



CITY OF San Juan Bautista

Water and Sewer Rate Study

**Draft Report
August 2015**



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

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August 4, 2015

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Re: Water and Sewer Rate Study

Bartle Wells Associates is pleased to submit to the City of San Juan Bautista the attached Draft Water and Sewer Rate Study. The study presents BWA's analysis of the operating and non-operating expenses of the City's water and sewer systems and provides a ten year cash flow projection. The primary purpose of this study was to analyze the City's water and sewer enterprise funds and make recommendations that would achieve their financial sustainability.

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 assistance of City staff 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: Sewer Tables

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1 EXECUTIVE SUMMARY

1.1 Background

The City of San Juan Bautista (City) is located at the northern region of San Benito County, CA, about 45 miles south of the City of San Jose. The City provides water and sewer services to nearly 700 customers in an area that encompasses of about 0.7 square miles.

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

Water and sewer rates were last reviewed in 2007, and were last increased in 2014. Phased-in rates increases were adopted in 2007 and they became effective from FY2008 – FY2014. Rate increases were primarily needed for the Water and Wastewater Infrastructure Improvements Project, which was needed to comply with the City's Drinking Water permit and Sewer System Discharge permit. The City was also required to complete various other capital projects, in addition to recovering the operating and maintenance costs of the utility systems.

Based on a survey of 5 other regional water agencies, the City currently has the highest residential water rates in the region. Based on a survey of 6 other regional sewer agencies, the City's current sewer rates fall in the upper portion of agencies. This is largely due to the fact that the City was required by the State Regional Water Quality Control Board to demonstrate good faith in implementing the Water Infrastructure Improvements Project. Other factors include the relatively small size of the City, which does not allow for the economies of scale of larger cities.

In December 2014, the City retained Bartle Wells Associates (BWA) to develop a detailed water rate study. In May 2015, the City's sewer system was added to the study. Basic objectives of the rate study include:

- Identify rate setting principles.
- Develop long-term financial projections to determine future annual water and sewer enterprise revenue requirements.
- Evaluate rate alternatives and recommend water and sewer 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.
- 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 sewer. 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 sewer 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 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 rates and suggesting alternative rules of procedure for formulating rates, thus permitting the exercise of judgment and preference to meet local conditions and requirements.”¹

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.

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

1.4 Water Overview

1.4.1 Water Customers

The City owns, operates, and maintains a potable water distribution system that serves 692 customers, 91% of which are residential. Customers are distinguished by their location inside as well as outside the City. The City anticipates growth of nearly 86 additional residential customers by FY2020.

1.4.2 Water System

The City's potable water supply comes from groundwater that is pumped to customers. The system extracts water from underground aquifers via a series of three groundwater wells, two of which provide water to the City whereas the third well is used for standby, and pipe ranging from 2-inch to 12-inch in diameter.

The City's water and sewer services are subject to various environmental regulations. The primary water quality issue relating to the City's groundwater supply is the high concentration of total dissolved solids (TDS) and hardness in all three wells, and the high concentration of nitrates in well three. In 2002, the City complied with these issues by taking well three of the water system off-line. The City issued \$11 million in Water and Wastewater Revenue bonds in 2008. The City's five-year capital improvement projects have an additional well scheduled, as well as the water softening plant.

BWA recommends (1) updating rates to better reflect revenue requirements and the cost of service, including increasing operational and capital costs, (2) developing a reserve fund target, (3) eliminating the multiple-tiered variable rate structure and reconfiguring tier breakpoints to uniform rates in response to the recent San Juan Capistrano court ruling.

1.4.3 Current Water Rates

Current monthly water rates are shown on Table 1. Rates were last increased in 2014. The current rates have a monthly base rate that differs for customers inside the City than those outside the City. There is a monthly variable rate, which is three tiers, and measured by 1,000 gallon units.

Table 1: Current Monthly Water Rates
City of San Juan Bautista
Water and Sewer Rate Study

	2012		2013		2014		2015 Current	
	Inside City	Outside City	Inside City	Outside City	Inside City	Outside City	Inside City	Outside City
Water								
Monthly Base Rate	\$46.48	\$56.56	\$47.27	\$57.53	\$48.50	\$59.03	\$48.50	\$59.03
Monthly Unit Cost - \$/1000 gallons								
Tier 1: 0 - 3000 gallons	1.94	1.94	1.98	1.98	2.04	2.04	2.04	2.04
Tier 2: 3001 - 8000 gallons	4.84	4.84	4.93	4.93	5.06	5.06	5.06	5.06
Tier 3: 8001+	6.45	6.45	6.56	6.56	6.73	6.73	6.73	6.73

1.4.4 Proposed Water Rates

Table 2 shows the proposed monthly water rate and tier updates for the next five years, including the recommendation to go from three tiers to a uniform rate. Rates would be phased in over the next five years, with the first increase going into effect October 15, 2015, and July 1st in the years thereafter.

Table 2: Proposed Monthly Water Rates, Tiers and Meter Ratios
City of San Juan Bautista
Water and Sewer Rate Study

Water	Current FY2015	Proposed				
		FY2016	FY2017	FY2018	FY2019	FY2020
Water Monthly Base Rate						
Inside City	\$48.50	\$49.83	\$51.20	\$52.61	\$54.14	\$55.76
Outside City	\$59.03	\$63.00	\$67.15	\$71.49	\$74.70	\$76.94
Monthly Unit Cost - \$/1000 gallons						
Tier 1: 0 - 3000 gallons	\$1.94					
Tier 2: 3001 - 8000 gallons	\$4.84					
Tier 3: 8001+	\$6.45					
Uniform Rate \$/1000 gallons		\$5.64	\$5.81	\$5.98	\$6.16	\$6.35

1.5 Sewer System Overview

1.5.1 Sewer Customers

The City's sewer collection system serves 669 customers, 84% of which are residential. The City anticipates growth of nearly 86 additional sewer customers by FY2020.

1.5.2 Sewer System

The City's sewer collection and transmission system consisting of approximately 6.2 linear miles of gravity sewer pipeline, which conveys sewer flows to 2 miles of force mains and 2 lift stations, to the City's one wastewater treatment plant, where it is pumped into Pond 1 and treated and discharged into San Juan Creek, eventually flowing into Monterey Bay.

The current capacity of the plant is 270,000 gallons per day (gpd) for dry weather averaged from May through October, and 500,000 gpd for wet weather averaged from November through April, which has been determined as sufficient for the City's anticipated growth. However, the City's aging wastewater system requires rehabilitation and replacement of various pipelines. Most of the sewer pipe in the wastewater system is over 30 years old and made of vitrified clay pipe.

1.5.3 Current Sewer Rates

The current monthly sewer charge is shown on Table 3. Sewer rates were last increased in 2014.

Table 3: Current Monthly Sewer Rates
City of San Juan Bautista
Water and Sewer Rate Study

	2012	2013	2014	2015 Current
<u>Sewer</u>				
Residential	74.37	76.01	77.61	77.61
Commercial	74.37	76.01	78.00	78.00
Min Mo Chg \$/1,000 gal	8.05	8.23		
Standard Strength \$/1,000 gal	12.06	12.33	8.45	8.45
Moderate Strength \$/1000 gal	16.09	16.44	12.65	12.65
High Strength \$/1,000 gal	40.23	41.12	16.88	16.88

1.5.4 Proposed Sewer Rates

Table 4 shows the proposed sewer rates for the next five years. BWA recommends continuing with the same rate structure but increasing rates in order to meet revenue requirements. Rates would be phased in over the next five years, with the first increase going into effect October 15, 2015, and July 1st in the years thereafter. BWA has determined that 1.5% annual increases are necessary to maintain the health of the sewer system.

Table 4: Proposed Monthly Sewer Rates
City of San Juan Bautista
Water and Sewer Rate Study

Sewer Scenario 3	Current FY2015	Proposed				
		FY2016	FY2017	FY2018	FY2019	FY2020
Revenue Requirement % Increase		1.5%	1.5%	1.5%	1.5%	1.5%
<u>Sewer Fixed Charge</u>						
Residential	\$77.61	\$78.77	\$79.96	\$81.16	\$82.37	\$83.61
Commercial	\$78.00	\$79.17	\$80.36	\$81.56	\$82.79	\$84.03
<u>Sewer Variable Charge</u>						
Standard Strength \$/1,000 gal	\$8.45	\$8.58	\$8.71	\$8.84	\$8.97	\$9.10
Moderate Strength \$/1000 gal	\$12.65	\$12.84	\$13.03	\$13.23	\$13.43	\$13.63
High Strength \$/1,000 gal	\$16.88	\$17.13	\$17.39	\$17.65	\$17.92	\$18.18
Waste Strength	Typical Customers					
Standard Strength	Office, Retail, General Commercial					
Moderate Strength	Restaurant with grease trap, Hotels/motels with restaurants, Supermarkets with garbage grinders or food preparation, Commercial and industrial laundries, RV parks, Mixed use facilities with standard and high strength					
High Strength	Restaurant without grease trap, Wholesale bakeries, Mortuaries					

2 WATER FINANCES & RATES

2.1 Water Financial Overview

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

- Water rates were last increased in 2014. Although the City has strived to keep costs down, water expenses have been escalating each year. One significant factor are the capital expenditures needed to comply with environmental regulations, specifically the water softening plant in the upcoming years.
- Growth is assumed at 25 additional residential units a year from FY2016 –FY2018, and 11 additional units in FY2019.
- With no increase in rates, and assuming no growth, the unrestricted cash fund will become depleted by FY2017.
- Based on a survey of 5 other regional water agencies, the City's average residential water bills (5/8" meter using 3,000 gallons of water monthly) are the highest compared to the other regional agencies.
- Water use increased from FY2012 to FY2013, but dropped significantly in FY2014. Use is assumed to continue at FY2014 levels.
- Total water reserves are projected to be \$780,576 at the start of FY2016. This includes \$435,101 of restricted cash funds. Minimum reserve fund targets were not met in FY2015 and, without an increase in rates, are only projected to meet targets from FY2018 – FY2021. If rates are increased, minimum fund reserves targets will be met from FY2017 onwards.
- The City has \$1.4 million in capital improvement projects (CIP) planned for the next 5 years.
- As mentioned in Section 1.3, water rates were developed using generally accepted cost-based principles and methodologies for establishing water rates, charges, and fees contained and discussed in the AWWA M1 Manual.
- Water expenses were determined by developing projections based on historical averages based on audits and budgets, as well as up to date information provided by the City. Annual revenue requirements were determined by taking into account projected expenses as well as minimum reserve fund targets.

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:** Customers inside the City, residential and non-residential, are charged the same fixed charges, whereas customers outside the City are charged a higher rate in order to cover additional expenses such as electricity. A significant portion of a water system's design and in turn, the utility's operating and capital costs, are related to meeting capacity requirements. 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 52% of total water rate revenues.

- 2) **Variable Charges:** All customers, inside and outside the City, are charged the same variable rates. Customers are billed according to a three-tiered inclining volumetric rate structure in which the cost per unit of water increases through the various tiers as customers use more water. Units are in 1,000s of gallons. 748 gallons of water is equal to a hundred cubic feet (ccf/hcf) of water. The water consumption charges are intended to recover costs that vary based on the amount of water consumed and currently generate 48% of total water rate revenues.

Table 5: Current Monthly Water Rates
City of San Juan Bautista
Water and Sewer Rate Study

	2012		2013		2014		2015 Current	
	Inside City	Outside City	Inside City	Outside City	Inside City	Outside City	Inside City	Outside City
Water								
Monthly Base Rate	\$46.48	\$56.56	\$47.27	\$57.53	\$48.50	\$59.03	\$48.50	\$59.03
Monthly Unit Cost - \$/1000 gallons								
Tier 1: 0 - 3000 gallons	1.94	1.94	1.98	1.98	2.04	2.04	2.04	2.04
Tier 2: 3001 - 8000 gallons	4.84	4.84	4.93	4.93	5.06	5.06	5.06	5.06
Tier 3: 8001+	6.45	6.45	6.56	6.56	6.73	6.73	6.73	6.73

2.3 Water Accounts

Table 6 shows current number of water accounts by customer class, as well as the 86 anticipated accounts of growth from FY2016 – FY2020.

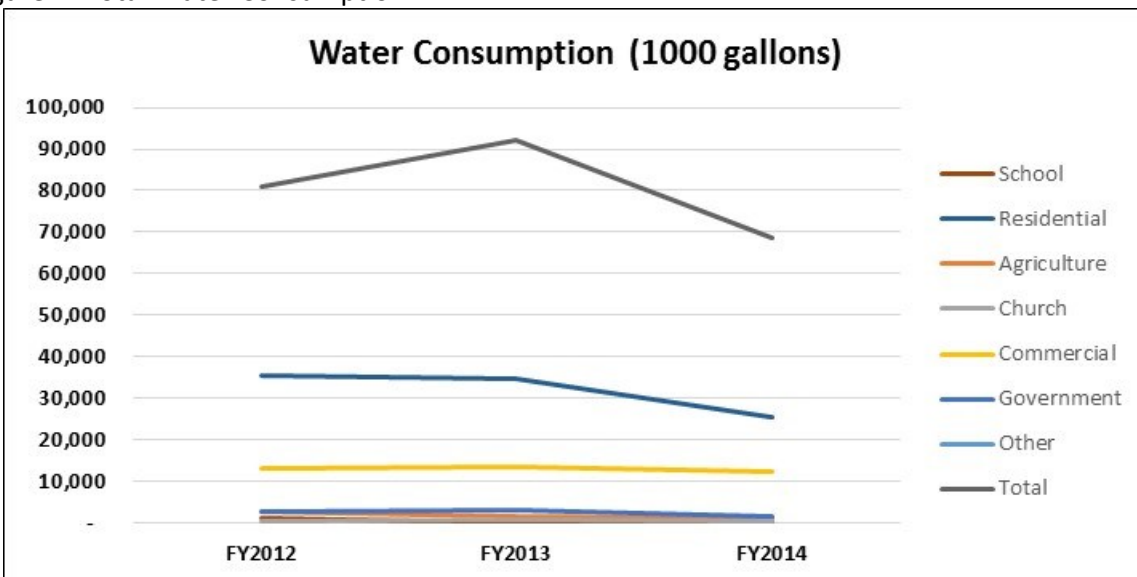
Table 6: Water Accounts
City of San Juan Bautista
Water and Sewer Rate Study

Class	FY2013	FY2014	FY2015	Percent of Total					
					FY2016	FY2017	FY2018	FY2019	FY2020
Residential - inside city	586	583	583	84.2%	25	25	25	11	0
Residential - outside city	48	48	48	6.9%	-	-	-	-	-
Commercial	49	43	43	6.2%	-	-	-	-	-
Government	7	7	7	1.0%	-	-	-	-	-
School	3	2	2	0.3%	-	-	-	-	-
Agriculture	6	4	4	0.6%	-	-	-	-	-
Church	5	5	5	0.7%	-	-	-	-	-
Other	0	0	0	0.0%	-	-	-	-	-
Total	704	692	692	100.0%	717	742	767	778	778
Increase					3.6%	3.5%	3.4%	1.4%	0.0%

2.4 Water Consumption

Figure 1 shows total annual water consumption. BWA's analysis shows that water consumption increased from FY2012 to FY2013, and decreased significantly from FY2013 to FY2014. For conservative estimates, decreased levels of consumption are assumed to continue.

