

City of

DINUBA | CALIFORNIA



Water and Sewer Rate Study

November 4, 2016

Final Report



Financial & Economic Consulting Services

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Section 1 - Introduction

1.1. Introduction

Willdan Financial Services (“Willdan”) was retained by the City of Dinuba, California (“City”) to conduct a Water and Sewer Rate Study (“Rate Study”) for the City’s water and sewer utilities (“Utilities”). This report details the results of the Rate Study analysis for the ten-year forecast period, Fiscal Year (FY) 2014-15-FY 2023-24, the results of which are presented in this Rate Study Report.

The results of the Rate Study presented herein are a financial plan and rate structure designed to provide revenues sufficient to fund the ongoing operating and capital costs necessary to operate the City’s water and sewer utilities, while meeting the financial requirements and goals set forth by the City for the water and sewer enterprise funds.

1.2. Overview of the Rate Study Process

The rate study process consists of three primary study components. First, a determination of the adequacy of system revenues to meet system expenses during the study forecast period must be made. The results of this analysis, known as the Revenue Sufficiency Analysis, is an assessment of the ability of the existing revenue stream to meet the projected financial requirements of the system during the forecast period and, to the extent required, the identification of the magnitude and timing of any required rate adjustments.

Next, a determination of the manner in which the utility incurs costs is made. The results of this analysis, known as the Cost of Service Analysis, are an allocation of system revenue requirements to each service (water/sewer), then further to functional cost categories, and finally to customer classes (such as residential or commercial).

Finally, specific rates and charges must be designed which provide sufficient revenue, as identified in the Revenue Sufficiency Analysis, to recover costs in a manner consistent with general rate-making practice, as identified in the Cost of Service Analysis. This final step is known as the Rate Design Analysis.

1.3. Organization of this Report

This Rate Study presents an overview of the rate-making concepts employed in the development of the analysis contained herein. The analysis is followed by a discussion of the data, assumptions and results associated with each component of the analysis. Finally, appendices with detailed schedules are presented for further investigation into the data, assumptions and calculations which drive the results presented in this Rate Study. The report is organized as follows:

- Section 1 - Introduction
- Section 2 – Overview of Utility Rate-Making Principles, Processes and Issues
- Section 3 – Rate Study Development and Results
- Section 4 – Conclusions and Recommendations
- Appendix A – Water Financial Plan
- Appendix B – Sewer Financial Plan
- Appendix C – Water Cost of Service Analysis and Rate Design

1.4. Reliance on Data

During the course of this project the City (and/or its representatives) provided Willdan with a variety of technical information, including cost and revenue data. Willdan did not independently assess or test for the accuracy of such data – historic or projected. We have relied on this data in the formulation of our findings and subsequent recommendations, as well as in the preparation of this report. As is often the case, there will be differences between actual and projected data, and these differences may be significant. Therefore, we take no responsibility for the accuracy of data or projections provided by or prepared on behalf of the City, nor do we have any responsibility for updating this report for events occurring after the date of this report.

1.5. Acknowledgements

We wish to extend our appreciation to the City and its staff for their cooperation during the progress of this study. In particular, we would like to thank Ms. Blanca Beltran, Public Works Director, Mr. George Avila, Business Manager and Mr. Cass Cook, Finance Director.

Section 2 - Overview of Utility Rate-Making Principles, Processes and Issues

2.1. Introduction

The Rate Study utilized generally accepted rate-making principles which resulted in the development of rates and charges which are projected to: 1) generate sufficient revenue to meet the financial requirements of the utilities, 2) address the need to recover costs from users in a manner which is fair and equitable relative to service provided, and 3) meet the rate design goals of the utilities. A discussion of some of the key principles of rate-making, and how the processes employed herein are guided by those principles, is presented below.

2.2. Discussion of General Rate-Making Principles

While the individual rates for each utility vary based on a variety of factors, the development of rates should, for the most part, be consistent with general rate-making principles set forth in utility rate-making practice and literature. The principle by which rate practitioners are guided is that rates designed for any utility should strike a reasonable balance between several key principles. In general, rates designed should:

- Generate a stable rate revenue stream which, when combined with other sources of funds, is sufficient to meet the financial requirements and goals of the utility
- Be fair and equitable – that is, they should generate revenue from customer classes which is reasonably in proportion to the cost to provide service to that customer class
- Be easy to understand by customers
- Be easy to administer by the utility

Striking the appropriate balance between the principles of rate-making is the result of a detailed process of evaluation of revenue requirements and cost of service, and how those translate into the rate design alternatives which most closely meet the specific objectives of the individual utility under the circumstances in which the utility operates.

2.3. The Revenue Sufficiency Process

In order to develop rates and charges which generate sufficient revenue to meet the fiscal requirements of the utility, a determination of the annual rate revenue required must be completed. This rate revenue, combined with other sources of funds, is evaluated to determine whether the total revenue is sufficient to meet those fiscal requirements. This process is typically referred to as a Revenue Sufficiency Analysis.

The process employed in the Revenue Sufficiency Analysis results in the identification of revenue requirements of the system, such as operating expenses, capital expenses (minor and major), debt service expense (including a provision for debt service coverage), transfers out and the maintenance of both restricted and unrestricted reserves at appropriate levels. These revenue requirements are then compared to the total sources of funds during each year of the forecast period to determine the adequacy of projected revenues to meet projected revenue requirements. To the extent that the existing revenue stream is not sufficient to meet the annual revenue requirements of the system, a series of rate revenue increases are calculated which would be required in order to provide revenue sufficient to meet those needs.

2.4. The Cost Allocation Process

In order to provide guidance to the utility as to how to appropriately recover the rate revenue requirements identified in the Revenue Sufficiency Analysis, a Cost of Service Analysis is required.

The process employed in the Cost of Service Analysis results in the identification of the cost to provide service to customers. These cost allocations are then used as the basis for the assignment of revenue requirements to customer classes, upon which the development of rates and charges is based.

Two common approaches to the development of a cost of service analysis are based on the Base-Extra Capacity methodology, as detailed in the American Water Works Association (AWWA) M1 Manual – Principles of Water Rates, Fees and Charges and the Functional Cost Allocation methodology, as detailed in the Water Environment Federation (WEF) Manual 27 – Financing and Charges for Sewer Systems.

The general approach to the development of cost of service allocations under both the Base-Extra Capacity and Functional Cost Allocation methodologies is to: 1) identify the costs by functional cost category, 2) allocate the functionalized costs further to cost categories and then 3) allocate rate revenue requirements to customer classes based on the distribution of costs and customer characteristics.

The resulting allocations provide guidance to the rate practitioner which, combined with the other goals and objectives of the utility, provides the necessary information required to proceed to the development of utility rates and charges.

2.5. The Rate Design Process

With the rate revenue requirement determined in the Revenue Sufficiency Analysis, and the manner in which that rate revenue should be recovered determined in the Cost of Service Analysis, the development of specific rates and charges can commence.

Utilities consider a variety of factors in establishing rates, including cost allocation, customer impact, and ease of administration. The rate design process seeks to find the balance between the need to recover sufficient revenue in a fair and equitable manner and the need to do so within the constraints of other objectives which are unique to each utility. By understanding the types of customers served by the utility, and the general usage characteristics of those customers, a system of rates and charges can be developed that balances those many objectives while also generating sufficient revenue.

First, the rate design goals of the utility are reviewed to identify areas the utility wishes to address over the course of the Rate Study. Next, an assessment of the existing rate design is undertaken to identify what has worked well for the utility with regard to their specific goals and objectives, and the general goals and objectives of utility rate-making. This assessment typically also identifies areas for improvement which can provide guidance to the rate practitioner with respect to the design of future rates and charges.

After a review of the existing rates and charges, a dialog of how to build on the positive aspects of the existing structure and how to address deficiencies in the existing structure occurs with utility management and staff.

With an evaluation of the strengths and weaknesses of the existing rate structure and the goals of the utility going forward, the development of a new rate structure can begin. Development of a new rate structure which recovers the costs to provide service in a manner which achieves the goals of the utility in a manner consistent with standard rate-making practice requires an analysis of the projected usage characteristics of the customer base to which the rates will apply. This analysis is typically referred to as a billing frequency analysis.

The billing frequency analysis is provided through the billing system of the utility and then used by the rate-practitioner to accumulate billing statistics for each class of customer. Typical customer classes for

utilities consist of residential and non-residential, sometimes broken down into subcategories such as commercial, and industrial. Billing data allows for the development of rates based on the use of the system by each class. Alternative rate designs which account for customer usage patterns and also address various combinations of utility rate-making goals and rate-making principles can then be developed and reviewed by both the rate-practitioner and the utility regarding the viability of each rate structure designed.

With the identification of the rate revenue required, the manner in which those requirements should be recovered and the billing units to be used to recover the required revenue, specific rates and charges can then be developed. At the heart of successful rate design is the attempt to strike a proper balance between the many, sometimes competing, objectives of rate-making while ensuring generation of revenue sufficient to meet system financial requirements.

Additionally, in the State of California, rates must adhere to and conform to the State Constitution and the State's Water Code. More specifically, Proposition 218 (Prop 218) requires that property related fees and charges, such as water rates must not exceed the reasonable cost of providing the service associated with the fee or charge, and shall not exceed the proportional cost of the service attributable to the parcel that is subject to the fee or charge.

Besides ensuring compliance with State law, another key principle for a comprehensive rate study is found in economic theory, which suggests the price of a commodity must roughly equal its cost or value if equity among customers is to be maintained – i.e. cost based. For example, capacity-related costs are usually incurred by a water utility to meet peak use requirements. Consequently, the customers causing peak demands should pay for the demand-related facilities in proportion to their contribution to maximum demands.

Through refinement of costing and pricing techniques, consumers of a product are given a more accurate price point of what the commodity costs to produce and deliver their water needs. The above fundamentals have considerable foundation in economic literature and correlate to the cost of service principles of Proposition 218. The “price-equals-cost” theory provides the basis for much of the subsequent analysis and comment.

This rate study was performed to allocate the costs of providing service to users in order to ensure that rates are equitable and in compliance with Proposition 218 requirements. The total cost of serving each

customer class is determined by distributing each of the utility cost components among the user classes based upon the respective service requirements of each customer class. Therefore, a cost of service rate study enables water and sewer utilities to adopt rates based on the costs attributable to each customer class and corresponding accounts. The purposes of this rate study include defining the proportional allocation of costs of service to users and deriving unit costs to support the development of utility rates.

2.6. Financial Management Goals of the City

The establishment of specific financial management goals of a utility is a key step in developing financial plans which will ensure the financial health of the utility remains strong. The financial management goals of City are described below.

2.6.1 Minimum Unrestricted Working Capital Balance

In order to maintain a certain level of liquidity, the City has developed a goal of maintaining unrestricted working capital reserves in an amount greater than or equal to approximately 2 months of operating expenses.

2.6.2 Debt Service Coverage

The City currently has outstanding debt which contains covenants requiring the City to maintain rates and charges such that a debt service coverage ratio, defined as Current Year Net Revenues divided by Current Year Debt Service, be maintained at a minimum of 1.00. The coverage requirement of 1.00x is associated with all outstanding debt for each specific year the coverage is being calculated. The analysis presented herein meets this goal in each year of the forecast period. The debt service coverage requirement is intended to provide assurance to debt holders that the City will be able to meet its annual debt obligations.

Section 3 - Rate Study Development and Results

3.1. Revenue Sufficiency Analysis

3.1.1 General Methodology

In order to develop rates and charges which generate sufficient revenue to meet the fiscal requirements of the City, a determination of the annual revenue from rates which, combined with other sources of funds, will provide sufficient funds to meet those fiscal requirements must first be completed. This process is typically referred to as a Revenue Sufficiency Analysis.

The process employed in the Revenue Sufficiency Analysis resulted in the identification of revenue requirements of the system, such as operating expenses, capital expenses (minor and major), debt service expense (including a provision for debt service coverage, as applicable), transfers out and the maintenance of both restricted and unrestricted reserves at appropriate levels. These revenue requirements were then compared to the total sources of funds during each year of the forecast period to determine the adequacy of projected revenues to meet requirements. To the extent that the existing revenue stream was not sufficient to meet the annual revenue requirements of the system, a series of rate revenue increases were calculated to provide revenue sufficient to meet those needs.

3.1.2 Data Items

Key data items reviewed, discussed and incorporated into the Revenue Sufficiency Analysis were:

- Financial management goals of the City
- FY 2013-14 and FY 2014-15 fund balances
- FY 2015-16 and FY 2016-17 budgets
- General assumptions related to:
 - Customer growth
 - Cost escalation factors
 - New debt

A discussion of the use of each of the above data items is presented below.

