilize the findings, conclusions from the District's 2017 rate study to establish cost-based, equitable and legally defensible rates for FY 2018.
- Provide rates which meet the legal requirements of Proposition 218. Under Proposition 218 requirements, to be legally compliant, a utility must have rates which do not exceed the reasonable cost of providing the service, and do not exceed the proportional cost of providing service to that parcel.

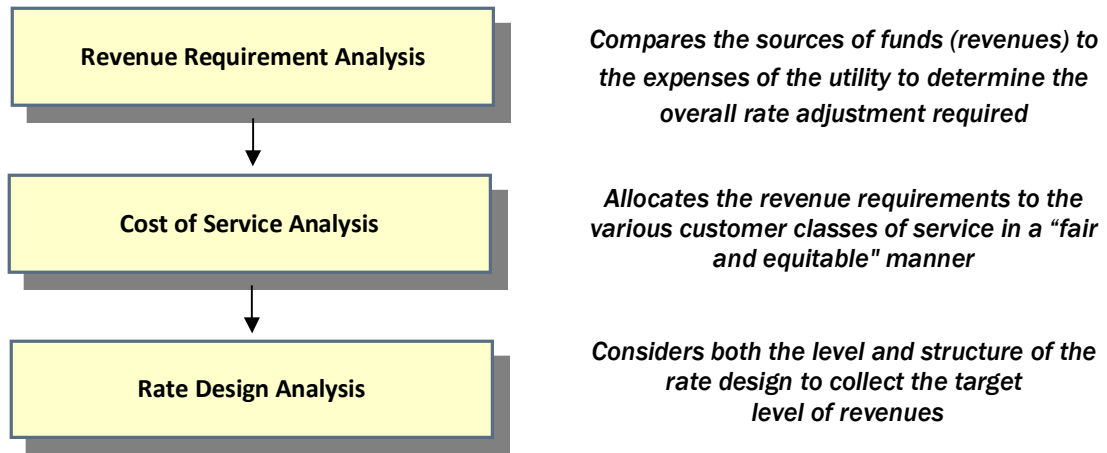
"This study determined the adequacy of the existing regional sewer rates and provides the framework for any needed future adjustments."

These key goals and objectives for the study provided a framework for the technical analysis that follows.

1.3 Overview of the Rate Study Process

User rates must be set at a level where a utility's operating and capital expenses are met with the revenues received from customers. This is an important point, as failure to achieve this objective may lead to insufficient funds to maintain system integrity. To evaluate the adequacy of the District's existing rates, a sewer rate study was performed. Provided below in Figure 1-1 is an overview of the key analyses undertaken.

Figure 1-1
Overview of the Comprehensive Rate Analyses



The above framework for reviewing and evaluating rates was utilized in the District's 2017 rate study and in the current study.

1.4 Organization of the Study

This report is organized in a sequential manner that first provides an overview of utility rate setting principles, followed by sections that detail the specific steps used to review the District's sewer rates. The following sections comprise the District's sewer rate study report:

- Section 2 – Overview of Sewer Rate Setting Principles
- Section 3 – Development of the Revenue Requirement
- Section 4 – Development of Cost of Service Analysis
- Section 5 – Development of the Sewer Rate Designs

A Technical Appendices is attached at the end of this report, which details the various technical analyses that were undertaken in the preparation of this report.

1.5 Summary

This report will review the comprehensive sewer rate analyses prepared for the District. This report has been prepared utilizing "generally accepted" sewer rate setting techniques. The next section of the report will provide a brief overview of the general rate setting process that was used to analyze and establish the proposed sewer rates for the District.

2. Overview of Sewer Rate Setting Principles

2.1 Introduction

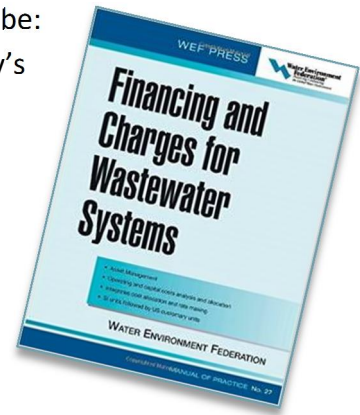
This section of the report provides background information about the sewer rate setting process, including descriptions of generally accepted principles, methods of determining a revenue requirement and designing rates. This information is useful for gaining a better understanding of the details presented in Sections 3, 4, and 5.

2.2 Generally Accepted Rate Setting Principles

As a practical matter, utilities should consider setting their rates around some generally accepted or global principles and guidelines. For sewer utilities, the source for these generally accepted or global principals is contained in the Water Environment Federation (WEF) Manual of Practice No. 27, *Financing and Charges for Wastewater Systems*.

In general, and paraphrased from the WEF manual, utility rates should be:

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



The above global principles have been used by the District to establish their rates in the past and are utilized in the current study.

2.3 Types of Utilities

Utilities are generally divided into two types:

- Public utilities are usually owned by a city, county, or special district, and are theoretically operated at zero profit. A public utility is locally owned since its customers are also its owners. Public utilities are capitalized or financed by issuing debt and soliciting funds from customers through direct capital contributions or user rates. Public or municipal utilities are typically exempt from state and federal income taxes. A publicly elected city council or board of trustees usually regulates public utilities.
- Private utilities are "for profit" enterprises and are owned by a private company and/or stockholders. The shareholders are, in essence, the owners of the private utility.

Therefore, the owners of a private utility may not be customers or local citizens, but rather numerous individuals or shareholders spread across the United States.

A private utility is capitalized by issuing stock to the general public. Private utilities are taxable entities. Given their for profit status, their rates and operations are generally regulated by a state public utility commission or other regulatory body.

As a point of reference, the Dublin San Ramon Services District is a public utility and the analysis developed within this report has been based on the methodology generally utilized by a public utility.

2.4 Determining the Revenue Requirement

Most public utilities, such as the District, use the “cash basis”¹ approach for establishing their revenue requirement and setting rates. This approach conforms to most public utility budgetary requirements and the calculation is easy to understand. A public utility totals its cash expenditures for a period of time to determine required revenues. The revenue requirement for a public utility is usually comprised of the following costs or expenses:

- Operation and maintenance (O&M) expenses which typically includes the materials, electricity, labor, supplies, etc. needed to keep the utility functioning.
- Taxes and/or Transfers, either state or utility taxes, or transfers to another fund.
- Annual debt service payments (principal and interest) which have been used to fund capital improvements. For the District, the annual debt service payments are funded through the capital replacement and expansion funds.
- Capital improvements financed with rate revenues, a utility sometimes includes depreciation expense to stabilize annual revenue requirement.

Under the “cash basis” approach, the sum of the total operating 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 capital improvements financed from rates) are necessary under the cash basis approach because utilities generally cannot finance all their capital facilities with long-term debt. An exception occurs if a public utility provides service to a wholesale or contract customer. In this situation, a public utility could use the “utility basis” approach (see below) to earn a fair return on its investment.

Table 2-1 provides an overview of the “cash basis” and “utility basis” revenue requirement methodology.

¹ “Cash basis” as used in the context of rate setting is not the same as the terminology used for accounting purposes and recognition of revenues and expenses. As used for rate setting, “cash basis” simply refers to the specific cost components to be included with the revenue requirement analysis

Table 2 – 1
Cash versus Utility Basis Comparison

Cash Basis	Utility Basis (Accrual)
+ O&M Expense	+ O&M Expense
+ Taxes or Transfer Payments	+ Taxes or Transfer Payments
+ Capital Improvements Financed with Rate Revenues (\geq Depreciation Expense)	+ Depreciation Expense
+ Debt service (Principal + Interest)	+ Return on Investment
= Total Revenue Requirement	= Total Revenue Requirement

2.5 Cost of Service Analysis

After the total revenue requirement is determined, it is allocated to the users of the service. The allocation, usually analyzed through a cost of service study, reflects the cost relationships for producing and delivering services.

A cost of service study requires three steps:

1. Costs are **functionalized** or grouped into the various cost categories related to providing service (e.g., treatment, pumping, etc.). This step is largely accomplished by the utility's accounting system.
2. The functionalized costs are then **classified** to specific cost components. Classification refers to the arrangement of the functionalized data into cost components. For example, a sewer utility's costs are typically classified as volume²-, biochemical oxygen demand (BOD)³-, suspended solids (SS)⁴, and/or customer-related.
3. Once the costs are classified into components, they are **allocated** to the customer classes of service (residential, commercial, industrial, etc.). The allocation is based on each customer class' relative contribution to the specific cost component. For example, customer-related costs are allocated to each class of service based on the total number of customers in that class of service. Once costs are allocated, the necessary revenues for achieving cost-based rates can be determined.

For example, a sewer utility incurs strength-related costs to treat higher strength sewer. It follows that the customers who have higher strength levels and create greater treatment costs should pay for those strength-related costs in proportion to their contribution to total plant loadings. Under this approach, costs are equitably allocated between the customer classes based on the cost impacts they place on the sewer system.

² Volume refers to the amount of wastewater discharged.

³ 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.

⁴ TSS is the entire amount of organic and inorganic particles dispersed in wastewater.

2.6 Designing Sewer 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 and does not consider other non-cost based goals and objectives (economic development, ability to pay, revenue stability, etc.). In designing final proposed rates, factors such as ability to pay, continuity of past rate philosophy, economic development, ease of administration, and customer understanding may be taken into consideration. However, the proposed rates must meet the requirements of California Constitution article XIII D, section 6.

2.7 Summary

This section of the report has provided a brief introduction to the general principles, techniques, and economic theory used to set the regional sewer rates. These principles and techniques will become the basis for the District's regional sewer rate analysis. The next section of this report will review the development of the revenue requirement for the District's regional sewer system.



3. Development of the Revenue Requirement

3.1 Introduction

This section describes the development of the revenue requirement analysis for District’s regional sewer system. The revenue requirement analysis is the first analytical step in the sewer rate study process. This analysis determines the adequacy of the overall wastewater rates. From this analysis, a determination can be made as to the overall costs of the utility and the level of rate adjustments needed to provide prudent funding for both operating and capital needs. Typically, one of the main objectives of a rate study is to develop cost-based and equitable rates while attempting to minimize the impacts to the utility’s customers.

The development of the revenue requirement analysis was completed by District staff. HDR developed a rate model for use by the District to review or set rates. This model was updated by District staff to include current revenues and expenses, customer characteristics (number of customers, water consumption, etc.), and capital funding assumptions. HDR then reviewed the revenue requirement and worked with District staff to develop the final revenue and rate projections.

3.2 Treatment Services

A wastewater utility provides two major sewer functions to their customers – collection of the wastewater and the treatment of the wastewater. DSRSD’s sewer treatment plant serves as a regional facility serving the City of Pleasanton in addition to their own service area. The focus of this study is on the regional treatment aspect of DSRSD’s wastewater system. Both the District and the City of Pleasanton establish separate rates for their respective collection system costs.

3.3 Determining the Revenue Requirement

In developing the District’s regional treatment revenue requirement, the utility must financially “stand on its own” and be properly funded. As a result, the revenue requirement analysis, as developed herein, assumes the full and proper funding needed to operate and maintain the District’s sewer treatment system on a financially sound and prudent basis.

“ . . . the revenue requirement analysis as developed herein assumes the full and proper funding needed to operate and maintain the District’s sewer system on a financially sound and prudent basis.”

Provided below is a more detailed discussion of the development of the revenue requirement analysis as developed by District staff and reviewed by HDR.

3.3.1 Establishing a Time Frame

The first step in calculating the revenue requirement for the District’s sewer utility was to establish a time frame for the revenue requirement analysis. For this study, the revenue requirement was developed for the ten-year period of Fiscal Year (FY) 2017 through FY 2026.

Reviewing a multi-year time period is recommended in an attempt to identify any major expenses that may be on the horizon. By anticipating future financial requirements, the District can begin planning for these changes sooner, thereby, minimizing short-term rate impacts and rates over the long-term.

3.3.2 Method of Accumulating Costs

The second step in determining the revenue requirement was to decide on the basis of accumulating costs. Similar to previous studies completed for the District, the revenue requirement analysis utilized a “cash basis” approach. Table 3-1 provides a summary of the District’s “cash basis” approach and cost components used to develop the District’s sewer revenue requirement.

The revenue requirement developed for the District was “customized” to follow the District’s system of accounts (budget documents). Table 3-1 provides a summary of the “cash basis” revenue requirement methodology that was used to develop the District’s regional sewer revenue requirement.

**Table 3-1
Overview of the District’s “Cash Basis” Revenue Requirements**

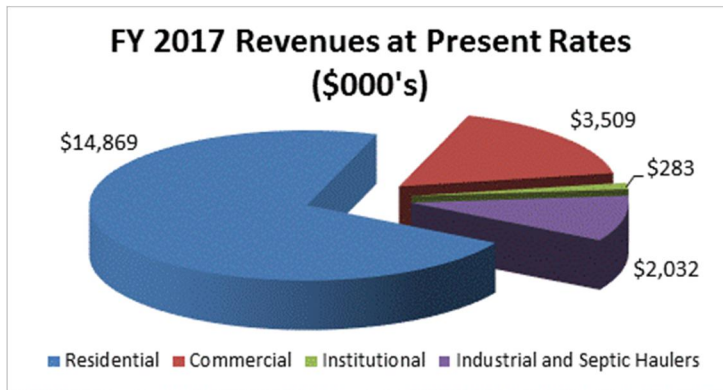
+	Sewer Operation and Maintenance Expenses
✓	Personnel Expenses
✓	Treatment Expenses
✓	Other Non-Personnel O&M Expenses
+	Debt Service (P + I) – Existing and Future
+	<u>Sanitary System Improvements (CIP)</u>
=	Total District Revenue Requirement
-	<u>Miscellaneous Revenues</u>
=	Net Revenue Requirement (Balance Required from Rates)

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 District’s sewer system.

3.3.3 Projection of Revenues

The next step in developing the revenue requirement for the District was to develop a projection of rate revenues. For this study District staff provided the FY 2017 and FY 2018 projected revenue as a starting point for revenue. Revenue beyond FY 2018 and through FY 2026 were projected using customer growth factors provided by the District. These factors, on average, were approximately 1%-2% for the District and just short of 1% for City of Pleasanton. In total, District revenues range from \$10.8 million in FY 2018 to \$12.8 million in FY 2026. City of Pleasanton revenues range from \$10.2 million in FY 2018 to \$11.4 million in FY 2026.

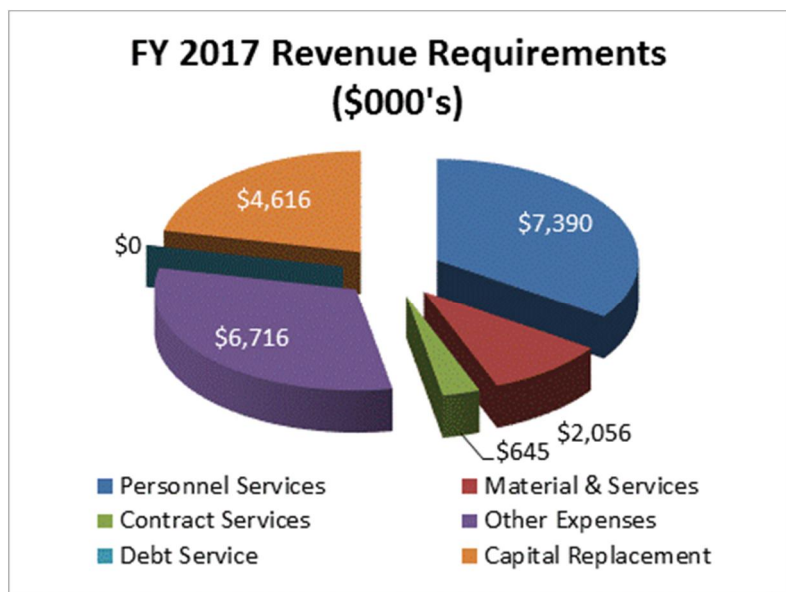
In addition to rate revenues the District receives additional revenues from other sources such as interest income and miscellaneous fees. The total amount of miscellaneous revenues is projected to be approximately \$1,000,000 for FY 2018 and escalating to \$1.3 million in 2026. Nearly half of the miscellaneous revenue is from lab fees and energy offsets.



3.3.4 Projection of Regional Sewer O&M Expenses

Operation and maintenance (O&M) expenses are incurred by the District to treat the wastewater flows from the District’s customers. O&M expenses are expensed during the current year and are not capitalized or amortized over an extended period of years.

District staff updated the revenue requirement for this study. Budget numbers were used for FY 2018 and FY 2019. The projected O&M expenses beyond FY 2019 were escalated using an appropriate escalation factor for the type of cost being reviewed. The majority of escalation factors ranged from 3% to 5% per year, except for medical benefits which started at 8% and decreased to 5% and PERS/Retirement which ranged from 21% to 10% during the analysis period. This higher than average escalation is a factor of increasing medical and retirement benefit costs being experienced by the District. All other expenses were escalated at historical inflationary levels.



