



# CITY OF GUADALUPE

## Water & Wastewater Rate Analysis and Study

**DRAFT Report**  
**November 2015**



**BARTLE WELLS ASSOCIATES**  
INDEPENDENT PUBLIC FINANCE ADVISORS

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November 17, 2015

Andrew Carter, City Administrator  
City of Guadalupe  
918 Obispo Street  
Guadalupe, CA 93434

Re: Water and Wastewater Rate Analysis and Study

Bartle Wells Associates is pleased to submit the attached Water and Wastewater Rate Analysis and Study to the City of Guadalupe. The study presents BWA's analysis of the operating and non-operating expenses of the City's water and wastewater systems and provides a ten year cash flow projection. The primary purpose of this study was to analyze the City's water and wastewater enterprise funds and make recommendations that would achieve their financial sustainability, including grant funding or other low-cost loan programs such as the State Revolving Fund.

The report recommends updating rates and charges in order to more accurately recover the costs of providing service to the City's customers. Recommendations were developed with substantial input from City staff. BWA finds that the rates and charges proposed in our report to be based on the cost of service, follow generally accepted rate design criteria, and adhere to the substantive requirements of Proposition 218. BWA believes that the proposed rates are fair and reasonable to the City's customers.

We have enjoyed working with you on the rate study and appreciate the City's assistance throughout the project. Please contact us if you ever have any future questions about this study and the rate recommendations.

Yours truly,

Doug Dove, CIPFA  
Principal

Matt Griffin  
Financial Analyst

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## **APPENDICES**

APPENDIX A: Water Tables

APPENDIX B: Wastewater Tables

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# 1 EXECUTIVE SUMMARY

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## 1.1 Background

The City of Guadalupe (City) is located at the north western corner of Santa Barbara County, CA, about 70 miles north of the City of Santa Barbara. The City provides water and wastewater services to about 2,000 water and wastewater customer accounts in an area that encompasses less than 1.5 square miles.

The revenues from the City's water and wastewater utilities are primarily derived from charges for services. The City must establish rates and charges adequate to fund the cost of providing water and wastewater services, including costs for operations and capital improvements needed to keep the City's utility infrastructure in safe and reliable operating condition.

Water rates were last reviewed in 2011, and have been increased by CPI since. Wastewater rates were last reviewed and increased in early 2015. Based on a survey of 14 regional water agencies, the City has some of the lowest residential water rates in the region. Based on a survey of 14 regional wastewater agencies, the City's wastewater rates fall roughly in the middle range of these agencies. This is largely due to the fact that the City has had to raise rates to pay for significant wastewater capital improvements, such as the 2013 failure of the main sewer line.

In May 2015, the City retained Bartle Wells Associates (BWA) to develop a comprehensive rate analysis and study for the City's water and wastewater enterprises. Basic objectives of the rate study include:

- Identify rate setting principles.
- Develop long-term financial projections to determine future annual water and wastewater enterprise revenue requirements.
- Evaluate rate alternatives and recommend water and wastewater designed to equitably recover the costs of providing service.

Based on input from City staff, key guiding principles included developing rates that:

- Are fair and equitable to all customer classes.
- Recover the costs of providing service and generate adequate funding for capital needs and staffing.
- Are easy to understand and implement.
- Comply with the legal requirements of Proposition 218 and other California laws.

## 1.2 Proposition 218

Utility rates are subject to the procedural and substantive requirements as set forth in Proposition 218. Proposition 218 was adopted by California voters in 1996 and added Articles 13C and 13D to the California Constitution. Article 13D, Section 6 governs property-related charges, which the California Supreme Court subsequently ruled includes ongoing utility service charges such as water and wastewater. Article 13D, Section 6 establishes a) procedural requirements for imposing or increasing property-related charges, and b) substantive requirements for those charges. Article 13D also requires voter approval for new or increased property-related charges but exempts from this voting requirement rates for water and wastewater service. The substantive requirements of Article 13D, Section 6 require the City's utility rates to meet the following conditions:

- Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service.
- Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
- The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.
- No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question.
- No fee or charge may be imposed for general governmental services, such as police or fire services, where the service is available to the public at large in substantially the same manner as it is to property owners.

The procedural requirements of Proposition 218 for all utility rate increases are as follows:

- **Noticing Requirement:** The City must mail a notice of proposed rate increases to all affected property owners. The notice must specify the basis of the fee, the reason for the fee, and the date/time/location of a public rate hearing at which the proposed rates will be considered/adopted.
- **Public Hearing:** The City must hold a public hearing prior to adopting the proposed rate increases. The public hearing must be held not less than 45 days after the required notices are mailed.
- **Rate Increases Subject to Majority Protest:** At the public hearing, the proposed rate increases are subject to majority protest. If more than 50% of affected property owners submit written protests against the proposed rate increases, the increases cannot be adopted.

### 1.3 Use of Generally Accepted Rate-Making Principles

The rates developed in this study use a straightforward methodology to establish an equitable system of fixed and variable charges that recover the cost of providing service and fairly apportion costs to each rate component. The rates were developed using generally accepted cost-based principles and methodologies for establishing water and wastewater rates, charges, and fees contained and discussed in the American Water Works Association (AWWA) M1 Manual.

In developing water and wastewater rates, it is important to know that there is no “one-size-fits-all” approach for establishing cost-based water rates, “the (M1 Manual) is aimed at outlining the basic elements involved in water and wastewater rates and suggesting alternative rules of procedure for formulating rates, thus permitting the exercise of judgment and preference to meet local conditions and requirements.”<sup>1</sup>

In reviewing the City’s water and wastewater rates and finances, BWA used the following criteria in developing our recommendations:

- 1) *Revenue Sufficiency*: Rates should recover the annual cost of service and provide revenue stability.
- 2) *Rate Impact*: While rates are calculated to generate sufficient revenue to cover operating and capital costs, they should be designed to minimize, as much as possible, the impacts on ratepayers.
- 3) *Equitable*: Rates should be fairly allocated among all customer classes based on their estimated demand characteristics. Each user class only pays its proportionate share.
- 4) *Practical*: Rates should be simple in form and, therefore, adaptable to changing conditions, easy to administer and easy to understand.

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<sup>1</sup> AWWA Manual M1 Manual, Principles of Water Rates, Fees, and Charges, Sixth Edition, 2012, page 5.

## **1.4 Water Overview**

### **1.4.1 Water System**

The City owns, operates, and maintains a potable water system that serves 1,968 customers, 92% of which are residential, 6% are commercial, and 1% are irrigation. The City anticipates growth of about 5% per year from FY2017 – FY2020, and 3% growth thereafter.

The City currently has one groundwater well and purchases additional State Water. The majority of water sold is for residential use. From FY2009 – FY2013 the water sold for residential was on average 62% of total water sold. In FY2014, due to conservation from the drought, this number fell to 52%, and in FY2015 to 46%. To be conservative, it is assumed that total water use will continue to decrease by another 10% in FY2016. Since a significant portion of the City's operating revenue is raised from the variable rate charge, decrease in consumption will result in revenue shortfalls for the City.

The Water Fund had a balance of about \$250,000 at the beginning of FY2016. Operating expenses are currently higher than operating revenues, but the City has received a \$350,000 grant which will help cover the shortfall. If rates are not increased, the Water Fund is projected to become depleted by FY2017. This is largely due to the \$3.4 million of capital improvement which are planned from FY2016 – FY2021.

### **1.4.2 Water System Recommendations**

BWA recommends updating rates to better reflect revenue requirements and the cost of service, including increasing operational and capital costs, and developing reserve fund targets. In addition to rate increase, BWA recommends the City borrow \$5.2 million through low interest State Revolving Fund (SRF) loans to pay for capital improvements. BWA recommends that once more data becomes available, the City reevaluate monthly fixed rates and derive a fixed rate for each meter size, and align these meter ratios with the American Water Works Association (AWWA) recommended ratios.

### **1.4.3 Current Water Rates**

Current monthly water rates are shown on Table 1. Rates were last reviewed in FY2011. The City's water rates are some of the lowest in the region. The current rate is a \$21.92 basic rate (fixed charge) for all customers, which includes 6 ccf (hundred cubic feet) of water, and each additional unit (variable rate) is \$3.65. It is assumed that \$21.92 is based on the cost of 6 units of water, with a slight difference due to annual rounding.

Table 1: Current Monthly Water Rates  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

All Meter Sizes	Monthly Rate
Basic Rate*	\$21.92
Each Additional Unit/ccf	\$3.65
Average Monthly Bill (9 ccf use)	\$32.87

\*Includes 6 ccf per month

#### 1.4.4 Proposed Water Rates

Table 2 shows the proposed monthly water rates. The first increase would take place February 1, 2016. Rate increases thereafter would come into effect on January 1<sup>st</sup>.

Table 2: Proposed Monthly Water Rates, Tiers and Meter Ratios  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Proposed Monthly Water Rates	Current	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
		Feb 1	Jan 1	Jan 1	Jan 1	Jan 1	Jan 1
Basic Rate (includes 6 ccf* use)	\$21.92	\$22.86	\$24.12	\$25.44	\$26.82	\$28.32	\$29.88
Each Additional Unit/ccf	\$3.65	\$3.81	\$4.02	\$4.24	\$4.47	\$4.72	\$4.98

\*ccf = 100 cubic feet (748 gallons)

## **1.5 Wastewater System Overview**

### **1.5.1 Wastewater Customers**

The City's wastewater collection system serves 1,910 customers, 95% of which are residential, while the remaining 5% are commercial. The City anticipates growth of about 5% per year from FY2017 – FY2020, and 3% growth thereafter.

### **1.5.2 Wastewater System**

The City's wastewater collection and transmission system consisting of approximately 15 miles of pipelines, which conveys wastewater flows by gravity to three lift stations and wastewater treatment plant. The wastewater treatment plant consists of the screening, biological treatment, sludge dewatering, effluent storage, and land application via spray distribution. The average daily flow is estimated to be .68 million gallons per day (MGD).

The Wastewater Fund balance is currently negative. The cash balance at the beginning of FY2016 was negative \$715,653 and is projected to be negative \$622,576 by the end of the year. If rates are not increased the negative fund balance is projected to become worse, reaching negative \$1.5 million in FY2017, and will only increase from there onward. This negative balance is largely due to the 2013 failure of the main sewer line.

### **1.5.3 Wastewater System**

BWA recommends updating rates to better reflect revenue requirements and the cost of service, including increasing operational and capital costs, and developing reserve fund targets. In addition to the rate increases, BWA recommends borrowing \$9 million through low interest State Revolving Fund (SRF) loans to pay for capital improvements.

### **1.5.4 Current Wastewater Rates**

The current monthly wastewater charge is shown on Table 3. Wastewater rates were last reviewed in 2011, and a one-time wastewater rate increase of 30% went into effect June 1, 2015.

Table 3: Current and Future Adapted Monthly Wastewater Rates  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Monthly Wastewater Rates	
Residential:	\$34.97
Boarding House (Per Room):	\$17.19
Commercial:	
Basic Rate (Up to 5 Units)	\$34.97
Each Additional Unit (ccf)	\$1.47

### 1.5.5 Proposed Wastewater Rates

Table 4 shows the proposed monthly wastewater rates. The first increase would take place February 1, 2016. Rate increases thereafter would come into effect on January 1<sup>st</sup>. BWA also recommends including boarding houses in the commercial classification.

Table 4: Proposed Monthly Wastewater Rates  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Proposed Wastewater Rates	Proposed					
	FY2016 Feb 1	FY2017 Jan 1	FY2018 Jan 1	FY2019 Jan 1	FY2020 Jan 1	FY2021 Jan 1
<u>Residential:</u>	\$40.74	\$45.43	\$48.38	\$49.10	\$49.84	\$50.59
<u>Commercial*</u>						
Basic Rate (Up to 5 Units)	\$40.74	\$45.43	\$48.38	\$49.10	\$49.84	\$50.59
Each Additional Unit (ccf**)	\$1.71	\$1.91	\$2.03	\$2.06	\$2.10	\$2.13
Average Residential Monthly Bill	\$40.74	\$45.43	\$48.38	\$49.10	\$49.84	\$50.59
<i>\$ Increase</i>	\$5.77	\$4.69	\$2.95	\$0.73	\$0.74	\$0.75
<i>% Increase</i>	16.5%	11.5%	6.5%	1.5%	1.5%	1.5%

\*Now includes Boarding Houses

\*\*ccf = 100 cubic feet (748 gallons)

## 2 WATER FINANCES & RATES

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### 2.1 Water Financial Overview

Bartle Wells Associates conducted an independent evaluation of the City's water enterprise finances. Key observations include:

- The current water rate consists of a fixed (base) rate (that includes 6 ccfs of water per month) and a variable rate for each additional unit (ccf). It is assumed that the fixed rate includes the cost of 6 units of water.
- The City currently serves nearly 2,000 customers. The majority are residential (92%).
- The City saw a 5% decrease in water use in FY2015, and due to the on-going drought it is assumed there will be a further 10% reduction in FY2016.
- The City is assuming a 12% decrease in water charge revenues for FY2016: 10% from the water reduction, and another 2% reduction from the elimination of the previously planned Franchise Fee (not legal per City Attorney). Currently, fixed rate revenue makes up 34% of the water charges, and variable rate revenue makes up the remaining 66%.
- Current water operating expenses are \$1,647,002 for FY2016. Over the next six years the City has \$3.5 million in capital improvements planned.
- The cash balance of the water reserves at the end of FY2015 was \$249,121. The estimated cash balance at the end of FY2016 is \$626,319.
- BWA developed four different revenue requirement increase scenarios: Scenario 1 where rates are only increased by CPI; Scenario 2 Pay-as-you-go where revenue requirement increases are funded solely by rates; Scenario 3 assumes \$5.2 million in SRF loans, along with rate increases; and Scenario 4 assumes \$3.5 million in SRF loans and \$1.7 million in grants, along with rate increases.
- BWA assumed two different State Revolving Fund (SRF) loan scenarios. The \$5.2 million scenario requires more SRF funding than the \$3.5 million because it assumes less grant funding.
- Beginning in FY2017, the City anticipates significant customer growth (Pasadera, Beachside Cooling, Pioneer Street Apartments, Guadalupe Court), which is conservatively assumed between 3 – 5% annually through FY2025.
- BWA developed reserve fund targets that consist of 25% of operating expenses in addition to a \$1 million capital expenditure reserve. Scenario 3 is expected to reach the reserve fund target by FY2022.
- BWA recommends setting rates based on Scenario 3, and maintaining a 35%/65% fixed/variable breakdown structure.
- The recommended rate is derived by taking the variable revenue requirement and dividing it by the assumed consumption for each year. The variable rate is then adjusted for rounding. The



fixed charge continues the current structure of including 6 units (ccf) of water, and is determined by multiplying the variable rate by 6 units.

- The City will continue to have an average monthly bill (9 ccf) at the lower end of the spectrum compared to other agencies in the region (Water Survey Chart).

## 2.2 Current Monthly Water Rates

The City bills water service on a monthly basis. As shown on Table 5, the current water rates include two components:

- 1) **Fixed Service Charge (Basic Rate):** All customers, residential and non-residential, are charged the same fixed charges. The fixed charge is levied regardless of water consumption and recognizes that even when a customer does not use any water, the City incurs fixed costs in connection with maintaining the ability or readiness to serve each connection. Fixed charges currently recover about 34% of total water service charges revenue. 6 units (ccf) are included in the current fixed charge. It is assumed that the current fixed charge is the cost of 6 units of water.
- 2) **Variable Charges (Each Additional Unit):** Each customer is billed according to a uniform-tier rate structure in which the cost per ccf (hundred cubic feet) unit of water remains constant as customers use more water. 748 gallons of water is equal to a hundred cubic feet (ccf/hcf) of water. The variable charges are intended to recover costs that vary based on the amount of water consumed and currently generate 66% of total water service charges revenue.

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Table 5: Current Monthly Water Rates  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

All Meter Sizes	Monthly Rate
Basic Rate*	\$21.92
Each Additional Unit/ccf	\$3.65
Average Monthly Bill (9 ccf use)	\$32.87

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\*Includes 6 ccf per month

## 2.3 Current Water Accounts

Table 6 shows current number of water accounts by customer class and meter size. The majority of customers are residential (92%).

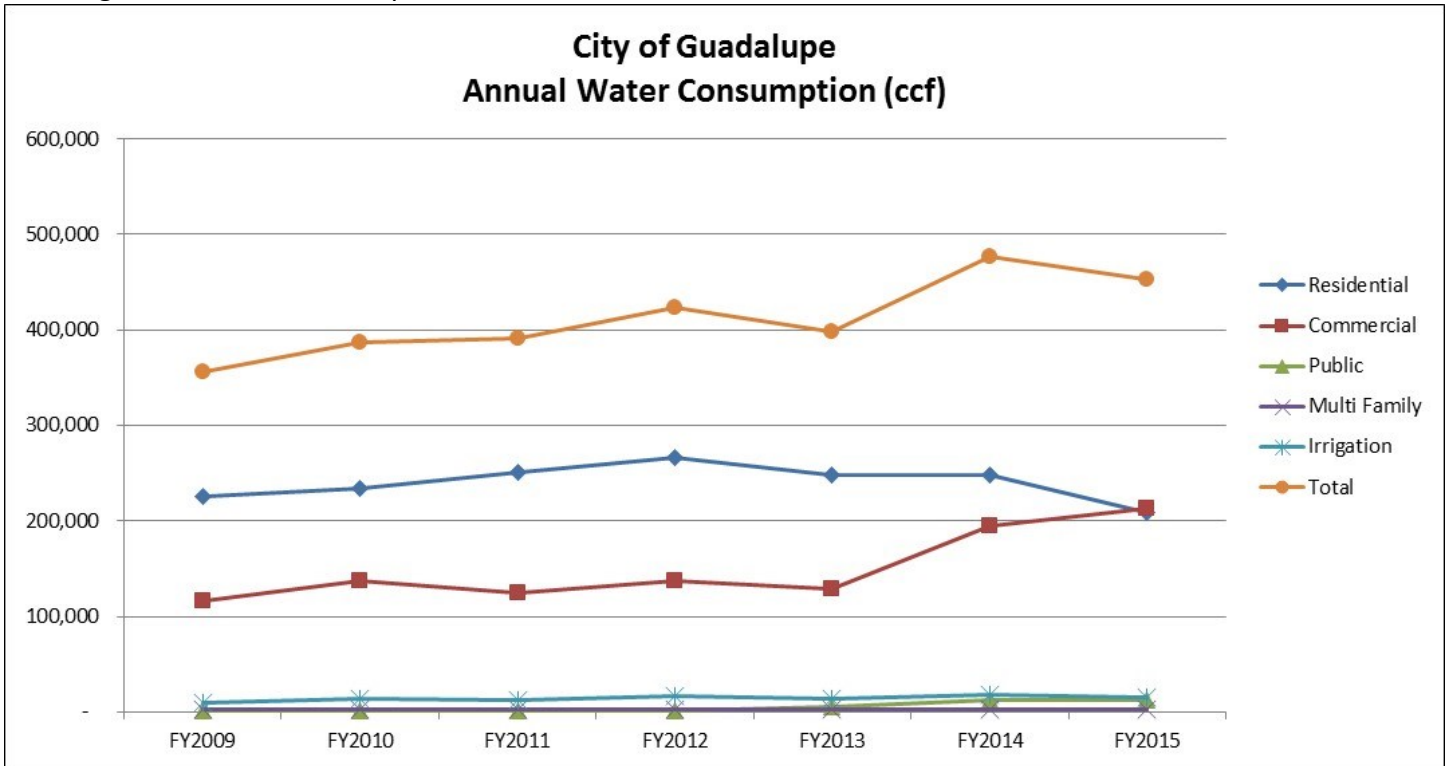
Table 6: Current Water Accounts  
City of Guadalupe  
Water and Wastewater Rate Analysis and Study

Water Class Codes	User Type	Avg # of Accounts FY2015	Percentage of Total Users
<b>Customer Class</b>			
1	Residential	1,815	92%
2	Commercial	111	6%
4	Public Authority	4	0%
5	Multifamily	11	1%
<u>6</u>	Irrigation	<u>27</u>	<u>1%</u>
Total		1,968	100%
<b>Meter Size</b>			
A1	3/4" – 5/8"	1,909	97%
B1	1"	15	1%
D1	1-1/2"	14	1%
E1	2"	21	1%
F1	3"	7	0%
G1	4"	2	0%
<u>H1</u>	6"	<u>-</u>	<u>0%</u>
Total		1,968	100%

## 2.4 Water Consumption

Figure 1 shows the City's annual water consumption. BWA's analysis shows that total water consumption has been steadily increasing in recent years, however FY2015 shows a decrease in total use. It is assumed total use will decrease another 10% in FY2016 due to continued conservation.