Figure 1: Total Water Consumption



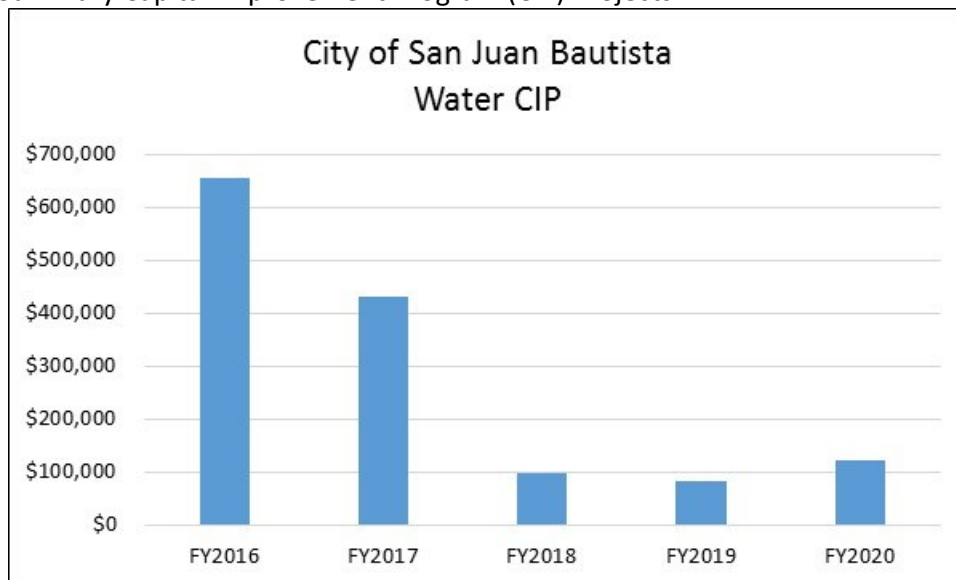
2.5 Financial Challenges / Key Drivers of Rate Increases

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 / Safety Regulations

In 2002, the California Department of Public Health issued the City a citation requiring the City to reduce nitrate levels in the drinking water. The City has made significant investments in the water system since then and continues to face substantial capital improvement needs over the next five years, most significantly the water softening plant. The City issued \$11 million in bonds in 2008 to pay for these projects. The City's 5-year capital improvement program (CIP) includes \$1.4 million of water system improvements and water main replacements from FY2016 through FY2020. Other projects include new lines, fire hydrants, and well projects. Many regional agencies are facing similar challenges. FY2016 and FY2017 have the most amount of CIP expenditures planned, due to the water softening plant. Figure 2 shows a breakdown of projected water system CIP costs through FY2020. A detailed list of CIP projects is shown on Table 22 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 sewer 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%. Appendix A includes a detailed description of water expense projections through FY2025.

2.5.3 Water Debt

Table 7 summarizes the City's water debt schedule on the City's \$11,145,000 2008 Water and Wastewater Revenue Bonds, as well as the Pavax debt. The water enterprise pays 55%, and sewer pays the remaining 45%. There is \$13 million outstanding in interest and principal, but the City is in the process of refunding this debt with new bonds, which will have an effect on the debt schedule. The debt schedule used for this study is based on the City's current debt service schedule.

When issuing bonds, the City must legally abide by a number of debt covenants designed to ensure adequate repayment security. Key among these is a debt service coverage covenant that requires the City to raise sewer rates as needed to achieve 120% coverage on annual debt service per the official statement. This means that annual net revenues (total revenues less operations and maintenance expenses) must be at least 120% of combined annual debt service payments on all parity (i.e. first lien) sewer obligations. Coverage ratios are a financial measure of the City's ability to repay outstanding debt and are a standard legal covenant for securing sewer revenue bonds or similar debt financing.

Table 7: Water Debt Schedule
City of San Juan Bautista
Water and Sewer Rate Study

2011 \$11m Water and Wastewater COP		
Years ending June 30,	Principal	Interest
2016	122,438	353,237
2017	130,263	347,311
2018	125,988	340,952
2019	90,750	335,779
2020-2024	528,000	1,595,824
2025-2029	717,750	1,409,436
2030-2034	979,000	1,148,469
2035-2039	1,336,500	790,110
2040-2044	1,826,000	299,580
	5,856,689	6,620,698
Pavax		
Years ending June 30,	Principal	Interest
2016	\$5,589	\$45,438
2017	\$3,264	\$49,413
<u>2018</u>	<u>\$859</u>	<u>\$39,214</u>
	\$9,712	\$134,065

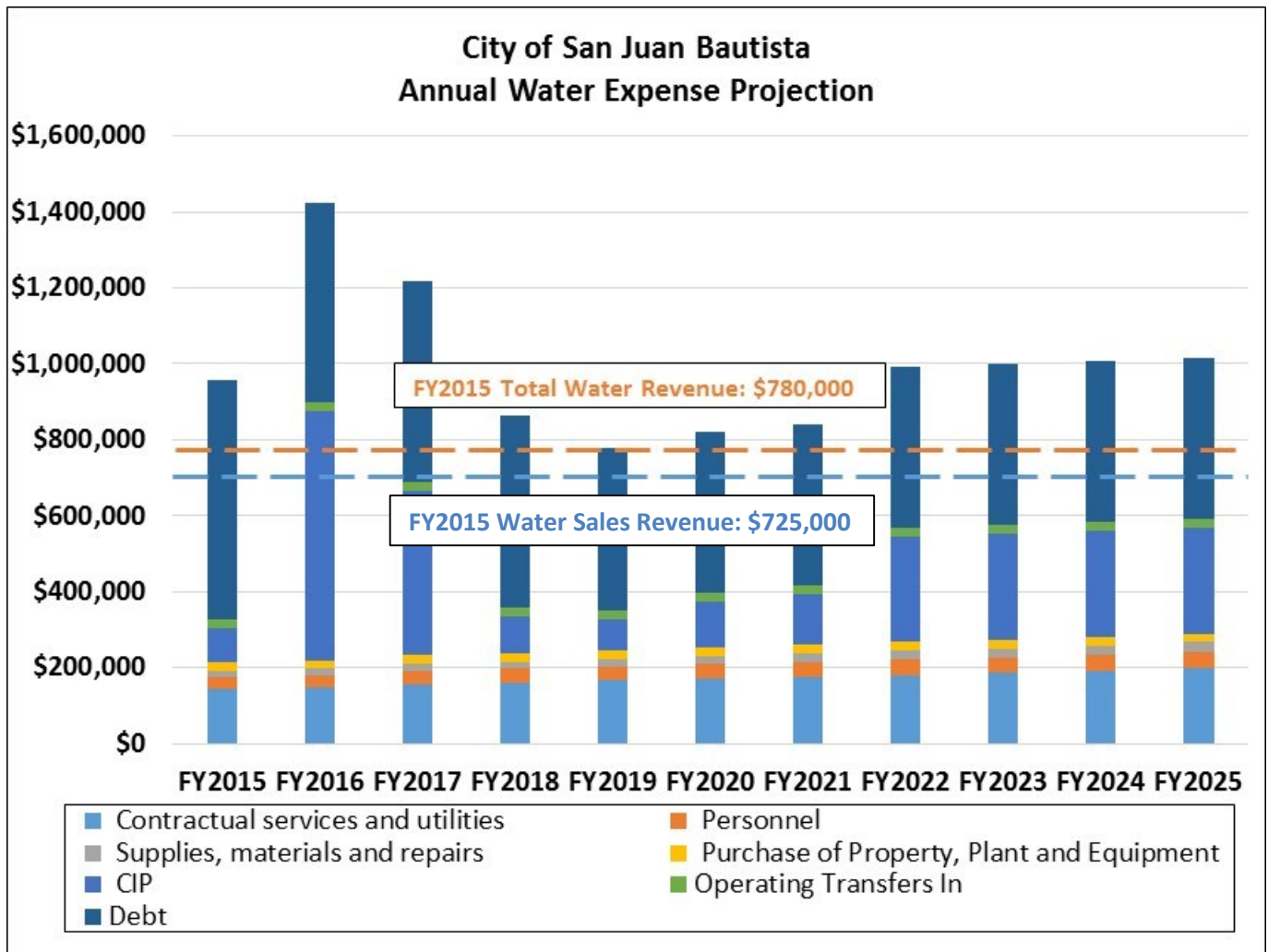
2.5.4 Water Reserve Funds

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 minimum reserve fund targets. These targets were developed with input from City staff as well as generally held industry standards. BWA recommends six months of operating reserves and the following year's CIP. The recommended reserve fund target is shown on the cash flow on Table 8 as well as in the cash flows in Appendix A.

2.5.5 Water Expense Projections

Figure 3 shows a 10-year breakdown of projected water enterprise expense. 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 analyzed rate scenarios based on varying levels of revenue requirements to meet the utility's funding needs, as well as taking into account growth. The scenarios are as follows:

2.6.1 Water Rate Scenarios

With input from City staff, BWA developed four scenarios (Scenarios 1-4) based on growth and rate increases.

- Scenario 1: No rate increases, assuming growth.
- Scenario 2: No rate increases, assuming no growth.
- **Scenario 3: Rate increases, assuming growth.**
- Scenario 4: Rate increases, assuming no growth.

Assuming growth, BWA recommends Scenario 3 in order to meet minimum reserve fund targets in FY2017.

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, Water Demand, & Wholesale Rate Assumptions

- Projections are conservative and assume 86 residential customers growth from FY2016 – FY2020, with no growth thereafter. This assumes an additional 25 residential units a year from FY2016 – FY2018, and 11 additional residential units in FY2019.
- Future water sales are projected to remain constant based on FY2014 consumption, which is 25% less than FY2013 use.

Revenue Assumptions

- Rate increases will become effective annually on July 1 of each year. The first rate increase will take effect on October 15, 2015. The City will adopt rate increases for the five year period from FY2015 through FY2020.
- Investment income is estimated based on estimates of earnings on all funds. Future projections are estimated based on conservative interest earning rates; actual amounts will vary based on reserves and future interest earning rates.

Expense Assumptions

- Operating & Maintenance Expenses are based on the FY2016 Budget and escalate at the annual rate of 3% to account for inflation.
- Capital Improvement Program expenditures include \$1.4 million in projects from FY2016 – FY2020.
- From FY2016 – FY2020 the City has \$2.4 million of debt payments scheduled.

Table 8 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. The cash flow projections beyond FY2020 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 8: Water Scenario 3 – Cash Flow Projection: Growth with Rate Increases

Scenario 3	Budget FY2015*	Projected				
		FY2016	FY2017	FY2018	FY2019	FY2020
Assumptions:						
Revenue Requirement Adjustment	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Monthly SFR Bill (5/8", 3 ccf)	\$56.15	\$57.83	\$59.57	\$61.36	\$63.20	\$65.09
Annual \$ Rate Increase - \$	\$0.00	\$1.68	\$1.74	\$1.79	\$1.84	\$1.90
Interest Earnings Rate	1.00%	1.00%	1.0%	1.0%	1.0%	1.0%
Growth (86 lots)	0.0%	3.6%	3.5%	3.4%	1.4%	0.0%
Cash Position (Beginning of year)	\$883,430	\$895,385	\$1,024,700	\$1,016,581	\$1,418,369	\$1,792,126
Operating Revenue						
Charges for services	783,500	836,160	891,274	948,943	991,429	1,021,171
Total Operating Revenue	783,500	836,160	891,274	948,943	991,429	1,021,171
Operating Expenses						
Contractual services and utilities	142,928	147,000	156,000	161,000	166,000	171,000
Personnel	32,489	33,000	35,000	36,000	37,000	38,000
Supplies, materials and repairs	16,400	17,000	18,000	19,000	20,000	21,000
Total Operating Expenses	191,817	197,000	209,000	216,000	223,000	230,000
Nonoperating Revenue						
Connection Fees (86 lots)	0	289,000	289,000	289,000	127,000	0
Development impact fees	18,500	19,000	19,000	19,000	19,000	19,000
Interest income	53,000	9,000	10,000	10,000	14,000	18,000
Total Nonoperating Revenue	71,500	317,000	318,000	318,000	160,000	37,000
Nonoperating Expenses						
Purchase of Property, Plant and Equipment	22,500	23,000	23,000	23,000	23,000	23,000
Debt Principal	114,808	128,027	133,527	126,847	90,750	105,600
Debt Interest	399,778	398,675	396,724	380,166	335,779	319,165
Total Nonoperating Expenses	537,086	549,702	553,251	530,013	449,529	447,765
CIP	91,000	654,000	432,000	96,000	82,000	121,000
Operating Transfers						
Transfers In	0	400,000	0	0	0	0
Transfers Out	23,142	23,142	23,142	23,142	23,142	23,142
Total Operating Transfers	23,142	423,142	23,142	23,142	23,142	23,142
Total Revenues	855,000	1,553,160	1,209,274	1,266,943	1,151,429	1,058,171
Total Expenses	843,045	1,423,844	1,217,393	865,155	777,671	821,907
Surplus / (Deficit)	11,955	129,315	(8,119)	401,788	373,758	236,265
Reserve Fund Balance (Cash Position)						
Beginning of Year	883,430	895,385	1,024,700	1,016,581	1,418,369	1,792,126
End of Year	895,385	1,024,700	1,016,581	1,418,369	1,792,126	2,028,391
Cash Restricted (End of Year)	435,101	435,101	435,101	435,101	435,101	435,101
Cash Unrestricted (End of Year)	460,284	589,599	581,480	983,268	1,357,025	1,593,290
Debt Service Coverage - Min. 1.20	1.15	1.21	1.29	1.45	1.80	1.86
Debt Service Coverage Met	No	Yes	Yes	Yes	Yes	Yes
Minimum Reserve Target (Unrestricted Cash)	1,045,750	850,080	541,637	556,471	616,714	642,586
Target met?	No	No	Yes	Yes	Yes	Yes

Table 9 shows the revenue requirement increases for all of the scenarios.

Table 9: Water Scenarios Comparison
City of San Juan Bautista
Water and Sewer Rate Study

Rate Increase Scenario	Current FY2015	Proposed Rate Increases				
		FY2016	FY2017	FY2018	FY2019	FY2020
Annual % Increase						
Scenario 1: No Rate Change with Growth	-	0.0%	0.0%	0.0%	0.0%	0.0%
Scenario 2: No Rate Change without Growth	-	0.0%	0.0%	0.0%	0.0%	0.0%
Scenario 3: Rate Increases with Growth	-	3.0%	3.0%	3.0%	3.0%	3.0%
Scenario 4: Rate Increases without Growth	-	8.0%	8.0%	8.0%	8.0%	8.0%
Annual \$ Amount						
Scenario 1: No Rate Change with Growth	\$56.15	\$56.15	\$56.15	\$56.15	\$56.15	\$56.15
Scenario 2: No Rate Change without Growth	\$56.15	\$56.15	\$56.15	\$56.15	\$56.15	\$56.15
Scenario 3: Rate Increases with Growth	\$56.15	\$57.83	\$59.57	\$61.36	\$63.20	\$65.09
Scenario 4: Rate Increases without Growth	\$56.15	\$60.64	\$65.49	\$70.73	\$76.39	\$82.50
Annual \$ Increase						
Scenario 1: No Rate Change with Growth	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Scenario 2: No Rate Change without Growth	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Scenario 3: Rate Increases with Growth	\$0.00	\$1.68	\$1.74	\$1.79	\$1.84	\$1.90
Scenario 4: Rate Increases without Growth	\$0.00	\$4.49	\$4.85	\$5.24	\$5.66	\$6.11

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 fixed costs that do not vary by water consumption, such as the debt payments, as well as costs for personnel and utilities. However, a portion of these fixed costs can

reasonably be apportioned to fixed rate recovery, and vice-versa with variable 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 52% on average (FY2012 – FY2015) of total water sales revenues from fixed charges and 48% from the variable charges. With input from the City, BWA recommends keeping this ratio in order that revenues remain stable even during times of decreased consumption. Taking a six-year average (FY2015 through FY2020), Table 10 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 fixed. Agencies that purchase water tend to have a higher allocation of variable costs compared to fixed costs.