3.1.3 FY 2014-15 and FY 2015-16 Fund Balances

To better understand what funds the City will have on hand to start the forecast period, a detailed review of fund balances from the fiscal year (FY) 2013-14 and FY 2014-15 periods was discussed and reviewed with City staff. Assumptions were made to estimate the actual unrestricted cash (available cash) balances available at the end of FY 2014-15, and therefore at the beginning of FY 2015-16. A summary of the individual funds and fund balances associated with the water and sewer Utility Enterprise Funds for the end of FY 2014-15 and therefore the beginning of FY 2015-16, as adjusted for use in this analysis, is presented in Table 3-1 below.

Table 3-1 Beginning Fund Balances Fiscal Year Ending June 30, 2015		
Description	Water	Sewer
Operations Fund	\$708,087	\$741,830

3.1.4 FY 2015-16 Budget

Staff provided Willdan with the FY 2015-16 budget, and associated line-item detail, as the basis for the projection of financial performance for FY 2015-16. In addition, staff provided a copy of the line-item budget for FY 2015-16 to be used as the basis for the projection of future budgetary line-items for the remainder of the forecast period.

Cost escalation factors were reviewed by staff and were used to project line-item costs beyond the FY 2015-16 budget. Those factors were applied based on line-item cost classifications.

A summary of the FY 2015-16 budget, and subsequent projected budgetary expenses, is presented below in Table 3-2. A more detailed presentation of the line-item budgeted and projected revenues and expenses is presented in Schedules A-3 through A-5, B-3 through B-5 respectively, in the Appendices.

Table 3-2 Operating Budget Fiscal Year Ending June 30, 2016		
Description	Water	Sewer
Operations and Maintenance Expenses	\$2,374,867	\$2,142,397
Debt Service	443,321	938,663
Transfers	<u>350,053</u>	<u>3,191</u>
Total Expenses	\$3,168,241	\$3,084,251

3.1.5 Capital Improvements Plan (CIP)

The City provided Willdan with a forecast of capital requirements for the ten-year study period. This capital forecast was escalated by Willdan for use in the analysis.

A summary table of the CIP (both cash and debt funded) for the FY 2014-15 – 2020-21 study period is presented below in Table 3-3. The CIP for the full 10-year forecast period is presented in Schedules A-6 and B-6, respectively, in the Appendices.

Table 3-3							
Capital Improvement Plan							
Fiscal Years Ending June 30 (\$ thousands)							
	2016	2017	2018	2019	2020	2021	Total
Water							
Cash	\$80	\$110	\$150	\$180	\$220	\$250	\$990
Debt	<u>0</u>	<u>0</u>	<u>206</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>206</u>
Total	80	110	356	180	220	250	1,196
WW							
Cash	\$0	\$50	\$90	\$120	\$160	\$200	\$620
Debt	<u>0</u>	<u>0</u>	<u>0</u>	<u>3,000</u>	<u>3,000</u>	<u>11,000</u>	<u>17,000</u>
Total	0	50	90	3,120	3,160	11,200	17,620
Total	\$80	\$160	\$446	\$3,300	\$3,380	\$11,450	\$18,816

3.1.6 Outstanding Debt

The City, like many utilities, has utilized long-term debt to fund capital assets in the past. The City has both outstanding water and sewer debt, and is anticipated to issue new debt in the future to fund significant water and sewer cost projects. Issuance of debt provides a reasonable matching between the facilities or infrastructure to be constructed and the rate payers who will be benefiting from the assets. Because the debt is retired over time, new customers who connect to the system in the future will share (through their rates) in the cost of the assets that they will benefit from through their use of the system.

3.1.7 General Assumptions

In order to develop the financial and rate projections, certain assumptions were made with regard to elements of the revenue sufficiency analysis. A summary of those assumptions is presented below.

3.1.7.1. Growth

The City anticipates growth of 2% per year based on their analysis of current City Growth projections and trends.

3.1.7.2. O&M Escalation Factors

Willdan worked with City staff to identify reasonable cost escalation factors to be applied to operations and maintenance expenses in recognition of increasing costs over time. It was determined that a 2% inflationary factor represented a reasonable estimate of annual cost increases during the study period. There were, however, some expenses which were anticipated to have one time changes in cost over and above the projected 2% increase.

3.1.7.3. New Debt Assumptions

In order to fund the City's water CIP, it is anticipated that new debt will be required. Specifically, a debt issuance of \$2 million in FY 2017-18 for a new well and transmission main (well 21). In order to fund the sewer CIP, debt issuance of \$28 million between FY 2018-19 and FY 2021-22 for the design and construction of the wastewater reclamation facility upgrade and expansion is projected. As the City evaluates its capital program with respect to the timing and cost estimates of the new well and wastewater treatment plant upgrades and expansion, the timing of debt issuances may be shifted. The following details the assumptions related to new debt projected during the forecast period:

- Revenue Bonds
 - Term – 30 Years
 - Rate – 2.0%
 - Issuance costs – 2.0%
 - Debt Service Coverage Requirement – 1.00

3.1.8 Results of the Revenue Sufficiency Analysis

After a thorough review of the above-mentioned data elements, a draft of the Revenue Sufficiency Analysis was developed and reviewed with City staff. This draft provided the forum in which various alternative assumptions were discussed, tested and evaluated for both their reasonableness and their impact upon the ultimate financial health of the utility. The resulting financial plan presented herein is the embodiment of the data, assumptions and review process undertaken with City staff in several meetings.

3.1.8.1. Rate Revenue Increases Required

Our analysis of the water and sewer utilities indicate that each utility will not generate sufficient revenue to meet their respective operations and maintenance, capital and debt service throughout the study period, based on current revenue levels. Revenue increases are required in order to maintain the financial integrities of the water and sewer utilities.

Table 3-4 below reflects our projections of revenue increases during the forecast period in order for the City to meet its ongoing operational costs and meet minimum prudent financial and system maintenance standards.

Table 3-4 Projected Rate Revenue Increases Fiscal Years Ending June 30		
Description	Water Rate Revenue Increases	Sewer Rate Revenue Increases
2015-16	0.0%	0.0%
2016-17	18.0%	25.0%
2017-18	5.0%	12.0%
2018-19	5.0%	0.0%
2019-20	0.0%	6.0%
2020-21	0.0%	4.0%

The City has not undertaken any water rate increases for several years, and has only increased sewer rates by small increases in recent years. Holding rates low occurred in conjunction with the recent drought which has resulted in lower revenues due to restrictions on the amount of irrigation water that customers could use. The combined effect of these two factors resulted in the City reducing the annual repair and replacement capital program and a drawdown of reserve funds.

The revenue projections in Table3-4, anticipate higher revenue increases in the early years of the study period in order to “catch up” on capital repair and maintenance needs as well as prepare for increased costs (debt service) associated with future year treatment plant upgrades.

A more detailed presentation of the pro forma, including a fund balance reconciliation and projection of annual debt service coverage, is presented in Schedules A-1 and B-1 in the Appendices.

3.1.8.2. Summary of Revenue Sufficiency Analysis

The resulting financial plan is presented in Table 3-5, which provides for funding of projected revenue requirements based on the provided current knowledge of expected expenditure forecasts during the forecast period, and is projected to meet or exceed the financial operations of the City.

A more detailed presentation of the financial plan, including fund balance reconciliations for each fund for the full 10-year forecast period, is presented in Schedules A-1 and B-1 in the Appendices.

Table 3-5							
Projected Net Operating Fund Results							
Fiscal Years 2014-15- to 2020-21							
(\$ thousands)							
Description	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Water							
Beginning Fund Balance	\$771	\$708	\$204	\$340	\$386	\$393	\$556
Total Operating Revenue	2,693	2,514	3,039	3,178	3,394	3,462	3,531
Operating Expenses	<u>2,060</u>	<u>2,375</u>	<u>2,003</u>	<u>2,230</u>	<u>2,346</u>	<u>2,264</u>	<u>2,275</u>
Net Revenue	633	139	1,036	948	1,049	1,198	1,256
Less:							
Other Uses of Funds	<u>696</u>	<u>643</u>	<u>899</u>	<u>903</u>	<u>1,041</u>	<u>1,036</u>	<u>1,087</u>
Net Cash Flow	(63)	(505)	137	46	8	162	169
Ending Fund Balance	\$708	\$204	\$340	\$386	\$393	\$556	\$724
Debt Service Coverage Ratio	2.39	0.80	2.85	3.03	2.69	3.55	3.97
Target	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Sewer							
Beginning Fund Balance	\$1,057	\$742	\$597	\$388	\$404	\$643	\$544
Total Operating Revenue	2,827	2,828	3,656	4,054	4,135	4,465	4,733
Operating Expenses	<u>2,010</u>	<u>2,142</u>	<u>2,186</u>	<u>2,286</u>	<u>2,358</u>	<u>2,433</u>	<u>2,507</u>
Net Revenue	818	685	1,471	1,768	1,777	2,033	2,226
Less:							
Other Uses of Funds	<u>1,133</u>	<u>830</u>	<u>1,679</u>	<u>1,753</u>	<u>1,538</u>	<u>2,132</u>	<u>2,238</u>
Net Cash Flow	(315)	(145)	(209)	15	239	(99)	(12)
Ending Fund Balance	\$742	\$597	\$388	\$404	\$643	\$544	\$532
Debt Service Coverage Ratio	0.97	1.07	1.36	1.73	1.88	1.37	1.39
Target	1.00	1.00	1.00	1.00	1.00	1.00	1.00

3.2. Cost of Service Analysis

3.2.1 General Methodology

In order to provide guidance to the City as to how to adequately recover the water rate revenue requirements identified in the Revenue Sufficiency Analysis, in a manner consistent with generally accepted rate-making principles, a Cost of Service Analysis was conducted.

The Cost of Service Analysis resulted in the identification of the cost to provide service to customers based on functional cost categories and the services they received from the City. These cost allocations were then used as the basis for the assignment of revenue requirements to customer classes upon which the development of rates and charges presented herein is based.

The water cost of service was based on the Base Extra Capacity methodology as detailed in the American Water Works Association (AWWA) Manual M1 – Principles of Water Rates, Fees and Charges.

The general approach to the development of cost of service allocations under the Functional Cost Allocation methodologies was to: 1) identify the costs by functional cost category / service, 2) allocate the functionalized costs further to cost categories and then to 3) allocate the rate revenue requirements to customer classes based on the distribution of costs and customer characteristics. The Cost of Service Analysis and results are presented below.

3.2.2 Allocation to Cost Categories

The water costs are allocated on their need to meet base demand, peak demand (max day and max hour water needs), as well as customer service costs such as billing and collection. Table 3-6 summarizes the cost of service based allocation of the City's water costs.

Table 3-6							
Water System - Summary of Functional Allocations to Cost Categories							
Fiscal Year 2016-17							
Functional Cost	Total	Base	Max Day	Max Hour	Meters & Services	Billing & Collection	Total
Treatment & Distribution	\$556,537	\$164,170	\$120,646	\$271,721	\$-	\$-	\$556,537
Administration & Transfers	1,835,127	1,376,345	-	-	229,391	229,391	1,835,127
Debt Service	510,297	510,297	-	-	-	-	510,297
Non-Operating Revenue/Changes in Reserves ⁽¹⁾	<u>(96,211)</u>	<u>(67,992)</u>	<u>(4,000)</u>	<u>(9,009)</u>	<u>(7,605)</u>	<u>(7,605)</u>	<u>(96,211)</u>
Total	\$2,805,750	\$1,982,820	\$116,646	\$262,712	\$221,786	\$221,786	\$2,805,750
(1) A positive value results in an increase of reserves through rates, while a negative value indicates use of non-operating revenue and existing reserves to meet annual expenses in addition to rates.							

Table 3-6 illustrates the costs to provide water service to customers. Total costs are allocated to functional categories such as treatment or transmission and distribution and then to cost categories such as base or max day. The cost categories are then used to distribute costs to each respective customer class such as residential or commercial.

The Cost of Service Analysis presented herein sets forth how to appropriately recover the rate revenue requirements for FY 2016-17. The allocations presented herein were used, along with the other goals and objectives of the utility, in the development of the water rates and charges presented in the next section.

3.3. Rate Design Analysis

3.3.1 General Methodology

With the rate revenue requirement determined in the Revenue Sufficiency Analysis, and allocations previously described in the Cost of Service Analysis, the development of specific rates and charges was completed as described below.