Figure 1: Water Consumption



## 2.5 Financial Challenges / Key Drivers of Rate Increases

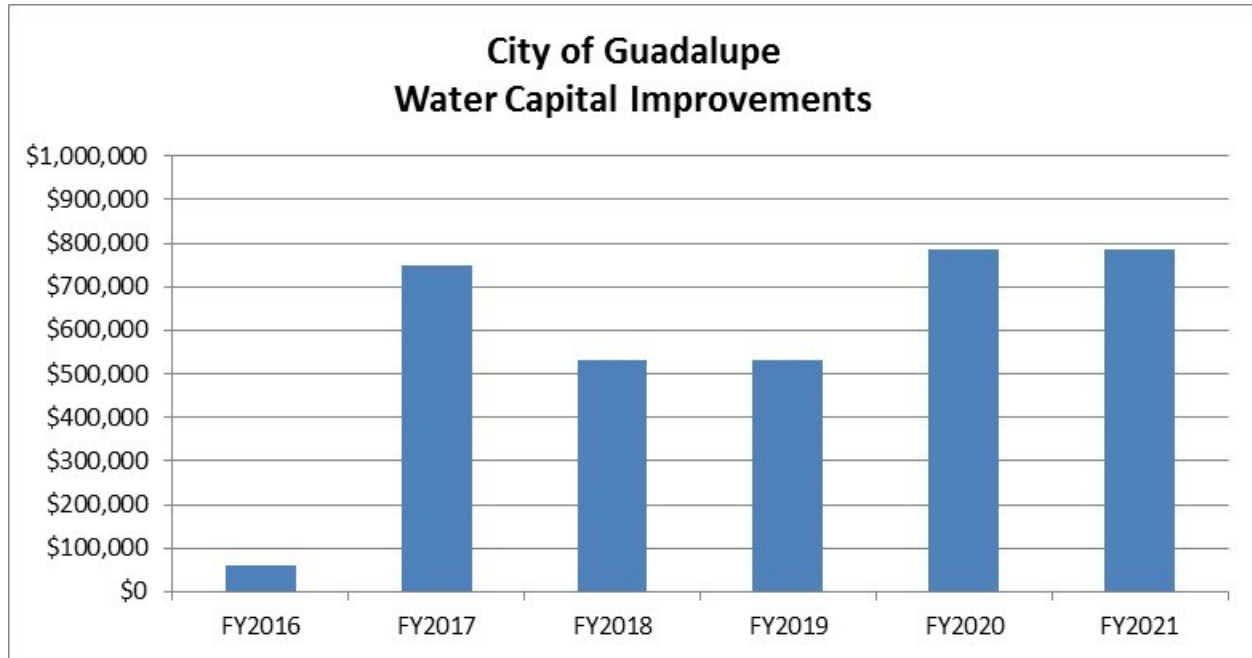
Going forward, the City’s water enterprise is facing a number of financial challenges that will require the City to raise its water rates. Key drivers of future rate increases are summarized as follows.

### 2.5.1 Capital Improvements / Aging Infrastructure

The City has made significant investments in the water distribution system over the past number of years and continues to face substantial capital improvement needs over the next five years. The City’s 5-year capital improvement program (CIP) includes \$3.4 million of water system improvements and upgrades from FY2016 through FY2021. Major projects include main replacements and meter replacements. Many regional agencies are facing similar challenges. FY2016 has a less significant amount of CIP expenditures planned, but the years after are much more significant.

Figure 2 shows a breakdown of projected water system CIP costs through FY2021. A detailed list of CIP projects is shown in Appendix A.

Figure 2: Summary Capital Improvement Program (CIP) Projects



**2.5.2 Ongoing Operating Cost Inflation**

The City faces ongoing operating cost inflation due to annual increases in a range of expenses such as utilities, supplies, as well as the cost of salaries, benefits, etc. Water and wastewater industry operating cost inflation has historically been significantly higher than the Consumer Price Index (CPI) for consumer goods and services. Since 1996, the average annual CPI for all urban customers has been 2.3%, whereas the average for the Construction Cost Index Engineering News Record (CCI ENR) 20-Cities average is 3.1%. The cash flows in Appendix A include a detailed description of water expense projections through FY2025.

**2.5.3 Water Reserve Funds**

Maintaining a prudent minimal level of fund reserves provides a financial cushion for dealing with unanticipated expenses, revenue shortfalls, and non-catastrophic emergency capital repairs. The fund reserve targets will escalate over time as the water utility’s revenues and expenses gradually increase in future years. Currently the City does not have reserve fund targets. The Water Fund balance at the start of FY2016 is \$249,121.

Table 7 shows BWA’s recommend water reserve fund targets. These targets were developed with input from City staff as well as generally held industry standards. BWA recommends creating an Operating Expense Reserve, which holds 25%, or 3 months, of operating and maintenance expenses; and a Capital Expense Reserve to cover the following year’s capital improvement projects, or at least \$1 million.

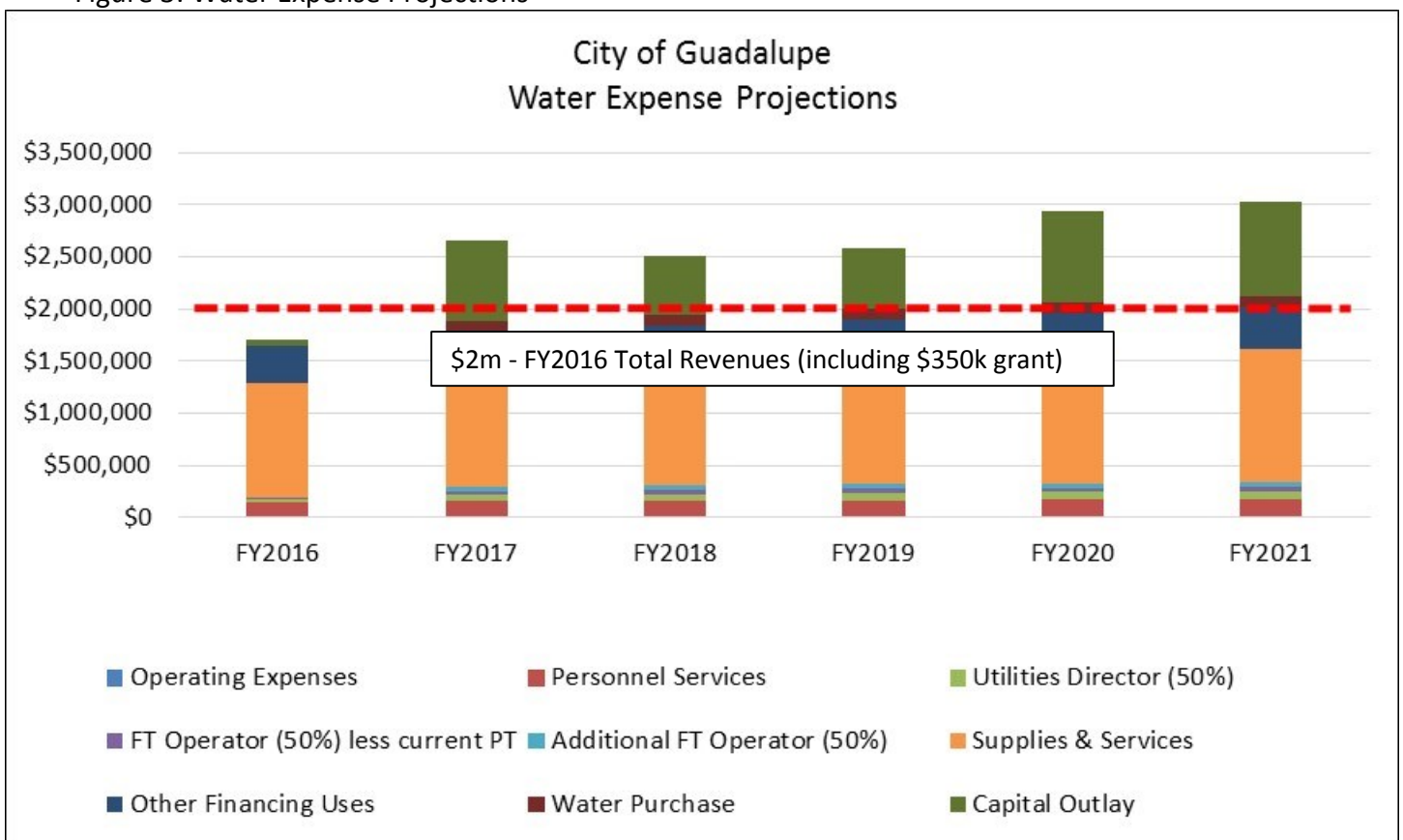
Table 7: Water Reserve Fund Targets  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Reserve Type	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Operating Expense Reserve (25%)	411,750	471,260	485,390	499,970	515,020	530,550
Capital Reserve	<u>1,000,000</u>	<u>1,000,000</u>	<u>1,000,000</u>	<u>1,000,000</u>	<u>1,000,000</u>	<u>1,000,000</u>
Total Reserve Target:	1,411,750	1,471,260	1,485,390	1,499,970	1,515,020	1,530,550

### 2.5.4 Water Expense Projections

Figure 3 shows a five-year breakdown of projected water enterprise expense. Revenues exceed expenses in FY2016 only because of a \$350,000 grant received. Revenues thereafter are less than expenses. Rate increases are needed to continue to fund increasing operating and capital expenses.

Figure 3: Water Expense Projections



## 2.6 Water Enterprise Rate Scenarios & Revenue Requirements

Bartle Wells Associates developed four rate scenarios based on varying levels of capital funding to meet the utility's funding needs. BWA recommends maintaining the current rate structure, with the exception of merging boarding houses in the commercial customer category. BWA analyzed various scenarios of revenue requirement increases and recommends Scenario 3 – \$5.2 million SRF Loan.

### 2.6.1 Water Rate Scenarios

With input from City staff, BWA developed four scenarios (Scenarios 1-4) of rate increases, including a scenario where rates are not increased.

- Scenario 1: CPI Increases. This is to project what would happen if the City only increased rates by CPI.
- Scenario 2: Pay As You Go. Revenue requirement increases solely based on rate increases.
- Scenario 3: \$5.2m SRF Loan (**Recommended**). Rate increases, in addition to \$5.2 million of SRF loans.
- Scenario 4: \$3.5m SRF Loan, \$1.7m Grants. Rate Increases, in addition to \$3.5 million of SRF loans and \$1.7 million in grants.

BWA recommends Scenario 3 in order to be conservative by not relying on grants, and meet reserve fund targets by FY2022.

## **2.6.2 Water Revenue Requirements: Cash Flow Projection**

The water cash flow projections incorporate the latest information available as well as a number of reasonable and slightly conservative assumptions. Key assumptions include:

### **Growth and Water Demand Assumptions**

- Projections assume 4.5 - 5% annual customer growth from FY2017 – FY2020, with 3% growth thereafter.
- Future water sales are projected to decrease by 10% from FY2015 consumption.

### **Revenue Assumptions**

- The first rate increase will become effective on February 1, 2016. Rate increases thereafter will become effective annually on July 1 of each year. The City will adopt rate increases for the five year period from FY2016 through FY2021.
- Water rate revenues for FY2015 account for 73% of total water utility revenues. Other revenues include fees, standby and connection charges, grants, as well as other sources.
- Interest and connection revenues are conservative estimates based on input from City staff. The City anticipates significant growth in residential and commercial customers through FY2020.

### **Expense Assumptions**

- Operating Expenses escalate at the annual rate of 3 - 4%.
- Capital Improvement Program expenditures include \$3.4 million in projects through FY2021.

### **State Revolving Fund (SRF) Loan Estimate**

Table 8 shows the SRF loan estimates for both Scenario 3 and Scenario 4. State Revolving Fund loans are low-cost loans from the Clean Water State Refunding Fund loan program from the State Water Resources Control Board (SWRCB). The SRF program offers low-cost financing set at roughly one half of the state's general obligation bond rate; current interest rates are below 2.0%. Debt service repayment starts one year after the project is completed. Debt repayment is typically secured by an agency's legal pledge to raise rates and fees as needed to repay debt service.

Table 8: SRF Loan Estimates  
City of Guadalupe  
Water and Wastewater Rate Analysis and Study

	\$5.2 Million SRF*	\$3.5 Million SRF**
	Est. at 2.0%	Est. at 2.0%
<b>Funding Target</b>	\$5,200,000	\$3,500,000
<b>STANDARD 30-YEAR SRF LOAN</b>		
Eligible Project Costs <sup>1</sup>	5,200,000	3,500,000
Accrued Interest During Construction <sup>2</sup>	52,000	35,000
Accrued Interest for One Year After Completion <sup>3</sup>	<u>105,000</u>	<u>71,000</u>
Total Loan Amount	5,357,000	3,606,000
<b>Loan Terms</b>		
Term (years)	30	30
Interest Rate <sup>4</sup>	2.00%	2.00%
<b>Annual Loan Payment</b>	239,000	161,000
<b>Reserve Fund Requirement<sup>5</sup></b>		
Equal to Annual Debt Service	239,000	161,000

\* \$5.2 million is based on total CIP from FY2016 - FY2025

\*\* \$3.5 million SRF is based on 2/3rds of total CIP from FY2016 - FY2025

1 Some costs may not be eligible for SRF Loan funding & would require another funding source.

2 Assumes steady gradual drawdown of loan funds over one year.

3 First debt service payment due one year following completion of project.

4 Total net interest rate estimated for financial planning purposes; actual rate may vary.

5 Agencies must set aside funds to meet the SRF Reserve Requirement at least 90 days prior to project completion date.

Table 9 shows the cash flow projection for Scenario 3. The recommended annual rate increases beginning in FY2016 are needed to fund revenue requirements for annual operating and capital expenses and to meet reserve fund targets by the end of FY2022. The cash flow projections beyond FY2021 (Appendix A) show estimates of future rate increases for planning purposes only; actual future rate increases will be determined annually by the City during the budget process. Detailed ten-year water cash flows for each scenario are shown in Appendix A.



Table 9: Scenario 3 – SRF Loan  
City of Guadalupe  
Water and Wastewater Rate Analysis and Study

Scenario 3: SRF Loan	Budget FY2016	Increase	Projected					
			FY2016*	FY2017	FY2018	FY2019	FY2020	FY2021
<b>Assumptions</b>								
Revenue Requirement Increase			3.0%	4.0%	4.0%	4.0%	4.0%	4.0%
CPI Adjustment	1.4%		1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth in Accounts***			0.0%	4.5%	4.5%	5.0%	5.0%	3.0%
Growth in Connection Fees****			0.0%	2.0%	2.0%	2.5%	2.5%	0.5%
Interest Rate			0.00%	0.25%	0.25%	0.25%	0.25%	0.25%
<b>Beginning Water Fund Balance</b>	249,121		249,121	626,319	736,536	702,140	781,001	1,019,589
<b>OPERATING REVENUES</b>								
Water Service Charge (1st half of year)	757,500		883,750	791,590	870,750	957,830	1,058,400	1,169,530
Water Service Charge (2nd half of year)	757,500	(growth)	659,658	870,750	957,830	1,058,400	1,169,530	1,268,940
Turn On/Off Fees	6,000	2%	6,000	6,120	6,240	6,360	6,490	6,620
Late Fees	47,000	2%	47,000	47,940	48,900	49,880	50,880	51,900
Meters	9,000	3%	9,000	9,270	9,550	9,840	10,140	10,440
Uncollectable Accounts	500	2%	500	510	520	530	540	550
Miscellaneous Income	400	2%	400	410	420	430	440	450
Interest Income	1,600		1,600	1,570	1,840	1,760	1,950	2,550
<b>Subtotal Operating Revenues</b>	<b>1,579,500</b>		<b>1,607,908</b>	<b>1,728,160</b>	<b>1,896,050</b>	<b>2,085,030</b>	<b>2,298,370</b>	<b>2,510,980</b>
<b>CAPITAL REVENUES</b>								
Grant	350,000		350,000	-	-	-	-	-
SRF Loan	-		-	773,000	562,000	579,000	886,000	913,000
DJ Farms Development Agreement	19,700		19,700	38,150	38,150	38,150	38,150	38,150
Water From New Development****	75,000		75,000	92,500	70,000	25,000	25,000	25,000
Water Connection Fees	10,000	(growth)	10,000	81,270	82,900	105,700	107,810	21,990
Standby-By Charges	40,000		40,000	38,000	36,000	34,000	32,000	30,000
<b>Subtotal Capital Revenues</b>	<b>494,700</b>		<b>494,700</b>	<b>1,022,920</b>	<b>789,050</b>	<b>781,850</b>	<b>1,088,960</b>	<b>1,028,140</b>
<b>Total Revenues</b>	<b>2,074,200</b>		<b>2,102,608</b>	<b>2,751,080</b>	<b>2,685,100</b>	<b>2,866,880</b>	<b>3,387,330</b>	<b>3,539,120</b>
<b>EXPENSES</b>								
<b>Operating Expenses</b>								
Personnel Services	146,637	4%	146,637	152,500	158,600	164,940	171,540	178,400
Utilities Director (50%)	32,500	4%	32,500	65,000	67,600	70,300	73,110	76,030
FT Operator (50%) less current PT	17,500	4%	17,500	35,000	36,400	37,860	39,370	40,940
Additional FT Operator (50%)		4%	-	40,000	41,600	43,260	44,990	46,790
Supplies & Services	1,093,765	3%	1,093,765	1,126,580	1,160,380	1,195,190	1,231,050	1,267,980
Other Financing Uses	356,600	3%	356,600	367,300	378,320	389,670	401,360	413,400
Water Purchase				98,650	98,650	98,650	98,650	98,650
<b>Subtotal Operating Expenses</b>	<b>1,647,002</b>		<b>1,647,002</b>	<b>1,885,030</b>	<b>1,941,550</b>	<b>1,999,870</b>	<b>2,060,070</b>	<b>2,122,190</b>
<b>Water Capital Expenses</b>								
Capital Outlay*****	60,000	3%	60,000	772,500	562,280	579,150	886,340	912,930
SRF Debt Payments			-	-	239,000	239,000	239,000	239,000
<b>Subtotal Capital Expenses</b>	<b>60,000</b>		<b>60,000</b>	<b>772,500</b>	<b>801,280</b>	<b>818,150</b>	<b>1,125,340</b>	<b>1,151,930</b>
<b>TOTAL EXPENSES</b>	<b>1,707,002</b>		<b>1,707,002</b>	<b>2,657,530</b>	<b>2,742,830</b>	<b>2,818,020</b>	<b>3,185,410</b>	<b>3,274,120</b>
<b>Total Net Revenues</b>	<b>367,198</b>		<b>395,606</b>	<b>93,550</b>	<b>(57,730)</b>	<b>48,860</b>	<b>201,920</b>	<b>265,000</b>
<b>Payback of General Fund Loan</b>	<b>10,000</b>		<b>10,000</b>	<b>16,667</b>	<b>23,334</b>	<b>30,001</b>	<b>36,668</b>	<b>43,334</b>
<b>Ending Water Fund Balance (All Funds)</b>	<b>626,319</b>		<b>654,727</b>	<b>736,536</b>	<b>702,140</b>	<b>781,001</b>	<b>1,019,589</b>	<b>1,327,923</b>
<b>Reserve Target</b>								
Operating Expense (25%)			411,750	471,260	485,390	499,970	515,020	530,550
Capital Expense Reserve			1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
<b>Total Reserve Target:</b>			<b>1,411,750</b>	<b>1,471,260</b>	<b>1,485,390</b>	<b>1,499,970</b>	<b>1,515,020</b>	<b>1,530,550</b>
Reserve Targets Met:			NO	NO	NO	NO	NO	NO

\* First rate increase Feb 1st 2016; rates thereafter increased on Jan 1st

\*\* Assumes usage of 9 ccf.

\*\*\* Two different growth rates. Accts: DJ Farms. DJ Farms has a Devel. Agree. DJ Farms Capital Revenue accounted for separately.

\*\*\*\* Includes Beachside Cooler, Pioneer Apts., Guadalupe Court, potential Apio expansion and 10 acre feet per year

\*\*\*\*\* From Water CIP. Only goes to FY21. Used nominal amount after that escalated.