The total projected sewer O&M expense ranged from \$17.2 million in FY 2018 increasing to \$24.0 million in FY 2026. No extraordinary O&M expenses were assumed during this projected time frame over budgeted amounts.

3.3.5 Projection of Capital Replacement Funding

Given the projection of O&M expenses, the next area of costs to be included within the District’s revenue requirement is capital costs. In the District’s analysis capital funding is shown as transfers to the Expansion and Replacement reserves that in turn fund capital projects. A key component of the revenue requirement was the development of a capital funding level by District

staff to meet future renewal and replacement needs. Given this need for increased renewal and replacement funding needs, the District increased the level of the transfer to provide sufficient funding for future capital replacement projects. For FY 2018, \$4.8 million was transferred for capital needs. This amount varies from year to year increasing to \$5.2 million in FY 2026. In this way, the District is prudently funding renewal and replacement needs on the regional sewer system.

3.3.6 Projection of Debt Service

The District currently has outstanding debt related to the regional sewer system. The debt service is related to capital replacement and expansion. These annual payments are funded through the replacement and expansion funds and are not funded through rates. Therefore, no annual debt service payment is included within the individual components of the revenue requirement analysis (i.e., when compared to the generally accepted “cash basis” methodology).

3.3.7 Summary of the Regional Sewer Revenue Requirement

Given the District’s projection of O&M expenses and capital needs, the revenue requirement was summarized. Presented below in Table 3-2 is the District’s projected 10 year revenue requirement for FY 2017 through FY 2026.

Table 3 - 2
Summary of Regional Sewer Revenue Requirements (\$000s)

	Budget		Projected							
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Sources of Funds										
Rate Revenue										
Dublin San Ramon	\$10,574	\$10,839	\$11,449	\$11,727	\$11,938	\$12,200	\$12,351	\$12,495	\$12,636	\$12,818
Pleasanton	10,119	10,242	10,550	10,665	10,781	10,897	11,013	11,129	11,245	11,361
Miscellaneous Revenue	<u>729</u>	<u>996</u>	<u>1,018</u>	<u>1,042</u>	<u>1,087</u>	<u>1,131</u>	<u>1,176</u>	<u>1,220</u>	<u>1,265</u>	<u>1,308</u>
Total Source of Funds	\$21,421	\$22,077	\$23,016	\$23,434	\$23,806	\$24,228	\$24,540	\$24,845	\$25,146	\$25,487
Applications of Funds										
O&M Expenses										
Personnel Services	\$7,390	\$7,122	\$7,452	\$7,816	\$8,366	\$8,905	\$9,329	\$9,783	\$10,268	\$10,789
Material & Services	2,056	2,361	2,421	2,519	2,621	2,727	2,838	2,953	3,074	3,200
Contract Services	645	998	981	1,010	1,040	1,071	1,104	1,137	1,171	1,206
Other Expenses	6,716	6,755	7,019	7,445	7,658	7,878	8,108	8,355	8,597	8,856
Debt Service	0	0	0	0	0	0	0	0	0	0
Transfers to Reserves	<u>4,616</u>	<u>4,841</u>	<u>3,214</u>	<u>3,491</u>	<u>3,771</u>	<u>4,052</u>	<u>4,335</u>	<u>4,619</u>	<u>4,906</u>	<u>5,194</u>
Total Application of Funds	\$21,421	\$22,077	\$21,086	\$22,281	\$23,455	\$24,633	\$25,713	\$26,847	\$28,016	\$29,246
Balance/(Deficiency) of Funds	\$0	\$0	\$1,930	\$1,153	\$350	(\$405)	(\$1,173)	(\$2,002)	(\$2,871)	(\$3,758)
Balance as % of Rev from Rates	0.0%	0.0%	-8.8%	-5.2%	-1.5%	1.8%	5.0%	8.5%	12.0%	15.5%

In summary form, the revenue requirement has summed the District's O&M expenses and capital funding needs. The total revenue requirement is then compared to the total sources of funds, which includes the rate revenues, at present rate levels, and other miscellaneous revenues. From this comparison a balance or deficiency of funds can be determined. This balance or deficiency of funds is then compared to the rate revenues to determine the level of rate adjustment needed to meet the revenue requirement.

In viewing Table 3-2, it should be noted that the deficiencies shown are cumulative and compared to the current level of revenues received by the District. In other words, the cumulative deficiency of approximately \$3.8 million in FY 2026 is a function of the existing rates and no assumed adjustments to rates over time. Any adjustment to rates in the initial years will reduce the deficiency in the following years.

In reviewing the overall revenue, and rate, needs of the District, HDR and District staff reviewed the need for a rate transition plan to sufficiently fund the needs of the District. To meet these financial needs, it is proposed that the District adjust revenues, and rates, annually based on actual inflationary levels. In other words, each year, the District will adjust rates based on the actual increase in costs based on the change in consumer price indices as part of the budget process.

3.4 Consultant's Conclusions

Based on the revenue requirement analysis as developed by the District, current revenue are sufficient to cover current costs, but as time progresses a gap develops leaving a revenue deficiency which increases over the projected time period. The degree of the deficiency will be largely dependent on the inflation of costs experienced by the District. It is recommended that the rates be adjusted annually to reflect the actual inflation of costs experienced by the District.

3.5 Summary

This section of the report has provided a discussion of the District's Regional sewer revenue requirement analysis. The revenue requirement analysis developed a financial plan to support the District's operating and capital needs. The next section of the report will discuss the allocation of costs to the Districts customer classes.

4. Development of the Cost of Service

4.1 Introduction

In the previous section, the revenue requirement analysis focused on the total sources and application of funds required to adequately fund the District's regional sewer system. This section will discuss and review the development and recommendations of the cost of service analysis.

A cost of service analysis is concerned with the equitable allocation of the total revenue requirement between the various customer classes of service (e.g., residential, commercial, industrial). The previously developed revenue requirement was utilized in the development of the cost of service analysis.

As with all public utilities there has been increased importance on cost of service studies by various government agencies, customers, utility regulatory commissions, and other parties. This interest has been generated in part by increasing wastewater discharge requirements, increased need to replace aging infrastructure, escalating operating costs, and concerns of equity in rates among customers. Following the generally-accepted guidelines and principles of a cost of service analysis will inherently lead to regional sewer rates which are equitable, cost-based, and not viewed as arbitrary or capricious in nature.

“Following the generally-accepted guidelines and principles of a cost of service analysis will inherently lead to rates which are equitable, cost-based, and not viewed as arbitrary or capricious in nature.”

4.2 Objectives of a Cost of Service Study

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

- Allocate the revenue requirement proportionally to the customer classes of service
- Derive average unit costs for subsequent rate designs

The regional sewer cost of service analysis equitably allocated the revenue requirement to the various customer classes of service. A regional sewer system incurs costs related to volume, strength, and customer-related cost components. Each of these types of costs may be collected in a slightly different manner as to allow for the development of rates that collect costs in relatively the same manner as they are incurred.

4.3 Regional Sewer Customer Classes of Service

Currently, the District has different rate designs for the individual sub-classes within the major customers classes of residential, commercial, schools/institutional, and industrial/demand. The customer classes for the regional sewer system are as follows:

**Table 4 – 1
Current Classes of Service**

Residential	Commercial	Other
<ul style="list-style-type: none"> ■ Single Family/Townhouse ■ Condo ■ Multi-Family ■ Duplex 	<ul style="list-style-type: none"> ■ Auto Steam cleaning ■ Bakery ■ Laundry ■ Grocery ■ Mortuary ■ Restaurant – Fast Food ■ Restaurant – Full Service ■ All Other 	<ul style="list-style-type: none"> ■ Schools <ul style="list-style-type: none"> ✓ Schools (Submetered) ✓ Schools (Non-Submetered) ■ Other Institutional ■ Industrial/Demand

In determining classes of service for cost of service purposes, the objective is to group customers together into similar or homogeneous groups based upon facility requirement and/or flow characteristics. While the commercial customer groups are classified by business type, the District has been discussing developing commercial customer rate classes that reflect the impacts like customers place on the system while simplifying the rate structure. To accomplish this the commercial rate classes were consolidated into three categories, high, medium, and low strength. Additionally some customers that were previously classified as industrial, but had strength levels that were more in line with commercial wastewater flows were reclassified into the appropriate commercial class. Septic haulers were broken out into their own class due to their unique wastewater flow characteristics. Residential rate classes remained the same for this study. Table 4.2 provides the summary of the proposed commercial and industrial rate classes.

**Table 4 – 2
New Commercial and Industrial Classes of Service**

Class	Strength Range ^[1]
Commercial – Low	0 – 300 Avg mg/l of BOD and SS
Commercial – Medium	301 – 600 Avg mg/l of BOD and SS
Commercial – High	Greater than 600 Avg mg/l of BOD and SS
Industrial – A	0 – 1,000 Avg mg/l of BOD and SS
Industrial – B	1,001 – 1,500 Avg mg/l of BOD and SS
Industrial – C	1,501 – 2,000 Avg mg/l of BOD and SS
Septic Hauler	NA

[1] Customers with wastewater strength greater than those used to establish the proposed rates may be subject to high strength surcharges should testing results show higher strength levels.

4.4 General Cost of Service Procedures

In order to determine the cost to serve each customer class of service on the District’s regional sewer system, a cost of service analysis is conducted. A cost of service study utilizes a three-step approach to review costs. These were previously discussed in our general overview in Section 2 and take the form of functionalization, classification, and allocation.

4.4.1 Functionalization of Costs

The first analytical step in the cost of service process is called functionalization. Functionalization is the arrangement of expenses and asset (plant) data by major operating functions within the utility (e.g., treatment, pumping). Within this study, the functionalization of the cost data was accomplished through the District’s detailed budget information.

4.4.2 Classification of Costs

The second analytical task performed in a regional sewer cost of service study is the classification of the costs. Classification determines why the expenses were incurred or what type of need is being met. The District’s revenue requirements were reviewed and classified using the following cost classifiers:

- **Volume-Related Costs:** Volume costs are those costs which tend to vary with the total quantity of wastewater contributed by a customer. Volume costs are the total flows contributed by a customer, typically over an annual time period. A significant portion of a regional sewer system’s revenue requirements are typically classified as volume related as the major function of a regional sewer system to collect the total flows from customers and transport that flow to the treatment plant.
- **Strength-Related Costs:** Strength related costs are those costs associated with the additional handling and treatment of high “strength” sewer. Increased strength levels generally equate to increased treatment costs. Strength-related costs refer to the strength of the wastewater contributed by the customer. In addition, higher strength wastewater may require special or additional treatment. In classifying strength-related costs, two types of strength parameters were

Terminology of a Sewer Cost of Service Analysis

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

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

Allocation – Allocating the classified costs to each class of service based upon each class’s proportional contribution to that specific cost component.

Volume Costs – Costs that are classified as volume related are associated with the total flow of wastewater.

Strength Costs – Costs classified as strength related refer to the wastewater treatment function. Typically, strength-related costs are further defined as biochemical oxygen demand (BOD) and suspended solids (SS). Different types of customers may have high wastewater strength characteristics and high strength wastewater costs more to treat. Treatment facilities are often designed and sized around meeting these costs

Customer Costs – Costs classified as customer related vary with the number of customers on the system, e.g. billing costs.

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

Customer Classes of Service – The grouping of customers into similar groups based upon usage characteristics and/or facility requirements.

considered; biochemical oxygen demand (BOD)⁵ and total suspended solids (TSS)⁶. Customers who have higher than average wastewater strength such as commercial or industrial customers are allocated a greater proportion of the cost of treatment.

- **Customer Related Costs:** Customer costs are those costs which vary with the number of customers on the sewer system. They do not vary with system output or strength of sewer. These costs are also sometimes referred to as readiness to serve or availability costs. Customer costs may also sometimes be further classified as either actual or weighted. Actual customer costs vary proportionally, from customer to customer, with the addition or deletion of a customer regardless of the size of the customer. In contrast, a weighted customer cost reflects a disproportionate cost, from customer to customer, with the addition or deletion of a customer. An example of an actual customer cost is postage for mailing bills. This cost does not vary from customer to customer, regardless of the size or consumption characteristics of the customer. An example of a weighted customer can be where the District must hand bill a customer when they are not included in the customer billing system.
- **Revenue Related Costs:** Certain costs associated with the regional system may vary with the amount of revenue received. An example is a utility tax based upon the amount of revenues received by the District.
- **Direct Assignments:** Certain costs associated with operating the system may be directly traced to a specific customer or class of service (e.g., bad debt expenses). In this case, these costs are then directly assigned to that specific class of service. This assures that other classes of service will not be allocated any costs for those significant facilities from which they do not benefit.

4.4.3 Development of Allocation Factors

Once the classification process is complete, and the customer groups have been defined, the various classified costs were allocated to each customer group. The District's classified costs were allocated to the various customer groups using the following allocation factors.

- **Volume Allocation Factor:** As noted earlier, volume related costs vary with the total flow of wastewater. Therefore, the volume allocation factors were based upon the projected total wastewater flows for each class of service for the projected year test period. Given that wastewater is not metered, each individual class was reviewed and a return factor applied to the customer classes' water consumption to determine the estimated wastewater volumes. As an example, the residential customer's wastewater volumes were based on winter water use, which is a surrogate for indoor water use, and as a result, is a reasonable measure of wastewater volumes. Each customer class was reviewed on a similar basis to determine the appropriate return factor.
- **Strength Allocation Factor:** The strength allocation factor will vary based on the overall strength of the wastewater and the volume. A strength level is assigned for each class of service and is measured in average milligrams per liter (mg/l). For example, domestic

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.

wastewater is commonly considered to have a BOD and TSS strength level that is less than a typical commercial customer. The customer volume is then applied against the assumed customer mg/l to determine the overall pounds of BOD and TSS for that customer. For the District's study, the assigned strength factor for each class of service, stated in mg/l, was based, in part, on recent testing and sampling of various sections of the District's system. In addition, the past study data was reviewed to determine if the recent data supported typical customer strength levels. In summary, the development of the strength factors was based on a combination of recent testing and historical testing to determine the strength levels by class of service.

- **Customer Allocation Factor:** Customer costs vary with the number of customers on the system. Two basic types of customer allocation factors were identified – actual and weighted. The allocation factors for actual customers were based upon the projection of the number of customers developed within the revenue requirement. The weighted customer allocation factor is an attempt to reflect the disproportionate costs associated with serving different types of customers. This weighted customer allocation factor takes into account the fact that the District has several large industrial customers which it hand bills each month compared to the residential customer bill which is included on the annual property tax statement.
- **Revenue Related Allocation Factor:** The revenue related allocation factor was developed from the projected rate revenues for FY 2018 for each customer group. These same revenues were used within the revenue requirement analysis previously discussed.

Given the development of the allocation factors, the final step in the cost of service study is to allocate the classified costs to the various customer classes of service.

4.5 Functionalization and Classification of the Revenue Requirement

For the District's study, the FY 2018 revenue requirement was functionalized, classified, and allocated. As noted earlier, the District utilized a cash basis revenue requirement, which in this case, is comprised of operation and maintenance expenses and transfers to the capital replacement fund.

The functionalization of the District's regional operating expenses was primarily accomplished through the District's detailed budget. However, in developing the cost of service, HDR worked with District staff to determine what costs were captured in the major cost categories related to wastewater treatment functions to develop an equitable allocation of costs to the various customer classes of service. For example, the costs related to District expense related to compliance and testing was allocated based on strength levels so that those customers receiving the benefit of these services were allocated their proportional share of these costs.

To determine the classification of operating expenses HDR started with the 2010 rate study. When reviewing the analysis, it was determined that additional detail was needed to provide an accurate and equitable classification of costs. As a result, HDR worked with District staff to determine the appropriate classification of costs. Specifically, District staff provided a breakout

of cost based upon the treatment process at the regional sewer treatment plant. These costs were then individually classified between volume-, BOD-, or TSS-related costs. When specific costs were noted in the revenue requirement the classification followed the classification provided by District staff. If costs were combined into a single line item, the related detailed cost components were used to determine the classification of the single line item. When comparing the current classification to past classifications of the District’s regional sewer revenue requirement it appears that the current classification better reflects the operations of the regional sewer treatment plant (i.e., how the costs are incurred: volume, strength, etc.).

A more detailed review of the classification of the regional sewer revenue requirement can be found in the Technical Appendix.

4.6 Assumptions of the Cost of Service Analysis

A number of key assumptions were used within the regional sewer cost of service study. Provided below is a brief discussion of the major assumptions used.