Table 10: Allocation of Water System Expenses to Fixed & Variable Costs
City of San Juan Bautista
Water and Sewer Rate Study

	Projected 6-Year (FY 2015-20) Avg	Cost Recovery %		Cost Recovery \$	
		Fixed	Variable	Fixed	Variable
Operating Expenses					
Contractual services and utilities	\$157,321	50%	50%	\$78,661	\$78,661
Personnel	\$35,248	50%	50%	17,624	17,624
<u>Supplies, materials and repairs</u>	<u>\$18,567</u>	<u>0%</u>	<u>100%</u>	<u>0</u>	<u>18,567</u>
Subtotal Operating Expenses	211,136			96,285	114,851
			<i>Percent of Total</i>	46%	54%
Non-Operating Expenses					
Purchase of Property, Plant and Equipment	22,917	0%	100%	0	22,917
Transfers	55,939	0%	100%	0	55,939
Debt	488,308	60%	40%	292,985	195,323
<u>CIP</u>	<u>246,000</u>	<u>60%</u>	<u>40%</u>	<u>147,600</u>	<u>98,400</u>
Subtotal Non-Operating Expenses	813,163			440,585	372,578
			<i>Percent of Total</i>	54%	46%
Total 5-Year Avg Water Expenses	1,024,299			536,869	487,430
			<i>Percent of Total</i>	52%	48%

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. Rate structure recommendations listed below incorporate input received from City staff.

2.8.1 Fixed Rate Recommendations

Besides the rate increases needed for revenue requirements, BWA does not have any fixed rate recommendations. BWA does recommend verifying that meter ratios are aligned with the American Water Works Association (AWWA) standards, once data for such is readily available. 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.

2.8.2 Water Variable Charge Recommendations

Modify Tier Breakpoints

The current water structure has three tiers. BWA recommends the City revise the tier breakpoints into one uniform tier. Doing this will better reflect the City's cost for providing water service, as well ensure variable rates are legally defensible.

2.8.3 Water Rate Derivation

Fixed Charge

The fixed meter charge is designed to recover fixed costs. The proposed FY2016 – FY2020 fixed rates are calculated by dividing the revenue requirement allocation for fixed costs, by 12 (monthly), by the total number of projected meter equivalents the City will serve each year, for both the meters inside the City as well as those outside. The fixed charges are then escalated by the increases made to the revenue requirements each year. The derivation for fixed rates from FY2016 – FY2020 is shown on Table 11.

The number of meters inside of the City is projected to grow, while the meters outside of the City are projected to remain constant. Currently, it is assumed that additional costs for servicing the 48 additional meters outside of the City is approximately \$6,000 year, which is represented by the current additional charge of \$10.53 per month for meters outside of the City. Since growth is projected for only the meters inside of the City, fixed charges for meters outside of the City increase more than those inside of the City. If growth for meters outside of the City is greater than anticipated, or if revenue requirements for those outside of the City are less than anticipated, fixed charges for meters outside of the City may increase less than those recommended in Scenario 3.

Variable Charge

The variable charge is designed to recover variable costs. The proposed FY2016 – FY2020 variable rate calculations, which are the recommended uniform rates rather than three-tiered rates, from are shown on Table 11.

Table 11: Derivation of Fixed Charges – Scenario 3 Uniform Rate
City of San Juan Bautista
Water and Sewer Rate Study

Scenario 3	Current FY2015	Proposed				
		FY2016	FY2017	FY2018	FY2019	FY2020
Rate Increase %		3%	3%	3%	3%	3%
Estimated Growth		3.61%	3.49%	3.37%	1.43%	0.00%
Total Revenue Requirement (with growth)	\$783,500	\$836,160	\$891,274	\$948,943	\$991,429	\$1,021,171
Allocation						
Fixed 52%	\$408,809	\$436,286	\$465,043	\$495,133	\$517,301	\$532,820
Variable 48%	\$374,691	\$399,874	\$426,231	\$453,810	\$474,128	\$488,352
Total	\$783,500	\$836,160	\$891,274	\$948,943	\$991,429	\$1,021,171
FIXED CHARGE						
Inside City	\$374,808	\$399,999	\$426,365	\$453,952	\$474,276	\$488,504
Outside City	\$34,001	\$36,287	\$38,678	\$41,181	\$43,025	\$44,315
Total Fixed Charge Allocation	\$408,809	\$436,286	\$465,043	\$495,133	\$517,301	\$532,820
% Inside City	93%	93%	94%	94%	94%	94%
% Outside City	7%	7%	6%	6%	6%	6%
Meters						
Inside City	644	669	694	719	730	730
Outside City	48	48	48	48	48	48
Total	692	717	742	767	778	778
Fixed Charge Calculation						
Inside City	\$48.50	\$49.83	\$51.20	\$52.61	\$54.14	\$55.76
Outside City	\$59.03	\$63.00	\$67.15	\$71.49	\$74.70	\$76.94
WATER CONSUMPTION CHARGE						
Total Consumption Charge Allocation	\$374,691	\$399,874	\$426,231	\$453,810	\$474,128	\$488,352
FY2014 Annual Consumption* (1000 gallons)	68,429	70,901	73,373	75,845	76,933	76,933
Proposed Uniform Rate per 1k/gal	\$5.48	\$5.64	\$5.81	\$5.98	\$6.16	\$6.35

*Projected consumption escalated by % growth

2.9 Proposed Water Rates

Table 12 shows the proposed monthly water rates that incorporate the updated meter ratios and tier breakpoints. 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 12: Proposed Monthly Fixed and Variable Charges
City of San Juan Bautista
Water and Sewer Rate Study

Water	Current FY2015	Proposed				
		FY2016	FY2017	FY2018	FY2019	FY2020
Water Monthly Base Rate						
Inside City	\$48.50	\$49.83	\$51.20	\$52.61	\$54.14	\$55.76
Outside City	\$59.03	\$63.00	\$67.15	\$71.49	\$74.70	\$76.94
Monthly Unit Cost - \$/1000 gallons						
Tier 1: 0 - 3000 gallons	\$1.94					
Tier 2: 3001 - 8000 gallons	\$4.84					
Tier 3: 8001+	\$6.45					
Uniform Rate \$/1000 gallons		\$5.64	\$5.81	\$5.98	\$6.16	\$6.35

2.10 Sample Water Rate Impacts

Table 13 shows the impacts of projected water rates on a range of customer profiles. The impacts account for both overall rate increases as well as the various rate structure modifications discussed previously, which for FY2016 represent the increases needed for a 3% revenue requirement increase. Note that water consumption, particularly for single family customers, typically varies due to seasonal variations in weather and/or other factors. Hence a single customer could face a range of impacts throughout the year.

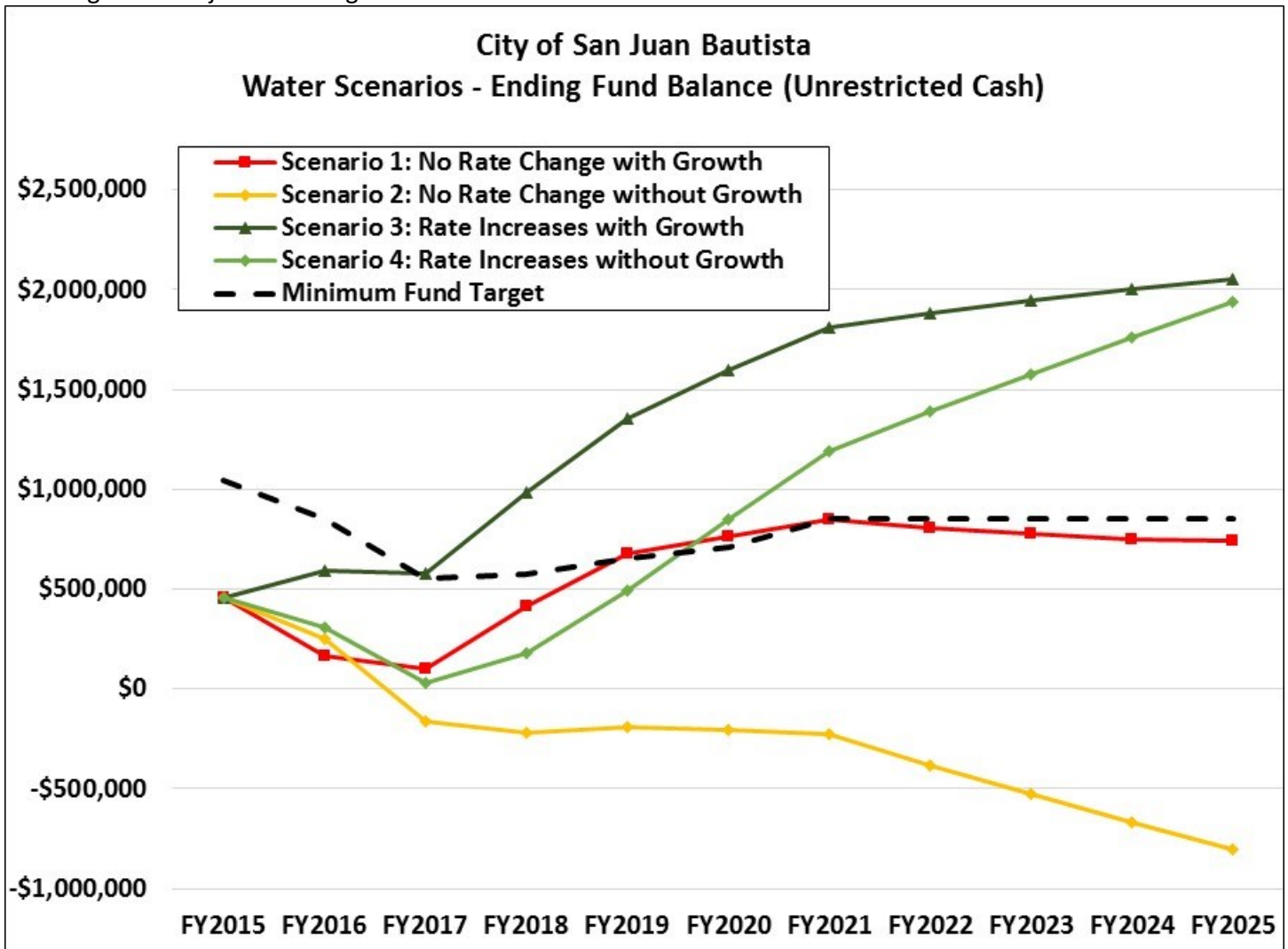
Table 13: Sample Monthly Bill Impacts – Proposed Rate Structure
City of San Juan Bautista
Water and Sewer Rate Study

Water Sample Bill Impacts	Current	Proposed FY2016
Inside City Base Rate	\$48.50	\$49.83
<u>3,000 gallons average use</u>	<u>\$5.82</u>	<u>\$16.92</u>
Total Monthly Bill	\$54.32	\$66.75
Outside City Base Rate	\$59.03	\$63.00
<u>3,000 gallons average use</u>	<u>\$5.82</u>	<u>\$16.92</u>
Total Monthly Bill	\$64.85	\$79.92
Inside City Base Rate	\$48.50	\$49.83
<u>10,000 gallons moderate use</u>	<u>\$42.92</u>	<u>\$56.40</u>
Total Monthly Bill	\$91.42	\$106.22
Outside City Base Rate	\$59.03	\$63.00
<u>10,000 gallons moderate use</u>	<u>\$42.92</u>	<u>\$56.40</u>
Total Monthly Bill	\$101.95	\$119.40
Inside City Base Rate	\$48.50	\$49.83
<u>20,000 gallons high use</u>	<u>\$107.42</u>	<u>\$112.80</u>
Total Monthly Bill	\$155.92	\$162.62
Outside City Base Rate	\$59.03	\$63.00
<u>20,000 gallons high use</u>	<u>\$107.42</u>	<u>\$112.80</u>
Total Monthly Bill	\$166.45	\$175.80

2.11 Ending Fund Balances

Figure 4 compares the City's ending fund balance of all reserves. Without a rate increase, and if there is not the anticipated 86 additional units of growth, the water reserve fund will be depleted before the end of FY2017. Scenario 3 (proposed rate increases) will restore the ending fund balance to meet minimum fund targets by FY2017.

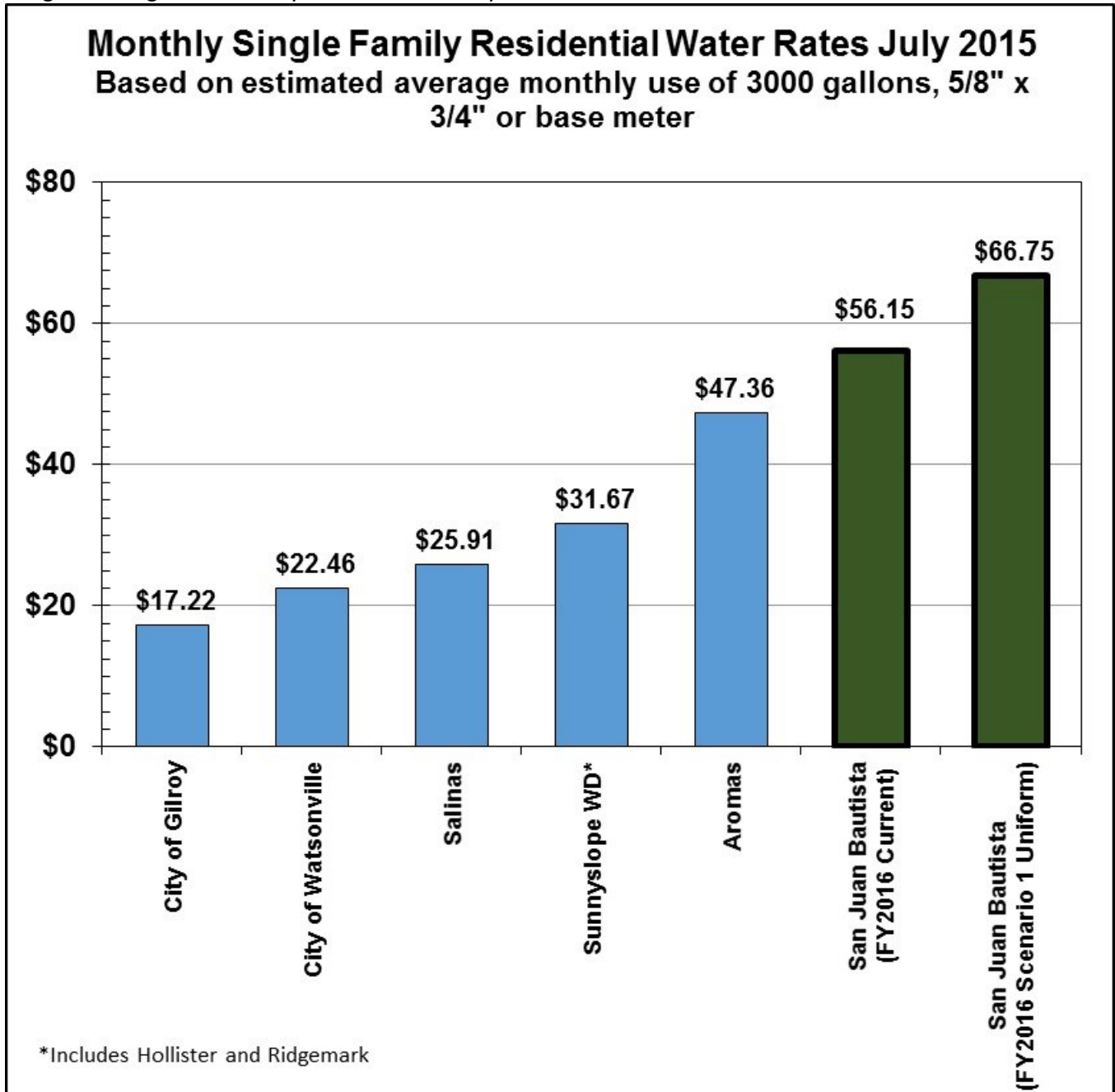
Figure 4: Projected Ending Fund Balances



2.12 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 3,000 gallons of water (monthly), the City's average single family monthly consumption. The City's current water rates are higher than all other regional agencies compared, and the City would remain the highest with the proposed rates for FY2016. Figure 5 is shown for comparative purposes only.