First, the rate design goals of the City were reviewed to identify areas the City wanted to address over the forecast period included in this Rate Study. Next, an assessment of the existing rate design was completed to identify areas which have worked well for the City with regard to their specific goals and objectives, and the general goals and objectives of utility rate-making. This analysis was conducted consistent with the provisions of Proposition 218.

With an evaluation of the existing rate structure, and the goals of the City going forward, the analysis required for the development of alternative rate structures was then completed. Cost of service and rate design schedules can be found in Appendix C.

3.3.2 Review of Existing Rate Structure

The City's current water rates and charges are comprised of a monthly base charge which includes the first 1,200 cubic feet of water use and a flow rate per hundred cubic feet. The volumetric rate for water is based on a declining block structure for all customers. Residential sewer customers are assessed a flat monthly charge. Commercial customers are assessed a fixed monthly charge and a flow rate per hundred cubic feet, while industrial customers are assessed a flow base rate per 100 cubic feet and a strength charge for their biochemical oxygen demand (BOD) and suspended solids (SS) contributions.

The review of existing rates and charges indicates they are consistent with industry standards. Table 3-7 below presents the existing rate structure of the City.

Table 3-7 Existing Water and Sewer Rate Structures Fiscal Year Ending June 30, 2015-16		
Category	Water System	Sewer System
Monthly Base Fee:		
Residential	\$20.85	\$26.63
Commercial	20.85	29.49
Industrial	20.85	n/a
Volume Rate (\$/100 cubic feet):		
Residential		
0-1,200 cubic feet	\$0.000	n/a
1,201 – 10,000 cubic feet	0.893	n/a
Over 10,000 cubic feet	0.671	n/a
Commercial		
0-1,200 cubic feet	\$0.000	2.949
1,201 – 10,000 cubic feet	0.893	2.949
Over 10,000 cubic feet	0.671	2.949
Industrial		
0-1,200 cubic feet	\$0.000	1.446
1,201 – 10,000 cubic feet	0.893	1.446
Over 10,000 cubic feet	0.671	1.446
BOD First 15,000 lbs (lb per ccf)	n/a	0.300
BOD Next 15,000 lbs (lb per ccf)	n/a	0.478
BOD Over 30,000 lbs (lb per ccf)	n/a	0.654
SS (lb per ccf)	n/a	0.284

3.3.3 Proposed Rate Structure Changes

3.3.3.1. Water Rates

Through discussions with City staff it was determined that there were areas of improvement with the current rate structure that would improve equity among customers, meet the City’s goals and be consistent with AWWA rate making practices as well as prop 218 requirements. As such, the current water rate structure is proposed to be revised. The first revision is to adjust the rates themselves to reflect class cost of service. This involves a new rate structure specific to each class, such that each class is intended to recover the proportional costs they place on the system. The second revision was to change the tier differentials. The residential class will maintain a tiered structure, but it will be reduced to two tiers. The first tier represents average indoor water use for Dinuba residents, while the second tier represents discretionary or outdoor water use. Under, the revised structure customers will pay only for the water they use, providing greater control over their bill. Under the current structure a customer pays

for 1,200 cubic feet of water a month regardless of whether or not they use it. The proposed non-residential rate structure is proposed to change to the current industry trend of a uniform rate structure as opposed to the current tiered structure. The final revision that applies to all customers, is a change in the unit of measurement from cubic feet to thousands of gallons (kgals).

These revisions are proposed to adhere to Proposition 218 and the appropriate recovery of revenues to reflect the costs to serve each respective class. Table 3-8 illustrates the proposed monthly water fixed charges and volume rates for the next 5 years.

Table 3-8					
Proposed Water Rates					
Fiscal Years 2016-17 through FY 2020-21					
Charge/Rate	16-17	17-18	18-19	19-20	20-21
Monthly Fixed Charge	\$11.80	\$12.39	\$13.01	\$13.01	\$13.01
Residential					
First 9,000 Gallons (\$/kgals)	1.190	1.250	1.312	1.312	1.312
Over 9,000 Gallons (\$/kgals)	1.928	2.025	2.126	2.126	2.126
Commercial					
All Use (per kgals)	1.411	1.482	1.556	1.556	1.556
Industrial					
All Use (per kgals)	1.484	1.559	1.637	1.637	1.637

The monthly fixed charge is assessed to all customers regardless of class and acts as a “readiness to serve” charge to ensure safe and reliable water systems such that customers can be assured of ongoing system maintenance and available water when the service is needed. The volumetric portion of a customer’s bill are specific to each customer class as summarized in Table 3-8.

Residential rates have a 2-tier rate structure with the rate differentials between tiers based on the residential class’ respective peaking factors for peak demand. The water system is designed to meet peak day demand needs of customers. Most of the year the water system operates an average level of demand and the capacity required to meet peak day and peak hour demand sits idle. However, the system must be sized to meet the peak demand when it occurs. This is an expensive way to operate a system and those customers whose demand require peak capacity, should pay for the cost of the peak capacity through their rates. The proposed rate structure recovers these costs through the 2-tier structure of the residential class.

The non-residential customer classes are proposed to be assessed a uniform rate specific to each customer class based on the respective demands and costs each class places on the water system.

3.3.3.2. Sewer Rates

Willdan did not identify any problems with the City’s existing Sewer rate structure, and through discussions with City staff it was determined that the existing sewer structure is effectively meeting the City’s goals and is consistent with WEF rate making practices. As such, no changes are proposed to the current sewer rate structure itself (aside from a unit change to kgals), but the rates themselves are proposed to increase in an across-the-board manner consistent with the financial plan projections. Table 3-9 provides a summary of the proposed rates.

Table 3-9					
Proposed Sewer Rates					
Fiscal Years 2016-17 through FY 2020-21					
Charge/Rate	16-17	17-18	18-19	19-20	20-21
Residential					
Per Month	\$33.29	\$37.28	\$37.28	\$39.52	\$41.10
Commercial					
Per Month	36.86	41.29	41.29	43.76	45.51
Flow (per kgals)	3.686	4.129	4.129	4.376	4.551
Industrial					
Flow (per kgals)	1.808	2.024	2.024	2.146	2.232
BOD - first 15,000 lbs (\$/lb/kgals)	0.375	0.420	0.420	0.445	0.463
BOD - next 15,000 lbs (\$/lb/kgals)	0.598	0.669	0.669	0.709	0.738
BOD - over 30,000 lbs (\$/lb/kgals)	0.818	0.916	0.916	0.971	1.009
SS (\$/lb/kgals)	0.355	0.398	0.398	0.421	0.438

3.3.4 Data Review

In order to develop the rates and charges presented herein, a detailed review of pertinent data was conducted. A description of the data reviewed, and the review process employed, is presented below.

3.3.4.1. Billing Data Review

In order to develop rates and charges which recover sufficient revenue to meet the financial goals of the City in a manner consistent with the cost of service analysis and generally accepted rate-making practice, a detailed review of historical billing units was undertaken. The analysis resulted in the identification of the historical bills issued at each increment of consumption for each unique customer class in the system for the FY 2014-15 billing period. This analysis is used as the basis for the projection of billing units used in the development of rates and charges, and the projection of revenue, for the City.

3.3.4.1.1. Billing Data Validation

In order to validate that the data used in the analysis is reasonable for use in the determination of rates and charges which recover the target revenue requirement, a billing data validation was conducted.

The billing data validation consisted of a revenue test in which the rates and charges in place during the last full fiscal year, 2014-15, were applied to the billing data compiled from the City for the same period. The resultant revenue calculated was compared to the revenue collected in FY 2014-15, as provided by City staff.

This comparison resulted in the determination that the billing data was within accepted tolerances for use in rate making.

3.3.5 Comparisons

As part of the study we examined and compared the City’s rates to those of neighboring entities. Figure 1 provides a comparison of the City’s water and sewer rates at 9,000 gallons of water flow per month as well as the City’s current monthly solid waste charge. These values represent the flows of the average residential customer in the City.

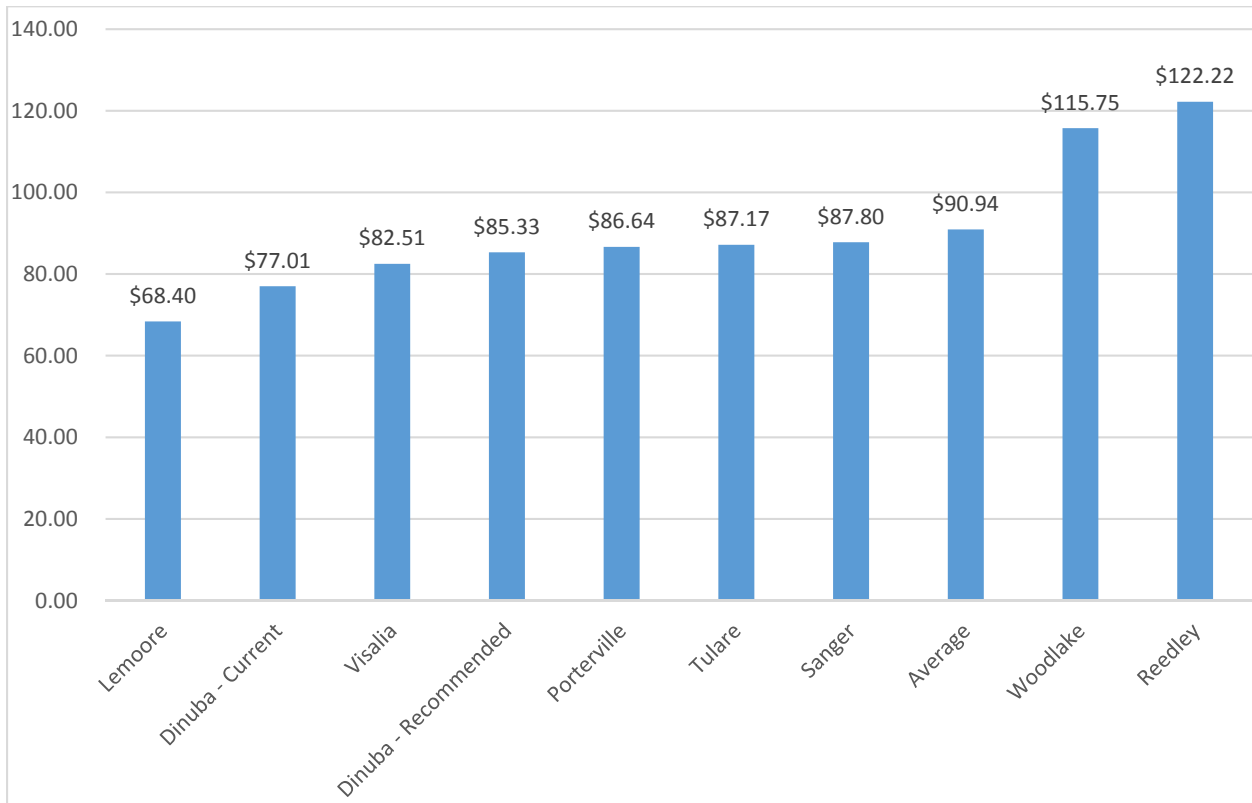


Figure 1 – Monthly Bill Comparison (9,000 gallons)

3.3.6 Summary of the Rate Study

The Rate Study presented herein utilized generally accepted rate-making principles which resulted in the development of rates and charges which are projected to: 1) generate sufficient revenue to meet the financial requirements of the utility, 2) address the need to recover costs from users in a manner which is fair and equitable relative to service provided, and 3) meet the financial and rate design goals of the City.

Section 4 - Conclusions and Recommendations

4.1. Conclusions

- Projected operating revenues and operating expenses for the forecast period were developed by, and/or in consultation with, City staff and are based upon reasonable projections.
- The projected capital project expenses have been developed by City staff, to address water and sewer system renewal, replacement and capacity regulatory needs.
- Based on Conclusions 1 and 2 above, we are of the opinion that the financial projections presented herein demonstrate the water and sewer utilities' ability to meet its obligations with regard to:
 - Operating expenses,
 - Non-operating expenses,
 - Capital project expenses, and
 - Key financial policies, including:
 - Maintenance of at least 2 months of operating reserve balances,
 - Legal debt service coverage of at least 1.00
- The proposed rates presented herein are in conformance with industry standard rate-making practice, prop 218 and/or the City's rate policies with respect to:
 - The fair and equitable recovery of costs through the water and sewer rates,
 - Generation of sufficient revenue to fully recover system revenue requirements and reserve requirements,
 - Recovery of all customer costs and a portion of fixed costs through the water and sewer fixed charges.