- The test period used for the cost of service analysis was FY 2018. The revenue and expense data for FY 2018 which was previously developed within the revenue requirement study.
- A cash basis approach was utilized which conforms to “generally accepted” cost of service approaches and methodologies. This is the same methodology that the District has historically utilized for the regional sewer cost of service analysis.
- Commercial customer classes were revised to simplify the approach yet maintain an equitable allocation of costs.
- Assumed wastewater volume by customer classes of service was provided by the District and the City of Pleasanton. The development of the wastewater volumes were based on return factors calculated by class of service based on estimated indoor use or winter water volume assumptions. The estimated total volumes as developed in the volume allocation factor were compared to the actual flows at the wastewater treatment plant to assess their reasonableness.
- Strength allocation factors were based upon each customer class of services strength levels based on recent sampling and historical sampling. Overall strength levels at the treatment plant were calculated and provided by the District and compared to the calculated levels based on the assumed strength levels to test the reasonableness of the assumptions.
- District staff provided detailed information on the classification of costs, based upon their knowledge of the facilities and its operation.
- Data assumptions were provided by the District and the City of Pleasanton customers separately. Final allocation of costs, and rates, were based on the combined customer for each class of service.

4.7 Summary of the Regional Sewer Cost of Service Analysis

In summary form, the regional sewer cost of service analysis began by functionalizing the District's FY 2018 regional projected operating expenses. The functionalized expense accounts were then classified into their various cost components. The individual classification totals were then allocated to the various customer groups based upon the appropriate allocation factors. The allocated expenses for each customer group were then aggregated to determine each customer group's overall revenue responsibility. A summary of the detailed cost responsibility developed for each class of service is shown in Table 4-3.

Table 4-3
Summary of the Sewer Cost of Service Results (\$000's)

	Projected 2018 Rate Revenue*	Allocated Costs	\$ Change	% Change
Residential	15,508	\$15,555	\$48	0.3%
Commercial				
High	\$150	\$180	\$30	20.3%
Medium	1,430	1,626	\$195	13.7%
Low	1,919	1,601	(\$318)	-16.6%
Institutional				
School (submetered)	\$144	\$164	\$20	13.8%
School (non-submetered)	88	101	12	13.7%
Industrial	1,828	1,827	(1)	-0.1%
Septic Hauler (per Gallon)	14	11	(3)	-22.0%
Fats Oils and Grease	<u>0</u>	<u>16</u>	<u>16</u>	<u>-</u>
Total	\$21,081	\$21,081	\$0	0.0%

*Projected 2018 Rate Revenue is the revenue the District would collect at the current rates.

The allocation of costs provided an equitable allocation of the facilities and costs allocated to each customer class reflected their respective benefit. The cost of service results indicated that some costs differences exist between the customer classes of service. This in part is driven by the change in the commercial customer classes of service which better reflect the impact they place on the system. In addition, the septic hauler customer class was moved from the industrial class of service to a separate class that better reflects the impacts they place on the system. In this case, it is a high strength customer with low volumes.

In viewing the above results, it is important to understand that a cost of service study is a "snapshot" of the regional sewer system at a single point in time and the key variables (volumetric wastewater contributions and strength levels) may change over time. For those reasons, it is prudent to conduct a cost of service every three to five years to help assure that the rates being charged are, for the most part, fair and equitable. It is also important to take into consideration the changes in customer characteristics over time. Specifically, with the increased focus on water conservation wastewater volumes by class of service can vary from year to year. As a result, the strength levels will also change and result in a different allocation of costs as customer characteristics change.

4.8 Consultant's Conclusions and Recommendations

The regional sewer cost of service analysis provides the basis for cost-based adjustments between the various customer classes of service. Historically, the District has followed cost of service principles to set rates, which is the case for this study. Given the results of the cost of service, the proposed rates will be set to reflect the results shown in Table 4-3.

The section of the report has reviewed the regional sewer cost of service analysis developed for the District. This study provides the basis for equitably allocating the regional system's costs between the customers utilizing the system. Furthermore, this study provides the basis for determining the level of revenue to be collected from each customer class of service within the rate design process. The next section of the report will discuss the design of the proposed regional sewer rates.



5. Development of the Sewer Rate Designs

5.1 Introduction

The final step of the comprehensive rate study process is the design of the proposed regional sewer rates. This step involves using the results of the revenue requirement and cost of service analysis to establish the overall level of adjustment required, along with the revenue responsibility by customer class of service. This section of the report will provide a more detailed discussion of the development of the proposed regional sewer rate designs.

5.2 Development of Cost-Based Sewer Rates

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

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

- **The revenue derived from sewer rates does not exceed the funds required to provide the property related service (i.e., wastewater service).** The proposed rates are designed to collect the overall revenue requirement of the District's regional sewer system.
- **The revenues derived from sewer rates shall not be used for any purpose other than that for which the fee or charge is imposed.** The revenues derived from the District's regional sewer rates are used exclusively to operate and maintain the District's regional sewer system.
- **The amount of a fee or charge imposed upon a parcel or person as an incident of property ownership shall not exceed the proportional costs of the service attributable to the parcel.** This study has focused almost exclusively on the issue of proportional assignment of costs to customer classes of service. The proposed rates have appropriately grouped customers into customer classes of service (residential, commercial, industrial, etc.) that reflect the varying volume and strength levels and system requirements (i.e., the benefits they receive from and burdens they place on the system) of each customer class of service. The grouping of customers and rates into these classes of service creates the equity and fairness expected

under Proposition 218 by having differing rates by customer classes of service which reflect both the level of revenue to be collected by the utility, and the manner in which these costs are incurred and equitably assigned to customer classes of service based upon their proportional impacts.

5.3 Overview of the Rate Adjustments by Class of Service

For this rate study the District is looking exclusively at FY 2018 to establish cost-based and equitable rates. Given the results of the revenue requirement, no changes in overall revenues are projected to prudently fund the O&M and capital needs of the system for FY 2018. However, given the development of new customer classes and rate structure for commercial and industrial customers, cost of service adjustments have been made to reflect the cost allocation to develop cost based and equitable rates for each of the customer classes of service.

As noted in Table 4-3, residential customer's revenue reasonably equals the allocation of costs. Therefore, no changes in the residential customer rates are proposed and rates will stay at the current levels for FY 2018.

Given the change in rate structure for the commercial customers, an overall adjustment is necessary to reflect the results of the cost of service study. For each commercial customer class (high-, medium-, low-strength) rate adjustments are proposed to reflect the allocation of costs based on the different strength levels as provided in Table 4-2. The cost of service analysis also showed that the institutional rate should also be adjusted to reflect the impacts they place on the system.

The industrial customer rate structure was also being reviewed as part of the study. Several customers were moved to more appropriate customer classes and the septic haulers were separated and a specific rate developed based on the impact they place on the system. As noted in Table 4-3, septic hauler revenues will decrease while overall industrial revenues will remain flat.

Provided below in Table 5-1 are the proposed regional sewer rate adjustments by customer classes of service. As noted, no change in the overall revenue levels are proposed and only interclass adjustments are proposed to reflect the results of the cost of service analysis.

**Table 5 – 1
Summary of the Regional Sewer Rate Adjustments**

Customer Classes of Service	FY 2018
Residential	0.0%
Commercial -	
High	20.3%
Medium	13.7%
Low	-16.6%
Schools/Institutional	
Schools (Submetered)	3.5%
Schools (Non-Submetered)	3.4%
Septic Hauler	-22.0%
Industrial	<u>0.0%</u>
Total	0.0%

As noted, given the change in the commercial rate structure, a comparison between present and proposed rates is challenging given the movement of customers to the proposed rate classes. For example the proposed commercial high-strength proposed rate is actually proposed to be lower than the rate currently charged to the majority of the customers in this new rate class. The difference between the cost of service results and the comparison of rates is related to how customers were reorganized and what they were previously charged and what class they fall into now. Table 5-2 shows how the current commercial customer classes line up with the new strength level customer classes.

**Table 5 – 2
% Commercial Class Changes**

	High	Med	Low
Auto Steam Cleaning	0%	0%	100%
Restaurant - Full Service	1%	96%	3%
Restaurant - Fast Food	1%	97%	1%
Grocery - Garbage Disposal	47%	13%	40%
Laundry	0%	0%	100%
Bakery	0%	22%	78%
Mortuary	0%	0%	100%
All Other	0%	5%	95%

Changes to the institutional rate class were minor with the Other Institutional class moving into the commercial customer. With only schools being left in the customer class the name was changed to schools. The structure of the school customers remain the same except an increase to bring them in line with the cost of service results. Both school customer classes are necessary

given the basis of the sewer rate being water consumption. In the District’s case, some school customers have separate irrigation meters while others don’t. Given this, the rate for those customers without separate irrigation meters is lower to reflect the higher consumption that does not enter the sewer system.

Similarly to commercial, industrial rate structure was changed significantly. The current industrial rate includes three demand components and three volume components. The District wanted to simplify the industrial rate to be compatible with their billing system. The new rate will be based on billed water consumption.

5.4 Review of the Present and Proposed Regional Sewer Rates

The District currently has a regional sewer rate schedule for residential, commercial, schools/institutional, and industrial/demand customers. As discussed above, based upon the cost of service study the regional sewer rates have been adjusted using the cost of service results, as previously shown in Table 5-1. Provided below are the present and proposed rate schedule summaries for each customer class of service.

The residential Single family and condominium customers are an annual flat rate per customer account on their property tax bill. Multi-family customers are charged a flat rate on a bi-monthly basis by per unit. The flat rate includes all water usage for the two month span. Presented below in Table 5-3 are the present and proposed regional sewer rates for residential customers.

Table 5 – 3 Summary of Residential Regional Sewer Rates		
	Present	Proposed
Bi-Monthly Base Charge - Residential		
Single Family Home	\$52.09	\$52.09
Condominium	34.65	34.65
Multi-Family	28.99	28.99

As noted previously, no changes to the residential rate level has been proposed at this time based on the results of the cost of service analysis. Single family and condominium customers are charged a flat rate per year on their property tax bill. Multi-family customers are charged a flat rate per living unit bi-monthly.

Unlike residential customers, the commercial and schools/institutional customers are charged based on their water usage. Commercial and Schools/Institutional customers are charged a rate for each 100 cubic feet of water consumption.

To develop the proposed rates for the proposed commercial high-, medium-, low-strength customers, the total allocated costs were divided by the proposed billing units, in this case, metered water consumption. The new rate structure has three ranges of wastewater strength which is the average of mg/l of BOD and TSS. These ranges are, 0 to 300 mg/l for low, 300 to 600

mg/l for medium and greater than 600 mg/l for high. Provided in Table 5-4 is a summary of the calculation to develop the proposed commercial rates.

Table 5 – 4 Calculation of the Commercial Unit Costs			
Customer Class	Allocated Costs^[1]	Metered Consumption ^[2]	Unit Costs ^[3]
High – Strength (> 600 mg/l)	\$180,435	27,224	\$6.63
Medium – Strength (300 – 600 mg/l)	1,625,555	342,343	\$4.75
Low – Strength (<300 mg/l)	1,600,518	676,007	\$2.37

[1] Allocated costs are shown in Table 4-3

[2] Metered consumption is based on District and City of Pleasanton billing records

[3] Unit costs are the allocated costs divided by metered consumption

The unit costs shown in Table 5-4 are the basis for the proposed commercial rates. For the school customers, the present rates have been adjusted based on the cost of service developed as part of this study. Septic hauler rates were developed based on the total allocated costs divided by the estimated volumes contributed by this customer class which reflects the significant strength characteristics and overall low volumes which is unlike any other customer type.

Presented below in Table 5-5 are the commercial and schools/institutional regional sewer rates.

Table 5 – 5 Summary of Commercial and Schools/Institutional Regional Sewer Rates		
	Present	Proposed
Usage (Volume) Charge – All Usage (per CCF)		
Commercial		
Low - Less than 300 mg/L	N/A	\$2.37
Medium - Greater than 300 and less than 600 mg/L	N/A	4.75
High - Greater than 600 mg/L	N/A	6.63
Schools		
Schools (Submetered)	\$2.29	\$2.37
Schools (Non-Submetered)	1.75	1.81
Septic Hauler (per Gallon)	N/A	\$0.056

The proposed commercial regional sewer rates have changed to streamline and more effectively represent customer usage characteristics. The previous rate structure had rates based on the type of business which does not necessarily reflect the customer’s wastewater strength if not placed in the appropriate customer class. For example, the majority of the commercial customers

were included in the “All Other” commercial group. After reviewing the customers, almost 50 of these customers are in the medium or high commercial strength class.

Industrial rates have been redesigned in a similar manner as commercial with three classes based on the strength of wastewater. Currently, the industrial customers are billed based on annual loading and peak loadings. Because of this, the District bases the results on testing results throughout the year, and then develops a bill, by hand, for these customers. To simplify the industrial rate structure, and bill these customers through the billing system, while still maintaining cost-based and equitable rates, a strength based rate structure was developed based on metered water consumption. For the industrial customers the strength categories were based on the ranges seen by the various customers and the costs allocated on the specific impacts the industrial customers have on the system. The proposed rates are the allocated costs, as shown in Table 4-3 divided by the annual metered water consumption. As a note, the industrial customers, and other commercial customers, will still be tested and monitored as part of the District’s practices. Provided in Table 5-6 are the industrial regional sewer rates.

Table 5 – 6		
Summary of Industrial Regional Sewer Rates		
	Present	Proposed
<i>Annual Loadings</i>		
All Other	\$1,382.06	N/A
BOD	452.43	N/A
SS	224.62	N/A
Connection	15.16	N/A
<i>Peak Month Loadings</i>		
All Other	\$55,214.96	N/A
BOD	18.09	N/A
SS	8.98	N/A
Connection	15.16	N/A
A - Less than 1,000 mg/L	N/A	\$8.14
B - Greater than 1,000 and Less than 1,500 mg/L	N/A	10.23
C - Greater than 2,000 mg/L	N/A	12.33

The proposed industrial regional sewer rates are designed to be easily input and billed through the Districts billing system. The overall adjustment for industrial was designed to be revenue neutral, but individual customers may see differences depending on their strength levels and how the demand (peak loadings) component of the previous rate structure impacted the customer bill.

5.5 Future Regional Sewer Rate Adjustments

As noted, the rate (revenue) adjustment for FY 2018 is revenue neutral, in other words no proposed changes in the District's regional sewer revenues are proposed. However, given the cost of service adjustments customers may see increases or decreases in their annual bills.

Moving forward, it is proposed that annual inflationary level adjustments are implemented. These adjustments will be based on the actual change in inflation based on regional indices. Based on the change, rates will be adjusted equally by the inflationary adjustment annually through the District's budgeting process.

5.6 Summary of the Comprehensive Regional Sewer Rate Study

This section of the report has discussed the development and results of the comprehensive regional sewer rate study conducted for the District. The results of the comprehensive regional sewer rate study indicated that regional sewer rates are deficient for the projected ten-year time period reviewed. The implementation of as needed inflationary rate adjustments, as shown in the rate transition plan, should generate the additional revenue needed to meet the regional sewer system's increased operating and transfer payment needs.

The proposed regional sewer rates, as proposed herein for FY 2018, are cost-based and were developed using "generally accepted" rate making methods and principles. These rates will enable the District's regional sewer system to operate in a financially sound and prudent manner.