Figure 5: Regional Monthly Water Rate Survey



3 SEWER FINANCES & RATES

3.1 Sewer Financial Overview

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

- Sewer rates were last increased in 2014. Although the City has strived to keep costs down, sewer expenses have been escalating each year. One significant factor are the capital expenditures needed to comply with environmental regulations, which have resulted in significant annual debt payments.
- The City currently provides sewer collection services to 669 customers. Growth is assumed at 25 additional residential units a year from FY2016 –FY2018, and 11 additional units in FY2019.
- The City's sewer collection and transmission system consisting of approximately 6.2 linear miles of gravity sewer pipeline, which conveys sewer flows to 2 miles of force mains and 2 lift stations, to the City's one wastewater treatment plant, where it is pumped into Pond 1 and treated and discharged into San Juan Creek, eventually flowing into Monterey Bay.
- The current capacity of the plant is 270,000 gallons per day (gpd) for dry weather averaged from May through October, and 500,000 gpd for wet weather averaged from November through April, which has been determined as sufficient for the City's anticipated growth. However, the City's aging wastewater system requires rehabilitation and replacement of various pipelines. Most of the sewer pipe in the wastewater system is over 30 years old and made of vitrified clay pipe.
- Total sewer reserves at the end of FY2015 are projected to be \$895,385, of which \$355,992 is restricted funds required by the 2008 Water and Wastewater Bonds. Reserves are projected to meet minimum fund targets from FY2015 – FY2025.
- The City has nearly \$340,000 in capital improvement projects from FY2016 – FY2020.

3.2 Current Monthly Sewer Rates

Table 14 shows the City's historical and current monthly sewer rates.

Table 14: Monthly Sewer Rates
City of San Juan Bautista
Water and Sewer Rate Study

	2012	2013	2014	2015 Current
<u>Sewer</u>				
Residential	74.37	76.01	77.61	77.61
Commercial	74.37	76.01	78.00	78.00
Min Month Charge \$/1,000 gal	8.05	8.23		
Standard Strength \$/1,000 gal	12.06	12.33	8.45	8.45
Moderate Strength \$/1000 gal	16.09	16.44	12.65	12.65
High Strength \$/1,000 gal	40.23	41.12	16.88	16.88

3.3 Sewer Accounts

Table 15 shows current number of sewer accounts by meter size, as well as the 86 anticipated accounts of growth from FY2016 – FY2020.

Table 15: Sewer Accounts
City of San Juan Bautista
Water and Sewer Rate Study

Class	FY2013	FY2014	FY2015	Percent of Total					
					FY2016	FY2017	FY2018	FY2019	FY2020
Residential	472	530	559	83.6%	25	25	25	11	-
Commercial									
Standard Strength	-	1	1	0.1%	-	-	-	-	-
Moderate Strength	-	82	82	0.0%	-	-	-	-	-
High Strength	-	27	27	0.0%	-	-	-	-	-
<u>Total Commercial</u>	<u>110</u>	<u>110</u>	<u>110</u>	<u>16.4%</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total	582	640	669	100.1%	694	719	744	755	755
<i>Increase</i>					<i>3.7%</i>	<i>3.6%</i>	<i>3.5%</i>	<i>1.5%</i>	<i>0.0%</i>

3.4 Financial Challenges / Key Drivers of Rate Increases

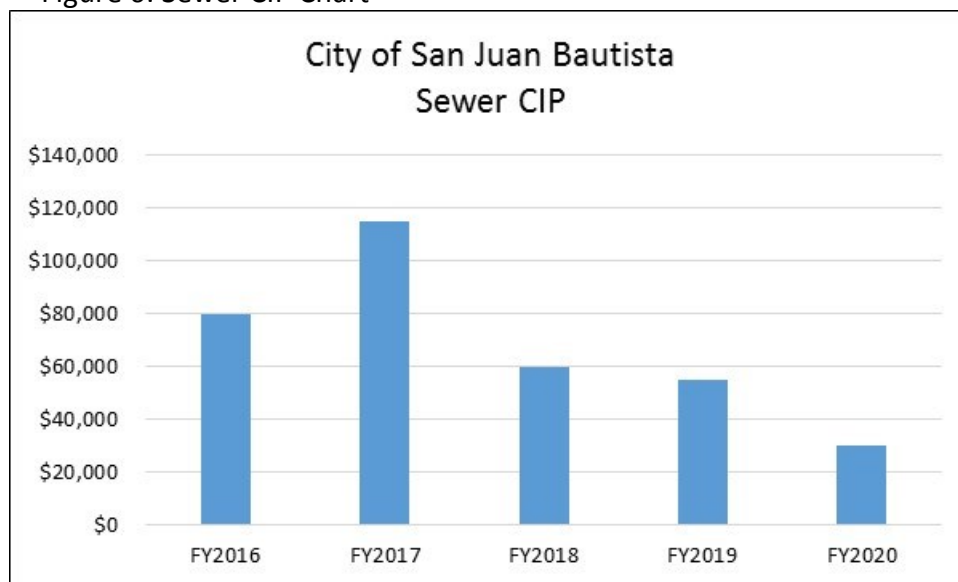
Going forward, the City’s sewer enterprise is facing moderate expenses for capital improvements, operating expenses that are projected to rise with inflation, and continued debt service payments.

3.4.1 Capital Improvements / Aging Infrastructure

Over the last decade the City has made moderate investments in the rehabilitation and replacement of its aging wastewater collection system. In FY2016 and FY2017, the CIP expenses will be about \$200,000, causing the City to have a deficit in FY2017. From FY2018 – FY2020, CIP expenses are expected to be less significant. The City’s five-year capital improvement program (CIP) projections from FY2016 through FY2020 total \$340,000.

Figure 6 shows a summary of the projected sewer system CIP costs through FY2020. A detailed CIP list is included in Appendix B.

Figure 6: Sewer CIP Chart



3.4.2 Ongoing Operating Cost Inflation

The City faces ongoing operating cost inflation due to annual cost increases in utilities, transfers, salaries, benefits, etc. Water and sewer 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 sewer expense projections through FY2025.

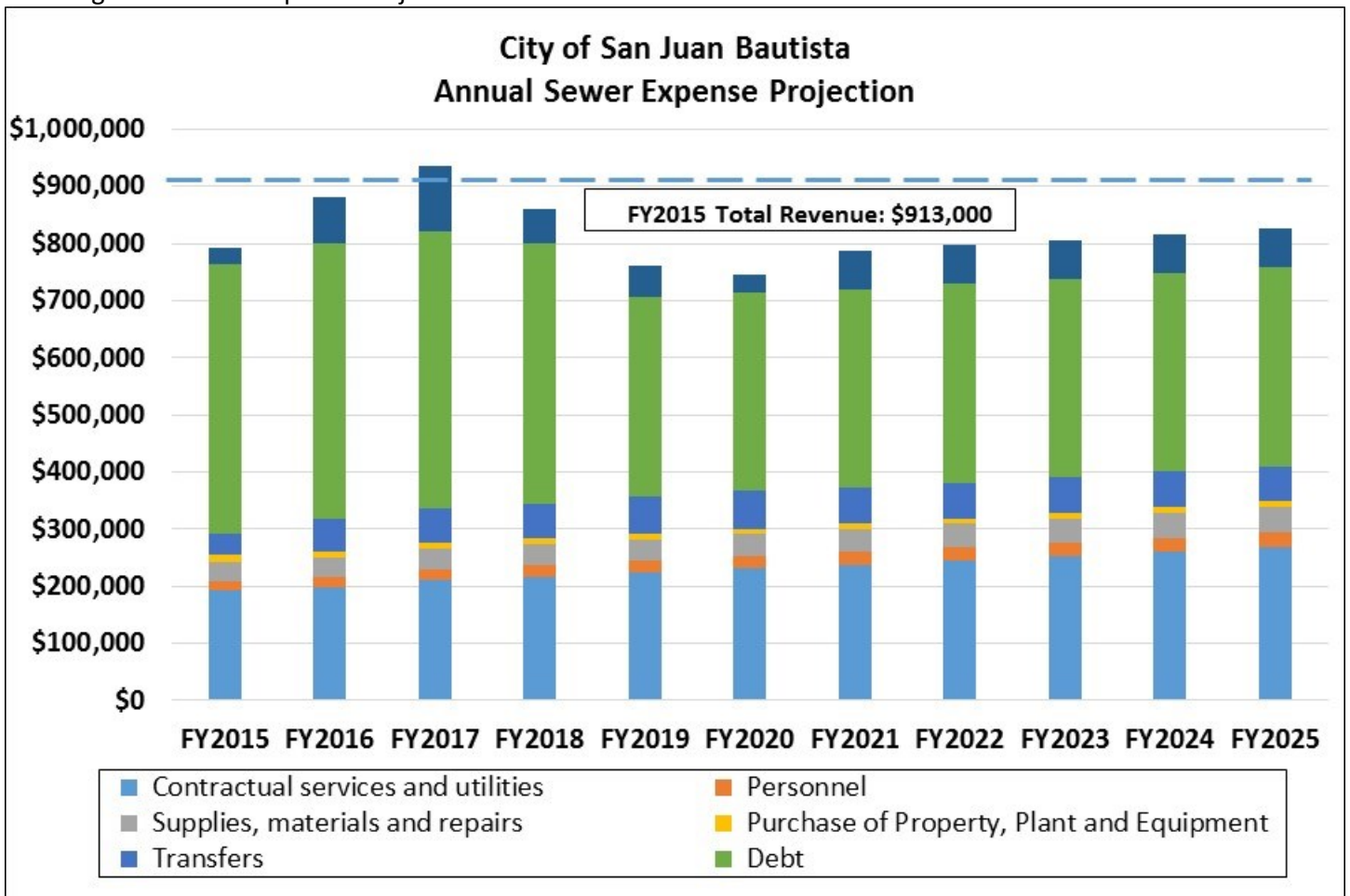
3.4.3 Sewer Reserve Funds

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 minimum reserve fund targets. These targets were developed with input from City staff as well as generally held industry standards. BWA recommends six months of operating reserves and the following year's CIP. The recommended reserve fund target is shown on the cash flows on Table 17 and in the cash flows in Appendix B.

3.4.4 Sewer Expense Projections

Figure 7 shows the ten-year sewer expense projections. FY2017 expenses are well above total sewer revenues, but thereafter revenues exceed expenses.

Figure 7: Sewer Expense Projections



3.4.1 Sewer Debt

Table 16 summarizes the City's sewer debt schedule on the City's \$11,145,000 2008 Water and Wastewater Revenue Bonds, as well as the Pavax debt. The sewer enterprise pays 45%, and water pays the remaining 45%. There is \$10.3 million outstanding in interest and principal, but the City is in the process of refunding this debt with new bonds, which will have an effect on the debt schedule. The debt schedule used for this study is based on the City's current debt service schedule.

When issuing bonds, the City must legally abide by a number of debt covenants designed to ensure adequate repayment security. Key among these is a debt service coverage covenant that requires the City to raise sewer rates as needed to achieve 120% coverage on annual debt service as per the official statement. This means that annual net revenues (total revenues less operations and maintenance expenses) must be at least 120% of combined annual debt service payments on all parity (i.e. first lien) wastewater obligations. Coverage ratios are a financial measure of the City's ability to repay outstanding debt and are a standard legal covenant for securing wastewater revenue bonds or similar debt financing.

Table 16: Sewer Debt Schedule
City of San Juan Bautista
Water and Sewer Rate Study

2011 \$11m Water and Wastewater COP			
	Years ending June 30,	Principal	Interest
	2016	100,177	289,012
	2017	106,579	284,164
	2018	103,081	278,961
	2019	74,250	274,728
	2020-2024	432,000	1,305,674
	2025-2029	587,250	1,153,175
	2030-2034	801,000	939,657
	2035-2039	1,093,500	646,454
	2040-2044	<u>1,494,000</u>	<u>245,111</u>
		\$4,791,837	\$5,416,934
Pavax			
	Years ending June 30,	Principal	Interest
	2016	\$4,573	\$37,177
	2017	\$2,671	\$40,429
	<u>2018</u>	<u>\$703</u>	<u>\$32,084</u>
		\$7,946	\$109,690

3.5 Sewer Enterprise Rate Scenarios & Financial Projections

3.5.1 Sewer Rate Scenarios

With input from City staff, BWA developed four scenarios (Scenarios 1-4) based on growth and rate increases.

- Scenario 1: No rate increases, assuming growth.
- Scenario 2: No rate increases, assuming no growth.
- **Scenario 3: Rate increases, assuming growth.**
- Scenario 4: Rate increases, assuming no growth.

Assuming growth, BWA recommends Scenario 3 in order to meet reserve fund targets from FY2016 – FY2025.

3.5.2 Sewer Revenue Requirements: Cash Flow Projection

The sewer cash flow projections incorporate the latest information available as well as a number of reasonable and slightly conservative assumptions. BWA recommends five years of 1.5% annual rate increases in order to meet revenue requirements. BWA analyzed various scenarios of revenue requirement increases, including no increases. Key assumptions include:

Growth and Revenue Assumptions

- Projections are conservative and assume the additional 86 residential units of future growth from FY2016 – FY2020, with no growth thereafter.
- Rate increases will become effective annually on July 1 of each year, with the first increase going into effect October 15, 2015.
- Investment income is estimated based on estimates of earnings on all funds. Future projections are estimated based on conservative interest earning rates; actual amounts will vary based on reserves and future interest earning rates.

Expense Assumptions

- Operating & Maintenance Expenses are based on the FY2016 Budget and escalate at the annual rate of 3% to account for inflation.
- Capital Improvement Program expenditures include \$340,000 in projects from FY2016 – FY2020.
- From FY2016 – FY2020 the City has \$2 million of debt payments scheduled.

Table 17 shows the cash flow projection with no rate increases. As mentioned previously, the sewer fund is currently meeting minimum fund targets and will continue doing so, due to the projected low CIP. Appendix B shows an extended (ten-year) version of the cash flow.