4.2. Recommendations

- It is recommended that the City implement the proposed rates and charges presented in this Report for FY 2016-17 through FY 2020-21 effective January, 2017.
- It is recommended that the City update the revenue sufficiency analysis portion of this study each year to ensure projected revenue is sufficient to fund projected expenses going forward as assumptions made during this analysis may change and have a material impact upon the analysis.

- It is recommended that the City update the cost of service analysis portion of this study every three to five years to ensure costs are recovered consistent with cost of service principles and customer characteristics.

City of Dinuba
Pro Forma with Debt Service Coverage and Fund Balance Reconciliation

Line No	Reference	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Operations Fund												
1												
	Water Revenue Increases	0.00%	0.00%	18.00%	5.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	% of Year Rate Increase Effective	100.00%	50.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
2	Beginning Unrestricted Fund Balance	Sch A - 2, Line 26	\$ 771,260	\$ 708,087	\$ 203,505	\$ 340,091	\$ 385,601	\$ 393,324	\$ 555,501	\$ 724,160	\$ 909,767	\$ 1,066,407
3	Rate Revenue 1	Sch A - 3, Line 2	\$ 2,506,120	\$ 2,331,132	\$ 2,805,750	\$ 3,004,958	\$ 3,218,310	\$ 3,282,676	\$ 3,348,330	\$ 3,415,297	\$ 3,483,603	\$ 3,553,275
4	Total Rate Revenue		\$ 2,506,120	\$ 2,331,132	\$ 2,805,750	\$ 3,004,958	\$ 3,218,310	\$ 3,282,676	\$ 3,348,330	\$ 3,415,297	\$ 3,483,603	\$ 3,553,275
5	Other Operating Revenue	Sch A - 3, Line 12	184,342	181,027	231,797	171,357	174,189	177,076	180,015	183,391	186,835	190,347
6	Interest Income - Operating Fund	Calc	2,362	1,500	1,000	2,000	2,000	2,000	4,000	5,000	6,000	
7	Total Operating Revenue		\$ 2,692,824	\$ 2,513,659	\$ 3,038,547	\$ 3,178,315	\$ 3,394,499	\$ 3,461,752	\$ 3,531,345	\$ 3,602,688	\$ 3,675,438	\$ 3,749,622
8	Operating Expenses	Sch A - 4, Line 2	(2,059,808)	(2,374,867)	(2,002,835)	(2,229,926)	(2,345,866)	(2,263,962)	(2,275,480)	(2,347,252)	(2,428,292)	(2,553,311)
9	Net Revenue		\$ 633,016	\$ 138,792	\$ 1,035,712	\$ 948,389	\$ 1,048,633	\$ 1,197,790	\$ 1,255,864	\$ 1,255,436	\$ 1,247,146	\$ 1,196,311
	Plus:											
	Other Sources of Funds											
10	Transfers In	Sch A - 3, Line 13	-	150,000	-	-	-	-	-	-	-	-
	Less:											
	Other Uses of Funds											
11	Minor Capital	Sch A - 4, Line 4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Major Capital Funded with Existing Reserves/Current Cash	Sch A - 6, Line 12	-	-	-	-	-	-	-	-	-	-
13	Transfers Out	Sch A - 4, Line 5	(252,868)	(350,053)	(388,829)	(392,583)	(436,768)	(489,894)	(541,488)	(560,561)	(581,240)	(603,658)
14	Non Operating Expenses	Sch A - 4, Line 3	-	-	-	-	-	-	-	-	-	-
15	Existing Revenue Bond Debt Service	Sch A - 4, Line 6	(443,321)	(443,321)	(510,297)	(510,297)	(510,297)	(451,872)	(451,872)	(415,421)	(415,421)	(415,421)
16	New SRF Debt Service	Sch A - 4, Line 7	-	-	-	-	(93,846)	(93,846)	(93,846)	(93,846)	(93,846)	(93,846)
17	Net Cash Flow		\$ (63,173)	\$ (504,582)	\$ 136,586	\$ 45,510	\$ 7,723	\$ 162,178	\$ 168,659	\$ 185,608	\$ 156,639	\$ 83,386
18	Ending Unrestricted Fund Balance		\$ 708,087	\$ 203,505	\$ 340,091	\$ 385,601	\$ 393,324	\$ 555,501	\$ 724,160	\$ 909,767	\$ 1,066,407	\$ 1,149,792
19	Days of O&M		125	31	62	63	61	90	116	141	160	164
20	Target Unrestricted Fund Balance	Target	343,301	395,811	333,806	371,654	390,978	377,327	379,247	391,209	404,715	425,552
Debt Service Coverage Calculations:												
Revenue Bond Debt Service Coverage												
Rate Covenant Debt Service Coverage Test:												
21	Net Revenue Available for Debt Service Coverage Test		\$ 1,059,124	\$ 352,966	\$ 1,453,167	\$ 1,546,091	\$ 1,626,468	\$ 1,938,378	\$ 2,165,699	\$ 2,350,878	\$ 2,499,227	\$ 2,531,778
Revenue Bond Debt Service:												
22	Existing Revenue Bond Debt Service		443,321	443,321	510,297	510,297	510,297	451,872	451,872	415,421	415,421	415,421
23	New SRF Debt Service		-	-	-	-	93,846	93,846	93,846	93,846	93,846	93,846
24	Total Revenue Bond Debt Service		\$ 443,321	\$ 443,321	\$ 510,297	\$ 510,297	\$ 604,143	\$ 545,718	\$ 545,718	\$ 509,267	\$ 509,267	\$ 509,267
25	Debt Service Coverage - Rate Covenant		2.39	0.80	2.85	3.03	2.69	3.55	3.97	4.62	4.91	4.97
26	Debt Service Coverage Requirement		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parity Debt Service Coverage Test:												
27	Net Revenue Available for Debt Service Coverage Test		\$ 1,059,124	\$ 352,966	\$ 1,453,167	\$ 1,546,091	\$ 1,626,468	\$ 1,938,378	\$ 2,165,699	\$ 2,350,878	\$ 2,499,227	\$ 2,531,778
28	Maximum Revenue Bond Debt Service		510,297	510,297	510,297	510,297	510,297	451,872	451,872	415,421	415,421	415,421
29	Debt Service Coverage - Parity Test		2.08	0.69	2.85	3.03	3.19	4.29	4.79	5.66	6.02	6.09
30	Debt Service Coverage Requirement		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SRF Debt Service Coverage Test												
SRF Test:												
31	Net Revenue Available for Debt Service Coverage Test		\$ 1,059,124	\$ 352,966	\$ 1,453,167	\$ 1,546,091	\$ 1,626,468	\$ 1,938,378	\$ 2,165,699	\$ 2,350,878	\$ 2,499,227	\$ 2,531,778
	Less:											
32	Existing Revenue Bond Debt Service		(443,321)	(443,321)	(510,297)	(510,297)	(604,143)	(545,718)	(545,718)	(509,267)	(509,267)	(509,267)
33	Net Revenue Available for SRF Debt Service Coverage Test		\$ 615,803	\$ (90,355)	\$ 942,870	\$ 1,035,794	\$ 1,022,325	\$ 1,392,660	\$ 1,619,981	\$ 1,841,611	\$ 1,989,960	\$ 2,022,511
34	Existing SRF Debt Service		-	-	-	-	-	-	-	-	-	-
35	New SRF Debt Service		-	-	-	-	-	-	-	-	-	-
36	Total SRF Debt Service		-	-	-	-	-	-	-	-	-	-
37	Debt Service Coverage - SRF Test		-	-	-	-	-	-	-	-	-	-
38	Debt Service Coverage Requirement		1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
SDC Fund												
39	Beginning Balance	Sch A - 2, Line 26	\$ -	\$ 121,408	\$ 336,582	\$ 186,570	\$ 168,044	\$ 118,534	\$ 82,699	\$ 40,588	\$ (10,812)	\$ (62,212)
40	Sources of Funds	Sch A - 3, Line 14	426,108	214,174	77,363	212,101	184,511	185,087	185,675	185,675	185,675	185,675
41	Interest Earnings	Calc	300	1,000	1,000	1,000	1,000	1,000	-	-	-	-
42	Uses of Funds other Than Major Capital	Sch A - 4, Line 12	-	-	(228,375)	(231,627)	(235,022)	(221,922)	(227,787)	(237,075)	(237,075)	(237,075)
43	Major Capital Funded with SDC Fund	Sch A - 6, Line 11	(305,000)	-	-	-	-	-	-	-	-	-
44	Ending Balance		\$ 121,408	\$ 336,582	\$ 186,570	\$ 168,044	\$ 118,534	\$ 82,699	\$ 40,588	\$ (10,812)	\$ (62,212)	\$ (113,612)
Capital Fund												
45	Beginning Balance	Sch A - 2, Line 26	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
46	Sources of Funds	Sch A - 3, Line 15	-	80,000	114,000	148,000	182,000	216,000	250,000	250,000	250,000	250,000
47	Interest Earnings	Calc	-	-	-	-	-	-	-	-	-	-
48	Uses of Funds other Than Major Capital	Sch A - 4, Line 15	-	-	-	-	-	-	-	-	-	-
49	Major Capital Funded with Capital Fund	Sch A - 6, Line 10	-	(80,000)	(114,000)	(148,000)	(182,000)	(216,000)	(250,000)	(250,000)	(250,000)	(250,000)
50	Ending Balance		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

City of Dinuba
Beginning Fund Balance Reconciliation

BEGINNING BALANCES					
Line No:		Operations Fund		SDC Fund	Capital Fund
1	Current assets:				
2	Pooled cash and investments	\$ 771,260	\$	-	\$ -
3	Receivables (net of allowance for uncollectibles):				
4	Accounts and other				
5	Unbilled accounts				
6	Accrued interest				
7	Due from other funds				
8	Due from other governments				
9	Inventories				
10	Prepaid expenses				
11	Other assets				
12	Total Current Assets	\$ 771,260	\$	-	\$ -
	Current Liabilities:				
13	Accounts and contracts payable				
14	Accrued liabilities				
15	Accrued interest payable				
16	Current portion of long-term debt:				
17	Deposits payable				
18	Certificates of Participation				
19	Due to other funds				
20	Deferred revenue				
21	Total Current Liabilities	\$ -	\$	-	\$ -
	Adjustments:				
22	Removal of Inventories (Not Liquid)	-		-	-
23	Other Assets (Unkown Cash)	-		-	-
24	Net Adjustments	\$ -	\$	-	\$ -
25	Net Beginning Balances (Curr Assets less Current Liabilities - with Adjustments)	\$ 771,260	\$	-	\$ -

City of Dinuba
Expenses Other than Major Capital Expenses

Line No:	Summary - Operations Fund											
FUND #	Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
1	1	Operating	\$ 2,059,808	\$ 2,374,867	\$ 2,002,835	\$ 2,229,926	\$ 2,345,866	\$ 2,263,962	\$ 2,275,480	\$ 2,347,252	\$ 2,428,292	\$ 2,553,311
3	1	Non Operating	-	-	-	-	-	-	-	-	-	-
4	1	Minor Capital	-	-	-	-	-	-	-	-	-	-
5	1	Transfers	252,868	350,053	388,829	392,583	436,768	489,894	541,488	560,561	581,240	603,658
6	1	Existing Bond Debt Service	443,321	443,321	510,297	510,297	510,297	451,872	451,872	415,421	415,421	415,421
7	1	New Bond Debt Service	-	-	-	-	93,846	93,846	93,846	93,846	93,846	93,846
8	1	Existing SRF Debt Service	-	-	-	-	-	-	-	-	-	-
9	1	New SRF Debt Service	-	-	-	-	-	-	-	-	-	-
10		TOTAL	2,755,997	3,168,241	2,901,961	3,132,805	3,386,776	3,299,574	3,362,686	3,417,080	3,518,798	3,666,236

Summary - SDC Fund												
FUND #	Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
11	2	Operating	-	-	-	-	-	-	-	-	-	-
13	2	Existing Bond Debt Service	-	-	228,375	231,627	235,022	221,922	227,787	237,075	237,075	237,075
13		TOTAL	-	-	228,375	231,627	235,022	221,922	227,787	237,075	237,075	237,075

Summary - Capital Fund												
FUND #	Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
14	3	Operating	-	-	-	-	-	-	-	-	-	-
16		TOTAL	-	-	-	-	-	-	-	-	-	-