**Technical Appendix A –
Technical Analysis**

**DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
EXHIBIT 1
SUMMARY OF THE REGIONAL SEWER REVENUE REQUIREMENT**

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Projected		FY 2023	FY 2024	FY 2025	FY 2026
						FY 2021	FY 2022				
SOURCES OF FUNDS											
<i>Rate Revenues</i>											
DSRSD Rate Revenues	\$10,201,744	\$10,573,615	\$10,838,830	\$11,448,642	\$11,726,757	\$11,937,619	\$12,199,515	\$12,351,035	\$12,495,433	\$12,635,876	\$12,817,858
City of Pleasanton Rate Revenues	9,515,592	10,118,997	10,242,342	10,549,694	10,665,381	10,781,152	10,897,008	11,012,950	11,128,981	11,245,101	11,361,314
Miscellaneous Revenues	855,410	728,829	995,620	1,018,034	1,045,277	1,093,188	1,141,092	1,189,776	1,239,281	1,289,248	1,339,526
TOTAL SOURCES OF FUNDS	\$20,572,746	\$21,421,441	\$22,076,792	\$23,016,369	\$23,437,416	\$23,811,959	\$24,237,614	\$24,553,760	\$24,863,695	\$25,170,225	\$25,518,698
APPLICATIONS OF FUNDS											
<i>Sewer Operations</i>											
Personnel Services	\$6,588,351	\$7,389,939	\$7,121,590	\$7,452,033	\$7,815,755	\$8,366,178	\$8,904,593	\$9,328,798	\$9,782,566	\$10,268,473	\$10,789,340
Material & Supplies	2,183,903	2,055,553	2,360,963	2,421,094	2,518,793	2,620,676	2,726,932	2,837,758	2,953,359	3,073,951	3,199,761
Contract Services	473,919	644,600	998,315	980,562	1,009,979	1,040,278	1,071,487	1,103,631	1,136,740	1,170,842	1,205,968
Other Expenses	5,535,478	6,715,680	6,755,256	7,018,549	7,444,674	7,657,659	7,877,905	8,108,409	8,355,082	8,597,369	8,856,440
Total Sewer Operations Expenses	\$14,781,651	\$16,805,772	\$17,236,125	\$17,872,238	\$18,789,201	\$19,684,792	\$20,580,917	\$21,378,597	\$22,227,747	\$23,110,635	\$24,051,509
Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfer to Reserves	\$2,574,461	\$4,615,669	\$4,840,668	\$3,008,919	\$3,218,919	\$3,428,919	\$3,638,919	\$3,848,919	\$4,058,919	\$4,268,919	\$4,478,919
TOTAL REVENUE REQUIREMENTS	\$17,356,112	\$21,421,441	\$22,076,792	\$20,881,157	\$22,008,120	\$23,113,711	\$24,219,836	\$25,227,516	\$26,286,666	\$27,379,554	\$28,530,428
Balance/(Deficiency) of Funds	\$3,216,634	\$0	\$0	\$2,135,213	\$1,429,296	\$698,248	\$17,778	(\$673,755)	(\$1,422,971)	(\$2,209,329)	(\$3,011,730)
Cumulative Balance as a % of Rate Revenues	-16.3%	0.0%	0.0%	-9.7%	-6.4%	-3.1%	-0.1%	2.9%	6.0%	9.3%	12.5%
Annual Balance as a % of Rate Revenues	-16.3%	19.5%	0.0%	-9.7%	3.7%	3.5%	3.1%	3.0%	3.1%	3.0%	2.9%
Less: Use of Reserves											
Enterprise Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Use of Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Balance/(Deficiency) of Funds	\$3,216,634	\$0	\$0	\$2,135,213	\$1,429,296	\$698,248	\$17,778	(\$673,755)	(\$1,422,971)	(\$2,209,329)	(\$3,011,730)
Cumulative Net Balance as a % of Rate Revenues	-16.3%	0.0%	0.0%	-9.7%	-6.4%	-3.1%	-0.1%	2.9%	6.0%	9.3%	12.5%
Annual Net Balance as a % of Rate Revenues	-16.3%	19.5%	0.0%	-9.7%	3.7%	3.5%	3.1%	3.0%	3.1%	3.0%	2.9%
Proposed Rate Adjustment	0.0%	0.0%	0.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Additional Revenue from Adjustment	\$0	\$0	\$0	\$439,967	\$904,642	\$1,390,571	\$1,903,896	\$2,431,742	\$2,980,513	\$3,550,759	\$4,150,582
Total Balance/(Deficiency) of Funds	\$3,216,634	\$0	\$0	\$2,575,179	\$2,333,938	\$2,088,818	\$1,921,675	\$1,757,987	\$1,557,542	\$1,341,430	\$1,138,852
Additional Rate Increase Needed	-16.3%	0.0%	0.0%	-11.5%	-10.0%	-8.7%	-7.7%	-6.8%	-5.9%	-4.9%	-4.0%
Debt Service Coverage Ratio											
Before Rate Adjustment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
After RR Rate Adjustment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
After Proposed Rate Adjustment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ending Fund Balance	\$10,817,108	\$12,858,316	\$15,110,064	\$18,105,244	\$21,069,182	\$23,998,000	\$26,969,675	\$29,987,662	\$33,015,204	\$36,036,634	\$39,065,486
Minimum Reserve Target	\$2,429,860	\$2,762,593	\$2,833,336	\$2,937,902	\$3,088,636	\$3,235,856	\$3,383,164	\$3,514,290	\$3,653,876	\$3,799,009	\$3,953,673

**DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
EXHIBIT 2
ESCALATION FACTORS**

		Projected									
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Revenues:											
DSRSD Customer Growth - SF	Calculated	2.46%	3.43%	3.83%	2.43%	1.80%	2.19%	1.24%	1.17%	1.12%	1.44%
DSRSD Customer Growth - MFR/Condo	Calculated	2.46%	3.43%	3.83%	2.43%	1.80%	2.19%	1.24%	1.17%	1.12%	1.44%
DSRSD Customer Growth - Commercial	Calculated	2.46%	3.43%	3.83%	2.43%	1.80%	2.19%	1.24%	1.17%	1.12%	1.44%
DSRSD Customer Growth - Institutional	Calculated	2.46%	3.43%	3.83%	2.43%	1.80%	2.19%	1.24%	1.17%	1.12%	1.44%
City of Pleasanton Customer Growth - SF	Calculated	0.92%	0.92%	0.91%	1.08%	1.07%	1.06%	1.04%	1.03%	1.02%	1.01%
City of Pleasanton Customer Growth - Condo	Calculated	0.92%	0.92%	0.91%	1.08%	1.07%	1.06%	1.04%	1.03%	1.02%	1.01%
City of Pleasanton Customer Growth - MFR	Calculated	0.92%	0.92%	0.91%	1.08%	1.07%	1.06%	1.04%	1.03%	1.02%	1.01%
City of Pleasanton Customer Growth - Commercial	Calculated	0.92%	0.92%	0.91%	1.08%	1.07%	1.06%	1.04%	1.03%	1.02%	1.01%
City of Pleasanton Customer Growth - Institutional	Calculated	0.92%	0.92%	0.91%	1.08%	1.07%	1.06%	1.04%	1.03%	1.02%	1.01%
Miscellaneous Revenues	Budget	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CPI Adj		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Expenses:											
Labor	Budget	3.50%	3.50%	3.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Benefits - Medical	Budget	8.00%	8.00%	8.00%	8.00%	8.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Benefits - PERS/Retirement	Budget	8.00%	8.00%	8.00%	12.00%	21.50%	17.70%	10.00%	10.00%	10.00%	10.00%
Benefits - FICA/PU	Budget	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Benefits - Other	Budget	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%
Materials & Supplies	Budget	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Equipment	Budget	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
JPA Line	Budget	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Miscellaneous	Budget	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Utilities	Budget	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Customer Growth	Calculated	2.46%	3.43%	3.83%	2.43%	1.80%	2.19%	1.24%	1.17%	1.12%	1.44%
Interest Earnings:	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
New Debt Service:											
Low Interest Loans											
Term in Years	0	0	0	0	0	0	0	0	0	0	0
Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Revenue Bond											
Term in Years	20	20	20	20	20	20	20	20	20	20	20
Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	3.50%	5.00%	5.00%

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 EXHIBIT 3
 SOURCES AND APPLICATION OF FUNDS
 PROJECTED FYE16 - FYE25
 REGIONAL SEWER OPERATIONS - 300

Account Name	Projected											Notes
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
SOURCES OF FUNDS												
<i>Regional DSRSD Rate Revenues</i>												
Residential												
Single Family Home	\$4,957,513	\$5,277,281	\$5,756,577	\$6,244,414	\$6,396,106	\$6,511,116	\$6,653,961	\$6,736,605	\$6,815,364	\$6,891,965	\$6,991,223	DSRSD Customer Growth - SF
Townhouse	80,948	89,695	98,893	101,266	103,726	105,591	107,908	109,248	110,525	111,767	113,377	DSRSD Customer Growth - SF
Condominium	1,156,241	1,096,762	1,071,686	1,097,407	1,124,065	1,144,278	1,169,381	1,183,905	1,197,747	1,211,209	1,228,653	DSRSD Customer Growth - MFR/Condo
Duplex	26,253	28,190	28,164	28,840	29,540	30,071	30,731	31,113	31,476	31,830	32,289	DSRSD Customer Growth - SF
Single Family Home with 2nd Dwelling Unit	72,486	69,314	83,690	85,699	87,781	89,359	91,319	92,454	93,534	94,586	95,948	DSRSD Customer Growth - SF
Multi-Family	739,940	814,113	762,152	780,444	799,403	813,777	831,630	841,959	851,803	861,377	873,782	DSRSD Customer Growth - MFR/Condo
Commercial												
Auto Steam Cleaning	20,336	35,055	58,077	59,470	60,915	62,010	63,371	64,158	64,908	65,638	66,583	DSRSD Customer Growth - Commercial
Bakery	28,944	27,764	30,919	31,662	32,431	33,014	33,738	34,157	34,556	34,945	35,448	DSRSD Customer Growth - Commercial
Laundry	15,700	11,621	16,109	16,496	16,896	17,200	17,577	17,796	18,004	18,206	18,468	DSRSD Customer Growth - Commercial
Market with Garbage Disposal	128,774	122,189	131,972	135,139	138,422	140,911	144,002	145,791	147,495	149,153	151,301	DSRSD Customer Growth - Commercial
Mortuary	0	0	0	0	0	0	0	0	0	0	0	DSRSD Customer Growth - Commercial
Restaurant (fast food)	39,652	40,947	40,529	41,502	42,510	43,274	44,224	44,773	45,296	45,806	46,465	DSRSD Customer Growth - Commercial
Restaurant (full service)	386,143	394,473	408,971	418,786	428,960	436,673	446,253	451,796	457,078	462,215	468,872	DSRSD Customer Growth - Commercial
Commercial All Others	484,671	845,224	635,258	650,504	666,306	678,287	693,168	701,777	709,982	717,962	728,302	DSRSD Customer Growth - Commercial
Institutional												
School (submetered)	41,427	42,448	77,004	78,852	80,767	82,220	84,023	85,067	86,062	87,029	88,282	DSRSD Customer Growth - Institutional
School (non-submetered)	0	0	0	0	0	0	0	0	0	0	0	DSRSD Customer Growth - Institutional
Institutional All Others	39,694	83,827	36,293	37,164	38,067	38,751	39,602	40,093	40,562	41,018	41,609	DSRSD Customer Growth - Institutional
Industrial/Demand												
Bureau of Prisons (FCI)	1,145,311	997,000	854,488	874,996	896,252	912,367	932,383	943,964	955,000	965,734	979,642	DSRSD Customer Growth - Commercial
Santa Rita Jail (Alameda Cty)	837,711	597,711	748,049	766,002	784,610	798,719	816,241	826,379	836,041	845,437	857,613	DSRSD Customer Growth - Commercial
Santa Rita Jail	0	0	0	0	0	0	0	0	0	0	0	DSRSD Customer Growth - Commercial
Total Regional Rate Revenues - DSRSD	\$10,201,744	\$10,573,615	\$10,838,830	\$11,448,642	\$11,726,757	\$11,937,619	\$12,199,515	\$12,351,035	\$12,495,433	\$12,635,876	\$12,817,858	
<i>Regional City of Pleasanton Rate Revenues</i>												
Residential												
Single Family Home	\$6,032,960	\$6,239,725	\$6,362,229	6,596,853	6,667,993	6,739,134	6,810,274	6,881,415	6,952,555	7,023,695	7,094,836	City of Pleasanton Customer Growth - SF
Condominium	309,147	376,796	376,389	385,422	389,579	393,735	397,891	402,048	406,204	410,360	414,517	City of Pleasanton Customer Growth - Condo
Multi-Family	856,828	876,861	876,146	897,173	906,848	916,523	926,198	935,873	945,549	955,224	964,899	City of Pleasanton Customer Growth - MFR
Commercial -												
Auto Steam Cleaning	20,577	31,507	31,489	32,245	32,593	32,941	33,288	33,636	33,984	34,331	34,679	City of Pleasanton Customer Growth - Commercial
Bakery	127,083	136,425	136,238	139,507	141,012	142,516	144,021	145,525	147,029	148,534	150,038	City of Pleasanton Customer Growth - Commercial
Laundry	3,768	3,748	3,743	3,833	3,874	3,915	3,956	3,998	4,039	4,080	4,122	City of Pleasanton Customer Growth - Commercial
Market with Garbage Disposal	55,461	57,238	57,224	58,597	59,229	59,861	60,493	61,125	61,757	62,388	63,020	City of Pleasanton Customer Growth - Commercial
Mortuary	560	636	636	651	658	665	672	679	686	693	700	City of Pleasanton Customer Growth - Commercial
Restaurant (fast food)	105,942	126,106	125,847	128,867	130,257	131,646	133,036	134,426	135,815	137,205	138,595	City of Pleasanton Customer Growth - Commercial
Restaurant (full service)	524,141	601,736	601,082	615,508	622,146	628,784	635,421	642,059	648,696	655,334	661,972	City of Pleasanton Customer Growth - Commercial
Commercial All Others	910,611	1,074,433	1,071,695	1,081,413	1,093,075	1,104,737	1,116,399	1,128,061	1,139,723	1,151,385	1,163,047	City of Pleasanton Customer Growth - Commercial
Schools/Institutional												
School (submetered)	50,410	68,617	67,479	70,420	71,179	71,938	72,698	73,457	74,217	74,976	75,735	City of Pleasanton Customer Growth - Institutional
School (non-submetered)	86,889	87,691	88,494	89,296	90,259	91,222	92,185	93,148	94,111	95,074	96,037	City of Pleasanton Customer Growth - Institutional
Institutional All Others	0	0	0	0	0	0	0	0	0	0	0	City of Pleasanton Customer Growth - Institutional
Industrial/Demand												
Industrial	209,626	203,998	106,940	109,507	110,688	111,868	113,049	114,230	115,411	116,592	117,773	City of Pleasanton Customer Growth - Commercial
Castlewood	87,947	89,875	91,673	93,506	95,376	97,284	99,229	101,214	103,238	105,303	107,409	Miscellaneous Revenues
Fairgrounds	108,150	110,313	112,519	114,770	117,065	119,406	121,794	124,230	126,715	129,249	131,834	Miscellaneous Revenues
	25,493	33,292	132,521	132,126	133,551	134,976	136,401	137,826	139,251	140,675	142,100	
Total Regional Rate Revenues - City of Pleasanton	\$9,515,592	\$10,118,997	\$10,242,342	\$10,549,694	\$10,665,381	\$10,781,152	\$10,897,008	\$11,012,950	\$11,128,981	\$11,245,101	\$11,361,314	
Miscellaneous Revenues												
<i>Enterprise Operations</i>												
DERWA/LAVVMA Lab Fees	\$80,181	\$74,000	\$82,931	\$84,590	\$86,281	\$88,007	\$89,767	\$91,563	\$93,394	\$95,262	\$97,167	Miscellaneous Revenues
DERWA Energy Offset	364,225	389,000	418,113	409,590	417,782	426,137	434,660	443,353	452,220	461,265	470,490	Miscellaneous Revenues
Brine Zone 7/Facility Lease	93,301	16,000	96,501	99,811	101,807	103,843	105,920	108,039	110,199	112,403	114,651	Miscellaneous Revenues
DERWA Internal Filter/Backwash	31,207	18,000	32,278	33,385	34,053	34,734	35,428	36,137	36,860	37,597	38,349	Miscellaneous Revenues
IW All others(Pretreatment, Sampling, etc)	209,627	166,955	216,815	216,815	221,151	225,574	230,086	234,688	239,381	244,169	249,052	Miscellaneous Revenues
Interest	76,869	64,874	148,982	173,843	184,202	214,892	245,230	275,997	307,227	338,552	369,816	Calculated on Reserves
Total Miscellaneous Revenues	\$855,410	\$728,829	\$995,620	\$1,018,034	\$1,045,277	\$1,093,188	\$1,141,092	\$1,189,776	\$1,239,281	\$1,289,248	\$1,339,526	
TOTAL SOURCES OF FUNDS	\$20,572,746	\$21,421,441	\$22,076,792	\$23,016,369	\$23,437,416	\$23,811,959	\$24,237,614	\$24,553,760	\$24,863,695	\$25,170,225	\$25,518,698	

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 EXHIBIT 3
 SOURCES AND APPLICATION OF FUNDS
 PROJECTED FYE16 - FYE25
 REGIONAL SEWER OPERATIONS - 300