Table 17: Sewer Cash Flow Projection – Rate Increases with Growth
City of San Juan Bautista
Water and Sewer Rate Study

Sewer Scenario 3	Budget FY2015	Projected				
		FY2016	FY2017	FY2018	FY2019	FY2020
Assumptions:						
Revenue Requirement Adjustment	0.0%	1.5%	1.5%	1.5%	1.5%	1.5%
Monthly SFR Bill (1 EDU, Residential)	\$77.61	\$78.77	\$79.96	\$81.16	\$82.37	\$83.61
Annual \$ Rate Increase - \$	\$0.00	\$1.16	\$1.18	\$1.20	\$1.22	\$1.24
Interest Earnings Rate	1.00%	1.00%	1.0%	1.0%	1.0%	1.0%
Growth (86 lots)	0.0%	3.7%	3.6%	3.5%	1.5%	0.0%
Cash Position (Beginning of year)	\$863,892	\$1,034,593	\$1,257,650	\$1,479,058	\$1,817,630	\$2,205,478
Operating Revenue						
Total Operating Revenue	913,000	961,000	1,011,000	1,062,000	1,094,000	1,110,000
Operating Expenses						
Contractual services and utilities	192,767	199,000	211,000	217,000	224,000	231,000
Personnel	16,710	17,000	18,000	19,000	20,000	21,000
<u>Supplies, materials and repairs</u>	<u>33,487</u>	<u>34,000</u>	<u>36,000</u>	<u>37,000</u>	<u>38,000</u>	<u>39,000</u>
Total Operating Expenses	242,964	250,000	265,000	273,000	282,000	291,000
Nonoperating Revenue						
Connection Fees (86 lots)	0	81,650	81,650	81,650	35,926	0
<u>Interest income</u>	<u>0</u>	<u>10,000</u>	<u>13,000</u>	<u>15,000</u>	<u>18,000</u>	<u>22,000</u>
Total Nonoperating Revenue	0	91,650	94,650	96,650	53,926	22,000
Nonoperating Expenses						
Purchase of Property, Plant and Equipment	12,000	10,000	10,000	10,000	10,000	10,000
Debt Principal	93,934	104,749	109,250	103,784	74,250	86,400
<u>Debt Interest</u>	<u>327,091</u>	<u>326,189</u>	<u>324,593</u>	<u>311,045</u>	<u>274,728</u>	<u>261,135</u>
Total Nonoperating Expenses	433,025	440,938	443,842	424,829	358,978	357,535
CIP	30,000	80,000	115,000	60,000	55,000	30,000
Operating Transfers						
Transfers In	0	0	0	0	0	0
<u>Transfers Out</u>	<u>36,310</u>	<u>58,654</u>	<u>60,400</u>	<u>62,250</u>	<u>64,100</u>	<u>66,050</u>
Total Operating Transfers	36,310	58,654	60,400	62,250	64,100	66,050
Total Revenues	913,000	1,052,650	1,105,650	1,158,650	1,147,926	1,132,000
Total Expenses	742,299	829,592	884,242	820,079	760,078	744,585
Surplus / (Deficit)	170,701	223,058	221,408	338,571	387,848	387,415
Cash Position						
Beginning of Year	863,892	1,034,593	1,257,650	1,479,058	1,817,630	2,205,478
End of Year	1,034,593	1,257,650	1,479,058	1,817,630	2,205,478	2,592,893
Cash Restricted (End of Year)	355,992	355,992	355,992	355,992	355,992	355,992
Cash Unrestricted (End of Year)	678,601	901,659	1,123,067	1,461,638	1,849,486	2,236,901
Debt Service Coverage - Min. 1.20	1.59	1.65	1.72	1.90	2.33	2.36
<i>Debt Service Coverage Met</i>	Yes	Yes	Yes	Yes	Yes	Yes
Minimum Reserve Target	536,500	595,500	565,500	586,000	577,000	623,000
<i>Target met?</i>	Yes	Yes	Yes	Yes	Yes	Yes

3.6 Cost of Service

Bartle Wells Associates conducted an independent analysis of the City's current sewer rate structure. Based on an evaluation of rate alternatives and input from City staff, no major modifications are recommended to the City's sewer rate structure. Table 18 shows the sewer rate cost of service and revenue requirement calculation, and the proposed rates derived from the revenue requirements.

Table 18: Sewer Cost of Service and Revenue Requirements
City of San Juan Bautista
Water and Sewer Rate Study

Class	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Total Projected Revenues	\$913,000	\$961,000	\$1,011,000	\$1,062,000	\$1,094,000	\$1,110,000
Rate Increase %	-	1.5%	1.5%	1.5%	1.5%	1.5%
Estimated Residential Growth	-	4.5%	4.3%	4.1%	1.7%	0.0%
Estimated Total Growth	-	3.7%	3.6%	3.5%	1.5%	0.0%
Total Revenue Requirement (assuming growth)	913,000	961,000	1,011,000	1,062,000	1,094,000	1,110,000
Detailed Revenue Requirement						
Residential Base	520,608	552,049	584,317	617,428	637,563	647,126
Commercial Base	102,960	104,504	106,072	107,663	109,278	110,917
Commercial Strength	141,708	143,834	145,991	148,181	150,404	152,660
Standard Strength	8,004	8,124	8,246	8,370	8,495	8,623
Moderate Strength	90,636	91,996	93,375	94,776	96,198	97,641
High Strength	<u>43,068</u>	<u>43,714</u>	<u>44,370</u>	<u>45,035</u>	<u>45,711</u>	<u>46,396</u>
Total	765,276	800,387	836,380	873,272	897,244	910,703
Accounts						
Residential	559	584	609	634	645	645
Commercial	110	110	110	110	110	110
Standard Strength	1	1	1	1	1	1
Moderate Strength	82	82	82	82	82	82
High Strength	<u>27</u>	<u>27</u>	<u>27</u>	<u>27</u>	<u>27</u>	<u>27</u>
Total	669	694	719	744	755	755
Avg Commercial Use per act (kgal)						
Standard Strength	78.93	78.93	78.93	78.93	78.93	78.93
Moderate Strength	7.28	7.28	7.28	7.28	7.28	7.28
High Strength	7.87	7.87	7.87	7.87	7.87	7.87
Monthly Charge (Rev. Req. / Account / 12 (months))						
Residential Base	\$77.61	\$78.77	\$79.96	\$81.16	\$82.37	\$83.61
Commercial Base	\$78.00	\$79.17	\$80.36	\$81.56	\$82.79	\$84.03
Commercial Strength (Rev. Req. / Account / Avg Use / 12 (months))						
Standard Strength	\$8.45	\$8.58	\$8.71	\$8.84	\$8.97	\$9.10
Moderate Strength	\$12.65	\$12.84	\$13.03	\$13.23	\$13.43	\$13.63
High Strength	\$16.88	\$17.13	\$17.39	\$17.65	\$17.92	\$18.18

3.7 Proposed Sewer Rates

The recommended rate increases are shown on Table 19. Under Proposition 218, the sewer rates shown on Table 19 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 sewer utility's finances to ensure that revenues are in line with expenses.

Table 19: Proposed Sewer Rate Increases
City of San Juan Bautista
Water and Sewer Rate Study

Sewer Scenario 3	Current FY2015	Proposed				
		FY2016	FY2017	FY2018	FY2019	FY2020
Revenue Requirement % Increase		1.5%	1.5%	1.5%	1.5%	1.5%
<u>Sewer Fixed Monthly Charge</u>						
Residential	\$77.61	\$78.77	\$79.96	\$81.16	\$82.37	\$83.61
Commercial	\$78.00	\$79.17	\$80.36	\$81.56	\$82.79	\$84.03
<u>Sewer Variable Monthly Charge</u>						
Standard Strength \$/1,000 gal	\$8.45	\$8.58	\$8.71	\$8.84	\$8.97	\$9.10
Moderate Strength \$/1000 gal	\$12.65	\$12.84	\$13.03	\$13.23	\$13.43	\$13.63
High Strength \$/1,000 gal	\$16.88	\$17.13	\$17.39	\$17.65	\$17.92	\$18.18
Waste Strength	Typical Customers					
Standard Strength	Office, Retail, General Commercial					
Moderate Strength	Restaurant with grease trap, Hotels/motels with restaurants, Supermarkets with garbage grinders or food preparation, Commercial and industrial laundries, RV parks, Mixed use facilities with standard and high strength					
High Strength	Restaurant without grease trap, Wholesale bakeries, Mortuaries					

3.8 Sample Sewer Bill Impacts

Table 20 shows various sample sewer bill impacts. Rates would come into effect October 15th, 2015.

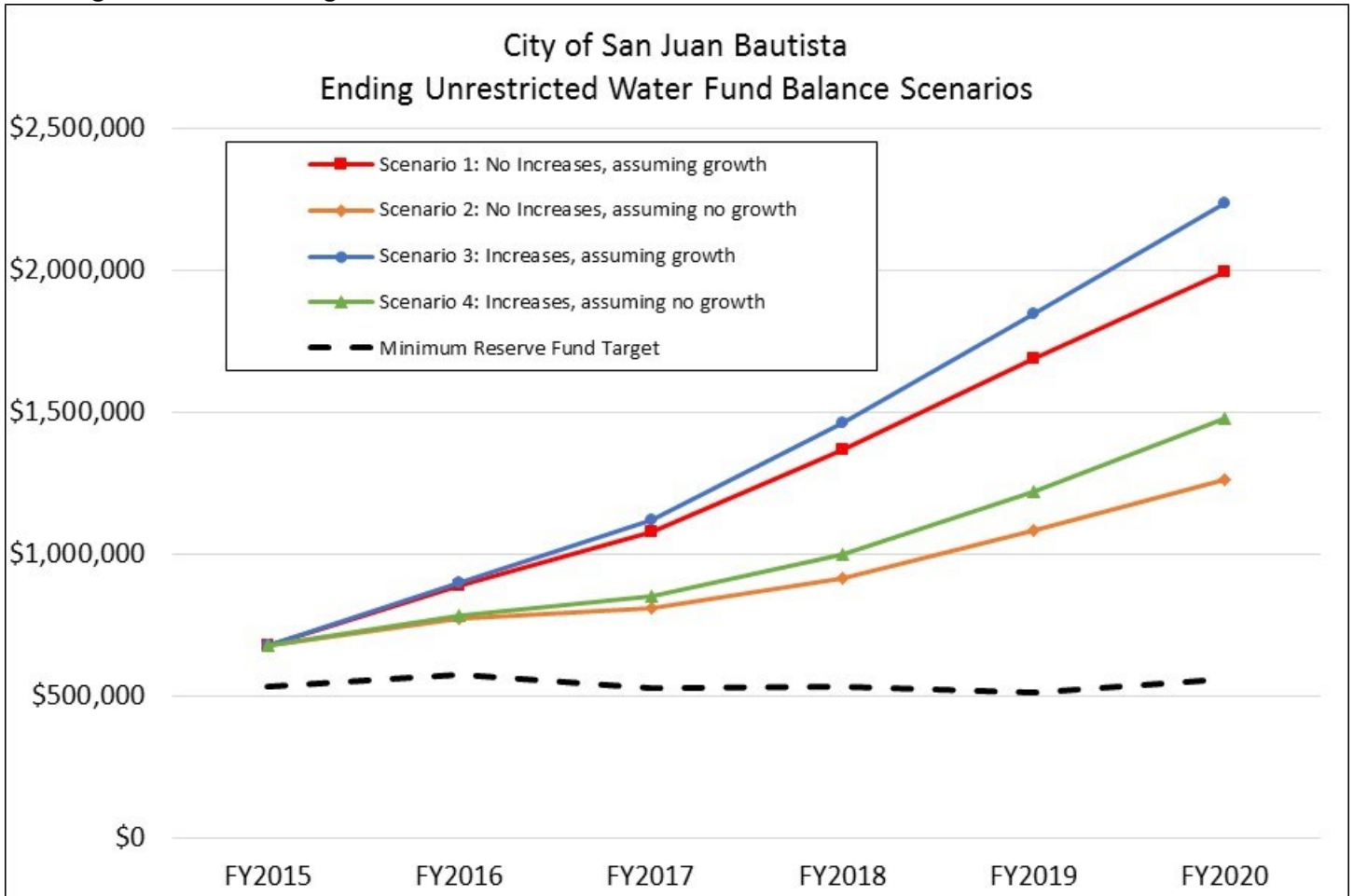
Table 20: Sample Sewer Bill Impacts
City of San Juan Bautista
Water and Sewer Rate Study

Sewer Sample Monthly Bill Impacts	Current	Proposed FY2016
Single-family residence	\$77.61	\$78.77
Commercial - Standard Strength 10,000 gallons		
Base	\$78.00	\$79.17
<u>Variable - rate x 10</u>	<u>\$84.50</u>	<u>\$85.77</u>
Total	\$162.50	\$164.94
Commercial - Moderate Strength 10,000 gallons		
Base	\$78.00	\$79.17
<u>Variable - rate x 10</u>	<u>\$126.50</u>	<u>\$128.40</u>
Total	\$204.50	\$207.57
Commercial - High Strength 10,000 gallons		
Base	\$78.00	\$79.17
<u>Variable - rate x 10</u>	<u>\$168.80</u>	<u>\$171.33</u>
Total	\$246.80	\$250.50

3.9 Ending Fund Balances

Figure 8 chart compares the projected ending unrestricted-fund balance reserves. As shown, minimum reserve fund targets will be met from FY2015 – FY2020.

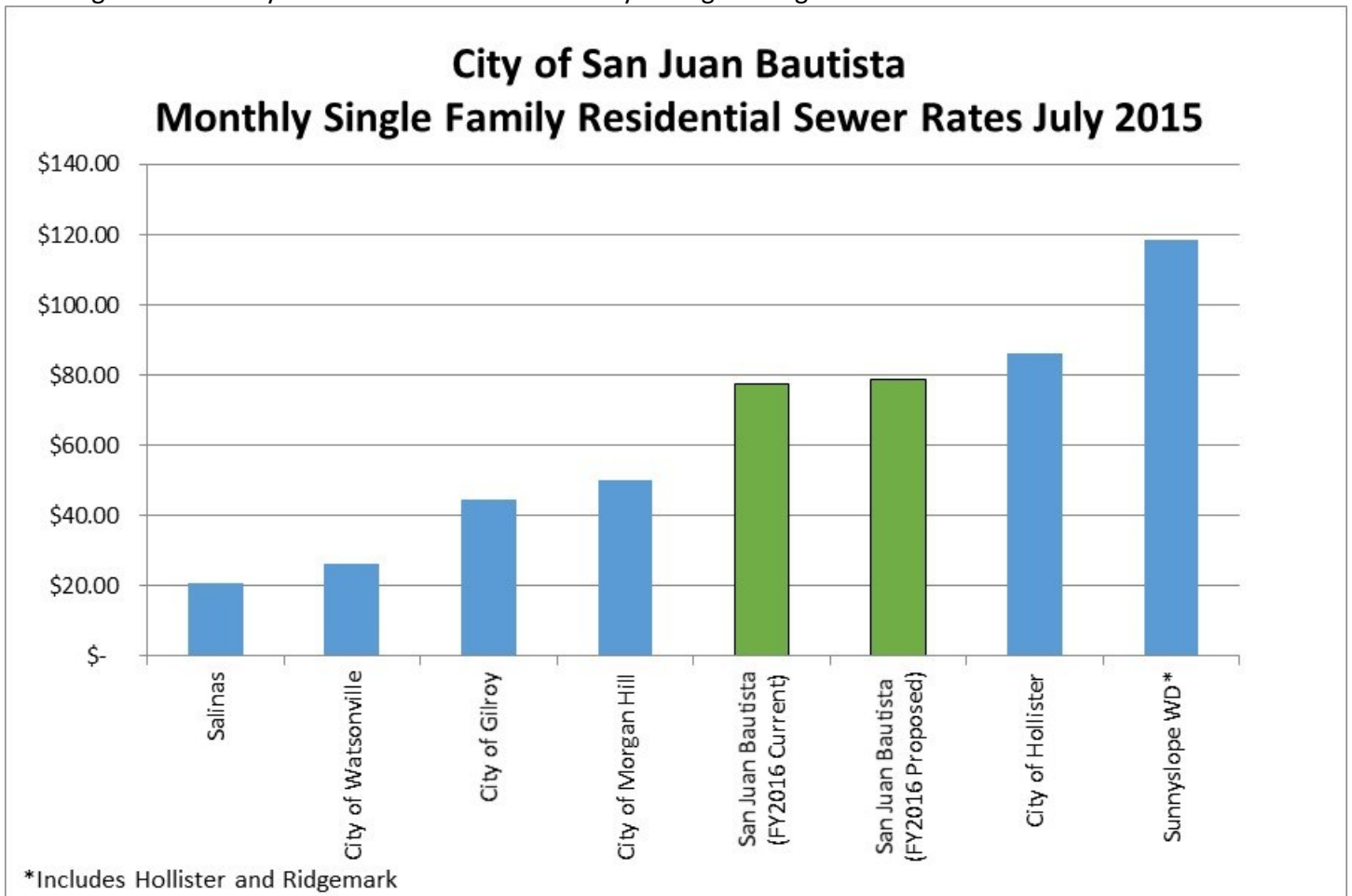
Figure 8: Sewer Ending Fund Balance



3.10 Regional Sewer Rate Survey

For comparison purposes, Figure 9 shows the City's current and proposed sewer rates relative to those of other regional agencies for a single family home paying a flat residential rate. As shown on the chart, the proposed sewer rate slightly increase in FY2016 for residential customers. The City's residential sewer charges will remain high for the region.