Detail												
FUND #	Annual Expense Escalation Factor	EXPENSES	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Detail												
Operations Fund												
Water Services												
Employee Services												
20	1	2.0%	294,056	291,999	298,253	307,261	316,540	326,099	335,948	373,708	415,713	462,439
21	1	2.0%	52,560	52,192	53,310	54,920	56,578	58,287	60,047	66,797	74,305	82,657
22	1	2.0%	6,874	6,826	6,972	7,183	7,400	7,623	7,854	8,736	9,718	10,811
23	1	2.0%	4,237	4,208	4,298	4,428	4,561	4,699	4,841	5,385	5,991	6,664
24	1	2.0%	54,581	54,199	55,360	57,032	58,754	60,529	62,357	69,366	77,162	85,835
25	1	2.0%	5,009	4,974	5,081	5,234	5,392	5,555	5,723	6,366	7,081	7,877
26	1	2.0%	7,907	7,852	8,020	8,263	8,512	8,769	9,034	10,049	11,179	12,436
27	1	2.0%	94,147	93,489	95,491	98,375	101,346	104,406	107,560	119,649	133,098	148,058
28	1	2.0%	54,167	53,789	54,941	56,600	58,309	60,070	61,884	68,840	76,578	85,185
29	1	2.0%	781	775	792	816	840	866	892	992	1,104	1,228
30	1	2.0%	4,434	4,403	4,498	4,634	4,774	4,918	5,066	5,636	6,269	6,974
31	Maintenance & Operations											
32	1	3.0%	1,890	2,500	1,032	1,053	1,074	1,095	1,117	1,139	1,162	1,185
33	1	2.0%	111,050	165,000	115,000	117,300	119,646	122,039	124,480	126,969	129,508	132,098
34	1	2.0%	21,413	18,000	20,645	21,058	21,479	21,909	22,347	22,794	23,250	23,715
35	1	2.0%	3,147	2,000	15,000	15,300	15,606	15,918	16,236	16,561	16,892	17,230
36	1	2.0%	434	500	1,032	1,053	1,074	1,095	1,117	1,139	1,162	1,185
37	1	2.0%	2,871	4,000	1,032	1,053	1,074	1,095	1,117	1,139	1,162	1,185
38	1	3.0%	264,624	265,000	255,000	262,650	270,530	278,645	287,005	295,615	304,483	313,617
39	1	2.0%	27,461	5,000	2,800	2,856	2,913	2,971	3,031	3,091	3,153	3,216
40	1	2.0%	20,505	28,000	25,375	25,883	26,400	26,928	27,467	28,016	28,576	29,148
41	1	2.0%	30,821	204,643	65,000	66,300	167,626	67,626	68,979	70,358	71,765	73,200
42	1	2.0%	-	-	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
43	1	2.0%	4,861	500	516	526	537	548	559	570	581	593
44	1	2.0%	6,970	23,000	22,000	22,440	22,889	23,347	23,814	24,290	24,776	25,272
45	1	2.0%	346	1,032	1,032	1,053	1,074	1,095	1,117	1,139	1,162	1,185
46	1	2.0%	14,803	14,000	13,612	13,884	14,162	14,445	14,734	15,029	15,330	15,637
47	1	2.0%	25,726	10,000	3,461	3,530	3,601	3,673	3,746	3,821	3,897	3,975
48	1	2.0%	10,556	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
49	Allocated Costs											
50	1	3.0%	14,757	14,222	14,741	15,036	15,337	15,643	15,956	16,435	16,928	17,436
51	1	3.0%	7,919	5,120	3,822	3,898	3,976	4,056	4,137	4,261	4,389	4,521
52	1	3.0%	120	1,972	2,206	2,250	2,295	2,341	2,388	2,460	2,533	2,609
53	1	3.0%	23,440	19,309	19,087	19,469	19,858	20,255	20,660	21,280	21,918	22,576
54	1	3.0%	27,242	36,717	36,688	37,422	38,170	38,934	39,712	40,903	42,130	43,394
55	1	3.0%	30,781	25,639	24,252	24,737	25,232	25,736	26,251	27,039	27,850	28,686
56	1	3.0%	4,711	4,852	4,852	4,949	5,048	5,149	5,252	5,410	5,572	5,739
57	1	0.0%	506,667	583,735	349,890	516,044	482,199	448,354	414,508	380,663	346,818	346,818

		Annual Expense Escalation		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
17	FUND #	Factor	EXPENSES										
18			Detail										
			Operations Fund										
58	1	3.0%	Overhead - Utility Billing	132,833	138,904	140,961	143,780	146,656	149,589	152,581	157,158	161,873	166,729
59	1	3.0%	Public Works Management Overhead	120,935	129,775	153,798	156,874	160,011	163,212	166,476	171,470	176,614	181,912
60	1	3.0%	Retirement Insurance	-	7,800	10,714	10,928	11,147	11,370	11,597	11,945	12,303	12,672
61	1	3.0%	Engineering Support	64,171	76,941	98,271	119,857	129,247	141,072	143,893	147,034	150,307	153,726
62	1	3.0%	Capital Outlays										
63			Transfers										
64	1	0.0%	Transfer Out - Water Construction FD	-	80,000	114,000	148,000	182,000	216,000	250,000	250,000	250,000	250,000
65	1	0.0%	Transfer Out - General Debt Service	6,381	6,381	4,786	4,786	4,786	4,786	4,786	4,786	4,786	4,786
66	1	0.0%	Transfer Out - Water Equipment Fd	40,000	40,000	100,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
67	1	0.0%	Transfer Out - Fin Auth (2012 LRB)	206,487	223,672	170,043	179,797	189,982	209,108	226,702	245,775	266,454	288,872
			New Bond Debt Service Pulls from Schedule A-6 Automatically - Based on Assumed New Debt Issuances Input on Dashboard										
68	1	0.0%	1998 Clean Water Loan	59,421	59,421	82,066	82,066	82,066	82,066	82,066	59,421	59,421	59,421
69	1	0.0%	1998 COP	77,900	77,900	58,425	58,425	58,425	-	-	-	-	-
70	1	0.0%	SDWSRF (Clean Water Loan)	306,000	306,000	369,806	369,806	369,806	369,806	369,806	356,000	356,000	356,000
			SDC Fund										
	2	0.0%	Capital Outlays										
71	2	0.0%	SDC Debt	-	-	228,375	231,627	235,022	221,922	227,787	50,000	50,000	50,000
	2	0.0%		-	-	-	-	-	-	-	187,075	187,075	187,075
			Capital Fund										
75	3	3.0%	Operating	-	-	-	-	-	-	-	-	-	-

City of Dinuba
CIP - Inflated

Line No:	Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Capital Projects											
1	Community Water Well Improvements	\$0	\$50,000	\$84,000	\$118,000	\$152,000	\$186,000	\$220,000	\$220,000	\$220,000	\$220,000
2	Community Water System Improvements	-	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
3	Preliminary Design #GC9501	5,000	-	-	-	-	-	-	-	-	-
4	Comm. System Imp. #WC9501	10,000	-	-	-	-	-	-	-	-	-
5	El Monte Way Widening Water Imp	290,000	-	-	-	-	-	-	-	-	-
6	Annual Repair and Replacement	-	-	-	-	-	-	-	-	-	-
7	Additional Water Improvements	-	-	-	-	-	-	-	-	-	-
8	Well No. 21 and Transmission Main	-	-	-	2,060,602	-	-	-	-	-	-
Total		\$ 305,000	\$ 80,000	\$ 114,000	\$ 2,208,602	\$ 182,000	\$ 216,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000

Current Day Dollars											
Line No:	Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1	Community Water Well Improvements	-	50,000	84,000	118,000	152,000	186,000	220,000	220,000	220,000	220,000
2	Community Water System Improvements	-	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
3	Preliminary Design #GC9501	5,000	-	-	-	-	-	-	-	-	-
4	Comm. System Imp. #WC9501	10,000	-	-	-	-	-	-	-	-	-
5	El Monte Way Widening Water Imp	290,000	-	-	-	-	-	-	-	-	-
6	Annual Repair and Replacement	-	-	-	-	-	-	-	-	-	-
7	Additional Water Improvements	-	-	-	-	-	-	-	-	-	-
8	Well No. 21 and Transmission Main	-	-	-	2,000,000	-	-	-	-	-	-
Total		\$ 305,000	\$ 80,000	\$ 114,000	\$ 2,148,000	\$ 182,000	\$ 216,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000

Revenue Bond Debt Service - Operations

							2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Annual New Debt Required							\$ -	\$ -	\$ -	\$ 2,060,602	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fiscal Year	Term (Yrs)	Rate	Issuance Costs	Capital Project Proceeds Required	Issuance Costs	Total Debt Required	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
2015	30	2.0%	2.0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2016	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2017	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2018	30	2.0%	2.0%	2,060,602	41,212	2,101,814	-	-	-	-	93,846	93,846	93,846	93,846	93,846	93,846	
2019	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2020	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2021	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2022	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2023	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2024	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cumulative Annual New Bond Debt Service							\$ -	\$ -	\$ -	\$ -	\$ 93,846	\$ 93,846	\$ 93,846	\$ 93,846	\$ 93,846	\$ 93,846	

Revenue Bond Debt Service - SDC

							2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Annual New Debt Required							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fiscal Year	Term (Yrs)	Rate	Issuance Costs	Capital Project Proceeds Required	Issuance Costs	Total Debt Required	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
2015	30	2.0%	2.0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2016	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2017	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2018	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2019	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2020	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2021	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2022	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2023	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2024	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cumulative Annual New SRF Debt Service							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

City of Dinuba
Pro Forma with Debt Service Coverage and Fund Balance Reconciliation