Table 10 shows the revenue requirement increases for all of the scenarios. Scenario 2 has the highest increases due to capital improvements being funded through water service charge revenues, whereas Scenarios 3 and 4 has additional funding sources through State Revolving Fund (SRF) loans and grants.

Table 10: Water Scenarios Comparison  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Annual Revenue Requirement Increase	Current	Proposed					
	FY2016	FY2016 Feb 1	FY2017 Jan 1	FY2018 Jan 1	FY2019 Jan 1	FY2020 Jan 1	FY2021 Jan 1
<b>Proposed Annual Revenue Requirement % Increases</b>							
Scenario 1: No Rate Increases	-	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Scenario 2: Pay As You Go Increases	-	11.5%	11.5%	11.5%	5.5%	5.5%	1.5%
Scenario 3: \$5.2m SRF Loan, No Grants	-	4.5%	5.5%	5.5%	5.5%	5.5%	5.5%
Scenario 4: \$3.5m SRF Loans, \$1.7 Grants	-	5.5%	5.5%	4.5%	4.5%	4.5%	1.5%
<b>Proposed Averaged Monthly Bill</b>							
Scenario 1: No Rate Increases	\$32.83	\$33.30	\$33.84	\$34.29	\$34.83	\$35.37	\$35.91
Scenario 2: Pay As You Go Increases	\$32.83	\$36.63	\$40.86	\$45.45	\$47.97	\$50.58	\$51.30
Scenario 3: \$5.2m SRF Loan, No Grants	\$32.87	\$34.29	\$36.18	\$38.16	\$40.23	\$42.48	\$44.82
Scenario 4: \$3.5m SRF Loans, \$1.7 Grants	\$32.83	\$34.63	\$36.45	\$38.02	\$39.65	\$41.35	\$41.95

## 2.7 Cost of Service

Water utilities have used a wide range of approaches or perspectives for allocating and recovering their costs for providing service, and these costs are most commonly recovered from a combination of fixed and variable charges. The percentage of revenues derived from the fixed and variable charges varies for each agency and should be proportional to each system’s expenditures and must not exceed the cost of providing service. A higher level of fixed charges provides better revenue stability and less dependence on variable sales. On the other hand, higher dependence on volumetric revenues provides a better conservation incentive.

Depending on perspective, the same costs can reasonably be allocated 100 percent to fixed revenue recovery, 100 percent to variable rate recovery, or to some combination of the two. For example, debt service used to fund water treatment facilities can legitimately be treated as a) a fixed annual cost that should be recovered from fixed charges, b) a cost related to providing water supply to meet customer demand and therefore a cost that should be recovered from variable rates, or c) a

cost that can be recovered from both fixed and variable rates in recognition of the two alternative perspectives.

Many of the City's costs are variable costs that vary by water consumption, such as the State Water purchases, as well as costs for personnel and utilities. However, a portion of these variable costs can reasonably be apportioned to fixed rate recovery, and vice-versa with fixed costs. For example, a share of the fixed cost of salaries related to water production can reasonably be recovered from usage-based charges as these costs are incurred to provide water supply to meet customer demand. Likewise, debt service payments may be fixed annual costs, but it is reasonable to recover some of these costs from usage-based rates as the costs are incurred to fund infrastructure that will improve the water delivery system.

While there is no single correct approach, BWA believes that costs should be allocated within a reasonable range that reflects both a) underlying cost causation, to the extent such causation can reasonably be determined or estimated, and b) the policy preferences of the agency in cases where a range of reasonable approaches can be justified.

The water utility currently collects approximately 34% of total water service charges revenues from fixed charges and 66% from the variable charges. BWA recommends keeping this ratio at approximately 35% fixed and 65% variable based on the cost allocation in Table 11. Taking a five-year average (FY2017 through FY2021), Table 11 shows a breakdown of the water utility's operating, capital, reserve contributions expenses based on input from City staff. As shown, the majority of the City's water system's costs are variable. Agencies that purchase water tend to have a higher allocation of variable costs compared to fixed costs.

Table 11: Allocation of Water System Expenses to Fixed & Variable Costs  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

	Projected 5-Year (FY 2017-21) Avg	Cost Recovery %		Cost Recovery \$	
		Fixed	Variable	Fixed	Variable
<b>Operating Expenses</b>					
Personnel Services	\$165,196	50%	50%	\$82,598	\$82,598
Utilities Director (50%)	70,408	50%	50%	35,204	35,204
FT Operator (50%) less current PT	37,914	75%	25%	28,436	9,479
Additional FT Operator (50%)	43,328	50%	50%	21,664	21,664
Supplies & Services	1,196,236	15%	85%	179,435	1,016,801
Other Financing Uses	390,010	50%	50%	195,005	195,005
<u>Water Purchase</u>	<u>98,650</u>	10%	90%	<u>9,865</u>	<u>88,785</u>
Subtotal Operating Expenses	2,001,742			552,207	1,449,535
			<i>Percent of Total</i>	28%	72%
<b>Water Capital Expenses</b>					
<u>Capital Outlay</u>	<u>742,640</u>	50%	50%	<u>371,320</u>	<u>371,320</u>
Subtotal Personnel Expenses	742,640			371,320	371,320
			<i>Percent of Total</i>	50%	50%
<b>Total 5-Year Avg Water Expenses</b>	2,744,382			923,527	1,820,855
			<i>Percent of Total</i>	34%	66%
<b>Current Fixed/Variable Breakdown</b>				34%	66%
<b>Recommended Fixed/Variable Breakdown</b>				35%	65%

## 2.8 Water Rate Structure Recommendations

BWA evaluated the City’s water rate structure for equity and compliance with the substantive provisions of Proposition 218. The City’s current meters are not assigned according to customer demand, for example a 4” meter might only be used by a customer who has demands that resemble a 1” meter. Until the meters are assigned according to customer demand, BWA recommends maintaining the current rate structure. This is to ensure that customers who might have meter sizes larger than their use do not pay over the capacity they are actually using.

### 2.8.1 Fixed Service Charge Recommendations

The current fixed charges are based on the cost of 6 units of water. All meter sizes pay the same fixed price. Because of this, meter charge ratios are not aligned with those recommended by the AWWA. The AWWA has established a set of capacity ratios using the maximum safe flow of various sizes of meters relative to the base or smallest meter size. For example, based on the AWWA meter

capacity ratios, a customer that has a 2-inch meter has 5.33 times the capacity equivalency of a customer with a 3/4-inch meter. (A 2-inch meter has a safe operating capacity of 160 gallons per minute (gpm) compared to a 3/4-inch meter which has a safe operating capacity of 30 gpm).

These meter capacity ratios provide a basis for charging customers proportional to the capacity that is reserved for them in the water system. Larger meters have the ability to place a greater demand on the water system and are therefore, charged based on that potential demand. Meter ratios are widely used in California rate setting and are consistent with meter ratios adopted by the California Public Utility Commission for private water companies. Table 12 shows the recommended meter ratios determined by the AWWA.

Table 12: AWWA Meter Ratios  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Meter Sizes	Proposed AWWA Meter Ratio
3/4 inch	1.00
1 inch	1.67
1-1/2 inch	3.30
2 inch	5.33
3 inch	10.00
4 inch	16.67
6 inch	33.33
8 inch	53.33
10 inch	76.67

Source: AWWA M1 Manual, Principals of Water Rates, Fees, and Charges, Sixth Edition, 2012, Table B-1

## 2.8.2 Water Variable Charge

### Maintain Uniform Tiered Structure

Water charges are currently billed the same to all customers, and are uniform tiered. After a customer uses the allotted 6 units that are included in the base charge, each additional unit is charged per ccf (hundred cubic feet). BWA recommends the City maintain this variable rate structure.

## 2.8.3 Water Rate Derivation

### Variable Charges

Table 13 shows the derivation of variable costs for FY2016 – FY2021, based on a fixed/variable 35%/65% allocation. The allocations for each year of the projected five years of revenue requirement increases (six total) are derived. The total variable revenue requirement is then divided by the total projected consumption (which excludes the 6 ccf assumed per customer in the fixed charge), to determine the proposed uniform rate.

### Fixed Charge

The derivation for fixed rates through FY2021 is shown on Table 13, which has been determined sufficient to meet revenue requirements. The fixed charge includes 6 ccf of water, and is derived by multiplying the variable rate by six.

Table 13: Derivation of Proposed Rates  
City of Guadalupe  
Water and Wastewater Rate Analysis and Study

Scenario 3 - Recommended 35/65 Fixed/Variable Split	Current FY2016	Proposed Rate Increases						
		2/1/2016	1/1/2017	1/1/2018	1/1/2019	1/1/2020	1/1/2021	
Growth Assumption		0.0%	4.5%	4.5%	5.0%	5.0%	3.0%	
CPI Increase %		1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	
Rate Increase %		3.0%	4.0%	4.0%	4.0%	4.0%	4.0%	
Total Annual Service Charge Revenue Requirement	\$1,515,000	\$1,583,180	\$1,741,500	\$1,915,660	\$2,116,800	\$2,339,060	\$2,537,880	
<b>Recommended Allocation</b>								
Fixed	35%	\$530,250	\$554,113	\$609,525	\$670,481	\$740,880	\$818,671	\$888,258
Variable	65%	\$984,750	\$1,029,067	\$1,131,975	\$1,245,179	\$1,375,920	\$1,520,389	\$1,649,622
Total	100%	\$1,515,000	\$1,583,180	\$1,741,500	\$1,915,660	\$2,116,800	\$2,339,060	\$2,537,880
<b>WATER CONSUMPTION CHARGE - UNIFORM RATE - No Structure Change</b>								
Total Variable Revenue Requirement	\$984,750	\$1,029,067	\$1,131,975	\$1,245,179	\$1,375,920	\$1,520,389	\$1,649,622	
Consumption (not including fixed 6 units), ccf	270,000	270,000 0.00%	282,150 4.50%	294,847 4.50%	309,589 5.00%	325,069 5.00%	334,821 3.00%	
<b>Proposed Uniform Rate (adjusted for rounding)</b>	\$3.65	<b>\$3.81</b>	<b>\$4.02</b>	<b>\$4.24</b>	<b>\$4.47</b>	<b>\$4.72</b>	<b>\$4.98</b>	
Fixed Charge - 6 ccf water	\$21.92	\$22.86	\$24.12	\$25.44	\$26.82	\$28.32	\$29.88	
Average Monthly Bill - 9 ccf water	\$32.87	\$34.29	\$36.18	\$38.16	\$40.23	\$42.48	\$44.82	
% Increase		4.32%	5.51%	5.47%	5.42%	5.59%	5.51%	

## 2.9 Proposed Water Rates

Table 14 shows the proposed monthly water rates. Under Proposition 218, the rates shown below are the maximum rates that the City can enact each year. The City can adopt rates that are lower than those shown based upon an annual review of the water utility’s finances to ensure that revenues are in line with expenses.

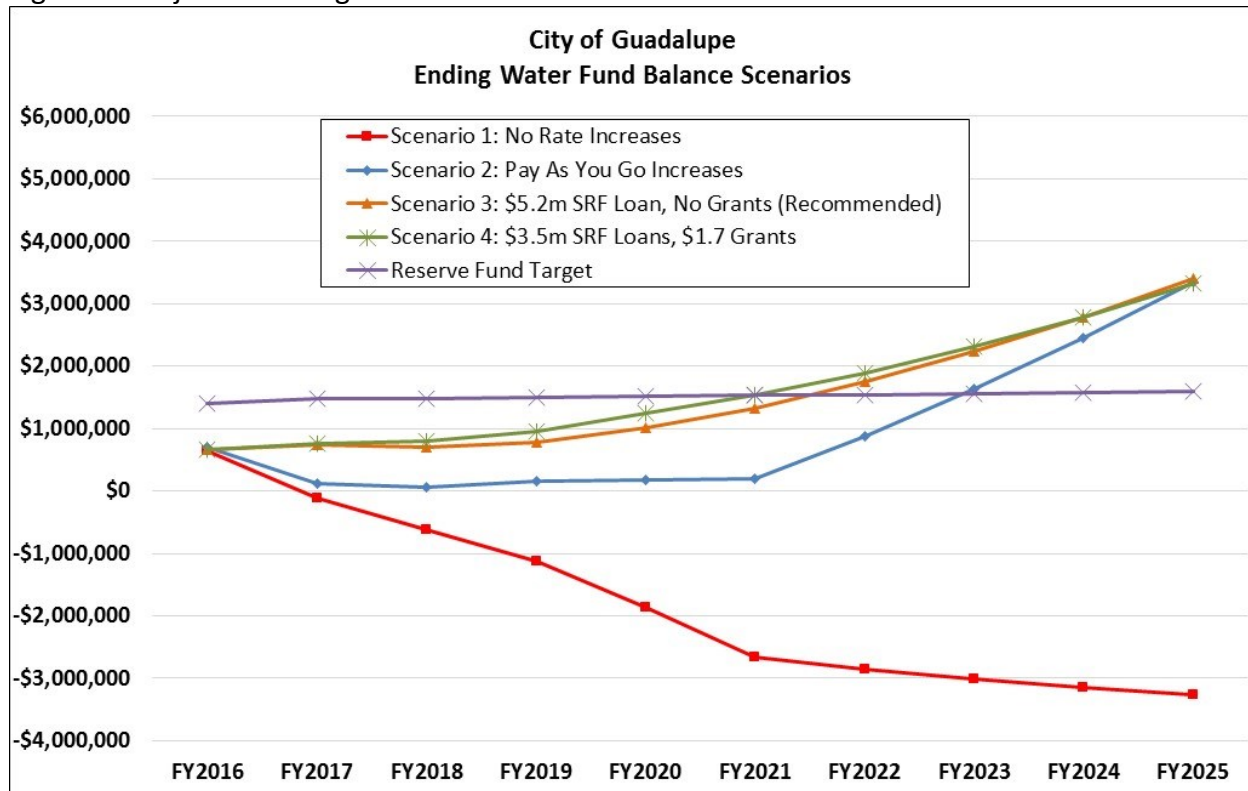
Table 14: Proposed Monthly Fixed and Variable Charges  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Proposed Water Rates: Scenario 3	Current FY2016	Proposed					
		FY2016 Feb 1	FY2017 Jan 1	FY2018 Jan 1	FY2019 Jan 1	FY2020 Jan 1	FY2021 Jan 1
Basic Rate*	\$21.92	\$22.86	\$24.12	\$25.44	\$26.82	\$28.32	\$29.88
Each Additional Unit/ccf	\$3.65	\$3.81	\$4.02	\$4.24	\$4.47	\$4.72	\$4.98
Average Monthly Bill (9 ccf use)	\$32.87	\$34.29	\$36.18	\$38.16	\$40.23	\$42.48	\$44.82

## 2.10 Ending Fund Balances

Figure 4 compares the City’s ending fund balance of all reserves. Without a rate increase, the water reserve fund will be depleted by FY2017. Scenario 3 (proposed rate increases) will restore the ending fund balances, allowing funds to reach their targets by FY2022.

Figure 4: Projected Ending Fund Balances

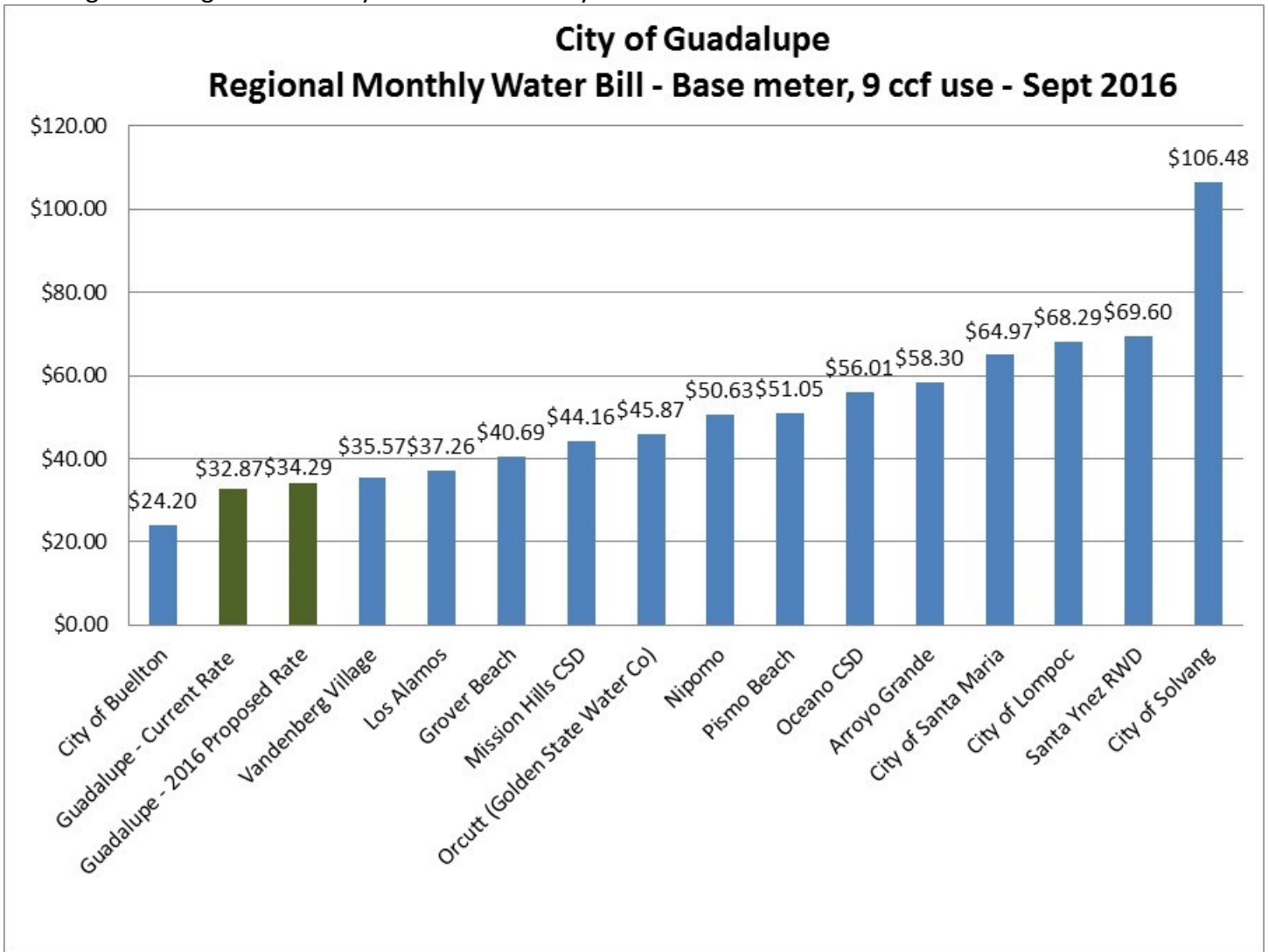




## 2.11 Regional Water Rate Survey

Figure 5 compares the City’s current and proposed monthly rates to those of other regional agencies for a single family home using 9 ccf of water (monthly), the City’s average single family monthly consumption. The City’s current water rates are lower than nearly all other regional agencies, and the City would remain one of the lowest with the proposed rates for FY2016 Scenario 3. Figure 5 is shown for comparative purposes only.

Figure 5: Regional Monthly Water Rate Survey



## 3 WASTEWATER FINANCES & RATES

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### 3.1 Wastewater Financial Overview

Bartle Wells Associates conducted an independent evaluation of the City's wastewater system finances. Key observations include:

- The current sewer rate for residential customers is a fixed monthly rate. Boarding house rates are 50% of residential. For commercial customers there is both a fixed rate (which includes 5 units ccf) and a variable rate for each unit thereafter.
- The City currently serves nearly 2,000 customers. The majority are residential (95%).
- The City is assuming a 7% decrease in sewer charge revenues for FY2016: 5% from water use reduction, and another 2% reduction from the elimination of the previously planned Franchise Fee.
- Current sewer operating expenses are \$1,086,673 for FY2016.
- Over the next six years the City has \$7 million in capital improvements planned.
- The cash balance of the sewer reserves at the end of FY2015 was negative \$715,653. The estimated cash balance at the end of FY2016 is negative \$622,576.
- BWA assumed two different State Revolving Fund (SRF) loan scenarios. The \$9 million scenario requires more funding than the \$6 million scenario because it assumes less grant funding. The four scenarios include: Scenario 1 where rates are only increased by CPI; Scenario 2 Pay-as-you-go where revenue requirement increases are funded solely by rates; Scenario 3 assumes \$9 million in SRF loans, along with rate increases; and Scenario 4 assumes \$6 million in SRF loans and \$3 million in grants, along with rate increases.
- Beginning in FY2017, the City anticipates significant growth, which is conservatively assumed between 3 – 5% a year through FY2025.
- BWA developed reserve fund targets consisting of 25% of operating expenses in addition to \$1 million capital expense reserve. Scenario 3 is expected to reach the target by FY2022.
- BWA recommends Scenario 3, and to merge boarding houses in the commercial classification. There are currently only three boarding house accounts.
- The recommended fixed rate is derived by taking each classification's fixed revenue requirement and dividing it by the assumed accounts for each year. The variable rate is derived by dividing the variable revenue requirement by the estimated additional units of flow. The fixed commercial charge continues the current structure of including 5 units (ccf) of flow.
- The City will continue to have an average monthly sewer bill at the midrange of the spectrum compared to other agencies in the region.