Account Name	Projected											Notes
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
APPLICATIONS OF FUNDS												
Sewer Operations												
			Add new staff	Add new staff								
<i>Personnel Services</i>			\$359,540.61	\$372,124.53								
Salaries	\$4,734,453	\$5,110,862	\$5,154,113	\$5,351,742	\$5,485,536	\$5,622,674	\$5,763,241	\$5,907,322	\$6,055,005	\$6,206,380	\$6,361,540	Labor
Overtime	149,777	146,861	164,140	178,948	183,422	188,007	192,707	197,525	202,463	207,525	212,713	Labor
Shift Pay	75,712	77,983	80,518	80,518	82,531	84,594	86,709	88,877	91,099	93,376	95,710	Labor
Medical	514,274	608,973	527,804	567,361	612,750	661,770	694,859	729,602	766,082	804,386	844,605	Benefits - Medical
Retirement	1,498,768	1,607,048	1,401,500	1,484,605	1,662,757	2,020,250	2,377,834	2,615,618	2,877,180	3,164,898	3,481,387	Benefits - PERS/Retirement
Other Benefits	274,279	275,091	249,389	266,496	278,156	290,325	303,027	316,284	330,121	344,564	359,639	Benefits - Other
Staff Credits	(773,578)	(684,984)	(708,958)	(733,772)	(752,116)	(770,919)	(790,192)	(809,946)	(830,195)	(850,950)	(872,224)	Labor
Training Costs/Group Training Services	36,313	55,930	58,800	61,050	62,576	64,141	65,744	67,388	69,072	70,799	72,569	Labor
Temporary Help/Interns	59,220	160,856	158,090	158,490	162,452	166,514	170,676	174,943	179,317	183,800	188,395	Labor
Uniforms and Safety Equipment	9,200	15,649	17,389	17,789	18,322	18,872	19,438	20,021	20,622	21,241	21,878	Materials & Supplies
Memberships & Certifications	9,933	15,670	18,805	18,805	19,369	19,950	20,549	21,165	21,800	22,454	23,128	Miscellaneous
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Total Personnel Services	\$6,588,351	\$7,389,939	\$7,121,590	\$7,452,033	\$7,815,755	\$8,366,178	\$8,904,593	\$9,328,798	\$9,782,566	\$10,268,473	\$10,789,340	
<i>Material & Supplies</i>												
Chemicals	\$259,724	\$396,556	\$340,946	\$351,446	\$361,989	\$372,849	\$384,035	\$395,556	\$407,422	\$419,645	\$432,234	Materials & Supplies
Equip/Fluids	61,401	56,854	87,654	68,417	70,469	72,583	74,761	77,004	79,314	81,693	84,144	Materials & Supplies
Fluid	40,604	45,000	48,410	48,410	49,862	51,358	52,899	54,486	56,120	57,804	59,538	Materials & Supplies
Fuel	34,773	85,171	54,820	54,870	56,516	58,212	59,958	61,757	63,609	65,518	67,483	Materials & Supplies
Gas & Electric	1,075,096	894,697	1,198,234	1,253,314	1,315,980	1,381,779	1,450,888	1,523,411	1,599,582	1,679,561	1,763,539	Utilities
General Supplies	639,024	535,313	584,703	598,941	616,909	635,417	654,479	674,113	694,337	715,167	736,622	Materials & Supplies
Tools	55,890	21,698	26,448	25,948	26,726	27,528	28,354	29,205	30,081	30,983	31,913	Materials & Supplies
Office Supplies	17,401	20,264	19,748	19,748	20,340	20,951	21,579	22,227	22,893	23,580	24,288	Materials & Supplies
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Total Material & Supplies	\$2,183,903	\$2,055,553	\$2,360,963	\$2,421,094	\$2,518,793	\$2,620,676	\$2,726,932	\$2,837,758	\$2,953,359	\$3,073,951	\$3,199,761	
<i>Contract Services</i>												
Ins/Legal	\$12,943	\$20,000	\$20,000	\$20,000	\$20,600	\$21,218	\$21,855	\$22,510	\$23,185	\$23,881	\$24,597	Miscellaneous
Advertising	1,758	1,800	2,800	72,800	74,984	77,234	79,551	81,937	84,395	86,927	89,535	Miscellaneous
Professional Services	26,995	50,080	225,950	132,750	136,733	140,834	145,060	149,411	153,894	158,510	163,266	Miscellaneous
Equip/Lease Rental	8,711	15,771	36,218	36,218	37,305	38,424	39,576	40,764	41,987	43,246	44,544	Miscellaneous
Maintenance Contracts	97,925	147,392	229,493	232,885	239,871	247,067	254,479	262,114	269,977	278,076	286,419	Miscellaneous
Monitoring & Testing Services	34,847	93,360	82,500	83,500	86,005	88,585	91,243	93,980	96,799	99,703	102,694	Miscellaneous
Other Services	274,443	295,394	373,491	374,226	385,453	397,016	408,927	421,195	433,830	446,845	460,251	Miscellaneous
Printing/Phone	1,341	5,400	14,081	14,381	14,812	15,256	15,714	16,185	16,671	17,171	17,686	Miscellaneous
Telephone Services	14,957	15,402	13,783	13,803	14,217	14,643	15,083	15,535	16,001	16,481	16,976	Miscellaneous
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Total Contract Services	\$473,919	\$644,600	\$998,315	\$980,562	\$1,009,979	\$1,040,278	\$1,071,487	\$1,103,631	\$1,136,740	\$1,170,842	\$1,205,968	
<i>Other Expenses</i>												
Meetings + 5th Suppl Agreement	\$4,924	\$6,015	\$6,770	\$6,770	\$6,973	\$7,182	\$7,398	\$7,620	\$7,848	\$8,084	\$8,326	Miscellaneous
Permits, Licenses & District Membership	155,820	171,945	180,567	180,567	185,984	191,564	197,310	203,230	209,327	215,606	222,075	Miscellaneous
Subscriptions & Publications	1,083	950	1,350	1,350	1,391	1,432	1,475	1,519	1,565	1,612	1,660	Miscellaneous
Overhead Charges	2,079,973	2,916,136	2,945,935	3,209,228	3,289,459	3,371,695	3,455,988	3,542,387	3,630,947	3,721,721	3,814,764	Labor
Contribution to JPA's - O&M	1,830,064	2,156,609	2,156,609	2,156,609	2,496,544	2,621,372	2,752,440	2,890,062	3,034,565	3,186,294	3,345,608	JPA Line
Contribution to JPA's - Debt	1,463,614	1,464,025	1,464,025	1,464,025	1,464,323	1,464,414	1,463,294	1,463,591	1,470,830	1,464,053	1,464,007	JPA Line
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Total Other Expenses	\$5,535,478	\$6,715,680	\$6,755,256	\$7,018,549	\$7,444,674	\$7,657,659	\$7,877,905	\$8,108,409	\$8,355,082	\$8,597,369	\$8,856,440	
Total Sewer Operations Expenses	\$14,781,651	\$16,805,772	\$17,236,125	\$17,872,238	\$18,789,201	\$19,684,792	\$20,580,917	\$21,378,597	\$22,227,747	\$23,110,635	\$24,051,509	

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 EXHIBIT 3
 SOURCES AND APPLICATION OF FUNDS
 PROJECTED FYE16 - FYE25
 REGIONAL SEWER OPERATIONS - 300

Account Name	Projected											Notes
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
Debt Service												
Sewer Operations Debt	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfer to Reserves												
Enterprise Fund (increase Buy-In revenue)	\$0	\$2,041,208	\$2,251,749	\$420,000	\$630,000	\$840,000	\$1,050,000	\$1,260,000	\$1,470,000	\$1,680,000	\$1,890,000	\$1,890,000
Expansion Fund	0	0	88,919	88,919	88,919	88,919	88,919	88,919	88,919	88,919	88,919	88,919
Replacement Fund	2,574,461	2,574,461	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Total Transfer to Reserves	\$2,574,461	\$4,615,669	\$4,840,668	\$3,008,919	\$3,218,919	\$3,428,919	\$3,638,919	\$3,848,919	\$4,058,919	\$4,268,919	\$4,478,919	\$4,478,919
TOTAL REVENUE REQUIREMENTS	\$17,356,112	\$21,421,441	\$22,076,792	\$20,881,157	\$22,008,120	\$23,113,711	\$24,219,836	\$25,227,516	\$26,286,666	\$27,379,554	\$28,530,428	
Balance/(Deficiency) of Funds	\$3,216,634	\$0	\$0	\$2,135,213	\$1,429,296	\$698,248	\$17,778	(\$673,755)	(\$1,422,971)	(\$2,209,329)	(\$3,011,730)	
Cumulative Balance as a % of Rate Revenues	-16.3%	0.0%	0.0%	-9.7%	-6.4%	-3.1%	-0.1%	2.9%	6.0%	9.3%	12.5%	
Annual Balance as a % of Rate Revenues	-16.3%	19.5%	0.0%	-9.7%	3.7%	3.5%	3.1%	3.0%	3.1%	3.0%	2.9%	
Less: Use of Reserves												
Enterprise Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Use of Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Net Balance/(Deficiency) of Funds	\$3,216,634	\$0	\$0	\$2,135,213	\$1,429,296	\$698,248	\$17,778	(\$673,755)	(\$1,422,971)	(\$2,209,329)	(\$3,011,730)	
Cumulative Net Balance as a % of Rate Revenues	-16.3%	0.0%	0.0%	-9.7%	-6.4%	-3.1%	-0.1%	2.9%	6.0%	9.3%	12.5%	
Annual Net Balance as a % of Rate Revenues	-16.3%	19.5%	0.0%	-9.7%	3.7%	3.5%	3.1%	3.0%	3.1%	3.0%	2.9%	
Proposed Rate Adjustment	0.0%	0.0%	0.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Additional Revenue from Adjustment	\$0	\$0	\$0	\$439,967	\$904,642.40	\$1,390,571	\$1,903,896	\$2,431,742	\$2,980,513	\$3,550,759	\$4,150,582	
Total Balance/(Deficiency) of Funds	\$3,216,634	\$0	\$0	\$2,575,179	\$2,333,938	\$2,088,818	\$1,921,675	\$1,757,987	\$1,557,542	\$1,341,430	\$1,138,852	
Additional Rate Increase Needed	-16.3%	0.0%	0.0%	-11.5%	-10.0%	-8.7%	-7.7%	-6.8%	-5.9%	-4.9%	-4.0%	
Average Residential Bi-Monthly Impact	\$52.09											
After Rate Adjustment Required		\$52.09	\$52.09	\$53.13	\$54.19	\$55.28	\$56.38	\$57.51	\$58.66	\$59.84	\$61.03	
Bi-Monthly \$ Change		\$0.00	\$0.00	\$1.04	\$1.06	\$1.08	\$1.11	\$1.13	\$1.15	\$1.17	\$1.20	
After Proposed Rate Adjustment		\$52.09	\$52.09	\$53.13	\$54.19	\$55.28	\$56.38	\$57.51	\$58.66	\$59.84	\$61.03	
Bi-Monthly \$ Change		\$0.00	\$0.00	\$1.04	\$1.06	\$1.08	\$1.11	\$1.13	\$1.15	\$1.17	\$1.20	
Debt Service Coverage Ratio												
Before Rate Adjustment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
After RR Rate Adjustment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
After Proposed Rate Adjustment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sewer Enterprise Fund - 300												
Beginning Cash Reserve Balance	\$7,600,474	\$10,817,108	\$12,858,316	\$15,110,064	\$18,105,244	\$21,069,182	\$23,998,000	\$26,969,675	\$29,987,662	\$33,015,204	\$36,036,634	
Plus: To Operating Reserves	0	2,041,208	2,251,749	420,000	630,000	840,000	1,050,000	1,260,000	1,470,000	1,680,000	1,890,000	
Less: Uses of Funds	0	0	0	0	0	0	0	0	0	0	0	
Total Balance/(Deficiency) of Funds	3,216,634	0	0	2,575,179	2,333,938	2,088,818	1,921,675	1,757,987	1,557,542	1,341,430	1,138,852	
Ending Balance	\$10,817,108	\$12,858,316	\$15,110,064	\$18,105,244	\$21,069,182	\$23,998,000	\$26,969,675	\$29,987,662	\$33,015,204	\$36,036,634	\$39,065,486	
Minimum reserve = 60 days of annual O&M	\$2,429,860	\$2,762,593	\$2,833,336	\$2,937,902	\$3,088,636	\$3,235,856	\$3,383,164	\$3,514,290	\$3,653,876	\$3,799,009	\$3,953,673	

Notes:

- [1] Interest Income Calculated on Enterprise Funds Prior proposed rate adjustments.
- [2] Transfer for Replacement Fund Capital Projects, per ENGR's Replacement model

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 SEWER EXHIBIT 5
 DEVELOPMENT OF VOLUME
 ALLOCATION FACTOR - HML SCENARIO

	Volume Allocation										
	Projected FY18 Annual Water Flow (CCF)	Winter Water Factor	Annual Sewer Flow (CCF)	2.5% Inflow and Infiltration	Total Annual Flow at Plant (CCF)	Avg. Daily Flow At Plant (MGD)	Combined % of Total	DSRSD % of Total	Pleasanton % of Total	Revised Ave Daily Flow (MGD)	Allocation of Capacity based on build out
DSRSD											
<i>Residential</i>											
Single Family Home	1,899,388	67.00%	1,272,590	31,815	1,304,405	2.67	21.6%	56.9%	2.67	21.5942%	
Condominium	262,740	91.00%	239,093	5,977	245,070	0.50	4.1%	10.7%	0.50	4.0571%	
Multi-Family	215,212	77.00%	165,713	4,143	169,856	0.35	2.8%	7.4%	0.35	2.8119%	
<i>Commercial</i>											
High	23,992	95.63%	22,943	574	23,517	0.05	0.4%	1.0%	0.05	0.3893%	
Medium	175,188	83.72%	146,666	3,667	150,333	0.31	2.5%	6.6%	0.31	2.4887%	
Low	212,907	76.06%	161,940	4,049	165,989	0.34	2.7%	7.2%	0.34	2.7479%	
<i>Institutional</i>											
School (submetered)	33,626	83.00%	27,910	698	28,607	0.06	0.5%	1.2%	0.06	0.4736%	
School (non-submetered)	0	63.70%	0	0	0	0.00	0.0%	0.0%	0.00	0.0000%	
<i>Industrial</i>											
Bureau of Prisons	NA	NA	97,159	2,429	99,588	0.20	1.6%	4.3%	0.20	1.6487%	
Santa Rita Jail	NA	NA	104,366	2,609	106,975	0.22	1.8%	4.7%	0.22	1.7710%	
Demand	NA	NA	0	0	0	0.00	0.0%	0.0%	0.00	0.0000%	
Subtotal - DSRSD	2,823,053		2,238,381	55,960	2,294,341	4.70	38.0%	100.0%	4.70	37.9825%	
Pleasanton											
<i>Residential</i>											
Single Family Home	4,008,153	63.00%	2,525,136	63,128	2,588,265	5.30	42.8%	69.1%	5.30	42.8483%	
Condominium	238,092	91.00%	216,664	5,417	222,080	0.46	3.7%	5.9%	0.46	3.6765%	
Multi-Family	494,433	77.00%	380,714	9,518	390,231	0.80	6.5%	10.4%	0.80	6.4602%	
<i>Commercial</i>											
High	3,232	72.07%	2,329	58	2,387	0.00	0.0%	0.1%	0.00	0.0395%	
Medium	167,155	78.36%	130,977	3,274	134,252	0.28	2.2%	3.6%	0.28	2.2225%	
Low	463,100	70.02%	324,271	8,107	332,378	0.68	5.5%	8.9%	0.68	5.5025%	
<i>Institutional</i>											
School (submetered)	29,467	83.00%	24,457	611	25,069	0.05	0.4%	0.2%	0.05	0.4150%	
School (non-submetered)	50,568	63.70%	32,212	805	33,017	0.07	0.5%	0.2%	0.07	0.5466%	
Septic Hauler	295	100.00%	295	7	303	0.00	0.0%	0.0%	0.00	0.0050%	
<i>Industrial</i>											
Clorox	NA	NA	5,969	149	6,119	0.01	0.1%	0.2%	0.01	0.1013%	
Roche Molecular Systems	NA	NA	6,206	155	6,362	0.01	0.1%	0.2%	0.01	0.1053%	
Thermo Fisher Scientific	NA	NA	5,582	140	5,721	0.01	0.1%	0.2%	0.01	0.0947%	
Subtotal - Pleasanton	5,454,495		3,654,813	91,370	3,746,184	7.68	62.0%	98.8%	7.68	62.0175%	
Combined Total	8,277,547		5,893,194	147,330	6,040,524	12.38	100.0%	100.0%	12.38	100.0%	

**DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
SEWER EXHIBIT 6
DEVELOPMENT OF ACTUAL CUSTOMER
ALLOCATION FACTORS - HML SCENARIO**

	Actual Customer			
	Number of Accounts	Combined % of Total	DSRSD % of Total	Pleasanton % of Total
DSRSD				
Single Family Home	19,169	33.29%	65.5%	
Condominium	5,155	8.95%	17.6%	
Multi-Family	4,382	7.61%	15.0%	
<i>Commercial</i>				
High	9	0.02%	0.0%	
Medium	133	0.23%	0.5%	
Low	395	0.69%	1.3%	
<i>Institutional</i>				
School (submetered)	37	0.06%	0.1%	
School (non-submetered)	0	0.00%	0.0%	
<i>Industrial</i>				
Bureau of Prisons	1	0.00%	0.0%	
Santa Rita Jail	1	0.00%	0.0%	
Demand	0	0.00%	0.0%	
	-----	-----	-----	
Subtotal - DSRSD	29,282	50.85%	100.0%	
Pleasanton				
Single Family Home	20,559	35.70%		72.6%
Condominium	1,810	3.14%		6.4%
Multi-Family	5,037	8.75%		17.8%
<i>Commercial</i>				
High	2	0.00%		0.0%
Medium	158	0.27%		0.6%
Low	721	1.25%		2.5%
<i>Institutional</i>				
School (submetered)	12	0.02%		0.0%
School (non-submetered)	4	0.01%		0.0%
Septic Hauler	1	0.00%		0.0%
<i>Industrial</i>				
Clorox	1	0.00%		0.0%
Roche Molecular Systems	1	0.00%		0.0%
Thermo Fisher Scientific	1	0.00%		0.0%
	-----	-----		-----
Subtotal - Pleasanton	28,307	49.15%		100.0%
Combined Total	57,589	100.0%	100.0%	100.0%
Allocation Factor		(AC - 1)	(AC - 2)	(AC - 3)