Line No

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Operations Fund										
1	Sewer Rate Revenue Increases									
	0.00%	0.00%	25.00%	12.00%	0.00%	6.00%	4.00%	4.00%	0.00%	0.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
2	Beginning Unrestricted Fund Balance									
	\$ 1,057,138	\$ 741,830	\$ 597,124	\$ 388,237	\$ 403,633	\$ 642,775	\$ 543,520	\$ 531,861	\$ 640,754	\$ 770,263
3	Rate Revenue 1									
	\$ 2,723,367	\$ 2,762,615	\$ 3,494,016	\$ 3,991,564	\$ 4,071,395	\$ 4,401,992	\$ 4,669,633	\$ 4,953,547	\$ 5,052,618	\$ 5,153,670
4	Total Rate Revenue									
	\$ 2,723,367	\$ 2,762,615	\$ 3,494,016	\$ 3,991,564	\$ 4,071,395	\$ 4,401,992	\$ 4,669,633	\$ 4,953,547	\$ 5,052,618	\$ 5,153,670
5	Other Operating Revenue									
	102,747	64,430	160,224	60,224	60,224	60,224	60,224	60,224	60,224	60,224
6	Interest Income - Operating Fund									
	1,292	500	2,000	2,000	3,000	3,000	3,000	3,000	4,000	4,000
7	Total Operating Revenue									
	\$ 2,827,406	\$ 2,827,545	\$ 3,656,240	\$ 4,053,788	\$ 4,134,619	\$ 4,465,216	\$ 4,732,857	\$ 5,016,771	\$ 5,116,842	\$ 5,217,894
8	Operating Expenses									
	(2,009,591)	(2,142,397)	(2,185,688)	(2,285,543)	(2,357,588)	(2,432,525)	(2,506,751)	(2,582,103)	(2,661,026)	(2,735,874)
9	Net Revenue									
	\$ 817,815	\$ 685,148	\$ 1,470,552	\$ 1,768,245	\$ 1,777,031	\$ 2,032,691	\$ 2,226,106	\$ 2,434,668	\$ 2,455,816	\$ 2,482,020
	Plus:									
	<u>Other Sources of Funds</u>									
10	Transfers In									
	12,000	112,000	63,221	-	-	-	-	-	-	-
	Less:									
	<u>Other Uses of Funds</u>									
11	Minor Capital									
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Major Capital Funded with Existing Reserves/Current Cash									
	-	-	-	-	-	-	-	-	-	-
13	Transfers Out									
	(3,191)	(3,191)	(299,000)	(336,000)	(124,000)	(162,000)	(200,000)	(200,721)	(200,829)	(218,737)
14	Non Operating Expenses									
	-	-	-	-	-	-	-	-	-	-
15	Existing Revenue Bond Debt Service									
	(1,141,932)	(938,663)	(1,443,660)	(1,416,848)	(1,413,890)	(1,201,410)	(1,269,228)	(1,168,654)	(1,169,077)	(1,172,819)
16	New Revenue Bond Debt Service									
	-	-	-	-	-	(768,537)	(768,537)	(956,401)	(956,401)	(956,401)
17	Net Cash Flow									
	\$ (315,308)	\$ (144,706)	\$ (208,887)	\$ 15,397	\$ 239,141	\$ (99,255)	\$ (11,658)	\$ 108,892	\$ 129,509	\$ 134,062
18	Ending Unrestricted Fund Balance									
	\$ 741,830	\$ 597,124	\$ 388,237	\$ 403,633	\$ 642,775	\$ 543,520	\$ 531,861	\$ 640,754	\$ 770,263	\$ 904,325
19	<u>Days of O&M</u>									
	135	102	65	64	100	82	77	91	106	121
20	Target Unrestricted Fund Balance									
	334,932	357,066	364,281	380,924	392,931	405,421	417,792	430,350	443,504	455,979
Debt Service Coverage Calculations:										
<u>Revenue Bond Debt Service Coverage</u>										
Rate Covenant Debt Service Coverage Test:										
21	Net Revenue Available for Debt Service Coverage Test									
	\$ 1,107,554	\$ 1,005,243	\$ 1,965,066	\$ 2,450,213	\$ 2,662,725	\$ 2,820,029	\$ 3,002,704	\$ 3,320,158	\$ 3,470,815	\$ 3,631,082
Revenue Bond Debt Service:										
22	Existing Revenue Bond Debt Service									
	1,397,347	1,193,153	1,468,660	1,441,848	1,438,890	1,226,410	1,294,228	1,168,654	1,169,077	1,172,819
23	New Revenue Bond Debt Service									
	-	-	-	-	68,314	836,851	836,851	1,275,201	1,275,201	1,275,201
24	Total Revenue Bond Debt Service									
	\$ 1,141,932	\$ 938,663	\$ 1,443,660	\$ 1,416,848	\$ 1,413,890	\$ 1,969,947	\$ 2,037,765	\$ 2,125,055	\$ 2,125,478	\$ 2,129,220
25	Debt Service Coverage - Rate Covenant									
	0.97	1.07	1.36	1.73	1.88	1.43	1.47	1.56	1.63	1.71
26	<u>Debt Service Coverage Requirement</u>									
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
<u>Parity Debt Service Coverage Test:</u>										
27	Net Revenue Available for Debt Service Coverage Test									
	\$ 1,107,554	\$ 1,005,243	\$ 1,965,066	\$ 2,450,213	\$ 2,662,725	\$ 2,820,029	\$ 3,002,704	\$ 3,320,158	\$ 3,470,815	\$ 3,631,082
28	Maximum Revenue Bond Debt Service									
	1,443,660	1,443,660	1,443,660	1,416,848	1,413,890	1,269,228	1,269,228	1,172,819	1,172,819	1,172,819
29	Debt Service Coverage - Parity Test									
	0.77	0.70	1.36	1.73	1.88	2.22	2.37	2.83	2.96	3.10
30	<u>Debt Service Coverage Requirement</u>									
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SDC Fund										
31	Beginning Balance									
	\$ -	\$ 34,624	\$ 100,229	\$ 182,507	\$ 437,842	\$ 590,447	\$ 743,951	\$ 899,374	\$ 829,310	\$ 759,247
32	Sources of Funds									
	289,739	320,095	106,278	278,335	242,919	243,819	244,736	244,736	244,736	244,736
33	Interest Earnings									
	300	-	1,000	2,000	3,000	3,000	4,000	4,000	4,000	4,000
34	Uses of Funds other Than Major Capital									
	(255,415)	(254,490)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	-	-	-
35	New SRF Debt									
	-	-	-	-	(68,314)	(68,314)	(68,314)	(318,800)	(318,800)	(318,800)
36	Major Capital Funded with SDC Fund									
	-	-	-	-	-	-	-	-	-	-
37	Ending Balance									
	\$ 34,624	\$ 100,229	\$ 182,507	\$ 437,842	\$ 590,447	\$ 743,951	\$ 899,374	\$ 829,310	\$ 759,247	\$ 689,183
Capital Fund										
38	Beginning Balance									
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
39	Sources of Funds									
	-	-	299,000	336,000	124,000	162,000	200,000	200,721	200,829	218,737
40	Interest Earnings									
	-	-	-	-	-	-	-	-	-	-
41	Uses of Funds other Than Major Capital									
	-	-	-	-	-	-	-	-	-	-
42	Major Capital Funded with Cash									
	-	-	(299,000)	(336,000)	(124,000)	(162,000)	(200,000)	(200,721)	(200,829)	(218,737)
43	Ending Balance									
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

City of Dinuba
Beginning Fund Balance Reconciliation

BEGINNING BALANCES						
Line No:		Operations Fund		SDC Fund		Capital Fund
1	Current assets:					
2	Cash and cash investments	\$ 1,057,138		\$ -		\$ -
3	Receivables (net of allowance for uncollectibles):					
4	Accounts and other					
5	Unbilled accounts					
6	Accrued interest					
7	Due from other funds					
8	Due from other governments					
9	Inventories					
10	Prepaid insurance					
11	Other assets					
12	Total Current Assets	\$ 1,057,138		\$ -		\$ -
	Current Liabilities:					
13	Accounts and contracts payable					
14	Accrued liabilities					
15	Accrued interest payable					
16	Current portion of long-term debt:					
17	Revenue Bonds					
18	Certificates of Participation					
19	Due to other funds					
20	Deferred revenue					
21	Total Current Liabilities	\$ -		\$ -		\$ -
	Adjustments by JV:					
22	Removal of Inventories (Not Liquid)		-		-	-
23	Other Assets (Unkown Cash)		-		-	-
24	Net Adjustments	\$ -		\$ -		\$ -
25	Net Beginning Balances (Curr Assets less Current Liabilities - with Adjustments)	\$ 1,057,138		\$ -		\$ -

City of Dinuba
Revenue

Line No:	Summary											
	Code	Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1												
2	RR1	Rate Revenue 1	\$ 2,723,367	\$ 2,762,615	\$ 3,494,016	\$ 3,991,564	\$ 4,071,395	\$ 4,401,992	\$ 4,669,633	\$ 4,953,547	\$ 5,052,618	\$ 5,153,670
3	OR	Other Operating Revenue	102,747	64,430	160,224	60,224	60,224	60,224	60,224	60,224	60,224	60,224
4	TRIN	Transfers In	12,000	112,000	63,221	-	-	-	-	-	-	-
5	Sources - Fund 2	Sources of Funds - Fund 2	289,739	320,095	106,278	278,335	242,919	243,819	244,736	244,736	244,736	244,736
6	Sources - Fund 3	Sources of Funds - Fund 3	-	-	299,000	336,000	124,000	162,000	200,000	200,721	200,829	218,737
7	INT - Fund 1	Interest Earnings - Fund 1	-	500	2,000	2,000	3,000	3,000	3,000	3,000	4,000	4,000
8	INT - Fund 2	Interest Earnings - Fund 2	300	-	1,000	2,000	3,000	3,000	4,000	4,000	4,000	4,000
9	INT - Fund 3	Interest Earnings - Fund 3	-	-	-	-	-	-	-	-	-	-
10												
11		Operations Fund										
	RR1 - BEFORE GROWTH AND RATE INCR											
12		Rate Revenue 1	\$ 2,723,367	\$ 2,762,615	\$ 2,795,213	\$ 3,494,016	\$ 3,991,564	\$ 4,071,395	\$ 4,401,992	\$ 4,669,633	\$ 4,953,547	\$ 5,052,618
13	RR1 - Growth	Growth	0.00%	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
14		Revenue Increase	0.00%	0.00%	25.00%	12.00%	0.00%	6.00%	4.00%	4.00%	0.00%	0.00%
15		Pct of Year Revenue Increase Effective	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
16	RR1	Total Rate Revenue 1 - After Revenue Increase	\$ 2,723,367	\$ 2,762,615	\$ 3,494,016	\$ 3,991,564	\$ 4,071,395	\$ 4,401,992	\$ 4,669,633	\$ 4,953,547	\$ 5,052,618	\$ 5,153,670
17		For Use In Rate Design Section - Do Not Alter:										
18		Total Rate Revenue - w/ Partial Year Rate Increase (as applicable)	\$ 2,723,367	\$ 2,762,615	\$ 3,494,016	\$ 3,991,564	\$ 4,071,395	\$ 4,401,992	\$ 4,669,633	\$ 4,953,547	\$ 5,052,618	\$ 5,153,670
19		Total Rate Revenue - w/ Full Year Rate Increase	\$ 2,762,615	\$ 2,795,213	\$ 3,494,016	\$ 3,991,564	\$ 4,071,395	\$ 4,401,992	\$ 4,669,633	\$ 4,953,547	\$ 5,052,618	\$ -
20	OR	Property Lease Rental	42,299	16,000	22,909	22,909	22,909	22,909	22,909	22,909	22,909	22,909
21	OR	Industrial Monitoring	27,982	18,000	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
22	TRIN	Loan Repayment Warehouse	12,000	12,000	63,221	-	-	-	-	-	-	-
23	OR	Utility Delinquency	31,147	29,230	29,815	29,815	29,815	29,815	29,815	29,815	29,815	29,815
24	OR	Miscellaneous Revenue	1,319	1,200	100,000	-	-	-	-	-	-	-
25	TRIN	Transfer In - Sewer Construction	-	100,000	-	-	-	-	-	-	-	-
26	OR	Non Rate Rev 9	-	-	-	-	-	-	-	-	-	-
27	OR	Non Rate Rev 10	-	-	-	-	-	-	-	-	-	-
28		Interest Earning Calculation										
29		Average Balance	\$ 899,000	\$ 669,000	\$ 492,000	\$ 395,000	\$ 522,000	\$ 592,000	\$ 536,000	\$ 585,000	\$ 704,000	\$ 835,000
30		Assumed Interest Earnings Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
31	INT - Fund 1	Projected Interest Earnings	\$ 1,292	\$ 500	\$ 2,000	\$ 2,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 4,000	\$ 4,000
32		SDC Fund										
33		Operating Revenue	139,739	320,095	106,278	278,335	242,919	243,819	244,736	244,736	244,736	244,736
34		Non Operating Revenue	150,000	-	-	-	-	-	-	-	-	-
35		Transfers In	-	-	-	-	-	-	-	-	-	-
36	Sources - Fund 2	Total Sources	289,739	320,095	106,278	278,335	242,919	243,819	244,736	244,736	244,736	244,736
37		Interest Earnings Calculation										
38		Average Balance	\$ 17,000	\$ 67,000	\$ 141,000	\$ 309,000	\$ 513,000	\$ 666,000	\$ 820,000	\$ 862,000	\$ 792,000	\$ 722,000
39		Assumed Interest Earnings Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
40	INT - Fund 2	Projected Interest Earnings	\$ 300	\$ -	\$ 1,000	\$ 2,000	\$ 3,000	\$ 3,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000
41		Capital Fund										
42		Operating Revenue	-	-	-	-	-	-	-	-	-	-
43		Non Operating Revenue	-	-	-	-	-	-	-	-	-	-
44		Transfers In	-	-	299,000	336,000	124,000	162,000	200,000	200,721	200,829	218,737
45	Sources - Fund 3	Total Sources	-	-	299,000	336,000	124,000	162,000	200,000	200,721	200,829	218,737
46		Interest Earnings Calculation										
47		Average Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
48		Assumed Interest Earnings Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
49	INT - Fund 3	Projected Interest Earnings	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Summary - Operations Fund												
FUND #	Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
1	Operating	\$ 2,009,591	\$ 2,142,397	\$ 2,185,688	\$ 2,285,543	\$ 2,357,588	\$ 2,432,525	\$ 2,506,751	\$ 2,582,103	\$ 2,661,026	\$ 2,735,874	
2	Non Operating	-	-	-	-	-	-	-	-	-	-	
3	Minor Capital	-	-	-	-	-	-	-	-	-	-	
4	Transfers	3,191	3,191	299,000	336,000	124,000	162,000	200,000	200,721	200,829	218,737	
5	Existing Bond Debt Service	1,141,932	938,663	1,443,660	1,416,848	1,413,890	1,201,410	1,269,228	1,168,654	1,169,077	1,172,819	
6	New Bond Debt Service	-	-	-	-	-	-	-	-	-	-	
7	Existing SRF Debt Service	-	-	-	-	-	-	-	-	-	-	
8	New SRF Debt Service	-	-	-	-	-	-	-	-	-	-	
9	TOTAL	3,154,714	3,084,251	3,928,348	4,038,391	3,895,478	3,795,935	3,975,979	3,951,478	4,030,932	4,127,431	