### 3.2 Current Monthly Wastewater Rates

Table 15 shows the City’s current monthly wastewater rates. The current sewer rate for single-family residential customers is a fixed monthly rate of \$34.97. Boarding house rates are 50% of residential. For commercial customers there is both a fixed rate (which includes 5 units ccf) and a variable rate for each unit thereafter.

Table 15: Current Monthly Wastewater Rates  
City of Guadalupe  
Water and Wastewater Rate Analysis and Study

Monthly Wastewater Rates	
Single Family Residential	\$34.97
Boarding House (Per Room)	\$17.19
Commercial (includes Multi-family)	
Basic Rate (Up to 5 Units)	\$34.97
Each Additional Unit (ccf)	\$1.47

### 3.3 Current Wastewater Accounts

Table 16 shows current wastewater customer accounts. The majority (95%) are residential customers.

Table 16: Current Wastewater Customer Accounts  
City of Guadalupe  
Water and Wastewater Rate Analysis and Study

Sewer Class Codes	User Type	# of Users		Percentage of Total Users
R1	Single Family Residential	1,820		95%
B1	Boarding Houses	3		0%
	Boarding House Rooms	-	38	
C1	Commercial	87		5%
	<u>Additional Units (ccf)</u>	=	15,000	=
Total		1,910		100%

### 3.4 Financial Challenges / Key Drivers of Rate Increases

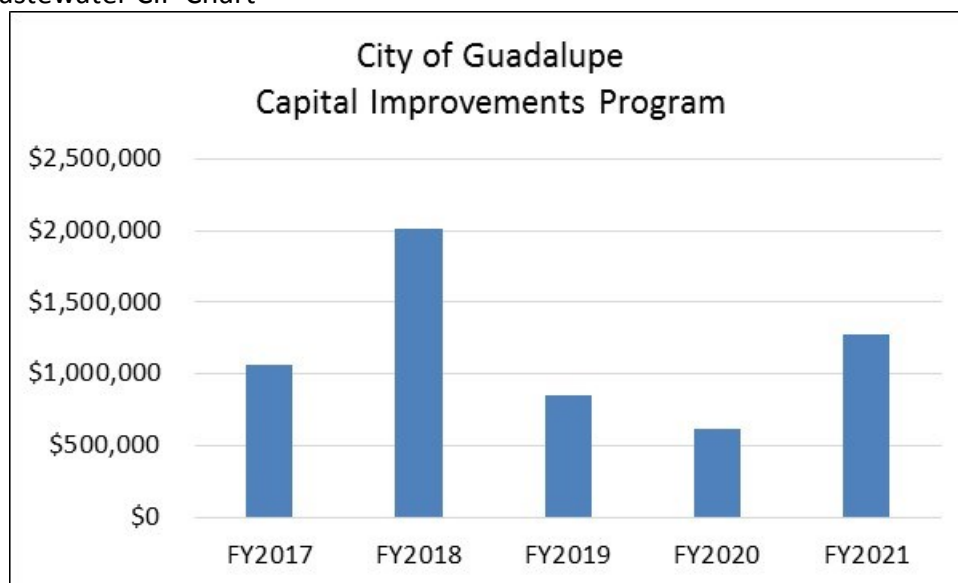
Going forward, the City’s wastewater enterprise is facing a number of financial challenges that will require the City to continue with scheduled rate increases. Key drivers of scheduled wastewater rate increases are summarized below.

#### 3.4.1 Capital Improvements / Aging Infrastructure

The City has capital improvement program (CIP) projects in FY2017 and FY2018 that total over \$3 million, which will put a strain on the Sewer fund negative \$700,000 at the beginning of FY2016. The City’s six-year CIP projections from FY2016 through FY2021 are over \$6 million. There are no capital improvements planned in FY2016.

Figure 6 shows a summary of the projected wastewater system CIP costs through FY2021. A detailed CIP list is included in Appendix B.

Figure 6: Wastewater CIP Chart



#### 3.4.2 Ongoing Operating Cost Inflation

The City faces ongoing operating cost inflation due to annual cost increases in personnel, supplies and services, etc. Water and wastewater industry operating cost inflation has historically been significantly higher than the Consumer Price Index (CPI) for consumer goods and services. Since 1996, the average annual CPI for all urban customers has been 2.3%, whereas the ENR-CCI 20-city average has been 3.1%. Appendix B includes a detailed description of wastewater expense projections through FY2025.

### 3.4.3 Wastewater Reserve Funds

Maintaining a prudent minimal level of fund reserves provides a financial cushion for dealing with unanticipated expenses, revenue shortfalls, and non-catastrophic emergency capital repairs. The fund reserve targets will escalate over time as the wastewater utility’s revenues and expenses gradually increase in future years. The City’s current reserves are negative \$715,653 at the beginning of FY2016. This is largely due to the unexpected TrusPro sewer line failure in 2013.

Currently the City does not have reserve fund targets. Table 17 shows BWA’s recommend water reserve fund targets. These targets were developed with input from City staff as well as generally held industry standards. BWA recommends creating an Operating Reserve, which holds 25%, or 3 months, of operating and maintenance expenses; and a Capital Expense Reserve to cover the following year’s capital improvement projects, or at least \$1 million.

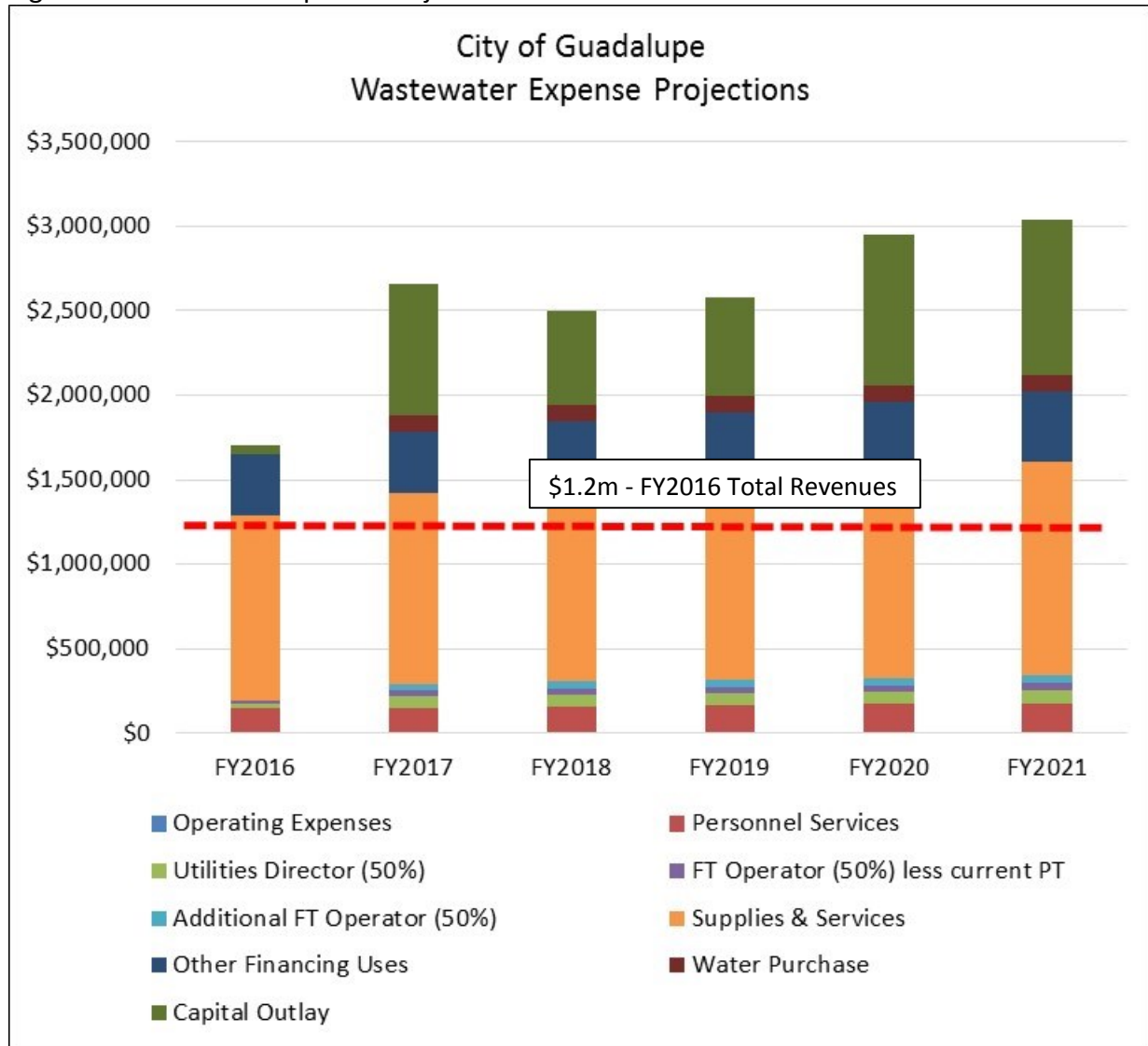
Table 17: Wastewater Reserve Funds  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Reserve Type	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Operating Expense Reserve (25%)	271,670	304,210	273,840	282,990	292,460	302,250
Capital Reserve	<u>1,000,000</u>	<u>1,000,000</u>	<u>1,000,000</u>	<u>1,000,000</u>	<u>1,000,000</u>	<u>1,000,000</u>
Total Reserve Target:	1,271,670	1,304,210	1,273,840	1,282,990	1,292,460	1,302,250

### 3.4.4 Wastewater Expense Projections

Figure 7 shows the ten-year wastewater expense projections. Expenses are above total wastewater revenues.

Figure 7: Wastewater Expense Projections



### **3.5 Wastewater Enterprise Rate Scenarios & Financial Projections**

The wastewater cash flow projections incorporate the latest information available as well as a number of reasonable and slightly conservative assumptions. BWA recommends maintaining the current rate structure, though merging boarding houses into the commercial customer category. BWA analyzed various scenarios of revenue requirement increases and recommends Scenario 3 – \$9 million SRF Loan. Key assumptions include:

#### **Growth and Revenue Assumptions**

- Projections assume 4.5 - 5% annual customers growth from FY2017 – FY2020, with 3% growth thereafter.
- Future additional unit sales are projected to decrease by 10% from FY2015 consumption.

#### **Expense Assumptions**

- Operating & Maintenance Expenses are based on the FY2016 Budget and escalate at the annual rate of 5% for personnel/benefits and utilities, with other expenses escalated at 3% to account for inflation.
- Capital Improvement Program expenditures include \$9 million in projects from FY2016 – FY2021.

#### **State Revolving Fund (SRF) Loan Estimate**

Table 18 shows the SRF loan estimates for both Scenario 3 and Scenario 4. State Revolving Fund loans are low-cost loans from the Clean Water State Refunding Fund loan program from the State Water Resources Control Board (SWRCB). The SRF program offers low-cost financing set at roughly one half of the state’s general obligation bond rate; current interest rates are below 2.0%. Debt service repayment starts one year after the project is completed. Debt repayment is typically secured by an agency’s legal pledge to raise rates and fees as needed to repay debt service.

Table 18: SRF Loan Estimates  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

	<b>\$9m SRF Est. at 2.0%</b>	<b>\$6m SRF* Est. at 2.0%</b>
<b>Funding Target</b>	\$8,800,000	\$6,000,000
<b>STANDARD 30-YEAR SRF LOAN</b>		
Eligible Project Costs <sup>1</sup>	8,800,000	6,000,000
Accrued Interest During Construction <sup>2</sup>	88,000	60,000
Accrued Interest for One Year After Completion <sup>3</sup>	<u>178,000</u>	<u>121,000</u>
Total Loan Amount	9,066,000	6,181,000
<b>Loan Terms</b>		
Term (years)	30	30
Interest Rate <sup>4</sup>	2.00%	2.00%
<b>Annual Loan Payment</b>	405,000	276,000
<b>Reserve Fund Requirement<sup>5</sup></b>		
Equal to Annual Debt Service	405,000	276,000

\*\$6m SRF, \$3m assumed in grant funding

1 Some costs may not be eligible for SRF Loan funding & would require another funding source.

2 Assumes steady gradual drawdown of loan funds over one year.

3 First debt service payment due one year following completion of project.

4 Total net interest rate estimated for financial planning purposes; actual rate may vary.

5 Agencies must set aside funds to meet the SRF Reserve Requirement at least 90 days prior to project completion date

Table 19 shows the cash flow projection with no rate increases. As mentioned previously, the wastewater fund currently has a negative balance and will continue doing so until FY2018 even with significant borrowing and rate increases. The wastewater fund is projected to meet reserve targets by FY2022. Appendix B shows an extended (ten-year) version of the cash flow.



Table 19: Wastewater Cash Flow Projection – Scenario 3: \$9m SRF Loan  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Scenario 3: \$9m SRF Loan	Budget FY2016	Increase	Projected									
			FY2016*	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
<b>Assumptions</b>												
Rate Increase*	28.2%		15.0%	10.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CPI Adjustment			1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth in Accounts***			0.00%	4.50%	4.50%	4.50%	4.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Growth in Connection Fees***			0.00%	2.00%	2.00%	2.00%	1.50%	0.50%	0.50%	0.50%	0.50%	0.50%
Interest Rate			0.00%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
<b>Beginning WW Fund Balance</b>	<b>(715,653)</b>		<b>(715,653)</b>	<b>(550,388)</b>	<b>(524,188)</b>	<b>(197,728)</b>	<b>220,082</b>	<b>667,132</b>	<b>1,104,482</b>	<b>1,583,372</b>	<b>2,106,762</b>	<b>2,677,152</b>
<b>OPERATING REVENUES</b>												
Sewer Service Charge (1st half of year)	525,000		612,500	611,630	709,490	787,530	834,780	880,690	920,320	961,730	1,005,010	1,050,240
Sewer Service Charge (2nd half of year)	525,000	(growth)	509,688	709,490	787,530	834,780	880,690	920,320	961,730	1,005,010	1,050,240	1,097,500
Set Up Fees	3,500	2%	3,500	3,570	3,640	3,710	3,780	3,860	3,940	4,020	4,100	4,180
Late Fees	27,000	2%	27,000	27,540	28,090	28,650	29,220	29,800	30,400	31,010	31,630	32,260
<b>Subtotal Operating Revenues</b>	<b>1,080,500</b>		<b>1,152,688</b>	<b>1,352,230</b>	<b>1,528,750</b>	<b>1,654,670</b>	<b>1,748,470</b>	<b>1,834,670</b>	<b>1,916,390</b>	<b>2,001,770</b>	<b>2,090,980</b>	<b>2,184,180</b>
<b>CAPITAL REVENUES</b>												
SRF	-			1,094,000	2,134,000	928,000	687,000	1,482,000	1,379,000	350,000	361,000	371,000
DJ Farms Develop. Agreement	93,750		93,750	187,500	187,500	187,500	187,500	187,500	187,500	187,500	187,500	187,500
Wastewater Connection Fees***	5,500	(Growth)	5,500	108,390	110,550	112,760	86,260	29,330	29,920	30,510	31,130	31,750
<b>Subtotal Capital Revenues</b>	<b>99,250</b>		<b>99,250</b>	<b>1,389,890</b>	<b>2,432,050</b>	<b>1,228,260</b>	<b>960,760</b>	<b>1,698,830</b>	<b>1,596,420</b>	<b>568,010</b>	<b>579,630</b>	<b>590,250</b>
<b>Total Revenues</b>	<b>1,179,750</b>		<b>1,251,938</b>	<b>2,742,120</b>	<b>3,960,800</b>	<b>2,882,930</b>	<b>2,709,230</b>	<b>3,533,500</b>	<b>3,512,810</b>	<b>2,569,780</b>	<b>2,670,610</b>	<b>2,774,430</b>
<b>EXPENSES</b>												
<b>Operating Expenses</b>												
Personnel Services	213,903	4%	213,903	222,460	231,360	240,610	250,230	260,240	270,650	281,480	292,740	304,450
Utilities Director (50%)	32,500	4%	32,500	65,000	67,600	70,300	73,110	76,030	79,070	82,230	85,520	88,940
FT Operator (50%) less current PT	17,500	4%	17,500	35,000	36,400	37,860	39,370	40,940	42,580	44,280	46,050	47,890
Additional FT Operator (50%)		4%	-	40,000	41,600	43,260	44,990	46,790	48,660	50,610	52,630	54,740
Supplies & Services	404,070	3%	404,070	416,190	428,680	441,540	454,790	468,430	482,480	496,950	511,860	527,220
Other Financing Uses	418,700	3%	418,700	438,170	289,700	298,390	307,340	316,560	326,060	335,840	345,920	356,300
<b>Subtotal Operating Expenses</b>	<b>1,086,673</b>		<b>1,086,673</b>	<b>1,216,820</b>	<b>1,095,340</b>	<b>1,131,960</b>	<b>1,169,830</b>	<b>1,208,990</b>	<b>1,249,500</b>	<b>1,291,390</b>	<b>1,334,720</b>	<b>1,379,540</b>
<b>Wastewater Capital Expenses</b>												
Capital Outlay****	-	3%	-	1,094,100	2,134,000	928,160	687,350	1,482,160	1,379,420	350,000	360,500	371,300
SRF loan repayments				405,000	405,000	405,000	405,000	405,000	405,000	405,000	405,000	405,000
<b>Subtotal Capital Expenses</b>	<b>-</b>		<b>-</b>	<b>1,499,100</b>	<b>2,539,000</b>	<b>1,333,160</b>	<b>1,092,350</b>	<b>1,887,160</b>	<b>1,784,420</b>	<b>755,000</b>	<b>765,500</b>	<b>776,300</b>
<b>TOTAL EXPENSES</b>	<b>1,086,673</b>		<b>1,086,673</b>	<b>2,715,920</b>	<b>3,634,340</b>	<b>2,465,120</b>	<b>2,262,180</b>	<b>3,096,150</b>	<b>3,033,920</b>	<b>2,046,390</b>	<b>2,100,220</b>	<b>2,155,840</b>
<b>Total Net Revenues</b>	<b>93,077</b>		<b>165,265</b>	<b>26,200</b>	<b>326,460</b>	<b>417,810</b>	<b>447,050</b>	<b>437,350</b>	<b>478,890</b>	<b>523,390</b>	<b>570,390</b>	<b>618,590</b>
<b>Ending WW Fund Balance (All Funds)</b>	<b>(622,576)</b>		<b>(550,388)</b>	<b>(524,188)</b>	<b>(197,728)</b>	<b>220,082</b>	<b>667,132</b>	<b>1,104,482</b>	<b>1,583,372</b>	<b>2,106,762</b>	<b>2,677,152</b>	<b>3,295,742</b>
<b>Reserve Targets</b>												
Operating Expense (25%)	-		271,670	304,210	273,840	282,990	292,460	302,250	312,380	322,850	333,680	344,890
Capital Expense Reserve	-		1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
<b>Total Reserve Targets:</b>	<b>-</b>		<b>1,271,670</b>	<b>1,304,210</b>	<b>1,273,840</b>	<b>1,282,990</b>	<b>1,292,460</b>	<b>1,302,250</b>	<b>1,312,380</b>	<b>1,322,850</b>	<b>1,333,680</b>	<b>1,344,890</b>
<b>Reserve Targets Met:</b>			<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

\* First rate increase Feb 1st 2016; rates thereafter increased on Jan 1st

\*\* Residential Flat Rate

\*\*\* Two different growth rates. Accts: DJ Farms. DJ Farms has a Devel. Agree. DJ Farms Capital Revenue accounted for separately.

\*\*\*\* From Sewer CIP. Only goes to FY22. Used nominal amount after that escalated.