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 SEWER EXHIBIT 7
 DEVELOPMENT OF CUSTOMER SERVICE AND
 ACCOUNTING ALLOCATION FACTORS - HML SCENARIO

	Customer Service & Accounting				DSRSD % of Total	Pleasanton % of Total
	Number of Bills	Weighting Factor	Weighted Customer	Combined % of Total		
DSRSD						
Single Family Home	19,169	1.0	19,169	32.4%	64.2%	
Condominium	5,155	1.0	5,155	8.7%	17.3%	
Multi-Family	4,382	1.0	4,382	7.4%	14.7%	
<i>Commercial</i>						
High	9	2.0	18	0.0%	0.1%	
Medium	133	2.0	266	0.5%	0.9%	
Low	395	2.0	790	1.3%	2.6%	
<i>Institutional</i>						
School (submetered)	37	2.0	74	0.1%	0.2%	
School (non-submetered)	0	2.0	0	0.0%	0.0%	
<i>Industrial</i>						
Bureau of Prisons	1	5.0	5	0.0%	0.0%	
Santa Rita Jail	1	5.0	5	0.0%	0.0%	
Demand	0	5.0	0	0.0%	0.0%	
	-----		-----	-----	-----	
Subtotal - DSRSD	29,282		29,864	50.5%	100.0%	
Pleasanton						
Single Family Home	20,559	1.0	20,559	34.8%		70.4%
Condominium	1,810	1.0	1,810	3.1%		6.2%
Multi-Family	5,037	1.0	5,037	8.5%		17.2%
<i>Commercial</i>						
High	2	2.0	4	0.0%		0.0%
Medium	158	2.0	316	0.5%		1.1%
Low	721	2.0	1,442	2.4%		4.9%
<i>Institutional</i>						
School (submetered)	12	2.0	24	0.0%		0.1%
School (non-submetered)	4	2.0	8	0.0%		0.0%
Septic Hauler	1	5.0	5	0.0%		0.0%
<i>Industrial</i>						
Clorox	1	5.0	5	0.0%		0.0%
Roche Molecular Systems	1	5.0	5	0.0%		0.0%
Thermo Fisher Scientific	1	5.0	5	0.0%		0.0%
	-----		-----	-----		-----
Subtotal - Pleasanton	28,307		29,220	49.5%		100.0%
Combined Total	57,589		59,084	100.0%	100.0%	100.0%

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 SEWER EXHIBIT 8.1
 DEVELOPMENT OF STRENGTH
 ALLOCATION FACTORS - BOD - HML SCENARIO

	Annual Flow (CCF)	Avg. Factor [1] (mg/l)	Calculated Pounds	BOD		
				Combined % of Total	DSRSD % of Total	Pleasanton % of Total
DSRSD						
Single Family Home	1,304,405	285	2,320,519	18.9%	44.4%	
Condominium	245,070	285	435,977	3.6%	8.3%	
Multi-Family	169,856	285	302,172	2.5%	5.8%	
<i>Commercial</i>						
High	23,517	800	117,435	1.0%	2.2%	
Medium	150,333	600	563,032	4.6%	10.8%	
Low	165,989	300	310,833	2.5%	6.0%	
<i>Institutional</i>						
School (submetered)	28,607	285	50,892	0.4%	1.0%	
School (non-submetered)	0	285	0	0.0%	0.0%	
<i>Industrial</i>						
Bureau of Prisons	99,588	1,167	725,349	5.9%	13.9%	
Santa Rita Jail	106,975	595	397,212	3.2%	7.6%	
Demand	0	0	0	0.0%	0.0%	
Subtotal - DSRSD	2,294,341		5,223,423	42.6%	100.0%	
Pleasanton						
Single Family Home	2,588,265	285	4,604,489	37.6%		65.5%
Condominium	222,080	285	395,078	3.2%		5.6%
Multi-Family	390,231	285	694,217	5.7%		9.9%
<i>Commercial</i>						
High	2,387	800	11,922	0.1%		0.2%
Medium	134,252	600	502,805	4.1%		7.2%
Low	332,378	300	622,417	5.1%		8.9%
<i>Institutional</i>						
School (submetered)	25,069	285	44,597	0.4%		0.6%
School (non-submetered)	33,017	285	58,737	0.5%		0.8%
Septic Hauler	303	5,684	10,745	0.1%		0.2%
<i>Industrial</i>						
Clorox	6,119	269	10,269	0.1%		
Roche Molecular Systems	6,362	555	22,021	0.2%		0.3%
Thermo Fisher Scientific	5,721	1,371	48,955	0.4%		0.7%
Subtotal - Pleasanton	3,746,184		7,026,251	57.4%		99.9%
Combined Total	6,040,524		12,249,674	100.0%	100.0%	99.9%
Allocation Factor				(BOD - 1)	(BOD - 2)	(BOD - 3)

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 SEWER EXHIBIT 8.2
 DEVELOPMENT OF STRENGTH
 ALLOCATION FACTORS - SS - HML SCENARIO

	Annual Flow (CCF)	Avg. Factor [1] (mg/l)	Calculated Pounds	SS		
				Combined % of Total	DSRSD % of Total	Pleasanton % of Total
DSRSD						
Single Family Home	1,304,405	255	2,076,254	17.5%	38.2%	
Condominium	245,070	255	390,085	3.3%	7.2%	
Multi-Family	169,856	255	270,364	2.3%	5.0%	
<i>Commercial</i>						
High	23,517	800	117,435	1.0%	2.2%	
Medium	150,333	600	563,032	4.8%	10.4%	
Low	165,989	300	310,833	2.6%	5.7%	
School (submetered)	28,607	255	45,535	0.4%	0.8%	
School (non-submetered)	0	255	0	0.0%	0.0%	
<i>Industrial</i>						
Bureau of Prisons	99,588	1,776	1,104,222	9.3%	20.3%	
Santa Rita Jail	106,975	833	556,478	4.7%	10.2%	
Demand	0	0	0	0.0%	0.0%	
Subtotal - DSRSD	2,294,341		5,434,239	45.9%	100.0%	
Pleasanton						
Single Family Home	2,588,265	255	4,119,806	34.8%		64.3%
Condominium	222,080	255	353,491	3.0%		5.5%
Multi-Family	390,231	255	621,141	5.2%		9.7%
<i>Commercial</i>						
High	2,387	800	11,922	0.1%		0.2%
Medium	134,252	600	502,805	4.2%		7.8%
Low	332,378	300	622,417	5.3%		9.7%
<i>Institutional</i>						
School (submetered)	25,069	255	39,903	0.3%		0.6%
School (non-submetered)	33,017	255	52,554	0.4%		0.8%
Septic Hauler	303	5,436	10,276	0.1%		0.2%
<i>Industrial</i>						
Clorox	6,119	463	17,693	0.1%		0.3%
Roche Molecular Systems	6,362	879	34,896	0.3%		0.5%
Thermo Fisher Scientific	5,721	693	24,758	0.2%		0.4%
Subtotal - Pleasanton	3,746,184		6,411,662	54.1%		100.0%
Combined Total	6,040,524		11,845,901	100.0%	100.0%	100.0%
Allocation Factor			8,256,532	(SS - 1)	(SS - 2)	(SS - 3)

**DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
SEWER EXHIBIT 9
DEVELOPMENT OF REVENUE RELATED
ALLOCATION FACTOR - DSRSD - HML SCENARIO**

	Projected Revenue FY 2018	Combined % of Total	DSRSD % of Total	Pleasanton % of Total
DSRSD				
<i>Residential</i>				
Single Family Home	\$5,967,323	28.3%	55.1%	
Condominium	1,071,686	5.1%	9.9%	
Multi-Family	762,152	3.6%	7.0%	
<i>Commercial</i>				
High	136,602	0.6%	1.3%	
Medium	603,126	2.9%	5.6%	
Low	618,400	2.9%	5.7%	
<i>Institutional</i>				
School (submetered)	77,004	0.4%	0.7%	
School (non-submetered)	0	0.0%	0.0%	
<i>Industrial</i>				
Bureau of Prisons	854,488	4.1%	7.9%	
Santa Rita Jail	748,049	3.5%	6.9%	
	-----	-----	-----	
Subtotal - DSRSD	10,838,830	51.4%	100.0%	
Pleasanton				
<i>Residential</i>				
Single Family Home	\$6,453,901	30.6%		63.0%
Condominium	\$376,389	1.8%		3.7%
Multi-Family	\$876,146	4.2%		8.6%
<i>Commercial</i>				
High	13,372	0.1%		0.1%
Medium	826,961	3.9%		8.1%
Low	1,300,140	6.2%		12.7%
<i>Institutional</i>				
School (submetered)	67,479	0.3%		0.7%
School (non-submetered)	88,494	0.4%		0.9%
<i>Septic Hauler</i>	13,688	0.1%		0.1%
<i>Industrial</i>				
Clorox	44,297	0.2%		0.4%
Roche Molecular Systems	116,604	0.6%		1.1%
Thermo Fisher Scientific	64,873	0.3%		0.6%
	-----	-----		-----
Subtotal - Pleasanton	10,242,342	48.6%		100.0%
Combined Total	21,081,172	100.0%	100.0%	100.0%
Allocation Factor		(RR - 1)	(RR - 2)	(RR - 3)

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 SEWER EXHIBIT 10
 FUNCTIONALIZATION AND CLASSIFICATION
 OF EXPENSES - HML SCENARIO

Account Name	FY 2018	Operating Volume (VOL - 1)	Strength Related		Weighted for:		Revenue (RR - 1)	Direct (DA)	Basis of Classification	
			Bio-oxygen Demand (VOL - 2)	Suspended Solids (SS - 1)	Actual Customer (AC - 1)	Customer Acct/Svcs (WCA - 1)				
APPLICATIONS OF FUNDS										
Sewer Operations										
<i>Personnel Services</i>										
Salaries	\$5,154,113	\$2,377,502	\$0	\$986,888	\$1,121,463	\$0	\$0	\$0	\$668,260	53.0% VOL 22.0% BOD 25.0% SS
Overtime	164,140	85,351	0	35,429	40,260	0	0	0	3,100	53.0% VOL 22.0% BOD 25.0% SS
Shift Pay	80,518	42,674	0	17,714	20,129	0	0	0	0	53.0% VOL 22.0% BOD 25.0% SS
Medical	527,804	247,192	0	102,608	116,600	0	0	0	61,404	53.0% VOL 22.0% BOD 25.0% SS
Retirement	1,401,500	629,482	0	261,294	296,925	0	0	0	213,799	53.0% VOL 22.0% BOD 25.0% SS
Other Benefits	249,389	109,137	0	45,302	51,480	0	0	0	43,471	53.0% VOL 22.0% BOD 25.0% SS
Staff Credits	(708,958)	(375,748)	0	(155,971)	(177,239)	0	0	0	0	53.0% VOL 22.0% BOD 25.0% SS
Travel and Training	58,800	29,680	0	12,320	14,000	0	0	0	2,800	53.0% VOL 22.0% BOD 25.0% SS
Temporary Help	158,090	83,788	0	34,780	39,523	0	0	0	0	53.0% VOL 22.0% BOD 25.0% SS
Uniforms and Safety Equipment	17,389	8,448	0	3,507	3,985	0	0	0	1,450	53.0% VOL 22.0% BOD 25.0% SS
Memberships & Certifications	18,805	8,626	0	3,581	4,069	0	0	0	2,530	53.0% VOL 22.0% BOD 25.0% SS
Total Personnel Services	\$7,121,590	\$3,246,131	\$0	\$1,347,451	\$1,531,194	\$0	\$0	\$0	\$996,814	
		45.6%		18.9%	21.5%					
<i>Material & Supplies</i>										
Chemicals	\$340,946	\$266,997	\$0	\$25,890	\$22,079	\$0	\$0	\$0	\$25,980	84.8% VOL 8.2% BOD 7.0% SS
Equip/Fluids	87,654	31,794	0	7,185	40,945	0	0	0	7,730	39.8% VOL 9.0% BOD 51.2% SS
Fluid	48,410	25,657	0	10,650	12,103	0	0	0	0	53.0% VOL 22.0% BOD 25.0% SS
Fuel	54,820	29,055	0	12,060	13,705	0	0	0	0	53.0% VOL 22.0% BOD 25.0% SS
Gas & Electric	1,198,234	539,205	0	479,294	179,735	0	0	0	0	45.0% VOL 40.0% BOD 15.0% SS
General Supplies	584,703	209,560	0	137,868	204,045	0	0	0	33,230	38.0% VOL 25.0% BOD 37.0% SS
Tools	26,448	14,017	0	5,819	6,612	0	0	0	0	53.0% VOL 22.0% BOD 25.0% SS
Office Supplies	19,748	10,466	0	4,345	4,937	0	0	0	0	53.0% VOL 22.0% BOD 25.0% SS
Total Materials & Supplies	\$2,360,963	\$1,126,751	\$0	\$683,111	\$484,161	\$0	\$0	\$0	\$66,940	
		47.7%		28.9%	20.5%					
<i>Contract Services</i>										
Ins/Legal	\$20,000	\$10,600	\$0	\$4,400	\$5,000	\$0	\$0	\$0	\$0	53.0% VOL 22.0% BOD 25.0% SS
Advertising	2,800	1,484	0	616	700	0	0	0	0	53.0% VOL 22.0% BOD 25.0% SS
Professional Services	225,950	0	0	134,214	91,736	0	0	0	0	0.0% VOL 59.4% BOD 40.6% SS
Equip/Lease Rental	36,218	18,701	0	7,763	8,821	0	0	0	933	53.0% VOL 22.0% BOD 25.0% SS
Maintenance Contracts	229,493	50,278	0	39,804	119,411	0	0	0	20,000	24.0% VOL 19.0% BOD 57.0% SS
Monitoring & Testing Services	82,500	939	0	4,226	6,574	0	0	0	70,760	8.0% VOL 36.0% BOD 56.0% SS
Other Services	373,491	236,634	0	51,764	81,343	0	0	0	3,750	64.0% VOL 14.0% BOD 22.0% SS
Printing/Phone	14,081	7,357	0	3,054	3,470	0	0	0	200	53.0% VOL 22.0% BOD 25.0% SS
Telephone Services	13,783	6,536	0	2,713	3,083	0	0	0	1,450	53.0% VOL 22.0% BOD 25.0% SS
Total Contract Services	\$998,315	\$332,530	\$0	\$248,554	\$320,139	\$0	\$0	\$0	\$97,093	

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 SEWER EXHIBIT 10
 FUNCTIONALIZATION AND CLASSIFICATION
 OF EXPENSES - HML SCENARIO

Account Name	FY 2018	Strength Related				Weighted for:		Revenue	Direct	Basis of Classification
		Operating Volume	Bio-oxygen Demand	Suspended Solids	Actual Customer	Customer Acct/Svcs				
		(VOL - 1)	(VOL - 2)	(BOD - 1)	(SS - 1)	(AC - 1)	(WCA - 1)	(RR - 1)	(DA)	
<i>Other Expenses</i>		33.3%		24.9%	32.1%					
Meetings + 5th Suppl Agreement	\$6,770	\$3,111	\$0	\$1,291	\$1,468	\$0	\$0	\$0	\$900	53.0% VOL 22.0% BOD 25.0% SS
Permits, Licenses & District Membership	180,567	94,111	0	39,065	44,392	0	0	0	3,000	53.0% VOL 22.0% BOD 25.0% SS
Subscriptions & Publications	1,350	583	0	242	275	0	0	0	250	53.0% VOL 22.0% BOD 25.0% SS
Overhead Charges	2,945,935	1,176,171	0	569,691	583,783	114,008	502,282	0	0	3.9% AC 17.1% WCA As Above Exp.
Contribution to JPA's - O&M	2,156,609	2,156,609	0	0	0	0	0	0	0	100.0% VOL
Contribution to JPA's - Debt	1,464,025	0	1,464,025	0	0	0	0	0	0	0.0% VOL 100.0% VOLII
Total Other Expenses	\$6,755,256	\$3,430,585	\$1,464,025	\$610,289	\$629,917	\$114,008	\$502,282	\$0	\$4,150	
		40.6%	0.0%	19.5%	20.1%	3.6%	16.0%			
Total Sewer Operations Expenses	\$17,236,125	\$8,135,997	\$1,464,025	\$2,889,404	\$2,965,411	\$114,008	\$502,282	\$0	\$1,164,997	
		47.2%	8.5%	16.8%	17.2%	0.7%	2.9%	0.0%	6.8%	
Debt Service										
Sewer Operations Debt	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	100.0% Factor-2
Total Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Transfer to Reserves										
Enterprise Fund (increase Buy-In revenue)	\$2,251,749	1,047,063	0	734,070	470,615	0	0	0	0	46.5% VOL 32.6% BOD 20.9% SS 0.0% AC
Expansion Fund	88,919	41,347	0	28,988	18,584	0	0	0	0	46.5% VOL 32.6% BOD 20.9% SS 0.0% AC
Replacement Fund	2,500,000	1,162,500	0	815,000	522,500	0	0	0	0	46.5% VOLII 32.6% BOD 20.9% SS 0.0% AC
Total Transfer to Reserves	\$4,840,668	\$2,250,910	\$0	\$1,578,058	\$1,011,700	\$0	\$0	\$0	\$0	
TOTAL REVENUE REQUIREMENTS	\$22,076,792	\$10,386,908	\$1,464,025	\$4,467,462	\$3,977,110	\$114,008	\$502,282	\$0	\$1,164,997	
		47.0%	6.6%	20.2%	18.0%	0.5%	2.3%	0.0%	5.3%	
Less: Miscellaneous Revenue										
<i>Enterprise Operations</i>										
Sewer Main TV Inspections	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Total Revenue Requirements
Pretreatment Charges	0	0	0	0	0	0	0	0	0	As Total Revenue Requirements
Inspection Fees	0	0	0	0	0	0	0	0	0	As Total Revenue Requirements
Annexation Fee	0	0	0	0	0	0	0	0	0	As Total Revenue Requirements
DERWA/LAVWMA Lab Fees	82,931	0	0	0	0	0	0	0	82,931	As Direct Assignment
DERWA Energy Offset	418,113	196,718	27,727	84,609	75,323	2,159	9,513	0	22,064	As Total Revenue Requirements
Brine Zone 7/Facility Lease	96,501	45,403	6,399	19,528	17,385	498	2,196	0	5,092	As Total Revenue Requirements
DERWA Internal Filter/Backwash	32,278	15,186	2,141	6,532	5,815	167	734	0	1,703	As Total Revenue Requirements
IW All others(Pretreatment, Sampling, etc)	216,815	0	0	0	0	0	0	0	216,815	As Direct Assignment
Interest	148,982	70,095	9,880	30,148	26,839	769	3,390	0	7,862	As Total Revenue Requirements
Total Miscellaneous Revenues	\$995,620	\$327,402	\$46,147	\$140,817	\$125,361	\$3,594	\$15,832	\$0	\$336,467	
Less: Use of Reserves										
Enterprise Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Total Revenue Requirements
Total Use of Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
NET REVENUE REQUIREMENTS	\$21,081,172	\$10,059,506	\$1,417,879	\$4,326,645	\$3,851,750	\$110,414	\$486,450	\$0	\$828,529	

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 SEWER EXHIBIT 12
 ALLOCATION OF TOTAL REVENUE REQUIREMENTS - HML SCENARIO

Customer Classification	Total Revenue Requirement	Volume Related	Volume II Related	Strength Related		Customer Related		Revenue Related	Direct Assignment
				Bio-Oxygen Demand	Suspended Solids	Actual Customer	Weighted Customer		
Residential	\$15,555,445	\$8,193,302	\$1,154,839	\$3,091,409	\$2,546,332	\$107,582	\$461,981	\$0	\$0
Commercial									
High	\$180,430	\$43,139	\$6,080	\$45,690	\$42,061	\$21	\$181	\$0	\$43,257
Medium	1,625,519	473,929	66,800	376,459	346,562	558	4,794	0	356,417
Low	1,600,522	829,948	116,981	329,629	303,451	2,139	18,374	0	0
Subtotal Commercial	\$3,406,471	\$1,347,017	\$189,861	\$751,777	\$692,074	\$2,719	\$23,349	\$0	\$399,674
Institutional									
School (submetered)	\$164,397	\$89,389	\$12,599	\$33,727	\$27,780	\$94	\$807	0	\$0
School (non-submetered)	100,642.55	54,985	7,750	20,746	17,088	8	66	0	0
Subtotal Schools	\$265,039	\$144,374	\$20,349	\$54,473	\$44,869	\$102	\$873	\$0	\$0
Septic Hauler	\$10,681	\$504	\$71	\$3,795	\$3,341	\$2	\$41	\$0	\$2,926
Industrial	\$1,827,144	\$374,309	\$52,758	\$425,190	\$565,134	\$10	\$206	\$0	\$409,537
Fats Oils and Grease	\$16,392	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,392
Combined Total	\$21,081,172	\$10,059,506	\$1,417,879	\$4,326,645	\$3,851,750	\$110,414	\$486,450	\$0	\$828,529

**DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
SEWER EXHIBIT 13
COST OF SERVICE ANALYSIS SUMMARY - HML SCENARIO**

Customer Classification	Revenues at Present Rates	Allocated Revenue Requirement	Balance/ (Deficiency) of Funds	% Change in Revenue
Residential	\$15,507,597	\$15,555,445	(\$47,847)	0.3%
Commercial				
High	\$149,973	\$180,430	(\$30,457)	20.3%
Medium	1,430,087	1,625,519	(195,432)	13.7%
Low	1,918,540	1,600,522	318,018	-16.6%
	-----	-----	-----	-----
Subtotal Commercial	\$3,498,600	\$3,406,471	\$92,129	-2.6%
Institutional				
School (submetered)	\$144,483	\$164,397	(\$19,914)	13.8%
School (non-submetered)	88,494	100,643	(12,149)	13.7%
	-----	-----	-----	-----
Subtotal Institutional	\$232,976	\$265,039	(\$32,063)	13.8%
Septic Hauler (per Gallon)	13,688	10,681	\$3,007	-22.0%
Industrial	\$1,828,310	\$1,827,144	\$1,167	-0.1%
Fats Oils and Grease	\$0	\$16,392	(\$16,392)	
2018 Total	\$21,081,172	\$21,081,172	\$0	0.0%

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 SEWER EXHIBIT 14
 AVERAGE UNIT COSTS SUMMARY - HML SCENARIO

	Revenue Requirements				Total \$/100 CF	Customer Costs \$/Cust./Month	Total Average Cost \$/CCF	Current Average Revenue \$/CCF	FOG Per Inspection	Basic Data		
	Volume Costs \$/100 CF	Bio-Oxygen Demand \$/100 CF	Suspended Solids \$/100 CF	Revenue/ Direct \$/100 CF						Annual Flow (CCF)	Number of Customers	Number of Inspection
Residential	\$1.90	\$0.63	\$0.52	\$0.00	\$3.05	0.85	\$3.16	\$3.15	\$0.00	4,919,908	56,112	0
Commercial												
High	\$1.90	\$1.76	\$1.62	\$1.67	\$6.96	1.53	\$6.97	\$5.79	\$0.00	25,904	11	0
Medium	1.90	1.32	1.22	1.25	5.69	1.53	5.71	5.03	0.00	284,585	291	0
Low	1.90	0.66	0.61	0.00	3.17	1.53	3.21	3.85	0.00	498,367	1,116	0
Subtotal Commercial	\$1.90	\$0.93	\$0.86	\$0.49	\$4.18	1.53	\$4.21	\$4.33	\$0.00	808,856	1,418	0
Institutional												
School (submetered)	\$1.90	\$0.63	\$0.52	\$0.00	\$3.05	1.53	\$3.06	\$2.69	\$0.00	53,676	49	0
School (non-submetered)	1.90	0.63	0.52	0.00	3.05	1.53	3.05	2.68	0.00	33,017	4	0
Subtotal Institutional	\$1.90	\$0.63	\$0.52	\$0.00	\$3.05	1.53	\$3.06	\$2.69	\$0.00	86,693	53	0
Septic Hauler (per Gallon)	\$1.90	\$12.53	\$11.03	\$9.66	\$35.13	3.59	\$35.27	\$45.20	\$0.00	303	1	0
Industrial	\$1.90	\$1.89	\$2.51	\$1.82	\$8.13	3.59	\$8.13	\$8.13	\$0.00	224,765	5	0
Fats Oils and Grease	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$70.66	0	0	232
System Average	\$1.90	\$0.72	\$0.64	\$0.14	\$3.39	\$0.86	\$3.49	\$3.49	\$70.66	6,040,524	57,589	232

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 SEWER EXHIBIT 15.1
 CALCULATION OF REVENUES
 AT PRESENT RATES eff 7/1/15

	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total	
RESIDENTIAL														
<i>Single Family Home</i>														
	<u>\$/Bi-Month/Unit</u>													
Rate/Acct	\$52.09	15,617	0	15,617	0	15,617	0	15,617	0	15,617	0	15,617	0	15,617
Revenue	\$813,490	\$0	\$813,490	\$0	\$813,490	\$0	\$813,490	\$0	\$813,490	\$0	\$813,490	\$0	\$4,880,937	
<i>Townhouse</i>														
	<u>\$/Bi-Month/Unit</u>													
Rate/Acct	\$52.09	259	0	259	0	259	0	259	0	259	0	259	0	259
Revenue	\$13,491	\$0	\$13,491	\$0	\$13,491	\$0	\$13,491	\$0	\$13,491	\$0	\$13,491	\$0	\$80,948	
<i>Condominium</i>														
	<u>\$/Bi-Month/Unit</u>													
Rate/Acct	\$34.65	5,291	0	5,291	0	5,291	0	5,291	0	5,291	0	5,291	0	5,291
Revenue	\$183,333	\$0	\$183,333	\$0	\$183,333	\$0	\$183,333	\$0	\$183,333	\$0	\$183,333	\$0	\$1,099,999	
<i>Duplex</i>														
	<u>\$/Bi-Month/Unit</u>													
Rate/Acct	\$104.18	42	0	42	0	42	0	42	0	42	0	42	0	42
Revenue	\$4,376	\$0	\$4,376	\$0	\$4,376	\$0	\$4,376	\$0	\$4,376	\$0	\$4,376	\$0	\$26,253	
<i>Single Family Home with 2nd Dwelling Unit</i>														
	<u>\$/Bi-Month/Unit</u>													
Rate/Acct	\$81.08	149	0	149	0	149	0	149	0	149	0	149	0	149
Revenue	\$12,081	\$0	\$12,081	\$0	\$12,081	\$0	\$12,081	\$0	\$12,081	\$0	\$12,081	\$0	\$72,486	
<i>Multi-Family</i>														
	<u>\$/Bi-Month/Unit</u>													
Rate/Acct	\$28.99	4,264	0	4,264	0	4,264	0	4,264	0	4,264	0	4,264	0	4,264
Revenue	\$123,613	\$0	\$123,613	\$0	\$123,613	\$0	\$123,613	\$0	\$123,613	\$0	\$123,613	\$0	\$741,680	
TOTAL RESIDENTIAL REVENUE	\$1,150,384	\$0	\$1,150,384	\$0	\$1,150,384	\$0	\$1,150,384	\$0	\$1,150,384	\$0	\$1,150,384	\$0	\$6,902,303	

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 SEWER EXHIBIT 15.1
 CALCULATION OF REVENUES
 AT PRESENT RATES eff 7/1/15

		Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
COMMERCIAL														
<i>Auto Steam Cleaning</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$7.32	39	1,654	63	1,554	6	1,078	115	714	7	1,182	44	1,292	7,748
Revenue		\$285	\$12,107	\$461	\$11,375	\$44	\$7,891	\$842	\$5,226	\$51	\$8,652	\$322	\$9,457	\$56,715
<i>Bakery</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$5.51	148	851	151	807	150	721	152	780	138	709	149	724	5,480
Revenue		\$815	\$4,689	\$832	\$4,447	\$827	\$3,973	\$838	\$4,298	\$760	\$3,907	\$821	\$3,989	\$30,195
<i>Laundry</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$3.14	0	902	0	814	0	770	0	863	0	863	0	798	5,010
Revenue		\$0	\$2,832	\$0	\$2,556	\$0	\$2,418	\$0	\$2,710	\$0	\$2,710	\$0	\$2,506	\$15,731
<i>Market with Garbage Disposal</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$5.77	1,036	3,199	1,347	3,513	1,256	3,156	1,202	3,424	1,059	3,423	1,017	3,153	26,785
Revenue		\$5,978	\$18,458	\$7,772	\$20,270	\$7,247	\$18,210	\$6,936	\$19,756	\$6,110	\$19,751	\$5,868	\$18,193	\$154,549
<i>Mortuary</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$6.15	0	0	0	0	0	0	0	0	0	0	0	0	0
Revenue		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<i>Restaurant (fast food)</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$3.83	439	1,386	416	1,274	412	1,222	439	1,638	575	1,404	576	1,172	10,953
Revenue		\$1,681	\$5,308	\$1,593	\$4,879	\$1,578	\$4,680	\$1,681	\$6,274	\$2,202	\$5,377	\$2,206	\$4,489	\$41,950
<i>Restaurant (full service)</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$4.38	9,122	5,298	9,042	4,861	10,611	4,798	11,132	5,959	9,543	5,827	9,541	5,207	90,941
Revenue		\$39,954	\$23,205	\$39,604	\$21,291	\$46,476	\$21,015	\$48,758	\$26,100	\$41,798	\$25,522	\$41,790	\$22,807	\$398,322
<i>Commercial All Others</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$2.63	13,119	18,515	14,415	16,718	13,718	15,238	13,255	14,080	13,687	13,718	13,163	13,316	172,942
Revenue		\$34,503	\$48,694	\$37,911	\$43,968	\$36,078	\$40,076	\$34,861	\$37,030	\$35,997	\$36,078	\$34,619	\$35,021	\$454,837
TOTAL COMMERCIAL REVENUE		\$83,217	\$115,295	\$88,174	\$108,787	\$92,250	\$98,263	\$93,915	\$101,395	\$86,919	\$101,997	\$85,626	\$96,462	\$1,152,300

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 SEWER EXHIBIT 15.1
 CALCULATION OF REVENUES
 AT PRESENT RATES eff 7/1/15

		Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
INSTITUTIONAL														
<i>School (submetered)</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$2.29	1,637	4,763	1,454	4,662	1,330	5,317	1,193	3,849	1,396	3,767	1,384	3,354	34,107
Revenue		\$3,749	\$10,907	\$3,330	\$10,676	\$3,046	\$12,176	\$2,732	\$8,814	\$3,197	\$8,627	\$3,170	\$7,681	\$78,105
<i>School (non-submetered)</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$1.75	0	0	0	0	0	0	0	0	0	0	0	0	0
Revenue		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<i>Institutional All Others</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$2.80	1,259	1,994	1,159	2,154	1,029	2,114	847	812	999	1,628	1,300	2,910	18,205
Revenue		\$3,525	\$5,583	\$3,245	\$6,031	\$2,881	\$5,919	\$2,372	\$2,274	\$2,797	\$4,558	\$3,640	\$8,148	\$50,974
TOTAL INSTITUTIONAL REVENUE		\$7,274	\$16,491	\$6,575	\$16,707	\$5,927	\$18,095	\$5,104	\$11,088	\$5,994	\$13,185	\$6,810	\$15,829	\$129,079
PARKS RFTA														
Connections	<u>\$/Connec.</u> \$0.00	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Connection Charge		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Demand	<u>\$/MGD</u> \$0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0
Total Demand Charge		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Loading	<u>\$/MG</u> \$0.00	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Loading Charge		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL PARKS RFTA REVENUES		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 SEWER EXHIBIT 15.1
 CALCULATION OF REVENUES
 AT PRESENT RATES eff 7/1/15

		Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
BUREAU OF PRISONS (FCI)														
Connections	<u>\$/Convec.</u> \$15.16	0	1	0	1	0	1	0	1	0	1	0	1	1
Total Connection Charge		\$0	\$15	\$0	\$15	\$0	\$15	\$0	\$15	\$0	\$15	\$0	\$15	\$91
Peak Month Loadings														
Demand	<u>\$/MGD</u> \$55,214.96	0	0.2500	0	0.2500	0	0.2500	0	0.2500	0	0.2500	0	0.2500	1,500
BOD (lb/day)	18.09	0	3,027	0	3,027	0	3,027	0	3,027	0	3,027	0	3,027	18,162
SS (lb/day)	8.98	0	3,366	0	3,366	0	3,366	0	3,366	0	3,366	0	3,366	20,196
Total Demand Charge		\$0	\$98,789	\$0	\$98,789	\$0	\$98,789	\$0	\$98,789	\$0	\$98,789	\$0	\$98,789	\$592,733
Annual Loadings														
Loading	<u>\$/MG</u> \$1,382.06	0	9.880	0	10.7200	0	9.9500	0	9.7100	0	9.6000	0	10.820	60,680
BOD (1,000 lb)	\$452.43	0	84.83	0	67.44	0	202.87	0	35.52	0	64.19	0	151.47	606.32
S.S. (1,000 lb)	\$224.62	0	120.10	0	90.92	0	336.82	0	64.19	0	105.64	0	205.35	923.02
Total Loading Charge		\$0	\$79,011	\$0	\$65,750	\$0	\$181,192	\$0	\$43,908	\$0	\$66,038	\$0	\$129,609	\$565,510
TOTAL PRISONS REVENUES		\$0	\$177,815	\$0	\$164,554	\$0	\$279,996	\$0	\$142,712	\$0	\$164,842	\$0	\$228,413	\$1,158,334
SANTA RITA JAIL														
Connections	<u>\$/Convec.</u> \$15.16	0	1	0	1	0	1	0	1	0	1	0	1	1
Total Connection Charge		\$0	\$15	\$0	\$15	\$0	\$15	\$0	\$15	\$0	\$15	\$0	\$15	\$91
Peak Month Loadings														
Demand	<u>\$/MGD</u> \$55,214.96	0	0.4670	0	0.4670	0	0.4670	0	0.4670	0	0.4670	0	0.4670	2,802
BOD (lb/day)	\$18.09	0	1,948	0	1,948	0	1,948	0	1,948	0	1,948	0	1,948	11,688
SS (lb/day)	\$8.98	0	1,948	0	1,948	0	1,948	0	2,872	0	2,872	0	2,872	14,460
Total Demand Charge		\$0	\$78,518	\$0	\$78,518	\$0	\$78,518	\$0	\$86,815	\$0	\$86,815	\$0	\$86,815	\$495,999
Annual Loadings														
Loading	<u>\$/MG</u> \$1,382.06	0	10.4000	0	9.8200	0	9.8000	0	10.3100	0	12.5100	0	12.3400	65,180
BOD (1,000 lb)	\$452.43	0	48.83	0	60.09	0	46.96	0	62.64	0	80.80	0	32.71	332.03
S.S. (1,000 lb)	\$224.62	0	68.86	0	80.17	0	43.77	0	110.02	0	120.24	0	42.10	465.16
Total Loading Charge		\$0	\$51,933	\$0	\$58,766	\$0	\$44,622	\$0	\$67,302	\$0	\$80,854	\$0	\$41,310	\$344,787
TOTAL JAIL REVENUES		\$0	\$130,466	\$0	\$137,299	\$0	\$123,155	\$0	\$154,132	\$0	\$167,685	\$0	\$128,141	\$840,877

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 SEWER EXHIBIT 15.2
 CALCULATION OF REVENUES
 AT PRESENT RATES - CITY OF PLEASANTON

	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total	
RESIDENTIAL														
<i>Single Family Home</i>														
	<u><i>\$/Bi-Month/Unit</i></u>													
Rate/Acct	\$52.09	19,303	0	19,303	0	19,303	0	19,303	0	19,303	0	19,303	0	19,303
Revenue	\$1,005,493	\$0	\$1,005,493	\$0	\$1,005,493	\$0	\$1,005,493	\$0	\$1,005,493	\$0	\$1,005,493	\$0	\$6,032,960	
<i>Condominium</i>														
	<u><i>\$/Bi-Month/Unit</i></u>													
Rate/Acct	\$34.65	1,487	0	1,487	0	1,487	0	1,487	0	1,487	0	1,487	0	1,487
Revenue	\$51,525	\$0	\$51,525	\$0	\$51,525	\$0	\$51,525	\$0	\$51,525	\$0	\$51,525	\$0	\$309,147	
<i>Single Family Home with 2nd Dwelling Unit</i>														
	<u><i>\$/Bi-Month/Unit</i></u>													
Rate/Acct	\$81.08	202	0	202	0	202	0	202	0	202	0	202	0	202
Revenue	\$16,378	\$0	\$16,378	\$0	\$16,378	\$0	\$16,378	\$0	\$16,378	\$0	\$16,378	\$0	\$98,269	
<i>Multi-Family</i>														
	<u><i>\$/Bi-Month/Unit</i></u>													
Rate/Acct	\$28.99	4,926	0	4,926	0	4,926	0	4,926	0	4,926	0	4,926	0	4,926
Revenue	\$142,805	\$0	\$142,805	\$0	\$142,805	\$0	\$142,805	\$0	\$142,805	\$0	\$142,805	\$0	\$856,828	
TOTAL RESIDENTIAL REVENUE	\$1,216,201	\$0	\$1,216,201	\$0	\$1,216,201	\$0	\$1,216,201	\$0	\$1,216,201	\$0	\$1,216,201	\$0	\$7,297,204	

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 SEWER EXHIBIT 15.2
 CALCULATION OF REVENUES
 AT PRESENT RATES - CITY OF PLEASANTON

		Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
COMMERCIAL														
<i>Auto Steam Cleaning</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$7.32		545		553		475		362		392		484	2,811
Revenue		\$0	\$3,989	\$0	\$4,048	\$0	\$3,477	\$0	\$2,650	\$0	\$2,869	\$0	\$3,543	\$20,577
<i>Bakery</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$5.51	1,950	1,587	1,103	2,644	1,967	1,530	1,599	2,202	2,772	1,007	2,683	2,020	23,064
Revenue		\$10,745	\$8,744	\$6,078	\$14,568	\$10,838	\$8,430	\$8,810	\$12,133	\$15,274	\$5,549	\$14,783	\$11,130	\$127,083
<i>Laundry</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$3.14	30	84	139	72	137	68	98	102	118	82	137	133	1,200
Revenue		\$94	\$264	\$436	\$226	\$430	\$214	\$308	\$320	\$371	\$257	\$430	\$418	\$3,768
<i>Market with Garbage Disposal</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$5.77	1,470	372	174	962	1,782	274	447	1,281	1,039	290	1,275	246	9,612
Revenue		\$8,482	\$2,146	\$1,004	\$5,551	\$10,282	\$1,581	\$2,579	\$7,391	\$5,995	\$1,673	\$7,357	\$1,419	\$55,461
<i>Mortuary</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$6.15	16			16	12			18	15		14		91
Revenue		\$98	\$0	\$0	\$98	\$74	\$0	\$0	\$111	\$92	\$0	\$86	\$0	\$560
<i>Restaurant (fast food)</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$3.83	4,111	1,156	2,868	2,367	3,305	1,221	1,809	2,709	3,326	787	2,947	1,055	27,661
Revenue		\$15,745	\$4,427	\$10,984	\$9,066	\$12,658	\$4,676	\$6,928	\$10,375	\$12,739	\$3,014	\$11,287	\$4,041	\$105,942
<i>Restaurant (full service)</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$4.38	17,314	5,688	14,026	8,539	15,070	4,931	10,991	7,406	13,631	3,970	13,575	4,526	119,667
Revenue		\$75,835	\$24,913	\$61,434	\$37,401	\$66,007	\$21,598	\$48,141	\$32,438	\$59,704	\$17,389	\$59,459	\$19,824	\$524,141
<i>Commercial All Others</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$2.63	49,410	18,429	43,631	24,783	42,578	15,305	31,688	17,979	42,978	5,611	37,940	15,888	346,220
Revenue		\$129,948	\$48,468	\$114,750	\$65,179	\$111,980	\$40,252	\$83,339	\$47,285	\$113,032	\$14,757	\$99,782	\$41,785	\$910,559
TOTAL COMMERCIAL REVENUE		\$240,849	\$92,953	\$194,686	\$136,039	\$212,195	\$80,228	\$150,106	\$112,593	\$207,114	\$45,509	\$193,098	\$82,160	\$1,747,530

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 SEWER EXHIBIT 15.2
 CALCULATION OF REVENUES
 AT PRESENT RATES - CITY OF PLEASANTON

	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total	
INSTITUTIONAL														
<i>School (submetered)</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$2.29	378	5,284	323	5,912	344	1,814	285	405	1,222	1,814	853	3,379	22,013
Revenue		866	12,100	740	13,538	788	4,154	653	927	2,798	4,154	1,953	7,738	50,410
<i>School (non-submetered)</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$1.75	11,926	97	14,005	7,055	2,640	787	660	81	1,631	1,279	3,870	5,620	49,651
Revenue		\$20,871	\$170	\$24,509	\$12,346	\$4,620	\$1,377	\$1,155	\$142	\$2,854	\$2,238	\$6,773	\$9,835	\$86,889
<i>Institutional All Others</i>														
	<u>\$/100 CF</u>													
Rate/Consumption	\$2.80	0	0	0	0	0	0	0	0	0	0	0	0	0
Revenue		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL INSTITUTIONAL REVENUE		\$21,736	\$12,270	\$25,248	\$25,885	\$5,408	\$5,531	\$1,808	\$1,069	\$5,653	\$6,392	\$8,726	\$17,573	\$137,299
Septic Hauler (A1 Enterprises)														
	<u>\$/Connec.</u>													
Connections	\$15.16	0	1	0	1	0	1	0	1	0	1	0	1	1
Total Connection Charge		\$0	\$15	\$0	\$15	\$0	\$15	\$0	\$15	\$0	\$15	\$0	\$15	\$91
<i>Peak Month Loadings</i>														
	<u>\$/MGD</u>													
Demand	\$55,214.96	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.008
BOD (lb/day)	\$18.09	0.000	39.000	0.000	39.000	0.000	39.000	0.000	39.000	0.000	39.000	0.000	39.000	234.000
SS (lb/day)	\$8.98	0.000	49.000	0.000	49.000	0.000	49.000	0.000	49.000	0.000	49.000	0.000	49.000	294.000
Total Demand Charge		0	1,212	0	1,212	0	1,212	0	1,212	66	1,212	0	1,212	\$7,337
<i>Annual Loadings</i>														
	<u>\$/MG</u>													
Loading	\$1,382.06	0.000	0.041	0.000	0.042	0.000	0.032	0.000	0.029	0.000	0.039	0.000	0.038	0.221
BOD (1,000 lbs)	\$452.43	0.000	1.600	0.000	1.700	0.000	1.430	0.000	1.000	0.000	1.850	0.000	1.220	8.800
SS (1,000 lbs)	\$224.62	0.000	1.860	0.000	1.200	0.000	1.190	0.000	1.170	0.000	1.370	0.000	0.890	7.680
Total Loading Charge		\$0	\$1,198	\$0	\$1,097	\$0	\$958	\$0	\$755	\$0	\$1,199	\$0	\$804	\$6,012
TOTAL INDUSTRIAL REVENUES		\$0	\$2,425	\$0	\$2,324	\$0	\$2,185	\$0	\$1,982	\$66	\$2,426	\$0	\$2,031	\$13,440
Thermo Fisher Scientific														
	<u>\$/Connec.</u>													
Connections	\$15.16	0	1	0	1	0	1	0	1	0	1	0	1	1
Total Connection Charge		\$0	\$15	\$0	\$15	\$0	\$15	\$0	\$15	\$0	\$15	\$0	\$15	\$91
<i>Peak Month Loadings</i>														
	<u>\$/MGD</u>													
Demand	\$55,214.96	0.000	0.021	0.000	0.021	0.000	0.021	0.000	0.021	0.000	0.021	0.000	0.021	0.126
BOD (lb/day)	\$18.09	0.000	188.000	0.000	188.000	0.000	188.000	0.000	188.000	0.000	188.000	0.000	188.000	1,128.000
SS (lb/day)	\$8.98	0.000	153.000	0.000	153.000	0.000	153.000	0.000	153.000	0.000	153.000	0.000	153.000	918.000
Total Demand Charge		\$0	\$5,934	\$0	\$5,934	\$0	\$5,934	\$0	\$5,934	\$0	\$5,934	\$0	\$5,934	\$35,606
<i>Annual Loadings</i>														
	<u>\$/MG</u>													
Loading	\$1,382.06	0.000	0.0242592	0	0.0235801	0	0.016479067	0	0.015473267	0	0.019357	0	0.017129067	3.488
BOD (1,000 lbs)	\$452.43	0.000	0.728	0.000	0.707	0.000	0.494	0.000	0.464	0.000	0.581	0.000	0.514	40.950
SS (1,000 lbs)	\$224.62	0.000	0.850	0.000	0.970	0.000	0.840	0.000	0.870	0.000	0.970	0.000	0.850	20.710
Total Loading Charge		\$0	\$5,806	\$0	\$6,034	\$0	\$6,038	\$0	\$3,236	\$0	\$2,950	\$0	\$3,936	\$28,000
TOTAL INDUSTRIAL REVENUES		\$0	\$11,756	\$0	\$11,983	\$0	\$11,988	\$0	\$9,185	\$0	\$8,900	\$0	\$9,886	\$63,697

DUBLIN SAN RAMON - REGIONAL SEWER UTILITY
 SEWER EXHIBIT 15.2
 CALCULATION OF REVENUES
 AT PRESENT RATES - CITY OF PLEASANTON

		Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
INDUSTRIAL														
Connections	<u>\$/Convec.</u> \$15.16	0	4	0	4	0	4	0	4	0	4	0	4	4
Total Connection Charge		\$0	\$61	\$0	\$61	\$0	\$61	\$0	\$61	\$0	\$61	\$0	\$61	\$364
Peak Month Loadings	<u>\$/MGD</u>													
Demand	\$55,214.96	0.000	0.068	0.000	0.068	0.000	0.068	0.000	0.068	0.000	0.068	0.000	0.077	0.418
BOD (lb/day)	\$18.09	0.000	836.000	0.000	836.000	0.000	836.000	0.000	836.000	0.000	836.000	0.000	840.000	5,020.000
SS (lb/day)	\$8.98	0.000	1,093.000	0.000	1,093.000	0.000	1,093.000	0.000	1,093.000	0.000	1,093.000	0.000	1,074.000	6,539.000
Total Demand Charge		\$0	\$28,704	\$0	\$28,704	\$0	\$28,704	\$0	\$28,704	\$0	\$28,704	\$0	\$29,081	\$172,601
Annual Loadings	<u>\$/MG</u>													
Loading	\$1,382.06	0.000	1.485	0.000	2.182	0.000	1.553	0.000	1.710	0.000	1.813	0.000	1.867	10.611
BOD (1,000 lbs)	\$452.43	0.000	11,220	0.000	14,170	0.000	14,430	0.000	7,960	0.000	7,640	0.000	13,250	68,670
SS (1,000 lbs)	\$224.62	0.000	8,760	0.000	15,620	0.000	10,560	0.000	6,100	0.000	7,720	0.000	16,520	65,270
Total Loading Charge		\$0	\$9,097	\$0	\$12,935	\$0	\$11,045	\$0	\$7,335	\$0	\$7,697	\$0	\$12,285	\$60,394
TOTAL INDUSTRIAL REVENUES		\$0	\$37,861	\$0	\$41,700	\$0	\$39,810	\$0	\$36,100	\$0	\$36,461	\$0	\$41,426	\$233,359
CASTLEWOOD														
Regional Fees	<u>\$/Convec.</u> \$52.09	0	202	0	202	0	202	0	202	0	202	0	202	202
Total Connection Charge		\$0	\$10,522	\$0	\$10,522	\$0	\$10,522	\$0	\$10,522	\$0	\$10,522	\$0	\$10,522	\$63,133
Regional Demand	<u>\$/MGD</u> \$22.80	0	167	0	81	0	57	0	23	0	22	0	49	66
Total Regional Demand Charge		\$0	\$3,808	\$0	\$13,477	\$0	\$4,640	\$0	\$1,319	\$0	\$501	\$0	\$1,070	\$24,814
TOTAL CASTLEWOOD REVENUES		\$0	\$14,330	\$0	\$24,000	\$0	\$15,162	\$0	\$11,841	\$0	\$11,023	\$0	\$11,592	\$87,947
FAIRGROUNDS														
Connections	<u>\$/Convec.</u> \$52.09	0	1	0	1	0	1	0	1	0	1	0	1	1
Total Connection Charge		\$0	\$52	\$0	\$52	\$0	\$52	\$0	\$52	\$0	\$52	\$0	\$52	\$313
Demand	<u>\$/100 CF</u> \$2.63	0	6,266	0	6,266	0	6,266	0	6,266	0	6,266	0	6,266	37,596
Total Demand Charge		\$0	\$16,480	\$0	\$16,480	\$0	\$16,480	\$0	\$16,480	\$0	\$16,480	\$0	\$16,480	\$98,877
TOTAL FAIRGROUNDS REVENUES		\$0	\$16,532	\$0	\$16,532	\$0	\$16,532	\$0	\$16,532	\$0	\$16,532	\$0	\$16,532	\$99,190