Figure 9: Monthly Residential Sewer Rate Survey of Regional Agencies



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APPENDIX A

Water Rate Study Tables

Table 21: Water Expenses
City of San Juan Bautista
Water and Sewer Rate Study

	Projected FY2015	Escalation Factor	Projected									
			FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Operating Expenses												
Contractual services and utilities	\$142,928	3%	\$147,000	\$156,000	\$161,000	\$166,000	\$171,000	\$176,000	\$181,000	\$186,000	\$192,000	\$198,000
Personnel	32,489	3%	33,000	35,000	36,000	37,000	38,000	39,000	40,000	41,000	42,000	43,000
<u>Supplies, materials and repairs</u>	<u>16,400</u>	3%	<u>17,000</u>	<u>18,000</u>	<u>19,000</u>	<u>20,000</u>	<u>21,000</u>	<u>22,000</u>	<u>23,000</u>	<u>24,000</u>	<u>25,000</u>	<u>26,000</u>
Total Operating Expenses	191,817		197,000	209,000	216,000	223,000	230,000	237,000	244,000	251,000	259,000	267,000
Nonoperating Expenses												
Purchase of Property, Plant and Equipment	22,500	3 year avg	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000
Transfers	55,631	-	56,000	56,000	56,000	56,000	56,000	56,000	56,000	56,000	56,000	56,000
Debt	514,586	-	526,702	530,251	507,013	426,529	424,765	424,765	424,765	424,765	424,765	425,437
<u>CIP</u>	<u>91,000</u>	-	<u>654,000</u>	<u>432,000</u>	<u>96,000</u>	<u>82,000</u>	<u>121,000</u>	<u>132,000</u>	<u>277,000</u>	<u>277,000</u>	<u>277,000</u>	<u>277,000</u>
Total Nonoperating Expenses	683,717		1,259,702	1,041,251	682,013	587,529	624,765	635,765	780,765	780,765	780,765	781,437
Total Expenses	875,534		1,457,000	1,250,000	898,000	811,000	855,000	873,000	1,025,000	1,032,000	1,040,000	1,048,000

Table 22: Detailed Water CIP
City of San Juan Bautista
Water and Sewer Rate Study

Project Title	Projected					Total
	FY2016	FY2017	FY2018	FY2019	FY2020	
New Water Well no. 4	\$160,000					\$160,000
New 6" Water line Fifth Street	22,000					22,000
New 8" Water line Second Street					66,000	66,000
New 12" Water line The Alameda to Lang St			40,000	40,000		80,000
New 8" Water line Muckelemi St.					38,000	38,000
Fence and security system Well no. 1		15,000				15,000
Construct Water softening plant	455,000	400,000				855,000
Portable Generator 75 kw						47,000
Fire Hydrants downtown area	17,000	17,000	17,000	17,000	17,000	119,000
Telemetry and monitoring system			39,000			39,000
Well no. 1 Improvement upgrades				25,000		25,000
Well no. 2 Improvement upgrades						12,000
Well no. 3 Improvement upgrades						15,000
<u>New 8" Water line Mission Vineyard Rd</u>						<u>115,000</u>
Total	654,000	\$432,000	\$96,000	\$82,000	\$121,000	1,385,000
Five-year average CIP						\$ 277,000

Source: Capital Improvement Water System 2015

Table 23: Water Cash Flow – Scenario 1: No Rate Increases, Assuming Growth

Scenario 1	Budget FY2015	Projected									
		FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Assumptions:											
Revenue Requirement Adjustment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Monthly SFR Bill (5/8", 3 ccf)	\$56.15	\$56.15	\$56.15	\$56.15	\$56.15	\$56.15	\$57.27	\$58.42	\$59.59	\$60.78	\$61.99
Annual \$ Rate Increase - \$	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.12	\$1.15	\$1.17	\$1.19	\$1.22
Interest Earnings Rate	1.00%	1.00%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth (86 lots)	0.0%	3.6%	3.5%	3.4%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash Position (Beginning of year)	\$883,430	\$895,385	\$600,540	\$537,147	\$852,992	\$1,110,321	\$1,198,414	\$1,287,508	\$1,243,601	\$1,209,694	\$1,186,787
Operating Revenue											
Charges for services	<u>783,500</u>	<u>812,000</u>	<u>840,000</u>	<u>868,000</u>	<u>880,000</u>	<u>880,000</u>	<u>898,000</u>	<u>916,000</u>	<u>934,000</u>	<u>953,000</u>	<u>972,000</u>
Total Operating Revenue	783,500	812,000	840,000	868,000	880,000	880,000	898,000	916,000	934,000	953,000	972,000
Operating Expenses											
Contractual services and utilities	142,928	147,000	156,000	161,000	166,000	171,000	176,000	181,000	186,000	192,000	198,000
Personnel	32,489	33,000	35,000	36,000	37,000	38,000	39,000	40,000	41,000	42,000	43,000
Supplies, materials and repairs	<u>16,400</u>	<u>17,000</u>	<u>18,000</u>	<u>19,000</u>	<u>20,000</u>	<u>21,000</u>	<u>22,000</u>	<u>23,000</u>	<u>24,000</u>	<u>25,000</u>	<u>26,000</u>
Total Operating Expenses	191,817	197,000	209,000	216,000	223,000	230,000	237,000	244,000	251,000	259,000	267,000
Nonoperating Revenue											
Connection Fees (86 lots)	0	289,000	289,000	289,000	127,000	0	0	0	0	0	0
Development impact fees	18,500	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000
Interest income	<u>53,000</u>	<u>9,000</u>	<u>6,000</u>	<u>5,000</u>	<u>9,000</u>	<u>11,000</u>	<u>12,000</u>	<u>13,000</u>	<u>12,000</u>	<u>12,000</u>	<u>12,000</u>
Total Nonoperating Revenue	71,500	317,000	314,000	313,000	155,000	30,000	31,000	32,000	31,000	31,000	31,000
Nonoperating Expenses											
Purchase of Property, Plant and Equipment	22,500	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000
Debt Principal	114,808	128,027	133,527	126,847	90,750	105,600	105,600	105,600	105,600	105,600	143,550
Debt Interest	<u>399,778</u>	<u>398,675</u>	<u>396,724</u>	<u>380,166</u>	<u>335,779</u>	<u>319,165</u>	<u>319,165</u>	<u>319,165</u>	<u>319,165</u>	<u>319,165</u>	<u>281,887</u>
Total Nonoperating Expenses	537,086	549,702	553,251	530,013	449,529	447,765	447,765	447,765	447,765	447,765	448,437
CIP	91,000	654,000	432,000	96,000	82,000	121,000	132,000	277,000	277,000	277,000	277,000
Operating Transfers											
Transfers In	0	400,000	0	0	0	0	0	0	0	0	0
Transfers Out	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>
Total Operating Transfers	23,142	423,142	23,142	23,142	23,142	23,142	23,142	23,142	23,142	23,142	23,142
Total Revenues	855,000	1,129,000	1,154,000	1,181,000	1,035,000	910,000	929,000	948,000	965,000	984,000	1,003,000
Total Expenses	843,045	1,423,844	1,217,393	865,155	777,671	821,907	839,907	991,907	998,907	1,006,907	1,015,579
Surplus / (Deficit)	11,955	(294,844)	(63,393)	315,845	257,329	88,093	89,093	(43,907)	(33,907)	(22,907)	(12,579)
Reserve Fund Balance (Cash Position)											
Beginning of Year	883,430	895,385	600,540	537,147	852,992	1,110,321	1,198,414	1,287,508	1,243,601	1,209,694	1,186,787
End of Year	895,385	600,540	537,147	852,992	1,110,321	1,198,414	1,287,508	1,243,601	1,209,694	1,186,787	1,174,208
Cash Restricted (End of Year)	435,101	435,101	435,101	435,101	435,101	435,101	435,101	435,101	435,101	435,101	435,101
Cash Unrestricted (End of Year)	460,284	165,439	102,046	417,891	675,220	763,313	852,407	808,500	774,593	751,686	739,107
Debt Service Coverage - Min. 1.20	1.15	1.17	1.19	1.29	1.54	1.53	1.56	1.58	1.61	1.63	1.66
Debt Service Coverage Met	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Minimum Reserve Target (Unrestricted Cash)	1,045,750	838,000	516,000	516,000	561,000	572,000	726,000	735,000	744,000	753,500	763,000
Target met?	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No	No

Table 24: Water Cash Flow – Scenario 2: No Rate Increases, Assuming No Growth

Scenario 2	Budget FY2015*	Projected									
		FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Assumptions:											
Revenue Requirement Adjustment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Monthly SFR Bill (5/8", 3 ccf)	\$56.15	\$56.15	\$56.15	\$56.15	\$56.15	\$56.15	\$57.27	\$58.42	\$59.59	\$60.78	\$61.99
Annual \$ Rate Increase - \$	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.12	\$1.15	\$1.17	\$1.19	\$1.22
Interest Earnings Rate	1.00%	1.00%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth (86 lots)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash Position (Beginning of year)	\$883,430	\$895,385	\$683,540	\$276,147	\$216,992	\$244,321	\$227,414	\$208,508	\$53,601	(\$93,306)	(\$233,213)
Operating Revenue											
Charges for services	<u>783,500</u>	<u>784,000</u>	<u>784,000</u>	<u>784,000</u>	<u>784,000</u>	<u>784,000</u>	<u>800,000</u>	<u>816,000</u>	<u>832,000</u>	<u>849,000</u>	<u>866,000</u>
Total Operating Revenue	783,500	784,000	784,000	784,000	784,000	784,000	800,000	816,000	832,000	849,000	866,000
Operating Expenses											
Contractual services and utilities	142,928	147,000	156,000	161,000	166,000	171,000	176,000	181,000	186,000	192,000	198,000
Personnel	32,489	33,000	35,000	36,000	37,000	38,000	39,000	40,000	41,000	42,000	43,000
Supplies, materials and repairs	<u>16,400</u>	<u>17,000</u>	<u>18,000</u>	<u>19,000</u>	<u>20,000</u>	<u>21,000</u>	<u>22,000</u>	<u>23,000</u>	<u>24,000</u>	<u>25,000</u>	<u>26,000</u>
Total Operating Expenses	191,817	197,000	209,000	216,000	223,000	230,000	237,000	244,000	251,000	259,000	267,000
Nonoperating Revenue											
Connection Fees (86 lots)	0	0	0	0	0	0	0	0	0	0	0
Development impact fees	18,500	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000
Interest income	<u>53,000</u>	<u>9,000</u>	<u>7,000</u>	<u>3,000</u>	<u>2,000</u>	<u>2,000</u>	<u>2,000</u>	<u>2,000</u>	<u>1,000</u>	<u>(1,000)</u>	<u>(2,000)</u>
Total Nonoperating Revenue	71,500	28,000	26,000	22,000	21,000	21,000	21,000	21,000	20,000	18,000	17,000
Nonoperating Expenses											
Purchase of Property, Plant and Equipment	22,500	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000
Debt Principal	114,808	128,027	133,527	126,847	90,750	105,600	105,600	105,600	105,600	105,600	143,550
Debt Interest	<u>399,778</u>	<u>398,675</u>	<u>396,724</u>	<u>380,166</u>	<u>335,779</u>	<u>319,165</u>	<u>319,165</u>	<u>319,165</u>	<u>319,165</u>	<u>319,165</u>	<u>281,887</u>
Total Nonoperating Expenses	537,086	549,702	553,251	530,013	449,529	447,765	447,765	447,765	447,765	447,765	448,437
CIP	91,000	654,000	432,000	96,000	82,000	121,000	132,000	277,000	277,000	277,000	277,000
Operating Transfers											
Transfers In	0	400,000	0	0	0	0	0	0	0	0	0
Transfers Out***	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>
Total Operating Transfers	23,142	423,142	23,142	23,142	23,142	23,142	23,142	23,142	23,142	23,142	23,142
Total Revenues	855,000	1,212,000	810,000	806,000	805,000	805,000	821,000	837,000	852,000	867,000	883,000
Total Expenses	843,045	1,423,844	1,217,393	865,155	777,671	821,907	839,907	991,907	998,907	1,006,907	1,015,579
Surplus / (Deficit)	11,955	(211,844)	(407,393)	(59,155)	27,329	(16,907)	(18,907)	(154,907)	(146,907)	(139,907)	(132,579)
Reserve Fund Balance (Cash Position)											
Beginning of Year	883,430	895,385	683,540	276,147	216,992	244,321	227,414	208,508	53,601	(93,306)	(233,213)
End of Year	895,385	683,540	276,147	216,992	244,321	227,414	208,508	53,601	(93,306)	(233,213)	(365,792)
Cash Restricted (End of Year)	435,101	435,101	435,101	435,101	435,101	435,101	435,101	435,101	435,101	435,101	435,101
Cash Unrestricted (End of Year)	460,284	248,439	(158,954)	(218,109)	(190,780)	(207,687)	(226,593)	(381,500)	(528,407)	(668,314)	(800,893)
Debt Service Coverage - Min. 1.20	1.15	1.11	1.08	1.12	1.32	1.30	1.33	1.35	1.37	1.39	1.41
Debt Service Coverage Met	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Minimum Reserve Target (Unrestricted Cash)	1,045,750	824,000	488,000	474,000	513,000	524,000	677,000	685,000	693,000	701,500	710,000
Target met?	No	No	No	No	No	No	No	No	No	No	No