### 3.6 Wastewater Rate Projections

BWA developed four scenarios which include: Scenario 1 where rates are only increased by CPI; Scenario 2 Pay-as-you-go where revenue requirement increases are funded solely by rates; Scenario 3 assumes \$9 million in SRF loans, along with rate increases; and Scenario 4 assumes \$6 million in SRF loans and \$3 million in grants, along with rate increases.

#### 3.6.1 Current Wastewater Rate Structure

Bartle Wells Associates conducted an independent analysis of the City’s current wastewater rate structure. Based on an evaluation of rate alternatives and input from City staff, no major modifications are recommended to the City’s residential rate structure, besides merging boarding houses into the commercial customer category. Table 15 shows the current wastewater rates.

### 3.7 Proposed Wastewater Rates

BWA recommends increasing rates in order to meet revenue requirements. Table 20 shows the revenue requirement increases for all of the scenarios. Scenario 2 has the highest increases due to capital improvements being funded through wastewater service charge revenues, whereas Scenarios 3 and 4 has additional funding sources through State Revolving Fund (SRF) loans and grants.

Table 20: Wastewater Scenarios Comparison  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Annual Revenue Requirement Increase	Current FY2016	Proposed					
		FY2016 Feb 1	FY2017 Jan 1	FY2018 Jan 1	FY2019 Jan 1	FY2020 Jan 1	FY2021 Jan 1
<b>Proposed Annual Revenue Requirement % Increases</b>							
Scenario 1: No Rate Increases	-	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Scenario 2: Pay As You Go Increases	-	31.5%	31.5%	21.5%	0.0%	0.0%	0.0%
Scenario 3: \$9m SRF Loan, No Grants	-	16.5%	11.5%	6.5%	1.5%	1.5%	1.5%
Scenario 4: \$6m SRF Loans, \$3m Grants	-	11.5%	8.5%	5.5%	1.5%	1.5%	1.5%
<b>Proposed Averaged Monthly Bill</b>							
Scenario 1: No Rate Increases	\$35.49	\$35.49	\$36.03	\$35.49	\$36.03	\$36.57	\$37.12
Scenario 2: Pay As You Go Increases	\$35.49	\$45.99	\$60.47	\$73.47	\$73.47	\$73.47	\$73.47
Scenario 3: \$9m SRF Loan, No Grants	\$35.49	\$40.74	\$45.43	\$48.38	\$49.10	\$49.84	\$50.59
Scenario 4: \$6m SRF Loans, \$3m Grants	\$35.49	\$38.99	\$42.31	\$44.63	\$45.30	\$45.98	\$46.67

BWA recommends Scenario 3, which assumes \$9 million of SRF loans and no grants. The proposed rate increases are shown on Table 21. Under Proposition 218, the wastewater rates shown on Table 21 are the maximum rates that the City can enact each year. The City can adopt rates that are lower than those shown based upon an annual review of the wastewater utility’s finances to ensure that revenues are in line with expenses.

Table 21: Proposed Wastewater Rate Increases  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Proposed Wastewater Rates	Proposed					
	FY2016 Feb 1	FY2017 Jan 1	FY2018 Jan 1	FY2019 Jan 1	FY2020 Jan 1	FY2021 Jan 1
<u>Single Family Residential</u>	\$40.74	\$45.43	\$48.38	\$49.10	\$49.84	\$50.59
<u>Commercial*</u>						
Basic Rate (Up to 5 Units)	\$40.74	\$45.43	\$48.38	\$49.10	\$49.84	\$50.59
Each Additional Unit (ccf**)	\$1.71	\$1.91	\$2.03	\$2.06	\$2.10	\$2.13
Average Single Family Residential Monthly Bill	\$40.74	\$45.43	\$48.38	\$49.10	\$49.84	\$50.59
<i>\$ Increase</i>	\$5.77	\$4.69	\$2.95	\$0.73	\$0.74	\$0.75
<i>% Increase</i>	16.5%	11.5%	6.5%	1.5%	1.5%	1.5%

\*Now includes Boarding Houses and Multi-Family

\*\*ccf = 100 cubic feet (748 gallons)

### 3.7.1 Wastewater Rate Derivation

The current monthly wastewater rate is not based on an EDU assignment calculation that incorporates a customer’s flow, biochemical oxygen demand (BOD) and suspended solids (SS). BWA recommends that once this data becomes more readily available to reevaluate and incorporate this additional data into the rate structure.

The proposed rates are developed by determining the total revenue required, and dividing the revenue requirements by each customer classification or average units (ccf). Table 22 shows the derivations of the proposed rates of Scenario 3.

Table 22: Scenario 3 Rate Derivation  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

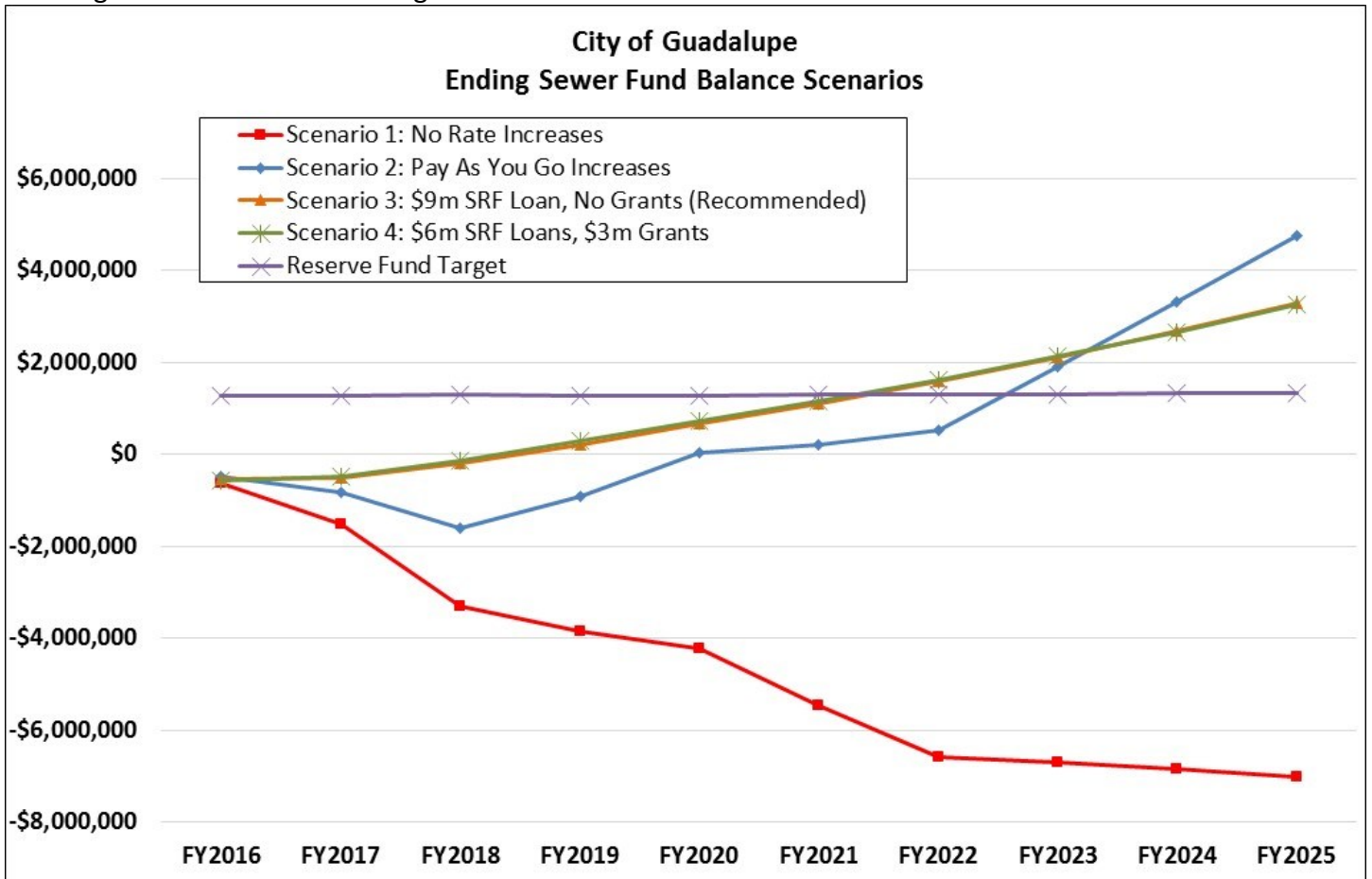
Scenario 3	Current FY2016	Proposed Rate Increases					
		2/1/2016	1/1/2017	1/1/2018	1/1/2019	1/1/2020	1/1/2021
Revenue % Requirement Increase (Rate + CPI)	-	16.5%	11.5%	6.5%	1.5%	1.5%	1.5%
Growth % Increase	-	0.00%	4.50%	4.50%	4.50%	4.00%	3.00%
<b>Revenue Requirement</b>							
<u>Total</u>	<u>\$1,050,000</u>	<u>\$1,122,188</u>	<u>\$1,321,120</u>	<u>\$1,497,020</u>	<u>\$1,622,310</u>	<u>\$1,715,470</u>	<u>\$1,801,010</u>
Revenue Requirement (1st half of year)	\$525,000	\$612,500	\$611,630	\$709,490	\$787,530	\$834,780	\$880,690
Revenue Requirement (2nd half of year)	\$525,000	\$509,688	\$709,490	\$787,530	\$834,780	\$880,690	\$920,320
<u>Residential</u>							
Revenue Requirement (1st half of year)	\$381,872	\$445,518	\$464,901	\$541,691	\$602,861	\$636,381	\$665,304
Revenue Requirement (2nd half of year)	\$381,872	\$370,734	\$518,365	\$576,901	\$611,904	\$645,926	\$675,284
<u>Commercial*</u>							
Revenue Requirement (1st half of year)	\$18,884	\$22,031	\$22,990	\$26,787	\$29,812	\$31,469	\$32,900
Revenue Requirement (2nd half of year)	\$18,884	\$18,333	\$25,633	\$28,528	\$30,259	\$31,941	\$33,393
<u>Commercial Additional Units</u>							
Revenue Requirement (1st half of year)	\$120,257	\$144,951	\$123,739	\$141,012	\$154,857	\$166,930	\$182,486
Revenue Requirement (2nd half of year)	\$120,257	\$120,620	\$165,492	\$182,101	\$192,617	\$202,822	\$211,643
<u>Accounts</u>							
Residential	1,820	1,820	1,902	1,987	2,077	2,160	2,225
<u>Commercial*</u>							
Basic Rate (Up to 5 ccf Units)	90	90	94	98	103	107	110
Additional Units (ccf) (per month)	13,714	13,714	14,331	14,976	15,650	16,276	16,764
<u>Monthly Rate</u>							
<u>Residential</u>							
Residential (1st half of year)	\$34.97	\$34.97	\$40.74	\$45.43	\$48.38	\$49.10	\$49.84
Residential (2nd half of year)	\$34.97	\$40.74	\$45.43	\$48.38	\$49.10	\$49.84	\$50.59
<u>Commercial*</u>							
Basic Rate (Up to 5 Units) (1st half of year)	\$34.97	\$34.97	\$40.74	\$45.43	\$48.38	\$49.10	\$49.84
Basic Rate (Up to 5 Units) (2nd half of year)	\$34.97	\$40.74	\$45.43	\$48.38	\$49.10	\$49.84	\$50.59
Each Additional Unit (1st half of year)	\$1.47	\$1.47	\$1.71	\$1.91	\$2.03	\$2.06	\$2.10
Each Additional Unit (2nd half of year)	\$1.47	\$1.71	\$1.91	\$2.03	\$2.06	\$2.10	\$2.13

\*Boarding houses now included in commercial

### 3.8 Ending Fund Balances

Figure 8 chart compares the ending fund balance of all wastewater reserves. As shown, Scenario 3 reaches the reserve fund target by FY2022.

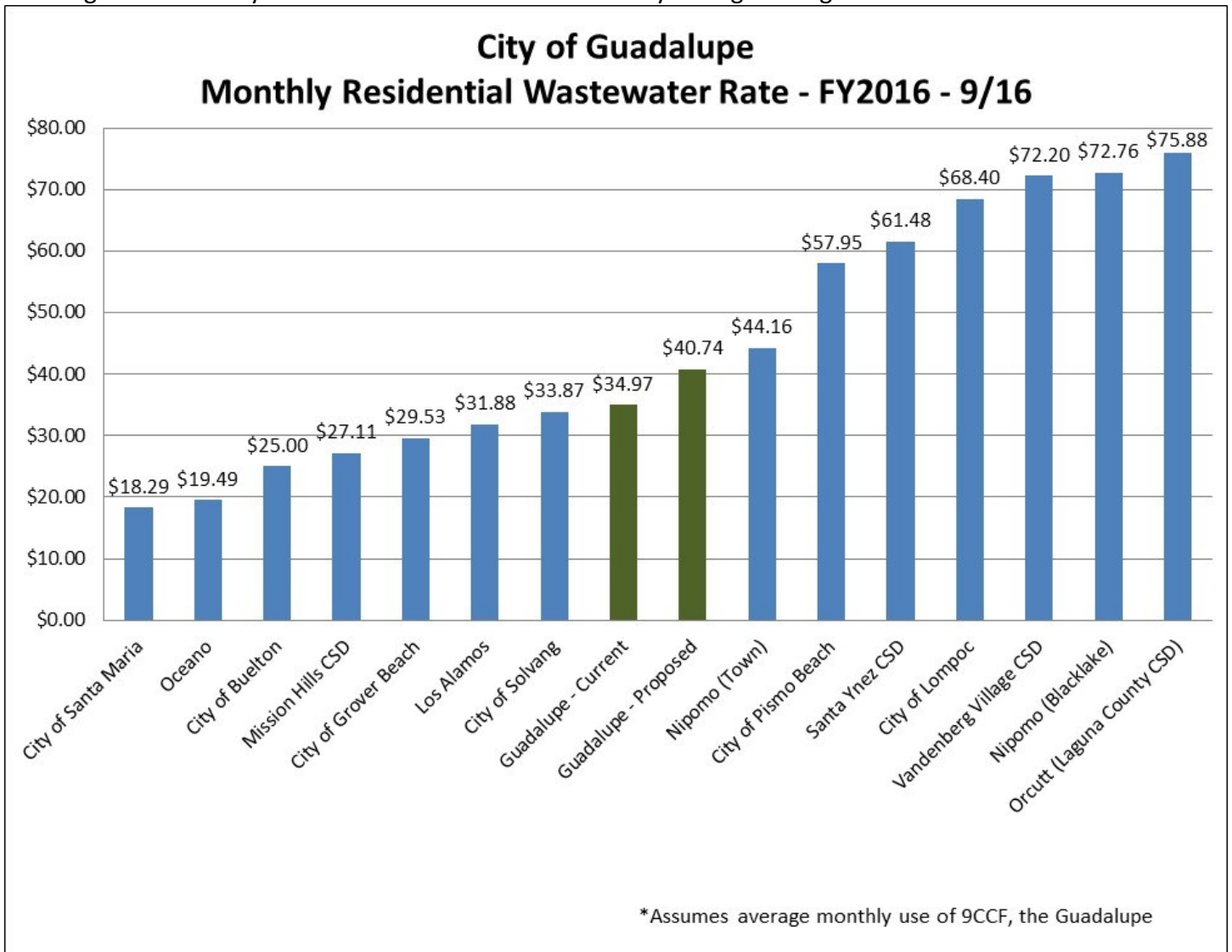
Figure 8: Wastewater Ending Fund Balance



### 3.9 Regional Wastewater Rate Survey

For comparison purposes, Figure 9 shows the City’s current and proposed wastewater rates relative to those of other regional agencies for a single family home paying a flat residential rate. The City’s residential wastewater charges will remain in the midrange for the region.

Figure 9: Monthly Residential Wastewater Rate Survey of Regional Agencies



# **APPENDIX A**

## **Water Rate Study Tables**

Table 23: Water Expenses  
City of Guadalupe  
Water and Wastewater Rate Analysis and Study

Water Operating Expenses	Budget* FY2016
<b>Personnel Services:</b>	
Salaries-Regular	\$76,305
Overtime	12,814
Utilities Director (Split w/ Wastewater)	32,500
FT Operator (Split w/ Wastewater)	17,500
Retirement-Pers	18,125
FICA/Medicare	7,917
Workers' Compensation	4,729
Medical/Life Insurance	10,856
Other Benefits	14,366
Dental Insurance	1,326
Vision Insurance	199
<b>Supplies and Services:</b>	
Utilities	90,000
Communications	5,000
Office Supplies and Postage	10,000
Advertising	2,000
Business Expense and Trng	500
Memberships, Dues & Subs	500
Equipment Maintenance	1,000
Facilities Maintenance	1,000
Vehicle Maintenance	2,000
Equipment Replacement	2,500
Meters	25,000
Operating Supplies & Exp.	45,000
State Water	751,000
Fuel & Lubricants	5,000
Bank Service Charges	1,200
Professional Services	75,000
Equipment Rental	1,000
Lease	200
Liability Insurance	40,865
Services by Other Agencies	35,000
<b>Other Financing Uses:</b>	
Debt Service Principal	36,000
Debt Service Interest	53,000
Lease Purchase	13,000
Transfer to General Fund	251,600
Write-Offs	3,000
<b>Total Operating Expenses:</b>	<b>1,647,002</b>

Source: Water Operating with Eliminated Franchise Fee

\*Includes New Staff Expenses



Table 24: Detailed Water CIP  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

CIP Projections--Water	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	Total
Bonita Reservoir & Pump Station Rehab	-	-	-	-	\$282,500	\$282,500	\$565,000
Kermit McKenzie Water Main Upgrade	-	-	125,000	125,000	85,000	85,000	420,000
Mary Buren Water Main Upgrade	-	750,000	100,000	100,000	-	-	950,000
Tognazzini Water Main Upgrade	-	-	-	-	150,000	150,000	300,000
Escalante Water Main Upgrade	-	-	-	-	145,000	145,000	290,000
South Obispo Water Main Upgrade & Ext.	60,000	-	185,000	185,000	-	-	430,000
8th Street Water Line Extension	-	-	-	-	45,000	45,000	90,000
<u>North Obispo Pipe Upgrade</u>	<u>-</u>	<u>-</u>	<u>120,000</u>	<u>120,000</u>	<u>80,000</u>	<u>80,000</u>	<u>400,000</u>
TOTALS*	60,000	750,000	530,000	530,000	787,500	787,500	3,445,000
* Expressed in 2015 dollars.					Six Year Average:	574,167	