Summary - SDC Fund												
FUND #	Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
10	Operating	-	-	-	-	-	-	-	-	-	-	
11	Existing Bond Debt Service	255,415	254,490	25,000	25,000	25,000	25,000	25,000	-	-	-	
12	New SRF Debt Service	-	-	-	-	-	-	-	-	-	-	
13	TOTAL	255,415	254,490	25,000	25,000	25,000	25,000	25,000	-	-	-	

Summary - Capital Fund												
FUND #	Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
15	Operating	-	-	299,000	336,000	124,000	162,000	200,000	200,721	200,829	218,737	
16	TOTAL	-	-	299,000	336,000	124,000	162,000	200,000	200,721	200,829	218,737	

Summary - Fund 9												
FUND #	Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
9	Operating	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	TOTAL	-	-	-	-	-	-	-	-	-	-	

Summary - Fund 10												
FUND #	Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
10	Operating	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	TOTAL	-	-	-	-	-	-	-	-	-	-	

Detail												
FUND #	Annual Expense Escalation Factor	EXPENSES	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024

Operations Fund													
Wastewater Treatment Plant													
Employee Services													
21	1	3.0%	Regular Salaries	193,162	215,148	231,815	238,816	246,028	253,458	261,113	268,999	277,123	285,493
22	1	3.0%	Overtime	7,390	8,231	8,869	9,137	9,413	9,697	9,990	10,290	10,599	10,917
23	1	3.0%	Standby	8,430	9,389	10,116	10,422	10,737	11,061	11,395	11,737	12,089	12,452
24	1	3.0%	PERS	29,237	32,565	35,087	36,147	37,239	38,363	39,522	40,707	41,928	43,186
25	1	3.0%	Medicare	2,782	3,099	3,339	3,440	3,544	3,651	3,761	3,874	3,990	4,110
26	1	3.0%	LTD/Life Insurance	5,181	5,770	6,217	6,405	6,598	6,798	7,003	7,213	7,429	7,652
27	1	3.0%	Health/Dental/Vision Ins.	54,688	60,913	65,631	67,614	69,655	71,759	73,926	76,144	78,428	80,781
28	1	3.0%	Workers' Compensation	4,217	4,697	5,061	5,214	5,371	5,533	5,701	5,872	6,048	6,229
29	1	3.0%	Unemployment Insurance	368	410	441	455	468	482	497	512	527	543
30	1	3.0%	Uniform Allowance	2,047	2,280	2,457	2,531	2,607	2,686	2,767	2,850	2,936	3,024
Maintenance & Operations													
31	1	2.0%	Office Supplies	3,574	7,500	509	519	530	540	551	562	573	584
32	1	2.0%	Operating Supplies	70,694	60,000	54,105	55,187	56,291	57,417	58,565	59,736	60,931	62,150
33	1	2.0%	Lubricant & Fuels	5,761	6,000	12,000	12,240	12,485	12,734	12,989	13,249	13,514	13,784
34	1	2.0%	Repair & Maintenance Supplies	-	-	-	-	-	-	-	-	-	-
35	1	2.0%	Small Tools	1,467	1,500	610	622	635	647	660	673	686	700
36	1	2.7%	Safety Equipment & Supplies	1,389	1,032	1,032	1,053	1,074	1,095	1,117	1,147	1,177	1,208
37	1	2.0%	Utilities (Subtotal)	496,248	485,000	441,528	470,242	482,667	495,381	510,242	520,447	530,856	541,473
38	1	2.0%	Communication (Subtotal)	2,489	2,300	1,273	1,298	1,324	1,351	1,378	1,405	1,433	1,462
39	1	2.0%	Professional & Technical Svcs	2,982	36,255	36,255	36,980	37,720	38,474	39,244	40,042	40,856	41,687
40	1	2.0%	Contractual Services	136,918	245,300	262,064	269,518	273,983	274,484	281,219	286,843	292,580	298,432
41	1	2.0%	Taxes	139	610	610	622	635	647	660	673	686	700
42	1	2.0%	Security Services	397	509	509	519	530	540	551	562	573	584
43	1	2.0%	Lab/Testing	7,967	8,000	12,000	12,240	12,485	12,734	12,989	13,249	13,514	13,784
44	1	2.0%	Training (Subtotal)	1,727	2,009	1,526	1,557	1,588	1,619	1,652	1,685	1,719	1,753
45	1	2.0%	Maintenance (Subtotal)	34,481	42,000	27,268	27,813	28,370	28,937	29,516	30,106	30,708	31,322
46	1	2.0%	Rental Property Maintenance	-	-	-	-	-	-	-	-	-	-
47	1	2.0%	Dues & Subscriptions, Other	583	1,000	509	519	530	540	551	562	573	584
48	1	0.0%	Advertising	-	1,100	509	519	530	540	551	562	573	584
49	1	2.0%	Rental	-	500	1,017	1,037	1,058	1,079	1,101	1,123	1,145	1,168
50	1	2.0%	Industrial Monitoring Expense	19,226	22,000	25,034	25,535	26,045	26,566	27,098	27,640	28,193	28,757
Allocated Costs													
51	1	3.0%	Liability Insurance	13,229	13,999	16,184	16,508	16,838	17,175	17,518	18,044	18,585	19,143
52	1	3.0%	Prop/Fire Insurance	7,099	6,355	5,667	5,780	5,896	6,014	6,134	6,318	6,508	6,703

18	FUND #	Annual Expense Escalation Factor	EXPENSES	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
19			Detail										
			Operations Fund										
55	1	3.0%	Risk Management	21,013	19,006	20,954	21,373	21,801	22,237	22,681	23,361	24,062	24,784
56	1	3.0%	Vehicle Maintenance	27,242	36,717	36,688	37,422	38,170	38,934	39,712	40,903	42,130	43,394
57	1	2.9%	Custodian	30,781	13,389	12,664	12,917	13,176	13,439	13,706	14,107	14,520	14,945
58	1	3.0%	IT/Computer Report	4,711	4,852	4,852	4,949	5,048	5,149	5,252	5,410	5,572	5,739
59	1	0.0%	Interdepartmental Overhead	306,667	250,000	257,953	265,907	273,860	281,814	289,767	297,720	305,674	305,674
60	1	3.0%	Overhead - Utility Billing	132,833	138,904	140,961	143,780	146,656	149,589	152,767	157,350	162,071	166,933
61	1	3.0%	Public Works Mgmt	120,935	129,775	153,798	156,874	160,011	163,212	166,476	171,470	176,614	181,912
62	1	3.0%	Retiree Health	-	-	7,073	7,214	7,359	7,506	7,656	7,886	8,123	8,367
63	1	3.0%	Engineering Support	64,171	76,941	98,271	119,857	129,247	141,072	141,072	141,072	141,072	141,072
64			Capital Outlays										
65			Transfers										
66	1	0.0%	Transfer Out - Sewer Construction FD	-	-	299,000	336,000	124,000	162,000	200,000	200,721	200,829	218,737
67	1	0.0%	Transfer Out - General Debt Service	3,191	3,191	-	-	-	-	-	-	-	-
68	1	0.0%	Transfer Out - Capital Project - warehouse	-	-	-	-	-	-	-	-	-	-
70			Sewer Collection										
			Employee Services										
71	1	3.0%	Regular Services	70,130	76,859	77,057	83,527	91,720	102,029	113,497	126,254	140,444	156,230
72	1	3.0%	Part-Time Salaries	-	-	-	-	-	-	-	-	-	-
73	1	3.0%	Overtime	1,205	1,321	1,324	1,435	1,576	1,753	1,950	2,169	2,413	2,684
74	1	3.0%	Standby Time	1,506	1,651	1,655	1,794	1,970	2,191	2,438	2,712	3,016	3,355
75	1	3.0%	PERS	12,148	13,314	13,348	14,469	15,888	17,674	19,660	21,870	24,328	27,062
76	1	3.0%	Medicare	1,006	1,103	1,106	1,198	1,316	1,464	1,628	1,811	2,015	2,241
77	1	3.0%	LTD/Life Insurance	1,873	2,052	2,058	2,230	2,449	2,725	3,031	3,371	3,750	4,172
78	1	3.0%	Health/Dental/Vision Ins.	19,320	21,173	21,228	23,010	25,267	28,107	31,266	34,781	38,690	43,039
79	1	3.0%	Workers' Compensation	8,997	9,860	9,886	10,716	11,767	13,089	14,561	16,197	18,018	20,043
80	1	3.0%	Unemployment Insurance	130	142	142	154	169	188	210	233	259	289
81	1	3.0%	Uniform Allowance	638	699	701	759	834	928	1,032	1,148	1,277	1,420
82			Maintenance & Operations										
83	1	2.0%	Office Supplies	-	-	-	-	-	-	-	-	-	-
84	1	2.0%	Lubricants & Fuels	2,627	1,759	1,537	1,568	1,599	1,631	1,664	1,697	1,731	1,766
85	1	2.0%	Small Tools	17,516	11,732	10,251	10,456	10,665	10,879	11,096	11,318	11,544	11,775
86	1	2.0%	Safety	355	238	208	212	216	220	225	230	235	240
87	1	2.0%	Utilities	21,335	14,290	12,486	12,736	12,990	13,250	13,515	13,785	14,061	14,342
88	1	2.0%	Prof. & Technical Services	899	595	520	531	541	552	563	574	585	597
89	1	2.0%	Rentals & Leases	-	-	-	-	-	-	-	-	-	-
90	1	2.0%	Contractual Services	8,758	5,866	5,126	5,228	5,333	5,439	5,548	5,659	5,772	5,887
91	1	2.0%	Training & Vocational	-	-	-	-	-	-	-	-	-	-
92	1	2.0%	Equipment Maintenance	4,378	2,932	2,562	2,614	2,666	2,719	2,773	2,828	2,885	2,943
93	1	2.0%	Special Dept. Expense	877	587	513	523	534	544	555	566	577	589
94			Allocated Costs										
95	1	3.0%	Liability Insurance	1,617	2,363	2,457	2,531	2,607	2,685	2,766	2,849	2,934	3,022
96	1	3.0%	Prop/Fire Insurance	868	1,269	1,319	1,358	1,399	1,441	1,484	1,529	1,575	1,622
97	1	3.0%	Auto Insurance	1,080	1,578	1,641	1,690	1,741	1,793	1,847	1,902	1,959	2,018
98	1	3.0%	Risk Management	2,569	3,755	3,903	4,021	4,141	4,265	4,393	4,525	4,661	4,801
99	1	3.0%	Interdepartmental Overhead	-	-	-	-	-	-	-	-	-	-
100	1	3.0%	Overhead - Utility Billing	-	-	-	-	-	-	-	-	-	-
	1	3.0%	Uncollectible Accounts	7,547	12,204	12,204	12,000	12,000	12,000	12,000	12,000	12,000	12,000
			New Bond Debt Service Pulls from Schedule A-6 Automatically - Based on Assumed New Debt Issuances Input on Dashboard										
101	1	0.0%	Transfer Out Sewer Equipment	40,000	40,000	100,000	60,000	60,000	60,000	60,000	-	-	-
102	1	0.0%	1998 COP	-	-	-	-	-	-	-	-	-	-
103	1	0.0%	2007 Lease Rev Bond	206,775	204,113	-	-	-	-	-	205,554	206,554	207,219
104	1	0.0%	2012 Wastewater Rev Bond	428,638	230,388	-	-	-	-	-	513,180	512,603	515,681
105	1	0.0%	2012 Lease Rev Bond	466,519	464,162	1,343,660	1,356,848	1,353,890	1,141,410	1,209,228	449,920	449,920	449,920
106	1	0.0%	Sewer Construction Bond	-	-	-	-	-	-	-	-	-	-
107	1	0.0%	CEC Loan	-	-	-	-	-	-	-	-	-	-
108	1	0.0%	Transfer Out Disposal Fund	-	-	-	-	-	-	-	-	-	-
			SDC Fund										
			Capital Outlays										
			Transfers										
110	2	0.0%	Transfer Out - Financing Authority	170,225	481,000	-	-	-	-	-	-	-	-
111	2	0.0%	Transfer Out - CEC WWTF Expansion	85,190	85,190	-	-	-	-	-	-	-	-
112	2	0.0%	1998 COP	170,225	169,300	25,000	25,000	25,000	25,000	25,000	-	-	-
113	2	0.0%	Sewer Construction Bond	-	-	-	-	-	-	-	-	-	-
114	2	0.0%	CEC Loan	85,190	85,190	-	-	-	-	-	-	-	-
			Capital Fund										
115	3	3.0%	Capital Expenditures	-	-	299,000	336,000	124,000	162,000	200,000	200,721	200,829	218,737