Table 25: Water Cash Flow – Scenario 3: Rate Increases, Assuming Growth

Scenario 3	Budget FY2015*	Projected									
		FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Assumptions:											
Revenue Requirement Adjustment	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Monthly SFR Bill (5/8", 3 ccf)	\$56.15	\$57.83	\$59.57	\$61.36	\$63.20	\$65.09	\$65.09	\$65.09	\$65.09	\$65.09	\$65.09
Annual \$ Rate Increase - \$	\$0.00	\$1.68	\$1.74	\$1.79	\$1.84	\$1.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Interest Earnings Rate	1.00%	1.00%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth (86 lots)	0.0%	3.6%	3.5%	3.4%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash Position (Beginning of year)	\$883,430	\$895,385	\$1,024,700	\$1,016,581	\$1,418,369	\$1,792,126	\$2,028,391	\$2,248,655	\$2,318,920	\$2,383,185	\$2,440,449
Operating Revenue											
<u>Charges for services</u>	<u>783,500</u>	<u>836,160</u>	<u>891,274</u>	<u>948,943</u>	<u>991,429</u>	<u>1,021,171</u>	<u>1,021,171</u>	<u>1,021,171</u>	<u>1,021,171</u>	<u>1,021,171</u>	<u>1,021,171</u>
Total Operating Revenue	783,500	836,160	891,274	948,943	991,429	1,021,171	1,021,171	1,021,171	1,021,171	1,021,171	1,021,171
Operating Expenses											
Contractual services and utilities	142,928	147,000	156,000	161,000	166,000	171,000	176,000	181,000	186,000	192,000	198,000
Personnel	32,489	33,000	35,000	36,000	37,000	38,000	39,000	40,000	41,000	42,000	43,000
<u>Supplies, materials and repairs</u>	<u>16,400</u>	<u>17,000</u>	<u>18,000</u>	<u>19,000</u>	<u>20,000</u>	<u>21,000</u>	<u>22,000</u>	<u>23,000</u>	<u>24,000</u>	<u>25,000</u>	<u>26,000</u>
Total Operating Expenses	191,817	197,000	209,000	216,000	223,000	230,000	237,000	244,000	251,000	259,000	267,000
Nonoperating Revenue											
Connection Fees (86 lots)	0	289,000	289,000	289,000	127,000	0	0	0	0	0	0
Development impact fees	18,500	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000
<u>Interest income</u>	<u>53,000</u>	<u>9,000</u>	<u>10,000</u>	<u>10,000</u>	<u>14,000</u>	<u>18,000</u>	<u>20,000</u>	<u>22,000</u>	<u>23,000</u>	<u>24,000</u>	<u>24,000</u>
Total Nonoperating Revenue	71,500	317,000	318,000	318,000	160,000	37,000	39,000	41,000	42,000	43,000	43,000
Nonoperating Expenses											
Purchase of Property, Plant and Equipment	22,500	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000
Debt Principal	114,808	128,027	133,527	126,847	90,750	105,600	105,600	105,600	105,600	105,600	143,550
<u>Debt Interest</u>	<u>399,778</u>	<u>398,675</u>	<u>396,724</u>	<u>380,166</u>	<u>335,779</u>	<u>319,165</u>	<u>319,165</u>	<u>319,165</u>	<u>319,165</u>	<u>319,165</u>	<u>281,887</u>
Total Nonoperating Expenses	537,086	549,702	553,251	530,013	449,529	447,765	447,765	447,765	447,765	447,765	448,437
CIP	91,000	654,000	432,000	96,000	82,000	121,000	132,000	277,000	277,000	277,000	277,000
Operating Transfers											
Transfers In	0	400,000	0	0	0	0	0	0	0	0	0
<u>Transfers Out</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>	<u>23,142</u>
Total Operating Transfers	23,142	423,142	23,142	23,142	23,142	23,142	23,142	23,142	23,142	23,142	23,142
Total Revenues	855,000	1,553,160	1,209,274	1,266,943	1,151,429	1,058,171	1,060,171	1,062,171	1,063,171	1,064,171	1,064,171
Total Expenses	843,045	1,423,844	1,217,393	865,155	777,671	821,907	839,907	991,907	998,907	1,006,907	1,015,579
Surplus / (Deficit)	11,955	129,315	(8,119)	401,788	373,758	236,265	220,265	70,265	64,265	57,265	48,592
Reserve Fund Balance (Cash Position)											
Beginning of Year	883,430	895,385	1,024,700	1,016,581	1,418,369	1,792,126	2,028,391	2,248,655	2,318,920	2,383,185	2,440,449
End of Year	895,385	1,024,700	1,016,581	1,418,369	1,792,126	2,028,391	2,248,655	2,318,920	2,383,185	2,440,449	2,489,041
Cash Restricted (End of Year)	435,101	435,101	435,101	435,101	435,101	435,101	435,101	435,101	435,101	435,101	435,101
Cash Unrestricted (End of Year)	460,284	589,599	581,480	983,268	1,357,025	1,593,290	1,813,554	1,883,819	1,948,084	2,005,348	2,053,940
Debt Service Coverage - Min. 1.20	1.15	1.21	1.29	1.45	1.80	1.86	1.85	1.83	1.81	1.79	1.77
<i>Debt Service Coverage Met</i>	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Minimum Reserve Target (Unrestricted Cash)	1,045,750	850,080	541,637	556,471	616,714	642,586	787,586	787,586	787,586	787,586	787,586
<i>Target met?</i>	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 26: Water Cash Flow – Scenario 4: Rate Increases, Assuming No Growth

Scenario 4	Budget FY2015	Projected									
		FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Assumptions:											
Revenue Requirement Adjustment	0.0%	8.0%	8.0%	8.0%	8.0%	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Monthly SFR Bill (5/8", 3 ccf)	\$56.15	\$60.64	\$65.49	\$70.73	\$76.39	\$82.50	\$82.50	\$82.50	\$82.50	\$82.50	\$82.50
Annual \$ Rate Increase - \$	\$0.00	\$4.49	\$4.85	\$5.24	\$5.66	\$6.11	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Interest Earnings Rate	1.00%	1.00%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth (86 lots)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash Position (Beginning of year)	\$883,430	\$895,385	\$745,720	\$468,201	\$614,031	\$927,303	\$1,284,615	\$1,627,927	\$1,822,238	\$2,011,550	\$2,194,862
Operating Revenue											
Charges for services	783,500	846,180	913,874	986,984	1,065,943	1,151,219	1,151,219	1,151,219	1,151,219	1,151,219	1,151,219
Total Operating Revenue	783,500	846,180	913,874	986,984	1,065,943	1,151,219	1,151,219	1,151,219	1,151,219	1,151,219	1,151,219
Operating Expenses											
Contractual services and utilities	142,928	147,000	156,000	161,000	166,000	171,000	176,000	181,000	186,000	192,000	198,000
Personnel	32,489	33,000	35,000	36,000	37,000	38,000	39,000	40,000	41,000	42,000	43,000
Supplies, materials and repairs	16,400	17,000	18,000	19,000	20,000	21,000	22,000	23,000	24,000	25,000	26,000
Total Operating Expenses	191,817	197,000	209,000	216,000	223,000	230,000	237,000	244,000	251,000	259,000	267,000
Nonoperating Revenue											
Connection Fees	0	0	0	0	0	0	0	0	0	0	0
Development impact fees	18,500	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000
Interest income	53,000	9,000	7,000	5,000	6,000	9,000	13,000	16,000	18,000	20,000	22,000
Total Nonoperating Revenue	71,500	28,000	26,000	24,000	25,000	28,000	32,000	35,000	37,000	39,000	41,000
Nonoperating Expenses											
Purchase of Property, Plant and Equipment	22,500	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000
Debt Principal	114,808	128,027	133,527	126,847	90,750	105,600	105,600	105,600	105,600	105,600	143,550
Debt Interest	399,778	398,675	396,724	380,166	335,779	319,165	319,165	319,165	319,165	319,165	281,887
Total Nonoperating Expenses	537,086	549,702	553,251	530,013	449,529	447,765	447,765	447,765	447,765	447,765	448,437
CIP	91,000	654,000	432,000	96,000	82,000	121,000	132,000	277,000	277,000	277,000	277,000
Operating Transfers											
Transfers In	0	400,000	0	0	0	0	0	0	0	0	0
Transfers Out	23,142	23,142	23,142	23,142	23,142	23,142	23,142	23,142	23,142	23,142	23,142
Total Operating Transfers	23,142	423,142	23,142	23,142	23,142	23,142	23,142	23,142	23,142	23,142	23,142
Total Revenues	855,000	1,274,180	939,874	1,010,984	1,090,943	1,179,219	1,183,219	1,186,219	1,188,219	1,190,219	1,192,219
Total Expenses	843,045	1,423,844	1,217,393	865,155	777,671	821,907	839,907	991,907	998,907	1,006,907	1,015,579
Surplus / (Deficit)	11,955	(149,664)	(277,519)	145,830	313,272	357,312	343,312	194,312	189,312	183,312	176,639
Reserve Fund Balance (Cash Position)											
Beginning of Year	883,430	895,385	745,720	468,201	614,031	927,303	1,284,615	1,627,927	1,822,238	2,011,550	2,194,862
End of Year	895,385	745,720	468,201	614,031	927,303	1,284,615	1,627,927	1,822,238	2,011,550	2,194,862	2,371,501
Cash Restricted (End of Year)	435,101	435,101	435,101	435,101	435,101	435,101	435,101	435,101	435,101	435,101	435,101
Cash Unrestricted (End of Year)	460,284	310,619	33,100	178,930	492,202	849,514	1,192,826	1,387,137	1,576,449	1,759,761	1,936,400
Debt Service Coverage - Min. 1.20	1.15	1.23	1.33	1.52	1.98	2.17	2.15	2.14	2.12	2.10	2.08
Debt Service Coverage Met	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Minimum Reserve Target (Unrestricted Cash)	1,045,750	855,090	552,937	575,492	653,972	707,609	852,609	852,609	852,609	852,609	852,609
Target met?	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes

APPENDIX B

Sewer Rate Study Tables

Table 27: Sewer Expenses
City of San Juan Bautista
Water and Sewer Rate Study

	FY2015	Escalation Factor	Projected									
			FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Operating Expenses												
Contractual services and utilities	\$192,767	3%	\$199,000	\$211,000	\$217,000	\$224,000	\$231,000	\$238,000	\$245,000	\$252,000	\$260,000	\$268,000
Personnel	\$16,710	3%	17,000	18,000	19,000	20,000	21,000	22,000	23,000	24,000	25,000	26,000
<u>Supplies, materials and repairs</u>	<u>\$33,487</u>	3%	<u>34,000</u>	<u>36,000</u>	<u>37,000</u>	<u>38,000</u>	<u>39,000</u>	<u>40,000</u>	<u>41,000</u>	<u>42,000</u>	<u>43,000</u>	<u>44,000</u>
Total Operating Expenses	242,964		250,000	265,000	273,000	282,000	291,000	300,000	309,000	318,000	328,000	338,000
Nonoperating Expenses												
Purchase of Property, Plant and Equipment	12,000	3 year avg	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Transfers	36,310	-	58,654	60,400	62,250	64,100	66,050	62,291	62,291	62,291	62,291	62,291
Debt	421,025	-	430,938	433,842	414,829	348,978	347,535	347,535	347,535	347,535	347,535	348,085
<u>CIP</u>	<u>30,000</u>	-	<u>80,000</u>	<u>115,000</u>	<u>60,000</u>	<u>55,000</u>	<u>30,000</u>	<u>68,000</u>	<u>68,000</u>	<u>68,000</u>	<u>68,000</u>	<u>68,000</u>
Total Nonoperating Expenses	381,348		579,592	619,242	547,079	478,078	453,585	487,826	487,826	487,826	487,826	488,376
Total Expenses	624,312		830,000	884,000	820,000	760,000	745,000	788,000	797,000	806,000	816,000	826,000

Table 28: Detailed Sewer CIP
City of San Juan Bautista
Water and Sewer Rate Study

Project Title	FY2015	Projected					Total
		FY2016	FY2017	FY2018	FY2019	FY2020	
Sanitary Sewer Sludge Removal	30,000	\$30,000	\$60,000	-	-	-	\$120,000
Sanitary Sewer Main Extension	-	50,000	45,000	35,000	-	-	130,000
Lang Street Extension	-	-	10,000	-	-	-	10,000
Lang Court Sewer Extension	-	-	-	25,000	55,000	-	80,000
<u>Sewer Main Extension</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>30,000</u>	<u>30,000</u>
Total	\$30,000	\$80,000	\$115,000	\$60,000	\$55,000	\$30,000	\$370,000
Five year average							\$ 68,000

Table 29: Sewer Cash Flow – Scenario 1: No Rate Increases, Assuming Growth

Sewer Scenario 1	Budget FY2015	Projected									
		FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Assumptions:											
Revenue Requirement Adjustment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Monthly SFR Bill (1 EDU, Residential)	\$77.61	\$77.61	\$77.61	\$77.61	\$77.61	\$77.61	\$77.61	\$77.61	\$77.61	\$77.61	\$77.61
Annual \$ Rate Increase - \$	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Interest Earnings Rate	1.00%	1.00%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth (86 lots)	0.0%	3.7%	3.6%	3.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash Position (Beginning of year)	\$863,892	\$1,034,593	\$1,243,650	\$1,434,058	\$1,724,630	\$2,047,478	\$2,352,893	\$2,619,067	\$2,878,242	\$3,131,416	\$3,376,590
Operating Revenue											
Total Operating Revenue	913,000	947,000	981,000	1,015,000	1,030,000	1,030,000	1,030,000	1,030,000	1,030,000	1,030,000	1,030,000
Operating Expenses											
Contractual services and utilities	192,767	199,000	211,000	217,000	224,000	231,000	238,000	245,000	252,000	260,000	268,000
Personnel	16,710	17,000	18,000	19,000	20,000	21,000	22,000	23,000	24,000	25,000	26,000
<u>Supplies, materials and repairs</u>	<u>33,487</u>	<u>34,000</u>	<u>36,000</u>	<u>37,000</u>	<u>38,000</u>	<u>39,000</u>	<u>40,000</u>	<u>41,000</u>	<u>42,000</u>	<u>43,000</u>	<u>44,000</u>
Total Operating Expenses	242,964	250,000	265,000	273,000	282,000	291,000	300,000	309,000	318,000	328,000	338,000
Nonoperating Revenue											
Connection Fees (86 lots)	0	81,650	81,650	81,650	35,926	0	0	0	0	0	0
<u>Interest income</u>	<u>0</u>	<u>10,000</u>	<u>12,000</u>	<u>14,000</u>	<u>17,000</u>	<u>20,000</u>	<u>24,000</u>	<u>26,000</u>	<u>29,000</u>	<u>31,000</u>	<u>34,000</u>
Total Nonoperating Revenue	0	91,650	93,650	95,650	52,926	20,000	24,000	26,000	29,000	31,000	34,000
Nonoperating Expenses											
Purchase of Property, Plant and Equipment	12,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Debt Principal	93,934	104,749	109,250	103,784	74,250	86,400	86,400	86,400	86,400	86,400	117,450
<u>Debt Interest</u>	<u>327,091</u>	<u>326,189</u>	<u>324,593</u>	<u>311,045</u>	<u>274,728</u>	<u>261,135</u>	<u>261,135</u>	<u>261,135</u>	<u>261,135</u>	<u>261,135</u>	<u>230,635</u>
Total Nonoperating Expenses	433,025	440,938	443,842	424,829	358,978	357,535	357,535	357,535	357,535	357,535	358,085
CIP	30,000	80,000	115,000	60,000	55,000	30,000	68,000	68,000	68,000	68,000	68,000
Operating Transfers											
Transfers In	0	0	0	0	0	0	0	0	0	0	0
<u>Transfers Out</u>	<u>36,310</u>	<u>58,654</u>	<u>60,400</u>	<u>62,250</u>	<u>64,100</u>	<u>66,050</u>	<u>62,291</u>	<u>62,291</u>	<u>62,291</u>	<u>62,291</u>	<u>62,291</u>
Total Operating Transfers	36,310	58,654	60,400	62,250	64,100	66,050	62,291	62,291	62,291	62,291	62,291
Total Revenues	913,000	1,038,650	1,074,650	1,110,650	1,082,926	1,050,000	1,054,000	1,056,000	1,059,000	1,061,000	1,064,000
Total Expenses	742,299	829,592	884,242	820,079	760,078	744,585	787,826	796,826	805,826	815,826	826,376
Surplus / (Deficit)	170,701	209,058	190,408	290,571	322,848	305,415	266,174	259,174	253,174	245,174	237,624
Cash Position											
Beginning of Year	863,892	1,034,593	1,243,650	1,434,058	1,724,630	2,047,478	2,352,893	2,619,067	2,878,242	3,131,416	3,376,590
End of Year	1,034,593	1,243,650	1,434,058	1,724,630	2,047,478	2,352,893	2,619,067	2,878,242	3,131,416	3,376,590	3,614,215
Cash Restricted (End of Year)	355,992	355,992	355,992	355,992	355,992	355,992	355,992	355,992	355,992	355,992	355,992
Cash Unrestricted (End of Year)	678,601	887,659	1,078,067	1,368,638	1,691,486	1,996,901	2,263,075	2,522,250	2,775,424	3,020,598	3,258,223
Debt Service Coverage - Min. 1.20	1.59	1.62	1.65	1.79	2.14	2.13	2.10	2.07	2.05	2.02	1.99
Debt Service Coverage Met	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Minimum Unrestricted Reserve Target	536,500	588,500	550,500	562,500	545,000	583,000	583,000	583,000	583,000	583,000	515,000
Target met?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 30: Sewer Cash Flow – Scenario 2: No Rate Increases, Assuming No Growth