Table 25: Water Cash Flow – Scenario 1: CPI Increases  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Scenario 1: CPI Increases	Budget FY2016	Increase	Projected									
			FY2016*	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
<b>Assumptions</b>												
Revenue Requirement Increase			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CPI Adjustment	1.4%		1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth in Accounts***			0.0%	4.5%	4.5%	5.0%	5.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Growth in Connection Fees***			0.0%	2.0%	2.0%	2.5%	2.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Interest Rate			0.00%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
<b>Beginning Water Fund Balance</b>	<b>249,121</b>		<b>249,121</b>	<b>626,319</b>	<b>(114,954)</b>	<b>(623,890)</b>	<b>(1,119,089)</b>	<b>(1,857,501)</b>	<b>(2,660,417)</b>	<b>(2,857,077)</b>	<b>(3,018,861)</b>	<b>(3,154,599)</b>
<b>OPERATING REVENUES</b>												
Water Service Charge (1st half of year)	757,500		883,750	768,860	814,990	863,890	920,040	979,840	1,023,930	1,070,010	1,118,160	1,168,480
Water Service Charge (2nd half of year)	757,500	(growth)	640,717	814,990	863,890	920,040	979,840	1,023,930	1,070,010	1,118,160	1,168,480	1,221,060
Turn On/Off Fees	6,000	2%	6,000	6,120	6,240	6,360	6,490	6,620	6,750	6,890	7,030	7,170
Late Fees	47,000	2%	47,000	47,940	48,900	49,880	50,880	51,900	52,940	54,000	55,080	56,180
Meters	9,000	3%	9,000	9,270	9,550	9,840	10,140	10,440	10,750	11,070	11,400	11,740
Uncollectable Accounts	500	2%	500	510	520	530	540	550	560	570	580	590
Miscellaneous Income	400	2%	400	410	420	430	440	450	460	470	480	490
Interest Income	1,600		1,600	1,570	-	-	-	-	-	-	-	-
<b>Subtotal Operating Revenues</b>	<b>1,579,500</b>		<b>1,588,967</b>	<b>1,649,670</b>	<b>1,744,510</b>	<b>1,850,970</b>	<b>1,968,370</b>	<b>2,073,730</b>	<b>2,165,400</b>	<b>2,261,170</b>	<b>2,361,210</b>	<b>2,465,710</b>
<b>CAPITAL REVENUES</b>												
Grant	350,000		350,000	-	-	-	-	-	-	-	-	-
DJ Farms Development Agreement	19,700		19,700	38,150	38,150	38,150	38,150	38,150	48,830	59,500	59,500	59,500
Water From New Development****	75,000		75,000	92,500	70,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Water Connection Fees	10,000	(growth)	10,000	81,270	82,900	105,700	107,810	21,990	22,430	22,880	23,340	23,810
Standby-By Charges	40,000		40,000	38,000	36,000	34,000	32,000	30,000	28,000	26,000	24,000	22,000
<b>Subtotal Capital Revenues</b>	<b>494,700</b>		<b>494,700</b>	<b>249,920</b>	<b>227,050</b>	<b>202,850</b>	<b>202,960</b>	<b>115,140</b>	<b>124,260</b>	<b>133,380</b>	<b>131,840</b>	<b>130,310</b>
<b>Total Revenues</b>	<b>2,074,200</b>		<b>2,083,667</b>	<b>1,899,590</b>	<b>1,971,560</b>	<b>2,053,820</b>	<b>2,171,330</b>	<b>2,188,870</b>	<b>2,289,660</b>	<b>2,394,550</b>	<b>2,493,050</b>	<b>2,596,020</b>
<b>EXPENSES</b>												
<b>Operating Expenses</b>												
Personnel Services	146,637	4%	146,637	152,500	158,600	164,940	171,540	178,400	185,540	192,960	200,680	208,710
Utilities Director (50%)	32,500	4%	32,500	65,000	67,600	70,300	73,110	76,030	79,070	82,230	85,520	88,940
FT Operator (50%) less current PT	17,500	4%	17,500	35,000	36,400	37,860	39,370	40,940	42,580	44,280	46,050	47,890
Additional FT Operator (50%)		4%	-	40,000	41,600	43,260	44,990	46,790	48,660	50,610	52,630	54,740
Supplies & Services	1,093,765	3%	1,093,765	1,126,580	1,160,380	1,195,190	1,231,050	1,267,980	1,306,020	1,345,200	1,385,560	1,427,130
Other Financing Uses	356,600	3%	356,600	367,300	378,320	389,670	401,360	413,400	425,800	438,570	451,730	465,280
Water Purchase				98,650	98,650	98,650	98,650	98,650	98,650	98,650	98,650	98,650
<b>Subtotal Operating Expenses</b>	<b>1,647,002</b>		<b>1,647,002</b>	<b>1,885,030</b>	<b>1,941,550</b>	<b>1,999,870</b>	<b>2,060,070</b>	<b>2,122,190</b>	<b>2,186,320</b>	<b>2,252,500</b>	<b>2,320,820</b>	<b>2,391,340</b>
<b>Water Capital Expenses</b>												
Capital Outlay*****	60,000	3%	60,000	772,500	562,280	579,150	886,340	912,930	350,000	360,500	371,300	382,400
<b>Subtotal Capital Expenses</b>	<b>60,000</b>		<b>60,000</b>	<b>772,500</b>	<b>562,280</b>	<b>579,150</b>	<b>886,340</b>	<b>912,930</b>	<b>350,000</b>	<b>360,500</b>	<b>371,300</b>	<b>382,400</b>
<b>TOTAL EXPENSES</b>	<b>1,707,002</b>		<b>1,707,002</b>	<b>2,657,530</b>	<b>2,503,830</b>	<b>2,579,020</b>	<b>2,946,410</b>	<b>3,035,120</b>	<b>2,536,320</b>	<b>2,613,000</b>	<b>2,692,120</b>	<b>2,773,740</b>
<b>Total Net Revenues</b>	<b>367,198</b>		<b>376,665</b>	<b>(757,940)</b>	<b>(532,270)</b>	<b>(525,200)</b>	<b>(775,080)</b>	<b>(846,250)</b>	<b>(246,660)</b>	<b>(218,450)</b>	<b>(199,070)</b>	<b>(177,720)</b>
<b>Payback of General Fund Loan</b>	<b>10,000</b>		<b>10,000</b>	<b>16,667</b>	<b>23,334</b>	<b>30,001</b>	<b>36,668</b>	<b>43,334</b>	<b>50,000</b>	<b>56,666</b>	<b>63,332</b>	<b>69,998</b>
<b>Ending Water Fund Balance (All Funds)</b>	<b>626,319</b>		<b>635,786</b>	<b>(114,954)</b>	<b>(623,890)</b>	<b>(1,119,089)</b>	<b>(1,857,501)</b>	<b>(2,660,417)</b>	<b>(2,857,077)</b>	<b>(3,018,861)</b>	<b>(3,154,599)</b>	<b>(3,262,321)</b>
<b>Reserve Target</b>												
Operating Expense (25%)			411,750	471,260	485,390	499,970	515,020	530,550	546,580	563,130	580,210	597,840
Capital Expense Reserve			1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
<b>Total Reserve Target:</b>			<b>1,411,750</b>	<b>1,471,260</b>	<b>1,485,390</b>	<b>1,499,970</b>	<b>1,515,020</b>	<b>1,530,550</b>	<b>1,546,580</b>	<b>1,563,130</b>	<b>1,580,210</b>	<b>1,597,840</b>
Reserve Targets Met:			NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

\* First rate increase Feb 1st 2016; rates thereafter increased on Jan 1st

\*\* Assumes usage of 9 ccf.

\*\*\* Two different growth rates. Accts: DJ Farms. DJ Farms has a Devel. Agree. DJ Farms Capital Revenue accounted for separately.

\*\*\*\* Includes Beachside Cooler, Pioneer Apts., Guadalupe Court, potential Apio expansion and 10 acre feet per year

\*\*\*\*\* From Water CIP. Only goes to FY21. Used nominal amount after that escalated.

Table 26: Water Cash Flow – Scenario 2: Pay As You Go  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Scenario 2: Pay As You Go	Budget	Increase	Projected									
	FY2016		FY2016*	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
<b>Assumptions</b>												
Revenue Requirement Increase			10.0%	10.0%	10.0%	4.0%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CPI Adjustment	1.4%		1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth in Accounts***			0.0%	4.5%	4.5%	5.0%	5.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Growth in Connection Fees***			0.0%	2.0%	2.0%	2.5%	2.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Interest Rate			0.00%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
<b>Beginning Water Fund Balance</b>	<b>249,121</b>		<b>249,121</b>	<b>626,319</b>	<b>125,556</b>	<b>54,310</b>	<b>167,671</b>	<b>173,339</b>	<b>204,933</b>	<b>880,403</b>	<b>1,631,659</b>	<b>2,451,821</b>
<b>OPERATING REVENUES</b>												
Water Service Charge (1st half of year)	757,500		883,750	844,610	979,750	1,136,510	1,255,840	1,387,700	1,450,150	1,515,410	1,583,600	1,654,860
Water Service Charge (2nd half of year)	757,500	(growth)	703,842	979,750	1,136,510	1,255,840	1,387,700	1,450,150	1,515,410	1,583,600	1,654,860	1,729,330
Turn On/Off Fees	6,000	2%	6,000	6,120	6,240	6,360	6,490	6,620	6,750	6,890	7,030	7,170
Late Fees	47,000	2%	47,000	47,940	48,900	49,880	50,880	51,900	52,940	54,000	55,080	56,180
Meters	9,000	3%	9,000	9,270	9,550	9,840	10,140	10,440	10,750	11,070	11,400	11,740
Uncollectable Accounts	500	2%	500	510	520	530	540	550	560	570	580	590
Miscellaneous Income	400	2%	400	410	420	430	440	450	460	470	480	490
Interest Income	1,600		1,600	1,570	310	140	420	430	510	2,200	4,080	6,130
<b>Subtotal Operating Revenues</b>	<b>1,579,500</b>		<b>1,652,092</b>	<b>1,890,180</b>	<b>2,182,200</b>	<b>2,459,530</b>	<b>2,712,450</b>	<b>2,908,240</b>	<b>3,037,530</b>	<b>3,174,210</b>	<b>3,317,110</b>	<b>3,466,490</b>
<b>CAPITAL REVENUES</b>												
Grant	350,000		350,000	-	-	-	-	-	-	-	-	-
DJ Farms Development Agreement	19,700		19,700	38,150	38,150	38,150	38,150	38,150	48,830	59,500	59,500	59,500
Water From New Development****	75,000		75,000	92,500	70,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Water Connection Fees	10,000	(growth)	10,000	81,270	82,900	105,700	107,810	21,990	22,430	22,880	23,340	23,810
Standby-By Charges	40,000		40,000	38,000	36,000	34,000	32,000	30,000	28,000	26,000	24,000	22,000
<b>Subtotal Capital Revenues</b>	<b>494,700</b>		<b>494,700</b>	<b>249,920</b>	<b>227,050</b>	<b>202,850</b>	<b>202,960</b>	<b>115,140</b>	<b>124,260</b>	<b>133,380</b>	<b>131,840</b>	<b>130,310</b>
<b>Total Revenues</b>	<b>2,074,200</b>		<b>2,146,792</b>	<b>2,140,100</b>	<b>2,409,250</b>	<b>2,662,380</b>	<b>2,915,410</b>	<b>3,023,380</b>	<b>3,161,790</b>	<b>3,307,590</b>	<b>3,448,950</b>	<b>3,596,800</b>
<b>EXPENSES</b>												
<b>Operating Expenses</b>												
Personnel Services	146,637	4%	146,637	152,500	158,600	164,940	171,540	178,400	185,540	192,960	200,680	208,710
Utilities Director (50%)	32,500	4%	32,500	65,000	67,600	70,300	73,110	76,030	79,070	82,230	85,520	88,940
FT Operator (50%) less current PT	17,500	4%	17,500	35,000	36,400	37,860	39,370	40,940	42,580	44,280	46,050	47,890
Additional FT Operator (50%)		4%	-	40,000	41,600	43,260	44,990	46,790	48,660	50,610	52,630	54,740
Supplies & Services	1,093,765	3%	1,093,765	1,126,580	1,160,380	1,195,190	1,231,050	1,267,980	1,306,020	1,345,200	1,385,560	1,427,130
Other Financing Uses	356,600	3%	356,600	367,300	378,320	389,670	401,360	413,400	425,800	438,570	451,730	465,280
Water Purchase				98,650	98,650	98,650	98,650	98,650	98,650	98,650	98,650	98,650
<b>Subtotal Operating Expenses</b>	<b>1,647,002</b>		<b>1,647,002</b>	<b>1,885,030</b>	<b>1,941,550</b>	<b>1,999,870</b>	<b>2,060,070</b>	<b>2,122,190</b>	<b>2,186,320</b>	<b>2,252,500</b>	<b>2,320,820</b>	<b>2,391,340</b>
<b>Water Capital Expenses</b>												
Capital Outlay*****	60,000	3%	60,000	772,500	562,280	579,150	886,340	912,930	350,000	360,500	371,300	382,400
<b>Subtotal Capital Expenses</b>	<b>60,000</b>		<b>60,000</b>	<b>772,500</b>	<b>562,280</b>	<b>579,150</b>	<b>886,340</b>	<b>912,930</b>	<b>350,000</b>	<b>360,500</b>	<b>371,300</b>	<b>382,400</b>
<b>TOTAL EXPENSES</b>	<b>1,707,002</b>		<b>1,707,002</b>	<b>2,657,530</b>	<b>2,503,830</b>	<b>2,579,020</b>	<b>2,946,410</b>	<b>3,035,120</b>	<b>2,536,320</b>	<b>2,613,000</b>	<b>2,692,120</b>	<b>2,773,740</b>
<b>Total Net Revenues</b>	<b>367,198</b>		<b>439,790</b>	<b>(517,430)</b>	<b>(94,580)</b>	<b>83,360</b>	<b>(31,000)</b>	<b>(11,740)</b>	<b>625,470</b>	<b>694,590</b>	<b>756,830</b>	<b>823,060</b>
<b>Payback of General Fund Loan</b>	<b>10,000</b>		<b>10,000</b>	<b>16,667</b>	<b>23,334</b>	<b>30,001</b>	<b>36,668</b>	<b>43,334</b>	<b>50,000</b>	<b>56,666</b>	<b>63,332</b>	<b>69,998</b>
<b>Ending Water Fund Balance (All Funds)</b>	<b>626,319</b>		<b>698,911</b>	<b>125,556</b>	<b>54,310</b>	<b>167,671</b>	<b>173,339</b>	<b>204,933</b>	<b>880,403</b>	<b>1,631,659</b>	<b>2,451,821</b>	<b>3,344,879</b>
<b>Reserve Target</b>												
Operating Expense (25%)			411,750	471,260	485,390	499,970	515,020	530,550	546,580	563,130	580,210	597,840
Capital Expense Reserve			1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
<b>Total Reserve Target:</b>			<b>1,411,750</b>	<b>1,471,260</b>	<b>1,485,390</b>	<b>1,499,970</b>	<b>1,515,020</b>	<b>1,530,550</b>	<b>1,546,580</b>	<b>1,563,130</b>	<b>1,580,210</b>	<b>1,597,840</b>
Reserve Targets Met:			NO	NO	NO	NO	NO	NO	NO	YES	YES	YES

\* First rate increase Feb 1st 2016; rates thereafter increased on Jan 1st

\*\* Assumes usage of 9 ccf.

\*\*\* Two different growth rates. Accts: DJ Farms. DJ Farms has a Devel. Agree. DJ Farms Capital Revenue accounted for separately.

\*\*\*\* Includes Beachside Cooler, Pioneer Apts., Guadalupe Court, potential Apio expansion and 10 acre feet per year

\*\*\*\*\* From Water CIP. Only goes to FY21. Used nominal amount after that escalated.

Table 27: Water Cash Flow – Scenario 3: \$5.2m SRF Loan  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Scenario 3: SRF Loan	Budget FY2016	Increase	Projected										
			FY2016*	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
<b>Assumptions</b>													
Revenue Requirement Increase			3.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	0.0%	0.0%	0.0%	0.0%
CPI Adjustment	1.4%		1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth in Accounts***			0.0%	4.5%	4.5%	5.0%	5.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Growth in Connection Fees***			0.0%	2.0%	2.0%	2.5%	2.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Interest Rate			0.00%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
<b>Beginning Water Fund Balance</b>	249,121		249,121	626,319	736,536	702,140	781,001	1,019,589	1,327,923	1,746,623	2,234,789	2,783,781	
<b>OPERATING REVENUES</b>													
Water Service Charge (1st half of year)	757,500		883,750	791,590	870,750	957,830	1,058,400	1,169,530	1,268,940	1,326,040	1,385,710	1,448,070	1,448,070
Water Service Charge (2nd half of year)	757,500	(growth)	659,658	870,750	957,830	1,058,400	1,169,530	1,268,940	1,326,040	1,385,710	1,448,070	1,513,230	1,513,230
Turn On/Off Fees	6,000	2%	6,000	6,120	6,240	6,360	6,490	6,620	6,750	6,890	7,030	7,170	7,170
Late Fees	47,000	2%	47,000	47,940	48,900	49,880	50,880	51,900	52,940	54,000	55,080	56,180	56,180
Meters	9,000	3%	9,000	9,270	9,550	9,840	10,140	10,440	10,750	11,070	11,400	11,740	11,740
Uncollectable Accounts	500	2%	500	510	520	530	540	550	560	570	580	590	590
Miscellaneous Income	400	2%	400	410	420	430	440	450	460	470	480	490	490
Interest Income	1,600		1,600	1,570	1,840	1,760	1,950	2,550	3,320	4,370	5,590	6,960	6,960
<b>Subtotal Operating Revenues</b>	<b>1,579,500</b>		<b>1,607,908</b>	<b>1,728,160</b>	<b>1,896,050</b>	<b>2,085,030</b>	<b>2,298,370</b>	<b>2,510,980</b>	<b>2,669,760</b>	<b>2,789,120</b>	<b>2,913,940</b>	<b>3,044,430</b>	<b>3,044,430</b>
<b>CAPITAL REVENUES</b>													
Grant	350,000		350,000	-	-	-	-	-	-	-	-	-	-
SRF Loan	-		-	773,000	562,000	579,000	886,000	913,000	350,000	361,000	371,000	382,000	382,000
DJ Farms Development Agreement	19,700		19,700	38,150	38,150	38,150	38,150	38,150	48,830	59,500	59,500	59,500	59,500
Water From New Development****	75,000		75,000	92,500	70,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Water Connection Fees	10,000	(growth)	10,000	81,270	82,900	105,700	107,810	21,990	22,430	22,880	23,340	23,810	23,810
Standby-By Charges	40,000		40,000	38,000	36,000	34,000	32,000	30,000	28,000	26,000	24,000	22,000	22,000
<b>Subtotal Capital Revenues</b>	<b>494,700</b>		<b>494,700</b>	<b>1,022,920</b>	<b>789,050</b>	<b>781,850</b>	<b>1,088,960</b>	<b>1,028,140</b>	<b>474,260</b>	<b>494,380</b>	<b>502,840</b>	<b>512,310</b>	<b>512,310</b>
<b>Total Revenues</b>	<b>2,074,200</b>		<b>2,102,608</b>	<b>2,751,080</b>	<b>2,685,100</b>	<b>2,866,880</b>	<b>3,387,330</b>	<b>3,539,120</b>	<b>3,144,020</b>	<b>3,283,500</b>	<b>3,416,780</b>	<b>3,556,740</b>	<b>3,556,740</b>
<b>EXPENSES</b>													
<b>Operating Expenses</b>													
Personnel Services	146,637	4%	146,637	152,500	158,600	164,940	171,540	178,400	185,540	192,960	200,680	208,710	208,710
Utilities Director (50%)	32,500	4%	32,500	65,000	67,600	70,300	73,110	76,030	79,070	82,230	85,520	88,940	88,940
FT Operator (50%) less current PT	17,500	4%	17,500	35,000	36,400	37,860	39,370	40,940	42,580	44,280	46,050	47,890	47,890
Additional FT Operator (50%)		4%	-	40,000	41,600	43,260	44,990	46,790	48,660	50,610	52,630	54,740	54,740
Supplies & Services	1,093,765	3%	1,093,765	1,126,580	1,160,380	1,195,190	1,231,050	1,267,980	1,306,020	1,345,200	1,385,560	1,427,130	1,427,130
Other Financing Uses	356,600	3%	356,600	367,300	378,320	389,670	401,360	413,400	425,800	438,570	451,730	465,280	465,280
Water Purchase				98,650	98,650	98,650	98,650	98,650	98,650	98,650	98,650	98,650	98,650
<b>Subtotal Operating Expenses</b>	<b>1,647,002</b>		<b>1,647,002</b>	<b>1,885,030</b>	<b>1,941,550</b>	<b>1,999,870</b>	<b>2,060,070</b>	<b>2,122,190</b>	<b>2,186,320</b>	<b>2,252,500</b>	<b>2,320,820</b>	<b>2,391,340</b>	<b>2,391,340</b>
<b>Water Capital Expenses</b>													
Capital Outlay*****	60,000	3%	60,000	772,500	562,280	579,150	886,340	912,930	350,000	360,500	371,300	382,400	382,400
SRF Debt Payments			-	-	239,000	239,000	239,000	239,000	239,000	239,000	239,000	239,000	239,000
<b>Subtotal Capital Expenses</b>	<b>60,000</b>		<b>60,000</b>	<b>772,500</b>	<b>801,280</b>	<b>818,150</b>	<b>1,125,340</b>	<b>1,151,930</b>	<b>589,000</b>	<b>599,500</b>	<b>610,300</b>	<b>621,400</b>	<b>621,400</b>
<b>TOTAL EXPENSES</b>	<b>1,707,002</b>		<b>1,707,002</b>	<b>2,657,530</b>	<b>2,742,830</b>	<b>2,818,020</b>	<b>3,185,410</b>	<b>3,274,120</b>	<b>2,775,320</b>	<b>2,852,000</b>	<b>2,931,120</b>	<b>3,012,740</b>	<b>3,012,740</b>
<b>Total Net Revenues</b>	<b>367,198</b>		<b>395,606</b>	<b>93,550</b>	<b>(57,730)</b>	<b>48,860</b>	<b>201,920</b>	<b>265,000</b>	<b>368,700</b>	<b>431,500</b>	<b>485,660</b>	<b>544,000</b>	<b>544,000</b>
<b>Payback of General Fund Loan</b>	<b>10,000</b>		<b>10,000</b>	<b>16,667</b>	<b>23,334</b>	<b>30,001</b>	<b>36,668</b>	<b>43,334</b>	<b>50,000</b>	<b>56,666</b>	<b>63,332</b>	<b>69,998</b>	<b>69,998</b>
<b>Ending Water Fund Balance (All Funds)</b>	<b>626,319</b>		<b>654,727</b>	<b>736,536</b>	<b>702,140</b>	<b>781,001</b>	<b>1,019,589</b>	<b>1,327,923</b>	<b>1,746,623</b>	<b>2,234,789</b>	<b>2,783,781</b>	<b>3,397,779</b>	<b>3,397,779</b>
<b>Reserve Target</b>													
Operating Expense (25%)			411,750	471,260	485,390	499,970	515,020	530,550	546,580	563,130	580,210	597,840	597,840
Capital Expense Reserve			1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
<b>Total Reserve Target:</b>			<b>1,411,750</b>	<b>1,471,260</b>	<b>1,485,390</b>	<b>1,499,970</b>	<b>1,515,020</b>	<b>1,530,550</b>	<b>1,546,580</b>	<b>1,563,130</b>	<b>1,580,210</b>	<b>1,597,840</b>	<b>1,597,840</b>
<b>Reserve Targets Met:</b>			<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

\* First rate increase Feb 1st 2016; rates thereafter increased on Jan 1st

\*\* Assumes usage of 9 ccf.

\*\*\* Two different growth rates. Accts: DJ Farms. DJ Farms has a Devel. Agree. DJ Farms Capital Revenue accounted for separately.

\*\*\*\* Includes Beachside Cooler, Pioneer Apts., Guadalupe Court, potential Apio expansion and 10 acre feet per year

\*\*\*\*\* From Water CIP. Only goes to FY21. Used nominal amount after that escalated.

Table 28: Water Cash Flow – Scenario 4: \$3.5m SRF \$1.7m Grants  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Scenario 4: \$3.5m SRF and \$1.7m Grants	Budget	Increase	Projected									
	FY2016		FY2016*	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
<b>Assumptions</b>												
Revenue Requirement Increase			4.0%	4.0%	3.0%	3.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CPI Adjustment	1.4%		1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth in Accounts***			0.0%	4.5%	4.5%	5.0%	5.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Growth in Connection Fees***			0.0%	2.0%	2.0%	2.5%	2.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Interest Rate			0.00%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
<b>Beginning Water Fund Balance</b>	<b>249,121</b>		<b>249,121</b>	<b>626,319</b>	<b>752,436</b>	<b>804,780</b>	<b>953,091</b>	<b>1,240,319</b>	<b>1,538,253</b>	<b>1,895,753</b>	<b>2,315,279</b>	<b>2,790,891</b>
<b>OPERATING REVENUES</b>												
Water Service Charge (1st half of year)	757,500		883,750	799,160	879,080	958,200	1,049,230	1,148,910	1,200,610	1,254,640	1,311,100	1,370,100
Water Service Charge (2nd half of year)	757,500	(growth)	665,967	879,080	958,200	1,049,230	1,148,910	1,200,610	1,254,640	1,311,100	1,370,100	1,431,750
Turn On/Off Fees	6,000	2%	6,000	6,120	6,240	6,360	6,490	6,620	6,750	6,890	7,030	7,170
Late Fees	47,000	2%	47,000	47,940	48,900	49,880	50,880	51,900	52,940	54,000	55,080	56,180
Meters	9,000	3%	9,000	9,270	9,550	9,840	10,140	10,440	10,750	11,070	11,400	11,740
Uncollectable Accounts	500	2%	500	510	520	530	540	550	560	570	580	590
Miscellaneous Income	400	2%	400	410	420	430	440	450	460	470	480	490
Interest Income	1,600		1,600	1,570	1,880	2,010	2,380	3,100	3,850	4,740	5,790	6,980
<b>Subtotal Operating Revenues</b>	<b>1,579,500</b>		<b>1,614,217</b>	<b>1,744,060</b>	<b>1,904,790</b>	<b>2,076,480</b>	<b>2,269,010</b>	<b>2,422,580</b>	<b>2,530,560</b>	<b>2,643,480</b>	<b>2,761,560</b>	<b>2,885,000</b>
<b>CAPITAL REVENUES</b>												
Grant	350,000		350,000	258,000	187,000	193,000	295,000	304,000	117,000	120,000	124,000	127,000
SRF loan			-	515,000	375,000	386,000	591,000	609,000	233,000	240,000	248,000	255,000
DJ Farms Development Agreement	19,700		19,700	38,150	38,150	38,150	38,150	38,150	48,830	59,500	59,500	59,500
Water From New Development****	75,000		75,000	92,500	70,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Water Connection Fees	10,000	(growth)	10,000	81,270	82,900	105,700	107,810	21,990	22,430	22,880	23,340	23,810
Standby-By Charges	40,000		40,000	38,000	36,000	34,000	32,000	30,000	28,000	26,000	24,000	22,000
<b>Subtotal Capital Revenues</b>	<b>494,700</b>		<b>494,700</b>	<b>1,022,920</b>	<b>789,050</b>	<b>781,850</b>	<b>1,088,960</b>	<b>1,028,140</b>	<b>474,260</b>	<b>493,380</b>	<b>503,840</b>	<b>512,310</b>
<b>Total Revenues</b>	<b>2,074,200</b>		<b>2,108,917</b>	<b>2,766,980</b>	<b>2,693,840</b>	<b>2,858,330</b>	<b>3,357,970</b>	<b>3,450,720</b>	<b>3,004,820</b>	<b>3,136,860</b>	<b>3,265,400</b>	<b>3,397,310</b>
<b>EXPENSES</b>												
<b>Operating Expenses</b>												
Personnel Services	146,637	4%	146,637	152,500	158,600	164,940	171,540	178,400	185,540	192,960	200,680	208,710
Utilities Director (50%)	32,500	4%	32,500	65,000	67,600	70,300	73,110	76,030	79,070	82,230	85,520	88,940
FT Operator (50%) less current PT	17,500	4%	17,500	35,000	36,400	37,860	39,370	40,940	42,580	44,280	46,050	47,890
Additional FT Operator (50%)		4%	-	40,000	41,600	43,260	44,990	46,790	48,660	50,610	52,630	54,740
Supplies & Services	1,093,765	3%	1,093,765	1,126,580	1,160,380	1,195,190	1,231,050	1,267,980	1,306,020	1,345,200	1,385,560	1,427,130
Other Financing Uses	356,600	3%	356,600	367,300	378,320	389,670	401,360	413,400	425,800	438,570	451,730	465,280
Water Purchase				98,650	98,650	98,650	98,650	98,650	98,650	98,650	98,650	98,650
<b>Subtotal Operating Expenses</b>	<b>1,647,002</b>		<b>1,647,002</b>	<b>1,885,030</b>	<b>1,941,550</b>	<b>1,999,870</b>	<b>2,060,070</b>	<b>2,122,190</b>	<b>2,186,320</b>	<b>2,252,500</b>	<b>2,320,820</b>	<b>2,391,340</b>
<b>Water Capital Expenses</b>												
Capital Outlay*****	60,000	3%	60,000	772,500	562,280	579,150	886,340	912,930	350,000	360,500	371,300	382,400
SRF Debt Payments					161,000	161,000	161,000	161,000	161,000	161,000	161,000	161,000
<b>Subtotal Capital Expenses</b>	<b>60,000</b>		<b>60,000</b>	<b>772,500</b>	<b>723,280</b>	<b>740,150</b>	<b>1,047,340</b>	<b>1,073,930</b>	<b>511,000</b>	<b>521,500</b>	<b>532,300</b>	<b>543,400</b>
<b>TOTAL EXPENSES</b>	<b>1,707,002</b>		<b>1,707,002</b>	<b>2,657,530</b>	<b>2,664,830</b>	<b>2,740,020</b>	<b>3,107,410</b>	<b>3,196,120</b>	<b>2,697,320</b>	<b>2,774,000</b>	<b>2,853,120</b>	<b>2,934,740</b>
<b>Total Net Revenues</b>	<b>367,198</b>		<b>401,915</b>	<b>109,450</b>	<b>29,010</b>	<b>118,310</b>	<b>250,560</b>	<b>254,600</b>	<b>307,500</b>	<b>362,860</b>	<b>412,280</b>	<b>462,570</b>
<b>Payback of General Fund Loan</b>	<b>10,000</b>		<b>10,000</b>	<b>16,667</b>	<b>23,334</b>	<b>30,001</b>	<b>36,668</b>	<b>43,334</b>	<b>50,000</b>	<b>56,666</b>	<b>63,332</b>	<b>69,998</b>
<b>Ending Water Fund Balance (All Funds)</b>	<b>626,319</b>		<b>661,036</b>	<b>752,436</b>	<b>804,780</b>	<b>953,091</b>	<b>1,240,319</b>	<b>1,538,253</b>	<b>1,895,753</b>	<b>2,315,279</b>	<b>2,790,891</b>	<b>3,323,459</b>
<b>Reserve Target</b>												
Operating Expense (25%)			411,750	471,260	485,390	499,970	515,020	530,550	546,580	563,130	580,210	597,840
Capital Expense Reserve			1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
<b>Total Reserve Target:</b>			<b>1,411,750</b>	<b>1,471,260</b>	<b>1,485,390</b>	<b>1,499,970</b>	<b>1,515,020</b>	<b>1,530,550</b>	<b>1,546,580</b>	<b>1,563,130</b>	<b>1,580,210</b>	<b>1,597,840</b>
Reserve Targets Met:			NO	NO	NO	NO	NO	YES	YES	YES	YES	YES

\* First rate increase Feb 1st 2016; rates thereafter increased on Jan 1st

\*\* Assumes usage of 9 ccf.

\*\*\* Two different growth rates. Accts: DJ Farms. DJ Farms has a Devel. Agree. DJ Farms Capital Revenue accounted for separately.

\*\*\*\* Includes Beachside Cooler, Pioneer Apts., Guadalupe Court, potential Apio expansion and 10 acre feet per year

\*\*\*\*\* From Water CIP. Only goes to FY21. Used nominal amount after that escalated.

# **APPENDIX B**

## **Wastewater Rate Study Tables**

Table 29: Wastewater Expenses  
City of Guadalupe  
Water and Wastewater Rate Analysis and Study

Wastewater Operating Expenses	Budget* FY2016
<b>Personal Services:</b>	
Salaries-Regular	\$111,897
Salaries-Temporary	10,450
Overtime	15,675
WW FT Operator (Split w/ Water)	17,500
Utilities Director (Split w/ Water)	32,500
Retirement-Pers	26,558
FICA/Medicare	12,119
Workers' Compensation	7,324
Medical/Life Insurance	13,705
Other Benefits	14,396
Dental Insurance	1,600
Vision Insurance	179
<b>Supplies and Services:</b>	
Utilities	185,000
Communications	4,000
Office Supplies and Postage	10,000
Advertising & Publication	500
Business Expense and Trng	500
Memberships, Dues & Subs	500
Equipment Maintenance	2,000
Facilities Maintenance	2,000
Vehicle Maintenance	1,000
Equipment Replacement	1,000
Operating Supplies & Exp.	30,000
Fuel & Lubricants	8,000
Bank Service Charges	1,200
Professional Services	100,000
It Services	5,000
Equipment Rental	5,000
Liability Insurance	28,370
Services by Other Agencies	20,000
<b>Other Financing Uses:</b>	
Debt Service Principal	20,000
Debt Service Interest	41,000
Lease Purchase	30,000
Transfer to RDA Operating	150,000
Transfer to General Fund	177,700
<b>Total Operating Expenses:</b>	<b>1,086,673</b>

Source: Wastewater Operating with Removed Franchise Fee

\*Includes New Staff Expenses

Table 30: Detailed Wastewater CIP  
City of Guadalupe  
Water and Wastewater Rate Analysis and Study

CIP Projections Sewer	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	Total
Pioneer Lift Station Replacement	\$454,350	\$0	\$0	\$0	\$0	\$0	\$454,350
Highway 1 Lift Station	607,880	-	-	-	-	-	607,880
Gularte Lift Station	-	-	20,000	-	-	-	20,000
11th Street Gravity Sewer	-	-	829,400	-	-	-	829,400
12-Inch Trunk Sewer	-	1,261,500	-	-	-	-	1,261,500
Campondonico Avenue Sewer	-	-	-	-	291,740	-	291,740
Pioneer Street Sewer	-	-	-	-	-	93,960	93,960
Tognazzini Avenue Sewer	-	-	-	-	34,104	-	34,104
Carline Drive Sewer	-	-	-	-	142,680	-	142,680
Mahoney Lane Sewer	-	-	-	-	-	107,880	107,880
Surfbird Lane Sewer	-	-	-	-	-	99,905	99,905
Riverview Development Sewer	-	-	-	-	-	43,500	43,500
Influent Pump Station	-	-	-	30,700	-	-	30,700
Treated Effluent Pipeline & Holding Pond	-	-	-	-	810,000	810,000	1,620,000
Irrigation Pump Station	-	750,000	-	-	-	-	750,000
Spray Irrigation	-	-	-	580,000	-	-	580,000
<b>TOTALS</b>	<b>1,062,230</b>	<b>2,011,500</b>	<b>849,400</b>	<b>610,700</b>	<b>1,278,524</b>	<b>1,155,245</b>	<b>6,967,599</b>

\* Expressed in 2015 dollars.

Six Year Average: 1,161,267



Table 31: Wastewater Cash Flow – Scenario 1: CPI Increases  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Scenario 1: No Rate Increases	Budget FY2016	Increase	Projected									
			FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
<b>Assumptions</b>												
Rate Increase*	28.2%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CPI Adjustment			1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth in Accounts***			0.00%	4.50%	4.50%	4.50%	4.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Growth in Connection Fees***			0.00%	2.00%	2.00%	2.00%	1.50%	0.50%	0.50%	0.50%	0.50%	0.50%
Interest Rate			0.00%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
<b>Beginning WW Fund Balance</b>	<b>(715,653)</b>		<b>(715,653)</b>	<b>(616,013)</b>	<b>(1,511,672)</b>	<b>(3,290,321)</b>	<b>(3,863,281)</b>	<b>(4,227,411)</b>	<b>(5,455,091)</b>	<b>(6,591,981)</b>	<b>(6,712,156)</b>	<b>(6,856,308)</b>
<b>OPERATING REVENUES</b>												
Sewer Service Charge (FY2016 7% reduction)	1,050,000	(growth)	1,056,563	1,088,261	1,120,911	1,154,540	1,186,290	1,212,980	1,240,270	1,268,175	1,296,708	1,325,884
Set Up Fees	3,500	2%	3,500	3,570	3,640	3,710	3,780	3,860	3,940	4,020	4,100	4,180
Late Fees	27,000	2%	27,000	27,540	28,090	28,650	29,220	29,800	30,400	31,010	31,630	32,260
<b>Subtotal Operating Revenues</b>	<b>1,080,500</b>		<b>1,087,063</b>	<b>1,119,371</b>	<b>1,152,641</b>	<b>1,186,900</b>	<b>1,219,290</b>	<b>1,246,640</b>	<b>1,274,610</b>	<b>1,303,205</b>	<b>1,332,438</b>	<b>1,362,324</b>
<b>CAPITAL REVENUES</b>												
DJ Farms Develop. Agreement	93,750		93,750	187,500	187,500	187,500	187,500	187,500	187,500	187,500	187,500	187,500
Wastewater Connection Fees***	5,500	(Growth)	5,500	108,390	110,550	112,760	86,260	29,330	29,920	30,510	31,130	31,750
<b>Subtotal Capital Revenues</b>	<b>99,250</b>		<b>99,250</b>	<b>295,890</b>	<b>298,050</b>	<b>300,260</b>	<b>273,760</b>	<b>216,830</b>	<b>217,420</b>	<b>218,010</b>	<b>218,630</b>	<b>219,250</b>
<b>Total Revenues</b>	<b>1,179,750</b>		<b>1,186,313</b>	<b>1,415,261</b>	<b>1,450,691</b>	<b>1,487,160</b>	<b>1,493,050</b>	<b>1,463,470</b>	<b>1,492,030</b>	<b>1,521,215</b>	<b>1,551,068</b>	<b>1,581,574</b>
<b>EXPENSES</b>												
<b>Operating Expenses</b>												
Personnel Services	213,903	4%	213,903	222,460	231,360	240,610	250,230	260,240	270,650	281,480	292,740	304,450
Utilities Director (50%)	32,500	4%	32,500	65,000	67,600	70,300	73,110	76,030	79,070	82,230	85,520	88,940
FT Operator (50%) less current PT	17,500	4%	17,500	35,000	36,400	37,860	39,370	40,940	42,580	44,280	46,050	47,890
Additional FT Operator (50%)		4%	-	40,000	41,600	43,260	44,990	46,790	48,660	50,610	52,630	54,740
Supplies & Services	404,070	3%	404,070	416,190	428,680	441,540	454,790	468,430	482,480	496,950	511,860	527,220
Other Financing Uses	418,700	3%	418,700	438,170	289,700	298,390	307,340	316,560	326,060	335,840	345,920	356,300
<b>Subtotal Operating Expenses</b>	<b>1,086,673</b>		<b>1,086,673</b>	<b>1,216,820</b>	<b>1,095,340</b>	<b>1,131,960</b>	<b>1,169,830</b>	<b>1,208,990</b>	<b>1,249,500</b>	<b>1,291,390</b>	<b>1,334,720</b>	<b>1,379,540</b>
<b>Wastewater Capital Expenses</b>												
Capital Outlay****	-	3%	-	1,094,100	2,134,000	928,160	687,350	1,482,160	1,379,420	350,000	360,500	371,300
<b>Subtotal Capital Expenses</b>	<b>-</b>		<b>-</b>	<b>1,094,100</b>	<b>2,134,000</b>	<b>928,160</b>	<b>687,350</b>	<b>1,482,160</b>	<b>1,379,420</b>	<b>350,000</b>	<b>360,500</b>	<b>371,300</b>
<b>TOTAL EXPENSES</b>	<b>1,086,673</b>		<b>1,086,673</b>	<b>2,310,920</b>	<b>3,229,340</b>	<b>2,060,120</b>	<b>1,857,180</b>	<b>2,691,150</b>	<b>2,628,920</b>	<b>1,641,390</b>	<b>1,695,220</b>	<b>1,750,840</b>
<b>Total Net Revenues</b>	<b>93,077</b>		<b>99,640</b>	<b>(895,659)</b>	<b>(1,778,649)</b>	<b>(572,960)</b>	<b>(364,130)</b>	<b>(1,227,680)</b>	<b>(1,136,890)</b>	<b>(120,175)</b>	<b>(144,152)</b>	<b>(169,266)</b>
<b>Ending WW Fund Balance (All Funds)</b>	<b>(622,576)</b>		<b>(616,013)</b>	<b>(1,511,672)</b>	<b>(3,290,321)</b>	<b>(3,863,281)</b>	<b>(4,227,411)</b>	<b>(5,455,091)</b>	<b>(6,591,981)</b>	<b>(6,712,156)</b>	<b>(6,856,308)</b>	<b>(7,025,575)</b>
<b>Reserve Targets</b>												
Operating Expense (25%)	-		271,670	304,210	273,840	282,990	292,460	302,250	312,380	322,850	333,680	344,890
Capital Expense Reserve	-		1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
<b>Total Reserve Targets:</b>	<b>-</b>		<b>1,271,670</b>	<b>1,304,210</b>	<b>1,273,840</b>	<b>1,282,990</b>	<b>1,292,460</b>	<b>1,302,250</b>	<b>1,312,380</b>	<b>1,322,850</b>	<b>1,333,680</b>	<b>1,344,890</b>
Reserve Targets Met:			NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

\* First rate increase Feb 1st 2016; rates thereafter increased on Jan 1st

\*\* Residential Flat Rate

\*\*\* Two different growth rates. Accts: DJ Farms. DJ Farms has a Devel. Agree. DJ Farms Capital Revenue accounted for separately.

\*\*\*\* From Sewer CIP. Only goes to FY22. Used nominal amount after that escalated.

Table 32: Wastewater Cash Flow – Scenario 2: Pay As You Go  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Scenario 2: Pay As You Go	Budget FY2016	Increase	Projected									
			FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
<b>Assumptions</b>												
Rate Increase*	28.2%		30.0%	30.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CPI Adjustment			1.5%	1.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth in Accounts***			0.00%	4.50%	4.50%	4.50%	4.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Growth in Connection Fees***			0.00%	2.00%	2.00%	2.00%	1.50%	0.50%	0.50%	0.50%	0.50%	0.50%
Interest Rate			0.00%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
<b>Beginning WW Fund Balance</b>	<b>(715,653)</b>		<b>(715,653)</b>	<b>(484,759)</b>	<b>(839,379)</b>	<b>(1,616,979)</b>	<b>(925,159)</b>	<b>46,431</b>	<b>215,921</b>	<b>527,631</b>	<b>1,909,581</b>	<b>3,320,771</b>
<b>OPERATING REVENUES</b>												
Sewer Service Charge (1st half of year)	525,000		612,500	690,380	938,920	1,183,040	1,236,280	1,285,730	1,324,300	1,364,030	1,404,950	1,447,100
Sewer Service Charge (2nd half of year)	525,000	(growth)	575,317	938,920	1,183,040	1,236,280	1,285,730	1,324,300	1,364,030	1,404,950	1,447,100	1,490,510
Set Up Fees	3,500	2%	3,500	3,570	3,640	3,710	3,780	3,860	3,940	4,020	4,100	4,180
Late Fees	27,000	2%	27,000	27,540	28,090	28,650	29,220	29,800	30,400	31,010	31,630	32,260
<b>Subtotal Operating Revenues</b>	<b>1,080,500</b>		<b>1,218,317</b>	<b>1,660,410</b>	<b>2,153,690</b>	<b>2,451,680</b>	<b>2,555,010</b>	<b>2,643,810</b>	<b>2,723,210</b>	<b>2,805,330</b>	<b>2,887,780</b>	<b>2,974,050</b>
<b>CAPITAL REVENUES</b>												
DJ Farms Develop. Agreement	93,750		93,750	187,500	187,500	187,500	187,500	187,500	187,500	187,500	187,500	187,500
Wastewater Connection Fees***	5,500	(Growth)	5,500	108,390	110,550	112,760	86,260	29,330	29,920	30,510	31,130	31,750
<b>Subtotal Capital Revenues</b>	<b>99,250</b>		<b>99,250</b>	<b>295,890</b>	<b>298,050</b>	<b>300,260</b>	<b>273,760</b>	<b>216,830</b>	<b>217,420</b>	<b>218,010</b>	<b>218,630</b>	<b>219,250</b>
<b>Total Revenues</b>	<b>1,179,750</b>		<b>1,317,567</b>	<b>1,956,300</b>	<b>2,451,740</b>	<b>2,751,940</b>	<b>2,828,770</b>	<b>2,860,640</b>	<b>2,940,630</b>	<b>3,023,340</b>	<b>3,106,410</b>	<b>3,193,300</b>
<b>EXPENSES</b>												
<b>Operating Expenses</b>												
Personnel Services	213,903	4%	213,903	222,460	231,360	240,610	250,230	260,240	270,650	281,480	292,740	304,450
Utilities Director (50%)	32,500	4%	32,500	65,000	67,600	70,300	73,110	76,030	79,070	82,230	85,520	88,940
FT Operator (50%) less current PT	17,500	4%	17,500	35,000	36,400	37,860	39,370	40,940	42,580	44,280	46,050	47,890
Additional FT Operator (50%)		4%	-	40,000	41,600	43,260	44,990	46,790	48,660	50,610	52,630	54,740
Supplies & Services	404,070	3%	404,070	416,190	428,680	441,540	454,790	468,430	482,480	496,950	511,860	527,220
Other Financing Uses	418,700	3%	418,700	438,170	289,700	298,390	307,340	316,560	326,060	335,840	345,920	356,300
<b>Subtotal Operating Expenses</b>	<b>1,086,673</b>		<b>1,086,673</b>	<b>1,216,820</b>	<b>1,095,340</b>	<b>1,131,960</b>	<b>1,169,830</b>	<b>1,208,990</b>	<b>1,249,500</b>	<b>1,291,390</b>	<b>1,334,720</b>	<b>1,379,540</b>
<b>Wastewater Capital Expenses</b>												
Capital Outlay****	-	3%	-	1,094,100	2,134,000	928,160	687,350	1,482,160	1,379,420	350,000	360,500	371,300
<b>Subtotal Capital Expenses</b>	<b>-</b>		<b>-</b>	<b>1,094,100</b>	<b>2,134,000</b>	<b>928,160</b>	<b>687,350</b>	<b>1,482,160</b>	<b>1,379,420</b>	<b>350,000</b>	<b>360,500</b>	<b>371,300</b>
<b>TOTAL EXPENSES</b>	<b>1,086,673</b>		<b>1,086,673</b>	<b>2,310,920</b>	<b>3,229,340</b>	<b>2,060,120</b>	<b>1,857,180</b>	<b>2,691,150</b>	<b>2,628,920</b>	<b>1,641,390</b>	<b>1,695,220</b>	<b>1,750,840</b>
<b>Total Net Revenues</b>	<b>93,077</b>		<b>230,894</b>	<b>(354,620)</b>	<b>(777,600)</b>	<b>691,820</b>	<b>971,590</b>	<b>169,490</b>	<b>311,710</b>	<b>1,381,950</b>	<b>1,411,190</b>	<b>1,442,460</b>
<b>Ending WW Fund Balance (All Funds)</b>	<b>(622,576)</b>		<b>(484,759)</b>	<b>(839,379)</b>	<b>(1,616,979)</b>	<b>(925,159)</b>	<b>46,431</b>	<b>215,921</b>	<b>527,631</b>	<b>1,909,581</b>	<b>3,320,771</b>	<b>4,763,231</b>
<b>Reserve Targets</b>												
Operating Expense (25%)	-		271,670	304,210	273,840	282,990	292,460	302,250	312,380	322,850	333,680	344,890
Capital Expense Reserve	-		1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
<b>Total Reserve Targets:</b>	<b>-</b>		<b>1,271,670</b>	<b>1,304,210</b>	<b>1,273,840</b>	<b>1,282,990</b>	<b>1,292,460</b>	<b>1,302,250</b>	<b>1,312,380</b>	<b>1,322,850</b>	<b>1,333,680</b>	<b>1,344,890</b>
<b>Reserve Targets Met:</b>			<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

\* First rate increase Feb 1st 2016; rates thereafter increased on Jan 1st

\*\* Residential Flat Rate

\*\*\* Two different growth rates. Accts: DJ Farms. DJ Farms has a Devel. Agree. DJ Farms Capital Revenue accounted for separately.

\*\*\*\* From Sewer CIP. Only goes to FY22. Used nominal amount after that escalated.

Table 33: Wastewater Cash Flow – Scenario 3: \$9m SRF Loan  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Scenario 3: \$9m SRF Loan	Budget FY2016	Increase	Projected									
			FY2016*	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
<b>Assumptions</b>												
Rate Increase*	28.2%		15.0%	10.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CPI Adjustment			1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth in Accounts***			0.00%	4.50%	4.50%	4.50%	4.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Growth in Connection Fees***			0.00%	2.00%	2.00%	2.00%	1.50%	0.50%	0.50%	0.50%	0.50%	0.50%
Interest Rate			0.00%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
<b>Beginning WW Fund Balance</b>	<b>(715,653)</b>		<b>(715,653)</b>	<b>(550,388)</b>	<b>(524,188)</b>	<b>(197,728)</b>	<b>220,082</b>	<b>667,132</b>	<b>1,104,482</b>	<b>1,583,372</b>	<b>2,106,762</b>	<b>2,677,152</b>
<b>OPERATING REVENUES</b>												
Sewer Service Charge (1st half of year)	525,000		612,500	611,630	709,490	787,530	834,780	880,690	920,320	961,730	1,005,010	1,050,240
Sewer Service Charge (2nd half of year)	525,000	(growth)	509,688	709,490	787,530	834,780	880,690	920,320	961,730	1,005,010	1,050,240	1,097,500
Set Up Fees	3,500	2%	3,500	3,570	3,640	3,710	3,780	3,860	3,940	4,020	4,100	4,180
Late Fees	27,000	2%	27,000	27,540	28,090	28,650	29,220	29,800	30,400	31,010	31,630	32,260
<b>Subtotal Operating Revenues</b>	<b>1,080,500</b>		<b>1,152,688</b>	<b>1,352,230</b>	<b>1,528,750</b>	<b>1,654,670</b>	<b>1,748,470</b>	<b>1,834,670</b>	<b>1,916,390</b>	<b>2,001,770</b>	<b>2,090,980</b>	<b>2,184,180</b>
<b>CAPITAL REVENUES</b>												
SRF	-			1,094,000	2,134,000	928,000	687,000	1,482,000	1,379,000	350,000	361,000	371,000
DJ Farms Develop. Agreement	93,750		93,750	187,500	187,500	187,500	187,500	187,500	187,500	187,500	187,500	187,500
Wastewater Connection Fees***	5,500	(Growth)	5,500	108,390	110,550	112,760	86,260	29,330	29,920	30,510	31,130	31,750
<b>Subtotal Capital Revenues</b>	<b>99,250</b>		<b>99,250</b>	<b>1,389,890</b>	<b>2,432,050</b>	<b>1,228,260</b>	<b>960,760</b>	<b>1,698,830</b>	<b>1,596,420</b>	<b>568,010</b>	<b>579,630</b>	<b>590,250</b>
<b>Total Revenues</b>	<b>1,179,750</b>		<b>1,251,938</b>	<b>2,742,120</b>	<b>3,960,800</b>	<b>2,882,930</b>	<b>2,709,230</b>	<b>3,533,500</b>	<b>3,512,810</b>	<b>2,569,780</b>	<b>2,670,610</b>	<b>2,774,430</b>
<b>EXPENSES</b>												
<b>Operating Expenses</b>												
Personnel Services	213,903	4%	213,903	222,460	231,360	240,610	250,230	260,240	270,650	281,480	292,740	304,450
Utilities Director (50%)	32,500	4%	32,500	65,000	67,600	70,300	73,110	76,030	79,070	82,230	85,520	88,940
FT Operator (50%) less current PT	17,500	4%	17,500	35,000	36,400	37,860	39,370	40,940	42,580	44,280	46,050	47,890
Additional FT Operator (50%)		4%	-	40,000	41,600	43,260	44,990	46,790	48,660	50,610	52,630	54,740
Supplies & Services	404,070	3%	404,070	416,190	428,680	441,540	454,790	468,430	482,480	496,950	511,860	527,220
Other Financing Uses	418,700	3%	418,700	438,170	289,700	298,390	307,340	316,560	326,060	335,840	345,920	356,300
<b>Subtotal Operating Expenses</b>	<b>1,086,673</b>		<b>1,086,673</b>	<b>1,216,820</b>	<b>1,095,340</b>	<b>1,131,960</b>	<b>1,169,830</b>	<b>1,208,990</b>	<b>1,249,500</b>	<b>1,291,390</b>	<b>1,334,720</b>	<b>1,379,540</b>
<b>Wastewater Capital Expenses</b>												
Capital Outlay****	-	3%	-	1,094,100	2,134,000	928,160	687,350	1,482,160	1,379,420	350,000	360,500	371,300
SRF loan repayments				405,000	405,000	405,000	405,000	405,000	405,000	405,000	405,000	405,000
<b>Subtotal Capital Expenses</b>	<b>-</b>		<b>-</b>	<b>1,499,100</b>	<b>2,539,000</b>	<b>1,333,160</b>	<b>1,092,350</b>	<b>1,887,160</b>	<b>1,784,420</b>	<b>755,000</b>	<b>765,500</b>	<b>776,300</b>
<b>TOTAL EXPENSES</b>	<b>1,086,673</b>		<b>1,086,673</b>	<b>2,715,920</b>	<b>3,634,340</b>	<b>2,465,120</b>	<b>2,262,180</b>	<b>3,096,150</b>	<b>3,033,920</b>	<b>2,046,390</b>	<b>2,100,220</b>	<b>2,155,840</b>
<b>Total Net Revenues</b>	<b>93,077</b>		<b>165,265</b>	<b>26,200</b>	<b>326,460</b>	<b>417,810</b>	<b>447,050</b>	<b>437,350</b>	<b>478,890</b>	<b>523,390</b>	<b>570,390</b>	<b>618,590</b>
<b>Ending WW Fund Balance (All Funds)</b>	<b>(622,576)</b>		<b>(550,388)</b>	<b>(524,188)</b>	<b>(197,728)</b>	<b>220,082</b>	<b>667,132</b>	<b>1,104,482</b>	<b>1,583,372</b>	<b>2,106,762</b>	<b>2,677,152</b>	<b>3,295,742</b>
<b>Reserve Targets</b>												
Operating Expense (25%)	-		271,670	304,210	273,840	282,990	292,460	302,250	312,380	322,850	333,680	344,890
Capital Expense Reserve	-		1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
<b>Total Reserve Targets:</b>	<b>-</b>		<b>1,271,670</b>	<b>1,304,210</b>	<b>1,273,840</b>	<b>1,282,990</b>	<b>1,292,460</b>	<b>1,302,250</b>	<b>1,312,380</b>	<b>1,322,850</b>	<b>1,333,680</b>	<b>1,344,890</b>
<b>Reserve Targets Met:</b>			<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

\* First rate increase Feb 1st 2016; rates thereafter increased on Jan 1st

\*\* Residential Flat Rate

\*\*\* Two different growth rates. Accts: DJ Farms. DJ Farms has a Devel. Agree. DJ Farms Capital Revenue accounted for separately.

\*\*\*\* From Sewer CIP. Only goes to FY22. Used nominal amount after that escalated.

Table 34: Wastewater Cash Flow – Scenario 4: \$6m SRF Loan \$3m Grants  
 City of Guadalupe  
 Water and Wastewater Rate Analysis and Study

Scenario 4: \$6m SRF, \$3m Grants	Budget FY2016	Increase	Projected									
			FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
<b>Assumptions</b>												
Rate Increase*	28.2%		10.0%	7.0%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CPI Adjustment			1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth in Accounts***			0.00%	4.50%	4.50%	4.50%	4.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Growth in Connection Fees***			0.00%	2.00%	2.00%	2.00%	1.50%	0.50%	0.50%	0.50%	0.50%	0.50%
Interest Rate			0.00%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
<b>Beginning WW Fund Balance</b>	<b>(715,653)</b>		<b>(715,653)</b>	<b>(572,259)</b>	<b>(491,319)</b>	<b>(143,769)</b>	<b>279,651</b>	<b>725,231</b>	<b>1,154,611</b>	<b>1,620,371</b>	<b>2,123,191</b>	<b>2,665,281</b>
<b>OPERATING REVENUES</b>												
Sewer Service Charge (1st half of year)	525,000		612,500	585,380	661,480	727,630	771,290	813,710	850,330	888,590	928,580	970,370
Sewer Service Charge (2nd half of year)	525,000	(growth)	487,817	661,480	727,630	771,290	813,710	850,330	888,590	928,580	970,370	1,014,040
Set Up Fees	3,500	2%	3,500	3,570	3,640	3,710	3,780	3,860	3,940	4,020	4,100	4,180
Late Fees	27,000	2%	27,000	27,540	28,090	28,650	29,220	29,800	30,400	31,010	31,630	32,260
<b>Subtotal Operating Revenues</b>	<b>1,080,500</b>		<b>1,130,817</b>	<b>1,277,970</b>	<b>1,420,840</b>	<b>1,531,280</b>	<b>1,618,000</b>	<b>1,697,700</b>	<b>1,773,260</b>	<b>1,852,200</b>	<b>1,934,680</b>	<b>2,020,850</b>
<b>CAPITAL REVENUES</b>												
SRF	-		-	729,000	1,423,000	619,000	458,000	988,000	920,000	233,000	240,000	248,000
Grants	-		-	365,000	711,000	309,000	229,000	494,000	460,000	117,000	120,000	124,000
DJ Farms Develop. Agreement	93,750		93,750	187,500	187,500	187,500	187,500	187,500	187,500	187,500	187,500	187,500
Wastewater Connection Fees***	5,500	(Growth)	5,500	108,390	110,550	112,760	86,260	29,330	29,920	30,510	31,130	31,750
<b>Subtotal Capital Revenues</b>	<b>99,250</b>		<b>99,250</b>	<b>1,389,890</b>	<b>2,432,050</b>	<b>1,228,260</b>	<b>960,760</b>	<b>1,698,830</b>	<b>1,597,420</b>	<b>568,010</b>	<b>578,630</b>	<b>591,250</b>
<b>Total Revenues</b>	<b>1,179,750</b>		<b>1,230,067</b>	<b>2,667,860</b>	<b>3,852,890</b>	<b>2,759,540</b>	<b>2,578,760</b>	<b>3,396,530</b>	<b>3,370,680</b>	<b>2,420,210</b>	<b>2,513,310</b>	<b>2,612,100</b>
<b>EXPENSES</b>												
<b>Operating Expenses</b>												
Personnel Services	213,903	4%	213,903	222,460	231,360	240,610	250,230	260,240	270,650	281,480	292,740	304,450
Utilities Director (50%)	32,500	4%	32,500	65,000	67,600	70,300	73,110	76,030	79,070	82,230	85,520	88,940
FT Operator (50%) less current PT	17,500	4%	17,500	35,000	36,400	37,860	39,370	40,940	42,580	44,280	46,050	47,890
Additional FT Operator (50%)	-	4%	-	40,000	41,600	43,260	44,990	46,790	48,660	50,610	52,630	54,740
Supplies & Services	404,070	3%	404,070	416,190	428,680	441,540	454,790	468,430	482,480	496,950	511,860	527,220
Other Financing Uses	418,700	3%	418,700	438,170	289,700	298,390	307,340	316,560	326,060	335,840	345,920	356,300
<b>Subtotal Operating Expenses</b>	<b>1,086,673</b>		<b>1,086,673</b>	<b>1,216,820</b>	<b>1,095,340</b>	<b>1,131,960</b>	<b>1,169,830</b>	<b>1,208,990</b>	<b>1,249,500</b>	<b>1,291,390</b>	<b>1,334,720</b>	<b>1,379,540</b>
<b>Wastewater Capital Expenses</b>												
Capital Outlay****	-	3%	-	1,094,100	2,134,000	928,160	687,350	1,482,160	1,379,420	350,000	360,500	371,300
SRF loan repayments	-		-	276,000	276,000	276,000	276,000	276,000	276,000	276,000	276,000	276,000
<b>Subtotal Capital Expenses</b>	<b>-</b>		<b>-</b>	<b>1,370,100</b>	<b>2,410,000</b>	<b>1,204,160</b>	<b>963,350</b>	<b>1,758,160</b>	<b>1,655,420</b>	<b>626,000</b>	<b>636,500</b>	<b>647,300</b>
<b>TOTAL EXPENSES</b>	<b>1,086,673</b>		<b>1,086,673</b>	<b>2,586,920</b>	<b>3,505,340</b>	<b>2,336,120</b>	<b>2,133,180</b>	<b>2,967,150</b>	<b>2,904,920</b>	<b>1,917,390</b>	<b>1,971,220</b>	<b>2,026,840</b>
<b>Total Net Revenues</b>	<b>93,077</b>		<b>143,394</b>	<b>80,940</b>	<b>347,550</b>	<b>423,420</b>	<b>445,580</b>	<b>429,380</b>	<b>465,760</b>	<b>502,820</b>	<b>542,090</b>	<b>585,260</b>
<b>Ending WW Fund Balance (All Funds)</b>	<b>(622,576)</b>		<b>(572,259)</b>	<b>(491,319)</b>	<b>(143,769)</b>	<b>279,651</b>	<b>725,231</b>	<b>1,154,611</b>	<b>1,620,371</b>	<b>2,123,191</b>	<b>2,665,281</b>	<b>3,250,541</b>
<b>Reserve Targets</b>												
Operating Expense (25%)	-		271,670	304,210	273,840	282,990	292,460	302,250	312,380	322,850	333,680	344,890
Capital Expense Reserve	-		1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
<b>Total Reserve Targets:</b>	<b>-</b>		<b>1,271,670</b>	<b>1,304,210</b>	<b>1,273,840</b>	<b>1,282,990</b>	<b>1,292,460</b>	<b>1,302,250</b>	<b>1,312,380</b>	<b>1,322,850</b>	<b>1,333,680</b>	<b>1,344,890</b>
<b>Reserve Targets Met:</b>			<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

\* First rate increase Feb 1st 2016; rates thereafter increased on Jan 1st

\*\* Residential Flat Rate

\*\*\* Two different growth rates. Accts: DJ Farms. DJ Farms has a Devel. Agree. DJ Farms Capital Revenue accounted for separately.

\*\*\*\* From Sewer CIP. Only goes to FY22. Used nominal amount after that escalated.