City of Dinuba
CIP

Line No:	Service	Function	Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Capital Projects													
1	Sewer	Sewer Collection	Community Sewer System Improvements	\$0	\$0	\$0	\$25,000	\$25,000	\$10,000	\$10,000	\$10,721	\$10,829	\$10,937
2	Sewer	Sewer Treatment	Annual Repair and Replacement	-	-	49,000	61,000	99,000	152,000	190,000	190,000	190,000	207,800
3	Sewer	Sewer Treatment	Wastewater Reclamation Facility Phase II Design	-	-	-	-	3,000,000	3,000,000	-	-	-	-
4	Sewer	Sewer Treatment	Wastewater Reclamation Facility Phase II Construction	-	-	-	-	-	-	11,000,000	11,000,000	-	-
5	Sewer	Sewer Treatment	DWR Permit	-	-	250,000	250,000	-	-	-	-	-	-
Total				\$ -	\$ -	\$ 299,000	\$ 336,000	\$ 3,124,000	\$ 3,162,000	\$ 11,200,000	\$ 11,200,721	\$ 200,829	\$ 218,737

Current Day Dollars													
Line No:	Service	Function	Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1	Sewer	Sewer Collection	Community Sewer System Improvements	-	-	-	25,000	25,000	10,000	10,000	10,000	10,000	10,000
2	Sewer	Sewer Treatment	Annual Repair and Replacement	-	-	49,000	61,000	99,000	152,000	190,000	190,000	190,000	190,000
3	Sewer	Sewer Treatment	Wastewater Reclamation Facility Phase II Design	-	-	-	-	3,000,000	3,000,000	-	-	-	-
4	Sewer	Sewer Treatment	Wastewater Reclamation Facility Phase II Construction	-	-	-	-	-	-	11,000,000	11,000,000	-	-
5	Sewer	Sewer Treatment	DWR Permit	-	-	250,000	250,000	-	-	-	-	-	-
Total				\$ -	\$ -	\$ 299,000	\$ 336,000	\$ 3,124,000	\$ 3,162,000	\$ 11,200,000	\$ 11,200,000	\$ 200,000	\$ 200,000

New Debt Service

Operations Revenue Bond Debt Service

							2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Annual New Debt Required							\$ -	\$ -	\$ -	\$ -	\$ 3,000,000	\$ 3,000,000	\$ 11,000,000	\$ 11,000,000	\$ -	\$ -
Fiscal Year	Term (Yrs)	Rate	Issuance Costs	Capital Project Proceeds Required	Issuance Costs	Total Debt Required	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
2015	30	2.0%	2.0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
2017	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
2018	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
2019	30	2.0%	2.0%	4,500,000	90,000	4,590,000	-	-	-	-	-	204,943	204,943	204,943	204,943	204,943
2020	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
2021	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	30	2.0%	2.0%	16,500,000	330,000	16,830,000	-	-	-	-	-	563,594	563,594	751,458	751,458	751,458
2023	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
2024	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
Cumulative Annual New Bond Debt Service							\$ -	\$ -	\$ -	\$ -	\$ -	\$ 768,537	\$ 768,537	\$ 956,401	\$ 956,401	\$ 956,401

SDC Revenue Bond Debt Service

							2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Annual New Debt Required							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fiscal Year	Term (Yrs)	Rate	Issuance Costs	Capital Project Proceeds Required	Issuance Costs	Total Debt Required	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
2015	20	2.0%	2.0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2016	20	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2017	20	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2018	20	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2019	30	2.0%	2.0%	1,500,000	30,000	1,530,000	-	-	-	-	68,314	68,314	68,314	68,314	68,314	68,314	
2020	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2021	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2022	30	2.0%	2.0%	5,500,000	110,000	5,610,000	-	-	-	-	-	-	-	250,486	250,486	250,486	
2023	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
2024	30	2.0%	2.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cumulative Annual New SRF Debt Service							\$ -	\$ -	\$ -	\$ -	\$ 68,314	\$ 68,314	\$ 68,314	\$ 318,800	\$ 318,800	\$ 318,800	

City of Dinuba
Development of Rate Revenue Requirement

Line No:		Reference	A		B	
			Test Year for Rate Revenue Requirement		% to Water	Water
			2017			
1	Total Operating Revenue Requirement	Sch A-3, Line 83	\$	3,038,547	100%	\$ 3,038,547
	Less:					
	<u>Other Operating Revenues</u>					
2	User Fees		\$	87,720	100%	\$ 87,720
3	DBCP Settlement		\$	36,666	100%	\$ 36,666
4	Water Svc Connection		\$	10,200	100%	\$ 10,200
5	After Hours Svc Chg		\$	1,020	100%	\$ 1,020
6	Delinquent Water On/Off		\$	32,970	100%	\$ 32,970
7	Miscellaneous Revenue		\$	-	100%	\$ -
8	Warehouse Loan Repayment		\$	63,221	100%	\$ 63,221
11	Change in Reserves		\$	1,000	100%	\$ 1,000
	Total Other Operating Revenues		\$	232,797		\$ 232,797
12	Total Rate Revenue Requirement	Sch A-3, Line 82	\$	2,805,750	100%	\$ 2,805,750
13	Portion to Fixed Charge				16%	\$ 443,571
14	Portion to Flow Charge				84%	\$ 2,362,179
15	Total Rate Revenue Requirement		\$	2,805,750	100%	\$ 2,805,750

City of Dinuba
Allocation of Test Year Costs to Water

		A	B
Line No:	Expense Group	Water	Total
1	Water - SOS	\$ -	\$ -
2	Water - Pump	-	-
3	Water - Treat	-	-
4	Water - T&D	556,537	556,537
5	Water - CS	-	-
6	Water - Admin	1,835,127	1,835,127
7	Water - Existing Bond DS	510,297	510,297
8	Water - Existing SRF DS	-	-
9	Sewer - Coll	-	-
10	Sewer - Pump	-	-
11	Sewer - Treat	-	-
12	Sewer - CS	-	-
13	Sewer - Admin	-	-
14	Sewer - Existing DS	-	-
15	Sewer - Existing SRF DS	-	-
16	New Bond DS - General	-	-
17	Total	\$ 2,901,961	\$ 2,901,961
	%	100%	100%

City of Dinuba
Allocation of Water Costs

Allocation to Base Extra Capacity - Water

Water Costs	Extra Capacity				Meters & Services	Billing & Collection	Total	
	Base	Max Day	Max Hour					
Water - SOS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Water - Pump	-	-	-	-	-	-	-	
Water - Treat	-	-	-	-	-	-	-	
Water - T&D	556,537	164,170	120,646	271,721	-	-	556,537	
Water - CS	-	-	-	-	-	-	-	
Water - Admin	1,835,127	1,376,345	-	-	229,391	229,391	1,835,127	
Water - Existing Bond DS	510,297	510,297	-	-	-	-	510,297	
New Bond DS - General	-	-	-	-	-	-	-	
Addition/(Reduction) in Reserve	(96,211)	(67,992)	(4,000)	(9,009)	(7,605)	(7,605)	(96,211)	
Total	\$ 2,805,750	\$ 1,982,820	\$ 116,646	\$ 262,712	\$ 221,786	\$ 221,786	\$ 2,805,750	
Fixed Charge Component					\$ 221,786	\$ 221,786	\$ 443,571	15.81%
Flow Charge Component		\$ 1,982,820	\$ 116,646	\$ 262,712			\$ 2,362,179	84.19%
Total		\$ 1,982,820	\$ 116,646	\$ 262,712	\$ 221,786	\$ 221,786	\$ 2,805,750	100.00%
					\$ 3.11	\$ 3.11		

Allocation to Customer Class - Water - Annual Basis

Customer Class	Total Annual Flow	Average Daily Flow	Maximum Day				Maximum Hour				Total Costs
			Base	Capacity Factor	Total Capacity	Extra Capacity	Capacity Factor	Total Capacity	Extra Capacity		
RES	1,275,200	3,494		162%	5,658	2,164	316%	11,055	7,562		
COM	380,874	1,043		109%	1,135	92	213%	2,218	1,175		
IND	140,408	385		93%	357	(28)	181%	697	312		
SR	19,918	55		103%	56	2	202%	110	56		
Total	1,816,400	4,976			7,206	2,230		14,081	9,104		
Allocated Costs			\$ 1,982,820			\$ 116,646			\$ 262,712	\$ 2,362,179	
Billing Units			1,816,400			2,230			9,104		
Rate			\$ 1.09			\$ 52.32			\$ 28.86		

Customer Class	Total Annual Flow	Base Costs Allocated to Customer Class	Max Day Costs Allocated to Customer Class		Max Hour Costs Allocated to Customer Class		Meters & Services & Billing & Collection Costs	Total Base Extra Capacity Costs Allocated to Customer Class	Cost Distribution
			Extra Capacity	Customer Class	Extra Capacity	Customer Class			
RES	1,275,200	\$ 1,392,035	2,164	\$ 113,212	7,562	\$ 218,193	\$ 386,184	\$ 2,109,624	75%
COM	380,874	415,770	92	\$ 4,799	1,175	\$ 33,898	\$ 49,091	\$ 503,559	18%
IND	140,408	153,272	(28)	\$ (1,461)	312	\$ 9,015	\$ 228	\$ 161,055	6%
SR	19,918	21,743	2	\$ 96	56	\$ 1,606	\$ 8,068	\$ 31,513	1%
Total	1,816,400	\$ 1,982,820	2,230	\$ 116,646	9,104	\$ 262,712	\$ 443,571	\$ 2,805,750	100%

City of Dinuba
Calculation of Fixed Charge Rates/ Revenue - Water

Line No:	Reference / Notes:		
1	Total Water Revenue Target	Sch B-1, Col. B, Line	\$ 2,805,750
2	Percent from Fixed Charge		30%
3	Total Fixed Charge Revenue Requirement - Water		\$ 841,725
4	Total Equivalent Meters		71,335
5	Monthly Water Fixed Charge per Equivalent Meter		\$ 11.80

Water Fixed Charge - By Meter Size

	Meter Size	Meter Equivalency	Monthly Water Fixed Charge	Multi Family Equiv. Factor	Outside Factor
6					
7	0.625	1.00	\$ 11.80	0.75	1.25

Water
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Meter Size	Billing Basis-->	Class -->					Total	Calculation of Equivalent Meters / Units - Inside					Units	Equiv. Factor	Inside / Outside Factor	Equivalent Units
		RES	COM	IND	SR	Total		Bills	Equiv. Factor	Inside / Outside Factor	Equivalent Meters					
0.625		62,106	7,895	37	1,297	71,335	71,335	1.00	1.00	71,335	-	0.75	1.00	-		
Total						71,335	71,335			71,335	-			-		

Rate Design

Development of Proposed 2016-17 Residential Rates

<u>Service Charge, \$ per Bill</u>	<u>Rate</u>	<u>Bills</u>	<u>Revenue</u>
All Meters	\$ 11.80	61,497	\$725,663

Total Service Charge Revenue

Block	% Volume in Block	Billed Volume (kgals)	Cumulative Factor	Volume Rate (\$/kgals)	Rate Revenue
0 - 9,000 gallons	57.0%	543,732	1.00	\$1.190	\$647,157
Over 9,000 gallons	43.0%	410,184	1.62	1.928	751,349
Total	100%	953,916			\$1,398,506

Development of Proposed 2016-17 Commercial Rates

<u>Service Charge, \$ per Bill</u>	<u>Rate</u>	<u>Bills</u>	<u>Revenue</u>
All Meters	\$ 11.80	7,817	\$92,245

Total Service Charge Revenue

Block	% Volume in Block	Billed Volume (kgals)	Cumulative Factor	Volume Rate (\$/kgals)	Rate Revenue
All Volume	100.0%	284,914	1.00	\$1.411	402,132
Total		284,914			\$402,132

Development of Proposed 2016-17 Industrial Rates

<u>Service Charge, \$ per Bill</u>	<u>Rate</u>	<u>Bills</u>	<u>Revenue</u>
All Meters	\$ 11.80	36	\$429

Total Service Charge Revenue

Block	% Volume in Block	Billed Volume (kgals)	Cumulative Factor	Volume Rate (\$/kgals)	Rate Revenue
All Volume	100.0%	105,032	1.00	\$1.484	155,912
Total		105,032			\$155,912