Sewer Scenario 2	Budget FY2015	Projected									
		FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Assumptions:											
Revenue Requirement Adjustment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Monthly SFR Bill (1 EDU, Residential)	\$77.61	\$77.61	\$77.61	\$77.61	\$77.61	\$77.61	\$77.61	\$77.61	\$77.61	\$77.61	\$77.61
Annual \$ Rate Increase - \$	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Interest Earnings Rate	1.00%	1.00%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth (86 lots)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash Position (Beginning of year)	\$863,892	\$1,034,593	\$1,128,000	\$1,167,758	\$1,272,680	\$1,438,602	\$1,621,017	\$1,762,191	\$1,896,366	\$2,022,540	\$2,139,714
Operating Revenue											
Total Operating Revenue	913,000	913,000	913,000	913,000	913,000	913,000	913,000	913,000	913,000	913,000	913,000
Operating Expenses											
Contractual services and utilities	192,767	199,000	211,000	217,000	224,000	231,000	238,000	245,000	252,000	260,000	268,000
Personnel	16,710	17,000	18,000	19,000	20,000	21,000	22,000	23,000	24,000	25,000	26,000
<u>Supplies, materials and repairs</u>	<u>33,487</u>	<u>34,000</u>	<u>36,000</u>	<u>37,000</u>	<u>38,000</u>	<u>39,000</u>	<u>40,000</u>	<u>41,000</u>	<u>42,000</u>	<u>43,000</u>	<u>44,000</u>
Total Operating Expenses	242,964	250,000	265,000	273,000	282,000	291,000	300,000	309,000	318,000	328,000	338,000
Nonoperating Revenue											
Connection Fees (86 lots)	0	0	0	0	0	0	0	0	0	0	0
<u>Interest income</u>	<u>0</u>	<u>10,000</u>	<u>11,000</u>	<u>12,000</u>	<u>13,000</u>	<u>14,000</u>	<u>16,000</u>	<u>18,000</u>	<u>19,000</u>	<u>20,000</u>	<u>21,000</u>
Total Nonoperating Revenue	0	10,000	11,000	12,000	13,000	14,000	16,000	18,000	19,000	20,000	21,000
Nonoperating Expenses											
Purchase of Property, Plant and Equipment	12,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Debt Principal	93,934	104,749	109,250	103,784	74,250	86,400	86,400	86,400	86,400	86,400	117,450
<u>Debt Interest</u>	<u>327,091</u>	<u>326,189</u>	<u>324,593</u>	<u>311,045</u>	<u>274,728</u>	<u>261,135</u>	<u>261,135</u>	<u>261,135</u>	<u>261,135</u>	<u>261,135</u>	<u>230,635</u>
Total Nonoperating Expenses	433,025	440,938	443,842	424,829	358,978	357,535	357,535	357,535	357,535	357,535	358,085
CIP	30,000	80,000	115,000	60,000	55,000	30,000	68,000	68,000	68,000	68,000	68,000
Operating Transfers											
Transfers In	0	0	0	0	0	0	0	0	0	0	0
<u>Transfers Out</u>	<u>36,310</u>	<u>58,654</u>	<u>60,400</u>	<u>62,250</u>	<u>64,100</u>	<u>66,050</u>	<u>62,291</u>	<u>62,291</u>	<u>62,291</u>	<u>62,291</u>	<u>62,291</u>
Total Operating Transfers	36,310	58,654	60,400	62,250	64,100	66,050	62,291	62,291	62,291	62,291	62,291
Total Revenues	913,000	923,000	924,000	925,000	926,000	927,000	929,000	931,000	932,000	933,000	934,000
Total Expenses	742,299	829,592	884,242	820,079	760,078	744,585	787,826	796,826	805,826	815,826	826,376
Surplus / (Deficit)	170,701	93,408	39,758	104,921	165,922	182,415	141,174	134,174	126,174	117,174	107,624
Cash Position											
Beginning of Year	863,892	1,034,593	1,128,000	1,167,758	1,272,680	1,438,602	1,621,017	1,762,191	1,896,366	2,022,540	2,139,714
End of Year	1,034,593	1,128,000	1,167,758	1,272,680	1,438,602	1,621,017	1,762,191	1,896,366	2,022,540	2,139,714	2,247,339
Cash Restricted (End of Year)	355,992	355,992	355,992	355,992	355,992	355,992	355,992	355,992	355,992	355,992	355,992
Cash Unrestricted (End of Year)	678,601	772,009	811,767	916,688	1,082,610	1,265,025	1,406,199	1,540,374	1,666,548	1,783,722	1,891,347
Debt Service Coverage - Min. 1.20	1.59	1.54	1.49	1.54	1.81	1.79	1.76	1.74	1.71	1.68	1.65
<i>Debt Service Coverage Met</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Minimum Reserve Target	536,500	571,500	516,500	511,500	486,500	524,500	524,500	524,500	524,500	524,500	524,500
<i>Target met?</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 31: Sewer Cash Flow – Scenario 3: Rate Increases, Assuming Growth

Sewer Scenario 3	Budget FY2015	Projected									
		FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Assumptions:											
Revenue Requirement Adjustment	0.0%	1.5%	1.5%	1.5%	1.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Monthly SFR Bill (1 EDU, Residential)	\$77.61	\$78.77	\$79.96	\$81.16	\$82.37	\$83.61	\$83.61	\$83.61	\$83.61	\$83.61	\$83.61
Annual \$ Rate Increase - \$	\$0.00	\$1.16	\$1.18	\$1.20	\$1.22	\$1.24	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Interest Earnings Rate	1.00%	1.00%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth (86 lots)	0.0%	3.7%	3.6%	3.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash Position (Beginning of year)	\$863,892	\$1,034,593	\$1,257,650	\$1,479,058	\$1,817,630	\$2,205,478	\$2,592,893	\$2,941,067	\$3,283,242	\$3,620,416	\$3,950,590
Operating Revenue											
Total Operating Revenue	913,000	961,000	1,011,000	1,062,000	1,094,000	1,110,000	1,110,000	1,110,000	1,110,000	1,110,000	1,110,000
Operating Expenses											
Contractual services and utilities	192,767	199,000	211,000	217,000	224,000	231,000	238,000	245,000	252,000	260,000	268,000
Personnel	16,710	17,000	18,000	19,000	20,000	21,000	22,000	23,000	24,000	25,000	26,000
<u>Supplies, materials and repairs</u>	<u>33,487</u>	<u>34,000</u>	<u>36,000</u>	<u>37,000</u>	<u>38,000</u>	<u>39,000</u>	<u>40,000</u>	<u>41,000</u>	<u>42,000</u>	<u>43,000</u>	<u>44,000</u>
Total Operating Expenses	242,964	250,000	265,000	273,000	282,000	291,000	300,000	309,000	318,000	328,000	338,000
Nonoperating Revenue											
Connection Fees (86 lots)	0	81,650	81,650	81,650	35,926	0	0	0	0	0	0
<u>Interest income</u>	<u>0</u>	<u>10,000</u>	<u>13,000</u>	<u>15,000</u>	<u>18,000</u>	<u>22,000</u>	<u>26,000</u>	<u>29,000</u>	<u>33,000</u>	<u>36,000</u>	<u>40,000</u>
Total Nonoperating Revenue	0	91,650	94,650	96,650	53,926	22,000	26,000	29,000	33,000	36,000	40,000
Nonoperating Expenses											
Purchase of Property, Plant and Equipment	12,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Debt Principal	93,934	104,749	109,250	103,784	74,250	86,400	86,400	86,400	86,400	86,400	117,450
<u>Debt Interest</u>	<u>327,091</u>	<u>326,189</u>	<u>324,593</u>	<u>311,045</u>	<u>274,728</u>	<u>261,135</u>	<u>261,135</u>	<u>261,135</u>	<u>261,135</u>	<u>261,135</u>	<u>230,635</u>
Total Nonoperating Expenses	433,025	440,938	443,842	424,829	358,978	357,535	357,535	357,535	357,535	357,535	358,085
CIP	30,000	80,000	115,000	60,000	55,000	30,000	68,000	68,000	68,000	68,000	68,000
Operating Transfers											
Transfers In	0	0	0	0	0	0	0	0	0	0	0
<u>Transfers Out</u>	<u>36,310</u>	<u>58,654</u>	<u>60,400</u>	<u>62,250</u>	<u>64,100</u>	<u>66,050</u>	<u>62,291</u>	<u>62,291</u>	<u>62,291</u>	<u>62,291</u>	<u>62,291</u>
Total Operating Transfers	36,310	58,654	60,400	62,250	64,100	66,050	62,291	62,291	62,291	62,291	62,291
Total Revenues	913,000	1,052,650	1,105,650	1,158,650	1,147,926	1,132,000	1,136,000	1,139,000	1,143,000	1,146,000	1,150,000
Total Expenses	742,299	829,592	884,242	820,079	760,078	744,585	787,826	796,826	805,826	815,826	826,376
Surplus / (Deficit)	170,701	223,058	221,408	338,571	387,848	387,415	348,174	342,174	337,174	330,174	323,624
Cash Position											
Beginning of Year	863,892	1,034,593	1,257,650	1,479,058	1,817,630	2,205,478	2,592,893	2,941,067	3,283,242	3,620,416	3,950,590
End of Year	1,034,593	1,257,650	1,479,058	1,817,630	2,205,478	2,592,893	2,941,067	3,283,242	3,620,416	3,950,590	4,274,215
Cash Restricted (End of Year)	355,992	355,992	355,992	355,992	355,992	355,992	355,992	355,992	355,992	355,992	355,992
Cash Unrestricted (End of Year)	678,601	901,659	1,123,067	1,461,638	1,849,486	2,236,901	2,585,075	2,927,250	3,264,424	3,594,598	3,918,223
Debt Service Coverage - Min. 1.20	1.59	1.65	1.72	1.90	2.33	2.36	2.33	2.30	2.28	2.25	2.22
<i>Debt Service Coverage Met</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Minimum Reserve Target	536,500	595,500	565,500	586,000	577,000	623,000	623,000	623,000	623,000	623,000	555,000
<i>Target met?</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 32: Sewer Cash Flow – Scenario 4: Rate Increases, Assuming No Growth

Sewer Scenario 4	Budget FY2015	Projected									
		FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Assumptions:											
Revenue Requirement Adjustment	0.0%	1.5%	1.5%	1.5%	1.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Monthly SFR Bill (1 EDU, Residential)	\$77.61	\$78.77	\$79.96	\$81.16	\$82.37	\$83.61	\$83.61	\$83.61	\$83.61	\$83.61	\$83.61
Annual \$ Rate Increase - \$	\$0.00	\$1.16	\$1.18	\$1.20	\$1.22	\$1.24	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Interest Earnings Rate	1.00%	1.00%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth (86 lots)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash Position (Beginning of year)	\$863,892	\$1,034,593	\$1,142,000	\$1,209,758	\$1,356,680	\$1,579,602	\$1,835,017	\$2,049,191	\$2,256,366	\$2,457,540	\$2,650,714
Operating Revenue											
Total Operating Revenue	913,000	927,000	941,000	955,000	969,000	984,000	984,000	984,000	984,000	984,000	984,000
Operating Expenses											
Contractual services and utilities	192,767	199,000	211,000	217,000	224,000	231,000	238,000	245,000	252,000	260,000	268,000
Personnel	16,710	17,000	18,000	19,000	20,000	21,000	22,000	23,000	24,000	25,000	26,000
<u>Supplies, materials and repairs</u>	<u>33,487</u>	<u>34,000</u>	<u>36,000</u>	<u>37,000</u>	<u>38,000</u>	<u>39,000</u>	<u>40,000</u>	<u>41,000</u>	<u>42,000</u>	<u>43,000</u>	<u>44,000</u>
Total Operating Expenses	242,964	250,000	265,000	273,000	282,000	291,000	300,000	309,000	318,000	328,000	338,000
Nonoperating Revenue											
Connection Fees (86 lots)	0	0	0	0	0	0	0	0	0	0	0
<u>Interest income</u>	<u>0</u>	<u>10,000</u>	<u>11,000</u>	<u>12,000</u>	<u>14,000</u>	<u>16,000</u>	<u>18,000</u>	<u>20,000</u>	<u>23,000</u>	<u>25,000</u>	<u>27,000</u>
Total Nonoperating Revenue	0	10,000	11,000	12,000	14,000	16,000	18,000	20,000	23,000	25,000	27,000
Nonoperating Expenses											
Purchase of Property, Plant and Equipment	12,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Debt Principal	93,934	104,749	109,250	103,784	74,250	86,400	86,400	86,400	86,400	86,400	117,450
<u>Debt Interest</u>	<u>327,091</u>	<u>326,189</u>	<u>324,593</u>	<u>311,045</u>	<u>274,728</u>	<u>261,135</u>	<u>261,135</u>	<u>261,135</u>	<u>261,135</u>	<u>261,135</u>	<u>230,635</u>
Total Nonoperating Expenses	433,025	440,938	443,842	424,829	358,978	357,535	357,535	357,535	357,535	357,535	358,085
CIP	30,000	80,000	115,000	60,000	55,000	30,000	68,000	68,000	68,000	68,000	68,000
Operating Transfers											
Transfers In											
<u>Transfers Out</u>	<u>36,310</u>	<u>58,654</u>	<u>60,400</u>	<u>62,250</u>	<u>64,100</u>	<u>66,050</u>	<u>62,291</u>	<u>62,291</u>	<u>62,291</u>	<u>62,291</u>	<u>62,291</u>
Total Operating Transfers	36,310	58,654	60,400	62,250	64,100	66,050	62,291	62,291	62,291	62,291	62,291
Total Revenues	913,000	937,000	952,000	967,000	983,000	1,000,000	1,002,000	1,004,000	1,007,000	1,009,000	1,011,000
Total Expenses	742,299	829,592	884,242	820,079	760,078	744,585	787,826	796,826	805,826	815,826	826,376
Surplus / (Deficit)	170,701	107,408	67,758	146,921	222,922	255,415	214,174	207,174	201,174	193,174	184,624
Cash Position											
Beginning of Year	863,892	1,034,593	1,142,000	1,209,758	1,356,680	1,579,602	1,835,017	2,049,191	2,256,366	2,457,540	2,650,714
End of Year	1,034,593	1,142,000	1,209,758	1,356,680	1,579,602	1,835,017	2,049,191	2,256,366	2,457,540	2,650,714	2,835,339
Cash Restricted (End of Year)	355,992	355,992	355,992	355,992	355,992	355,992	355,992	355,992	355,992	355,992	355,992
Cash Unrestricted (End of Year)	678,601	786,009	853,767	1,000,688	1,223,610	1,479,025	1,693,199	1,900,374	2,101,548	2,294,722	2,479,347
Debt Service Coverage - Min. 1.20	1.59	1.57	1.56	1.64	1.97	1.99	1.97	1.94	1.92	1.89	1.86
<i>Debt Service Coverage Met</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Minimum Reserve Target	536,500	578,500	530,500	532,500	514,500	560,000	560,000	560,000	560,000	560,000	492,000
<i>Target met?</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes