

CITY OF OXNARD
PUBLIC WORKS INTEGRATED MASTER PLAN
DRAFT WATER COST OF SERVICE STUDY
FINAL
July 2017



CITY OF OXNARD
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COST OF SERVICE STUDY

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WATER COST OF SERVICE STUDY

1.0 INTRODUCTION

The City of Oxnard owns and operates a public water utility to serve its residential, commercial, industrial, institutional, and agricultural customers. The largest city in Ventura County, Oxnard has a population in excess of 200,000 people and a land area of nearly 27 square miles. The City services more than 40,000 customers, of which 88 percent are single and multi-family residential accounts.

This report presents revenue requirements, cost of service analysis, and utility rate design recommendations for the water utility of the City of Oxnard as a factual basis for establishing rates to support the capital and operating requirements of the water utility. The completed analysis and report support the City's financial goals:

- Maintain sufficient cash flows to meet current and projected increases in utility operations and maintenance.
- Finance capital improvements to rehabilitate facilities, increase operating efficiency, meet regulatory requirements, and expand system capacity to serve new development.
- Increase fund balances to target levels of the City Council adopted reserve policy (January 2016).
- Meet or exceed the bond coverage target of the City Council adopted coverage policy (January 2016).
- Increase the resilience of utility finances to address unexpected demands on utility operations and facilities.
- Adopt utility rate schedules and financial policies to provide for the equitable allocation of utility requirements to the City's ratepayers in keeping with the requirements of California law.

1.1 Background

The Water Utility is responsible for a system of water production, transmission, distribution and storage facilities, blending stations, and a water treatment facility to deliver potable water to City customers. In 2015, about 45 percent of the City's potable water supply was imported surface water from the Calleguas Municipal Water District, 25 percent of the water supply was from regional groundwater sources via the United Water Conservation District, and 30 percent was from the City's own wells. A portion of the water is treated by reverse osmosis at the City's Water Campus before entering the transmission and distribution system, where water from all sources is blended to provide consistent quality.

The City also owns and operates the Advanced Water Purification Facility (AWPF) that produces recycled water to supplement the City's water supply. With the connection of the River Ridge Golf Course, Pleasant Valley Water, and Southland Sod, recycled water sales began to ramp up in 2016. Recycled water deliveries are expected to continue to increase in FY 2017/18 as New Indy Paper, the River Park Development, and other smaller users connect to the system. Increased sales of recycled water provide benefits to the water utility as a whole through generating additional revenues, and when taken in lieu of potable water, freeing low cost potable supplies for other users and lessening reliance on more expensive imported water.

1.1.1 Cost of Service Study Background

The City completed a cost of service study for its Water, Wastewater, and Environmental Resources utilities in September of 2015. The water analysis was based on providing funding for the utility's capital improvements and the City's financial and operational goals as they were understood at that time. The proposed rate revenue increases consisted of a 15 percent increase for FY 2015/16, followed by a 12 increase on January 1, 2017, and 8 percent increases on January 1 of 2018, 2019, and 2020. The proposed rates also included several rate structure adjustments to account for changing consumption patterns since the current rate structure was adopted. The proposed rates as recommended in the September 2015 cost of service study were not adopted.

Since the completion of the last cost of service study, customer usage patterns have continued to shift, and the City has continued to evaluate operational and capital needs. Because of these changes, the City determined that it would need to revisit the cost of service study to develop updated proposed rates. This new cost of service study is based on the most up to date financial and capital planning data available from the City. The key differences between the plan set forth in the previous study and that of this study are the incorporation of updated financial information, a re-evaluated CIP, and re-evaluated operations and maintenance (O&M) costs.

1.2 Overview of Rate Setting Process

Cities perform periodic reviews of their utility finances and rates in order to ensure that resources are available to adequately and equitably fund utility operations, maintenance, and capital investments. In California, water rates must conform to cost of service requirements imposed by Proposition 218 and the State Constitution. The Proposition requires that water rates and other property related fees and charges do not exceed the reasonable and proportional cost of providing the service.

The rate setting process determines whether the existing rates adequately cover the utility's costs; allocates operating, maintenance, and capital costs to customer classes based on the burden they place on the system; and designs rates to allow for total cost recovery by incorporating the results of the cost of service study and calculating rates that do not

exceed the costs of providing the service. The rate setting process can be broken into three main components.

- 1) *Revenue Requirements*: The revenue requirement analysis compares the revenues received for providing the services to the operating and capital costs associated with providing the services to determine the adequacy of the existing rates to recover the full costs. If current rates are insufficient to cover costs, the revenue requirement analysis is used to determine the appropriate amount of rate revenue necessary to fully cover expenses and other obligations (such as debt service coverage), while not exceeding the cost to provide service.
- 2) *Cost of Service Analysis*: The cost of service analysis is the fundamental element in making sure that each customer receives its proportional cost. The operating and capital costs are allocated to functional cost centers and then reallocated to the specific customer classes based on the burden they place on the system. Lastly, unit rates are developed for each customer class and used to assess charges to customers based on their account type, meter size, and water usage.
- 3) *Rate Design*: The rate design element is the development of rate structures that allow for recovery of total costs while incorporating the results of the cost of service analyses. The rate structures have a multitude of guidelines that can be incorporated, but rely on the fundamental fact that they will not exceed the costs of providing the services.

1.3 General Assumptions and Direction

Because utility operations are inherently complex, rate studies typically reflect multiple goals and objectives and consider operational, maintenance, financial, and capital planning requirements. The City of Oxnard has undertaken this cost of service study to achieve the follow primary objectives:

- Adopt a single utility rate adjustment (to be implemented September 1, 2017) to allow the water utility to meet its financial obligations and to provide sufficient, predictable, and reliable revenues to deliver utility services in response to customer demand.
- Strengthen the financial position of the water utility in order to meet revenue and reserve obligations associated with the outstanding bonds, provide financial sustainability and stability, and to finance critical capital investments.
- Strive to adhere to the City Council's adopted financial policies (January 2016).
- Design water rates consistent with the requirements of CA Proposition 218 that effectively distribute the cost of water supply based on each customer's usage pattern.

1.4 Forward-Looking Statement

The projections and forecasts of this analysis are based on reasonable expectations of future events using commonly acceptable methodologies and figures. Should these projections prove to be significantly inaccurate, or if unforeseen circumstances significantly impact revenues or expenditures, the City may begin a new Proposition 218 process to determine new rates.

2.0 WATER DEMANDS AND SUPPLIES

2.1 Historic Demands

In FY 2015/16, the City delivered nearly 9 million HCF (hundred cubic feet) of potable and recycled water to more than 40,000 utility customers, inside and outside of the City. Demands have decreased since their peak of almost 11 million HCF in FY 2013/14 due to the voluntary and mandatory conservation that occurred during the recent drought.

The City's potable water customers are split into five major rate classes based on their account characteristics and how they utilize the system. Within the major rate classes, customers are further categorized to allow the City to track usage, billing, and revenue records at a greater level of detail. Table 1 below shows the major customer classes and detailed rate codes. In addition to these five classes, the City also serves private fire connections and recycled water users.

Table 1: Customer Classes and Rate Codes

Single Family Residential		Commercial, Industrial, and Institutional	
S	SINGLE FAMILY WATER	C	COMMERCIAL WATER
SH	HSG AUTH SNGLE UNIT WATER	C1	COMML WATER HIGH USE RATE
LS	SINGLE FAMILY LARGE LOT	CC	COMML RESTAURANT WATER
Multi-Family Residential		CS	CESAR CHAVEZ SCHOOL
M	MULTIPLE UNIT WATER	SS	SCHOOLS COMMERCIAL
MH	HSG AUTH MULT UNIT WATER	GB	CITY GOVT BLDGS FAC MAINT
Irrigation		I	INDUSTRIAL WATER
CI	COMMERCIAL IRRIGATION	I3	INDL WATER HIGH USE RATE
GI	CITY GOVT - IRRIGATION	Oceanview Agricultural Irrigation	
II	INDUSTRIAL IRRIGATION	A	AGRICULTURAL WATER

Table 2 and Table 3 show the current number of potable and fire protection customers of each meter size, in each rate class, and the number of meter equivalent units (MEUs) in each class. Meter equivalent units relate the capacity required to serve each connection to the system based on the expected maximum flow from meters of each size.

Table 2: Potable Water Customers

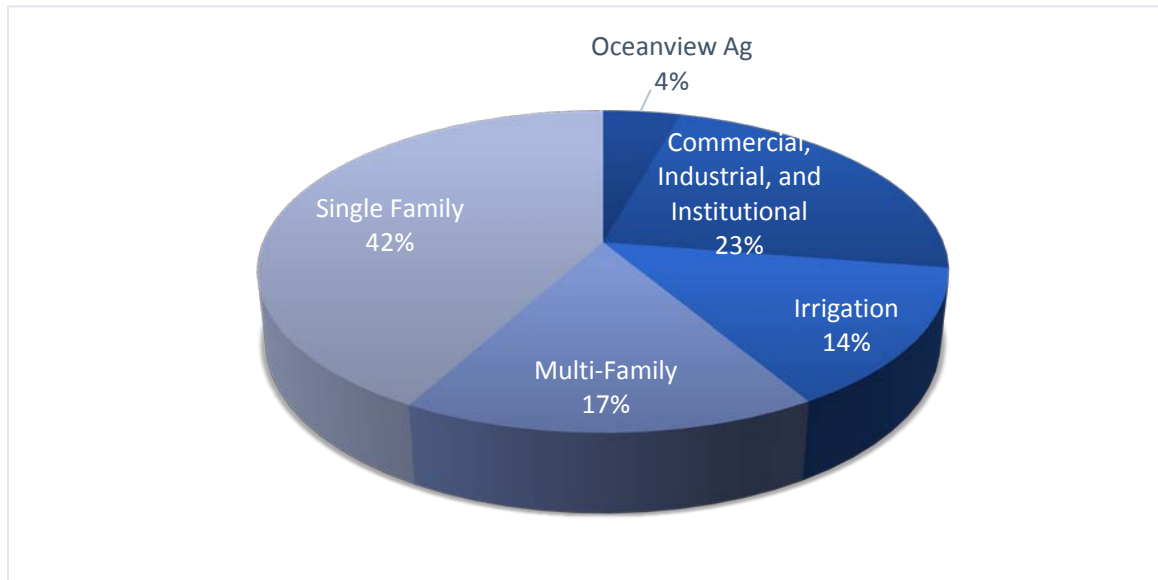
Meter Size	MEU Ratio	Single Family	Multi-Family	Commercial, Industrial, and Institutional	Irrigation	Oceanview Ag
3/4"	1.0	25,665	615	1,002	244	9
1"	1.7	8,401	750	565	338	4
1.5"	3.3	63	400	506	408	8
2"	5.3	1	231	515	476	1
3"	11.7	0	15	100	64	4
4"	20.0	0	14	47	17	1
6"	41.7	0	7	8	3	16
8"	60.0	0	2	5	0	5
10"	96.7	0	0	0	0	0
Total Accounts		34,130	2,034	2,747	1,550	49
Total MEUs		39,909	5,302	9,112	5,921	1,098

Table 3: Fire Protection Connections

Meter Size	MEU Ratio	Private Fire Protection
3/4"	1.0	8
1"	1.7	6
1.5"	3.3	2
2"	5.3	334
3"	11.7	22
4"	20.0	571
6"	41.7	389
8"	60.0	199
10"	96.7	34
Total Connections		1,565
Total MEUs		44,918

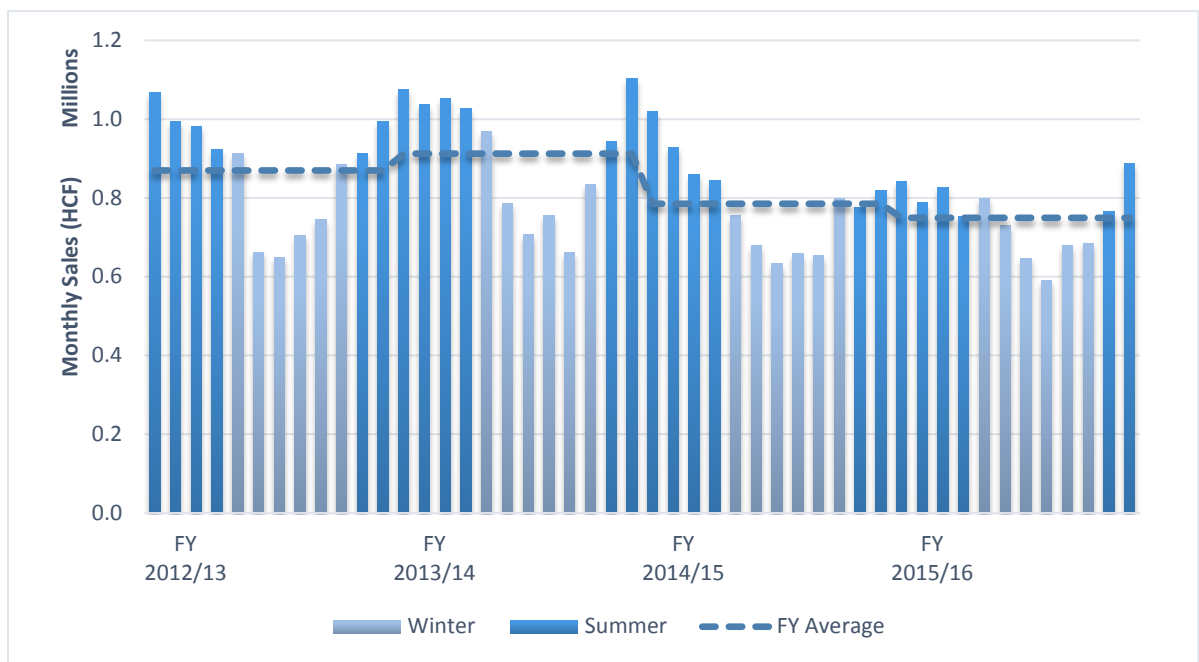
From July 2012 through June 2016, about 59 percent of the potable water delivered by the City was used by single family and multi-family users. About 23 percent was delivered to commercial, industrial, and institutional customers, and 14 percent to irrigation customers. The remaining 4 percent of potable deliveries were to Oceanview agricultural customers. Oceanview customers are served directly from United Water Conservation District's pipeline and are charged a pass-through rate. Figure 1 below presents the percent of water sales to each of the major rate classes.

Figure 1: Water Usage by Customer Class



Water demand fluctuates throughout each fiscal year; in FY 2015/16 monthly water demand ranged from a minimum of about 590,000 HCF in February to a maximum of 661,177 HCF in June. Figure 2 illustrates the monthly water sales from July 2012 through June 2016. The conservation that has occurred since FY 2013/14 has been concentrated in the summer months, with summer conservation of 22 percent and winter conservation of only 12 percent.

Figure 2: Historic Usage by Month



2.2 Projected Demand and Growth

The City's Planning Department completed a comprehensive analysis of population growth in 2014 as a part of its work on the Integrated Public Works Master Plan. The projections were based on 2010 Census data, a housing count from developments constructed between 2010 and 2014, and projected housing projects and planned developments in the City.

It is important to draw distinction between the long-term usage projections used for capital planning and those used for rate design. The water demand forecast presented in PM 2.2 of the Integrated Master Plan is intended to provide a basis for capital planning, and it therefore reflects the likely long-term maximum water demands of the City, so that the system is designed with the necessary capacity and redundancy to serve future users. In rate design, it is important to refine usage projections to accurately represent water sales as they are now and how they will change in the short-term (the next five years).

Due largely to the recent drought and the associated State mandated usage curtailments, In-City customers cut usage by 12 percent in FY 2014/15 when compared to FY 2013/14. With the onset of mandatory conservation in FY 2015/16, sales fell an additional 4 percent to about 9 million HCF. To date, sales have been relatively consistent with those of FY 2015/16. Additionally, the wet winter and early spring has curtailed outdoor usage. Though the mandatory curtailments have been lifted, it is not expected that demands will rebound for FY 2017/18.

The analysis assumes no change in demands for FY 2017/18, then a rebound of 5 percent per year in FY 2018/19 and FY 2019/20. After that time, demand growth is expected at the annual growth levels from the planning department. Table 4 below shows the projected usage and accounts (not including fire protection) for City customers.

Table 4: Account and Demand Growth

	Account Growth⁽¹⁾	Accounts	Demand Growth	Demands (HCF)
FY 2017/18	-	40,510	-	8,994,000
FY 2018/19	0.87%	40,864	5.00%	9,444,000
FY 2019/20	0.87%	41,221	5.00%	9,916,000
FY 2020/21	0.87%	41,581	0.87%	10,002,000
FY 2021/22	0.84%	41,929	0.84%	10,086,000

Notes (1): Based on Table 11 of PM 2.2 "Water Demand Projections".

Figure 3 shows the historic and projected demands for the City's customers. As shown, demands are expected to stay flat in FY 2017/18 and rebound thereafter, it is not expected that demands will reach pre-drought levels within the next five years.

Figure 3: Water Demands

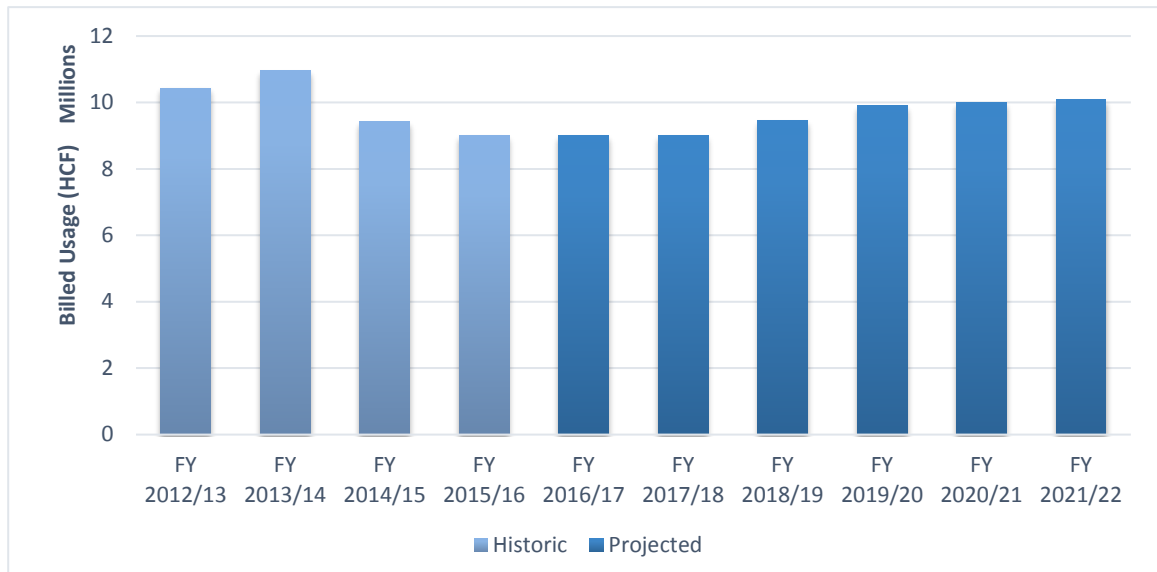


Table 5 below presents the projected usage from each of the major rate classes for FY 2017/18. Increases in recycled water sales for usage in lieu of potable use will offset a portion of usage from Commercial, Industrial, and Institutional customers and Irrigation customers. Detailed records of customer demands are included in Appendix A.

Table 5: Demand Detail by Customer Class

Projected Usage	FY 2015/16		FY 2017/18	
Single Family	3,779,000	42%	3,779,000	42%
Multi-Family	1,524,000	17%	1,524,000	17%
Commercial, Industrial, and Institutional	2,220,000	25%	1,959,000	22%
Irrigation	1,078,000	12%	978,000	11%
Oceanview Ag	393,000	4%	393,000	4%
Recycled Water In-Lieu of Potable	0	0%	362,000	4%
Total	8,994,000	100%	8,994,000	100%

Note: Totals may be off due to rounding.

2.3 Water Supply

In order to meet customer demand, the City relies on water supplies from four major sources. The City owns and manages local groundwater resources (managed by Fox Canyon Groundwater Management Agency (FCGMA)), purchases regional groundwater from United Water Conservation District (United), and purchases state surface water provided by the Metropolitan Water District of Southern California through the Calleguas Municipal Water District (Calleguas). The City also owns and operates an Advanced Water Purification Facility (AWPF) to produce recycled water from its wastewater treatment plant.

The non-potable water is sold directly to in-city customers, to agricultural customers, and to other water purveyors.

In addition to demands from City customers, the City also provides water to the Port Hueneme Water Agency (PHWA), and Proctor and Gamble. Based on the Three Party Water Supply Agreement, the City provided PHWA with 700 acre-ft per year (AFY) of water in exchange for an equal transfer of PHWA's FCGMA pumping credits. Additionally the City wheels Calleguas water (from PHWA's own Calleguas tier 1 or tier 2 allocation) to PHWA, for which PHWA pays a pass-through rate. Over the last three fiscal years, the amount of water wheeled to PHWA has averaged 947 AFY. Revenues collected from PHWA offset the cost of water that is passed on to City customers.

Proctor and Gamble (P&G) receives unblended Calleguas water through a single 10-inch water meter connected directly to the Del Norte Conduit, which connects the City's system to Calleguas' Springville reservoir. No pumping or chemical treatment is provided by the City for water delivered to P&G. Accordingly, P&G is charged a specific rate to recover Calleguas costs and a fixed charge to recover the City's cost of providing service. Revenues collected from P&G offset the cost of water that is passed on to City customers.

Table 6 below shows the required supplies for FY 2017/18.

Table 6: Required Water Supplies for FY 2017/18

	Projected: FY 2017/18	
	HCF	Acre-Ft
Projected City Usage	8,994,000	20,647
Plus: Unaccounted for Water	955,000	2,193
Plus: Concentrate From Desalter	372,000	855
Plus: PHWA Transfer	305,000	700
Plus: PHWA Calleguas	412,000	947
Plus: Proctor and Gamble	719,000	1,650
Total Supply Required	11,758,000	26,992
Less: Recycled Water In Lieu of Potable	(362,000)	(830)
Potable Supplies Required	11,396,000	26,162

The purchase of water supplies from outside agencies represents a significant portion of Water Utility operating requirements. Table 7 below shows the expected supplies from each source for FY 2017/18 in acre-ft and in HCF as well as the projected costs associated with each. Detailed calculations of supply costs are included for reference in Appendix B.

Table 7: Potable Water Supplies by Source for FY 2017/18

Projected: FY 2017/18	HCF	Acre-Ft	Percent of Supply	Costs	Percent of Costs
City Groundwater	3,130,000	7,186	27%	\$1,595,000	7%
United	3,194,000	7,333	28%	4,357,000	19%
Calleguas Tier 1	5,072,000	11,643	45%	16,907,000	74%
Potable Supplies Required	11,396,000	26,162	100%	\$22,859,000	100%

3.0 WATER REVENUE REQUIREMENTS

This section presents a detailed analysis of revenue requirements for the City's water utility. The intent of this analysis is to evaluate the financial health of the water utility, assess the adequacy of current water user fees, and provide factual basis for near- and long-term rate planning.

Future water utility revenue requirements are calculated based on projected increases in the costs of current operations and water purchases, as well as increases in operating and water supply costs to serve projected growth in population and economic activity. The analysis includes an evaluation of existing water utility operating expenses, reserve balances and ongoing reserve requirements, user fee income based on current rates, as well as other non-rate revenue. The net balance of estimated utility requirements, less estimated utility income, represents future utility revenue requirements for purposes of determining future adjustments to water user fees and other utility charges.

The analysis includes two sufficiency tests to define the annual revenues necessary to provide for (1) cash flow and (2) bond coverage. These tests are commonly used to determine the financial health of the utility and the amount of annual revenue that must be generated to address estimated utility requirements.

3.1 Existing Revenues

Charges paid by customers for water service are the primary source of revenues to pay for water utility requirements, with user rate, recycled water, P&G, Oceanview, and other water revenues accounting for 88 percent of utility operating resources in FY 2015/16.

Table 8 presents actual revenues from FY 2015/16 and estimated and projected revenues for FY 2016/17 and 2017/18. Detailed projections are included for reference in Appendix C.

Table 8: Existing Revenues

	FY 2015/16	FY 2016/17	FY 2017/18	FY 2017/18
	Actual	Mid-year Est.	Projected Pre-Increase	Change
Water Rate Revenues	\$39,985,000	\$39,779,000	\$42,672,000	\$2,893,000
Recycled Water Revenues	0	742,000	2,105,000	1,363,000
P&G Water	2,447,000	2,500,000	2,500,000	0
Oceanview Volumetric Revenues	466,000	462,000	464,000	2,000
Other Water Revenues	822,000	1,664,000	1,664,000	0
BABs Refund	1,938,000	1,938,000	1,809,000	(129,000)
Connection Fees	812,000	844,000	844,000	0
Other Revenues	3,271,000	2,822,000	2,766,000	(56,000)
Total Revenues	\$49,741,000	\$50,751,000	\$54,824,000	\$4,073,000

Water Rate Revenues: These revenues are generated from the City's residential, commercial, industrial, institutional, and irrigation water customers. Water rate revenues are expected to increase in FY 2017/18 due to the water supply pass-through adjustment that was completed in March 2017. The adjustment resulted in an effective rate revenue increase of about 7 percent by adjusting rates to account for increases in FCGMA, United, and Calleguas costs since the last adjustment that was made in 2015.

Recycled Water Revenues: This category includes revenues from all recycled water users, both in City users who use recycled water in lieu of potable water and other outside users including agricultural customers and Pleasant Valley Water. Recycled water revenues are expected to increase in FY 2017/18 due to increasing sales to in lieu of potable users, the River Ridge Golf Course, and Pleasant Valley Water. If the sales do not materialize, the City should realize some level of cost savings due to decreased operation of the AWPf.

P&G Water: Revenues from P&G are expected to remain constant with past years' revenues.

Oceanview Volumetric Revenues: Oceanview agricultural users pay a pass-through rate based on the United wholesale charges with a 10 percent administrative/overhead charge to cover the City costs, as well as the applicable city monthly fixed charge (Oxnard Ordinance 2752). This revenue line item includes only the volumetric component, the fixed component is included in the Water Rate Revenues discussed above. Oceanview agricultural volumetric revenues are expected to remain relatively flat.

Other Water Revenues: The sources of revenue in this item are the charges received from PHWA for deliveries of Calleguas water. Historically revenues in this category have totaled about \$1.6 million per year, though they dropped significantly in FY 2015/16. For FY 2016/17 and FY 2017/18, these revenues are expected to be closer to the historic levels or \$1.66 million. If revenues decrease because PHWA takes delivery of a lower amount of water there will be a corresponding decrease in the amount of Calleguas water that the City must purchase and therefore a decrease in costs.

Build America Bonds (BABs) Refund: The 2010B bonds are Build America Bonds that are eligible for an interest credit from the United States Treasury. The credit is calculated based on the amount of interest payments due in each fiscal year. The refund amount is expected to stay relatively flat for FY 2017/18. The BABs refund is not counted as a revenue source in the calculation of debt coverage as stipulated by the City's outstanding debt obligations.

Connection Fees: This item includes revenues from the City's resource development fee and the capital facilities charge; they are expected to stay flat in FY 2017/18. Because they are collected through connection fees, these revenues can only be spent on applicable

capital projects and cannot be used to fund operations or other non-capital activities, as dictated by California Government Code 66000.

Other Revenues: This item includes revenues from other fees charged by the City, as well as miscellaneous sources. These include the Security and Contamination Prevention Fee, the Cross Contamination Prevention Fee, Penalties and Forfeitures, and other miscellaneous revenues. They are expected to stay relatively flat for FY 2017/18.

3.2 Existing Operating Expenses

The financial costs of the City’s water utility include the purchase of water supply, current operating expenses, debt service payments on bonds used to pay for major investments in system facilities and equipment, and other financial requirements established by the City to ensure the financial integrity and sustainability of the water utility.

Operating expenses include the costs of day-to-day utility functions including personnel and professional services, energy and fuel, process water requirements, laboratory supplies and equipment, information and monitoring systems, and indirect costs associated with utility administration and finance. Projected operating expenses were based on FY 2016/17 mid-year estimated operating budgets, adjusted to exclude any unusual or one-time expenses that would distort future cost estimates. Table 9 presents the inflation rates used to estimate increases in operating expenses, including salaries, fringe benefits, supplies, power, telephone, contracted services, etc.

Table 9: Escalation Factors

	FY 2017/18
Account/Flow Growth	0.00%
Capital Inflation	3.20%
Labor Inflation	2.50%
General Inflation	2.50%
Utilities Inflation	2.50%
Chemicals Cost Inflation	2.50%

Table 10 provides a summary of actual operating costs from FY 2015/16, estimated costs for FY 2016/17, and projected costs for FY 2017/18. Overall, projected costs for FY 2017/18 are expected to be about \$1.4 million higher than the actual costs from FY 2015/16. Over two-thirds of this increase, \$960,000, can be attributed to increases in water supply costs from FCGMA, United, and Calleguas. The remainder of the increase, \$421,000, is due to expected inflationary increases in the City’s costs. Detailed projections by line item are included for reference in Appendix C.

Table 10: Historic and Projected O&M Costs

Division	FY 2015/16 Actual	FY 2016/17 Mid-year Est.	FY 2017/18 Projected	FY 2017/18 Change
Production:				
City Costs	\$3,692,000	\$3,401,000	\$3,486,000	\$85,000
City Groundwater	1,319,000	1,400,000	1,595,000	195,000
United	4,052,000	4,000,000	4,357,000	357,000
Calleguas	15,367,000	16,500,000	16,907,000	407,000
Subtotal: Production	\$24,430,000	\$25,301,000	\$26,345,000	\$1,044,000
Distribution	1,702,000	1,830,000	1,876,000	46,000
Metering	1,309,000	1,608,000	1,648,000	40,000
Procurement	7,875,000	5,625,000	5,766,000	141,000
Conservation	130,000	237,000	243,000	6,000
Recycle	2,316,000	2,678,000	2,745,000	67,000
Public Information	110,000	172,000	176,000	4,000
Security & Contamination Prevention	794,000	852,000	873,000	21,000
Debt Service Admin	434,000	427,000	438,000	11,000
Total O&M Expenditures	\$39,100,000	\$38,730,000	\$40,110,000	\$1,380,000
Note: (1) Includes applicable FCGMA and United Costs.				

3.2.1 Water Production

The Water Production and Treatment Division supplies the City's almost 40,000 water customers with a reliable potable water supply that is both aesthetically pleasing and meets or exceeds current Federal and State drinking water standards:

- Produces and treats water through City-owned water wells in three wellfields and blends the locally produced water with water purchased from Calleguas and United and transmits it to the City's water distribution system via five blending stations.
- Treats water to remove dissolved minerals from one of the wellfields with reverse osmosis treatment.
- Maintains the assets associated with the three wellfields, the emergency power generation equipment, the treatment systems, the blending stations, and the water system control and monitoring equipment.

3.2.2 Distribution

The Water Distribution Division provides operation of and maintenance and repairs to over 500 miles of City water pipelines in order to provide water service to the City's water customers in compliance with all regulatory requirements:

- Performs leak detection activities and makes repairs promptly in order to minimize water losses and makes recommendations for capital projects to replace aging sections of pipeline.
- Performs water distribution system flushing in order to minimize the chances of water quality problems in the piping.
- Reviews and analyzes proposed changes to the water distribution system and plans and constructs some new customer connections.

3.2.3 Metering

The Water Metering Division provides metering, leak detection, installation, testing, maintenance, and replacement and field customer service to the City's customers:

- Assists customers with correcting water leaks or inefficiencies in their private on-site plumbing systems and coordinates closely with the Water Conservation Program.
- Program staff serves as the primary field contact with the City's water, wastewater, and new customers, and coordinates with the utility billing department.

3.2.4 Procurement

The Water Procurement Division provides the planning and business functions of the City's water utility:

- Negotiates and manages agreements with water wholesale agencies, environmental organizations, and regulatory agencies in order to protect and manage current supplies and to develop new water supplies.
- Works closely with the Planning & Environmental Services, Building & Engineering, Capital Projects Management, Utility Billing, Finance, Water Production & Treatment, Water Distribution, Water Metering, Water Conservation and Education, and Water Quality and Cross-Connection Control Programs on business management issues to ensure long-term, stable operations for the City's utilities customers.

3.2.5 Conservation and Education

The Water Conservation and Education Division protects future water resources through effective conservation practices by providing education and training, funding opportunities, and technical assistance to all City water customers:

- Reviews and analyzes Citywide water usage, prepares and disseminates public information materials, provides follow-up and response to inquiries and complaints,

compiles and verifies data, provides incentives to local businesses and individuals to conserve water, and reports water conservation activities to state regulatory agencies.

- Works closely with other City programs, including developing standards for water-efficient landscaping, retrofitting of existing public buildings with water-efficient plumbing fixtures, and retrofitting of existing public parks and open spaces with water-efficient irrigation control systems.
- Monitors and enforces the City Code requirements prohibiting water waste.

3.2.6 Recycle

The Recycle Division provides for the operation and maintenance of the City's recycled water system including the production and delivery of recycled water to customers and eventually to the City's aquifer storage and recovery (ASR) operations:

- Operates and maintains the AWPf to produce recycled water from the secondary treated effluent of the Oxnard Wastewater Treatment Plant (OWTP).
- Operates and maintains the recycled water transmission facilities.
- Provides planning and construction of recycled water pipelines and new connections to the recycled water system.

3.2.7 Public Information

The Public Information Division provides for collaboration between the Communication Public Information Office (CPIO) and the Public Works Department; staff oversee the scheduling of community outreach for current and future water projects:

- Meets with key staff to identify projects, resources, develop work plans, estimates, timelines, and prioritizations.
- Coordinates workshops and notifications to the community of construction projects

3.2.8 Security and Contamination Prevention

The Water Quality and Cross Connection Control Division provides monitoring of the quality of the City's water supplies, from source to treatment to customers, minimizes the risk of customer activities leading to contamination of the water in the distribution system, and maintains security to water system facilities:

- Provides monitoring of water quality, management of the City's water security systems, and oversight of customers' backflow prevention devices.

- Conducts sampling and analysis, manages contract laboratories, maintains records, and reports to regulatory agencies regarding the water quality of the City’s source waters, treated water at the blending stations, and water within the distribution system.
- Analyzes risks to the security of the water system and plans and carries out projects and programs to minimize those risks.
- Oversees several thousand private backflow prevention devices, which prevent the activities of customers from causing contamination to the City’s water distribution system.

3.2.9 Other O&M Cost Categories

For the purpose of this analysis, certain costs were separated out into the additional categories of Debt Service Administration and the Infrastructure Use Fee.

Debt Service Administration Costs are associated with the management of the outstanding water debt obligations. They are charged by the City Finance Department to the Water Fund.

The Infrastructure Use Fee is typically tracked and budgeted in the Procurement Division but has been separated out for this analysis. It is discussed later in this document.

3.3 Debt Service Requirements

The City has used revenue bonds in the past to fund capital improvements to the water system. At present, the utility pays about \$14.4 million per year in principal and interest costs toward the outstanding water utility revenue bonds. With the BABs refund of \$1.8 million, effective debt service is about \$12.6 million. The total outstanding principal on the existing debt obligations is about \$177 million, as shown in Table 11 below.

Table 11: Outstanding Debt Principal

Obligation	Outstanding Principal ⁽¹⁾	Year Fully Repaid
2006 Bonds	\$46,245,000	FY 2035/36
2012 Revenue Refunding	\$7,300,000	FY 2029/30
2010A Revenue Bond	\$8,475,000	FY 2021/22
2010B Revenue Bond	\$83,670,000	FY 2039/40
2014 Refunding Bonds	\$31,277,000	FY 2033/34
Total	\$176,967,000	
<small>(1) FY 2016/17 as of June 30, 2017, through repayment, based on official statements</small>		

Table 12 shows the total debt service related to the outstanding bonds for FY 2017/18.

Table 12: Existing Debt Service

Outstanding Debt Service	FY 2017/18
Interest	\$9,973,000
Principal	\$4,475,000
Total	\$14,448,000
Less: BABs Credit	(\$1,809,000)
Debt Service Net of BABs	\$12,639,000

3.4 Capital Improvements

Over the coming years, the City plans to make significant investments in water utility capital improvements, including the renewal, replacement, improvement, and expansion of capital facilities and infrastructure to meet current and future system needs. However, due to the water utility’s current financial position, the City plans to delay significant investment to beyond the first half of FY 2018/19.

Table 13 below shows the expected capital improvements for the next two years.

Table 13: Capital Improvements

	FY 2017/18	FY 2018/19	Funding Source
Potable Water Projects	\$1,000,000	\$2,000,000	Rate Funded
Recycled Water Projects	\$5,000,000	\$5,000,000	Water Resource Development Fees (Fund Balance)

Potable Water Capital Improvements

This analysis assumes that the City will undertake \$1 million in new capital projects in FY 2017/18 and \$2 million in new projects for FY 2018/19 for the potable water system. Capital expenditures in FY 2017/18 and FY 2018/19 will be funded with cash from user rate revenues. In addition to these new projects, the Water Fund has projects in progress worth about \$2 million, which have existing funding in place.

Recycled Water Capital Improvements

The City currently has about \$11 million in Fund 603 from the Water Resources Development Fee. Having been collected through development fees, these funds are restricted for use on specific types of capital projects, and cannot be used to fund the system operations on other activities. The City plans to use these funds to undertake \$5 million per year in recycled water system projects in FY 2017/18 and FY 2018/19. These projects will not impact rates because they will be funded using existing development fee funds.

3.5 Infrastructure Use Fee

The Infrastructure Use Fee is a payment from the Water Fund to the City to cover street maintenance. The current Infrastructure Use Fee structure was developed in a study completed in 2014. The cost of service analysis includes a fee for streets.

Table 14: Infrastructure Use Fee- Streets

	FY 2016/17 Budget	FY 2017/18 Projected
Streets Infrastructure Use Fee	1,878,000	\$1,925,000

3.6 Financial Policy Requirements

In January of 2016, the Oxnard City Council adopted a series of financial policies for the utility enterprise funds (Water, Wastewater, and Environmental Resources). While all of the policies were considered in the analysis, the two that have the greatest impact are the reserve policy and the debt coverage ratio policy.

3.6.1 Reserve Policy

The reserve policy sets a target reserve (cash on-hand) balance that the utilities should strive to achieve. The overall reserve target is set based on three components related to each utility's O&M costs, depreciation, and annual debt service. For the Water utility, the available reserves will be unrestricted and are to be held in the Water Operating Fund (Fund 601).

3.6.1.1 *Reserve Policy Components*

O&M Component

The O&M component of the reserve policy is intended to provide sufficient resources to pay budgeted operating and maintenance expenses recognizing the timing differences between payment of expenditures and receipt of revenues. It also provides a source of funds to allow the water utility to operate during short term fluctuations in revenues and/or expenditures. The operating component target is equal to 90 days of O&M costs, including the Infrastructure Use Fee, in a given fiscal year.

Debt Service Component

The debt service component of the reserve policy is intended to provide the ability to make debt service payments in an extreme event that may impact the water utility's ability to recover revenues or if critical infrastructure repairs are needed to restore systems after a failure or emergency. It is intended to prevent an event where the water utility would be unable to pay its debt service obligations during such emergencies, or extreme market

disruptions. The debt service component target is equal to 180 days of debt service payments (principal and interest) due in a given fiscal year.

Capital Component

The capital component of this reserve is intended to provide funds for the ability to repair the system or replace equipment in the event of an unanticipated breakdown or failure. It can also provide funds to maintain continuity of construction over fiscal years to be reimbursed by bond proceeds or other resources. The capital component target is equal to one year of depreciation in a given fiscal year. *Error! Reference source not found.*

Table 15 below identifies the annual target amount for each reserve component as well as the total reserve target for FY 2017/18.

Table 15: Reserve Policy Targets

	FY 2017/18
O&M Component	
Projected O&M Expenses	\$42,035,000
Reserve Goal: 90 Days of Operating Expenses	
O&M Component Target	\$10,365,000
Debt Service Component	
Debt Service	\$14,448,000
Reserve Goal: 180 Days of Debt Service Expenses	
Debt Service Component Target	\$7,125,000
Capital Component	
Reserve Goal: 1 Year of Depreciation ¹	
Capital Component Target	\$7,495,000
Combined Reserve Target	\$24,985,000
(1) Escalated from FY 2015/16 actual depreciation based on capital escalation of 3.2%.	

3.6.1.2 Impact of Reserve Policy on Credit Rating

In addition to providing the benefits discussed above, reserve policies such as those adopted by the City Council are viewed favorably by credit rating agencies. Credit rating agencies often use a utility’s amount of cash on hand, as well as the adopted policy behind that amount, as one of the factors determining the utility’s viability as a debt issuer, and therefore its credit rating. The cash on hand, or liquidity measurement, is typically expressed in days of operating expenses. Fully funded, the reserves policy would provide between 330 and 360 days of O&M expenditures depending on the specific fiscal year. This amount of reserves is typical among the City’s peer agencies.

3.6.2 Debt Coverage Ratio Policy

A minimum level of annual rate revenues is required in order to satisfy legal and/or policy driven debt coverage obligations. Debt coverage refers to the collection of revenues to meet all operating expenses and debt service obligations plus an additional percentage of

that debt service. The debt coverage ratio is used as a means of assessing an agency's debt service performance or capacity. It is important to note that the debt service coverage requirement is a revenue generation requirement, and not a reserve or expenditure requirement. Thus, revenues collected to meet the coverage requirement will still be available to the City to fund other operating, capital, or reserve needs.

The equation below shows the general calculation for debt coverage.

$$\text{Debt Coverage Factor} = \frac{\text{Revenues} - \text{Ongoing Operating Expenditures}}{\text{Annual Debt Service}}$$

The adopted policy sets a target coverage ratio of 1.25 x.

3.7 Cash Flow and Debt Coverage Tests

The water utility's financial health is measured by two tests of the adequacy of utility revenues to pay for all operating and debt service requirements, as well as sufficient reserves to meet legal and operational commitments. If current rates are insufficient to cover costs, the tests are used to determine the appropriate amount of rate revenue necessary to fully cover expenses and other obligations, while not exceeding the cost to provide service.

Cash Flow Requirements

The Cash Flow test evaluates the adequacy of utility revenues to pay for all current operating costs, scheduled debt service payments, cash funded capital, and any additional operating requirements that result from policy decisions of the City while maintaining policy targeted minimum reserves. If these policy targeted minimum balances on certain reserves aren't met, the City must raise revenue in order to replenish these reserves. The purpose of the test is to anticipate and manage financial conditions in order to maintain a prudent financial balance.

Debt Coverage Requirements

The Debt Coverage test evaluates whether the City is generating sufficient revenues to meet financial reserve commitments made to City bondholders. Typically, a water agency is obligated to provide security to its bondholders by pledging to maintain a safe margin between utility revenues and operating expenses. Instead, the City of Oxnard's current debt obligations require that the City maintain a coverage ratio of 1.0x and a reserve balance of 25 percent of one year worth of debt service. However, it is assumed that the City's future bond issuances will be covered by the standard 25 percent safe margin of revenue above that which is required to pay for annual operating expenses and debt service, in line with the City's adopted financial policies.

In this study, the City's ability to maintain annual revenues at 125 percent of its expenses is tested. The Debt Coverage test helps the City anticipate and manage financial conditions in order to maintain its legal commitments to bondholders.

3.8 Recommended Rate Revenue Increase

Since FY 2015/16, decreased water demands have led to revenue shortfalls for the water utility. While the pass-through adjustment from March 2017 offers some relief by allowing the City to cover increased imported water costs, revenue shortfalls are expected to continue without additional rate increases. As shown in Table 16 below, negative cash flows of about \$2.7 million and a coverage factor of just 0.80 x are expected for FY 2017/18 if rates are not adjusted.

Table 16: Revenue Requirements

	FY 2017/18
<u>Pre-Increase Revenue</u>	
User Rate Revenues	\$42,672,000
Other Revenues	12,151,000
Total Revenues Before Rate Increase	\$54,823,000
<u>Requirements</u>	
O&M Expenditures	\$40,111,000
Infrastructure Use Fee	1,925,000
Debt Service	14,448,000
Rate Funded Capital	1,000,000
Total Requirements	\$57,484,000
Available for Capital or Reserves: Without Increase	(\$2,661,000)
<i>Projected Operating Fund Balance Without Increase</i>	<i>\$513,000</i>
<u>Debt Coverage Calculation: Without Increase</u>	
Total Revenues Before Rate Increase	\$54,823,000
Less: BABs Credit ⁽¹⁾	(1,809,000)
Revenues Applicable to Debt Coverage	\$53,014,000
Less: O&M Expenditures ⁽²⁾	(\$39,599,000)
Less: Infrastructure Use Fee	(1,925,000)
Net Revenues Available for Debt Service	\$11,490,000
Coverage Factor: Without Increase	0.80 x
<u>Rate Revenue Increase</u>	
Proposed Rate Increase	14%
Month of Implementation	September
Revenues from Rate Increase	\$4,978,000
Available for Capital or Reserves: With Increase	\$2,317,000
Coverage Factor: With Increase	1.14 x
Projected Operating Fund Balance: With Increase	\$4,649,000
Notes:	
(1) As stipulated by the outstanding debt obligations BABs credits are not considered in the debt coverage calculation.	
(2) Adjusted to remove \$513,000 in Legal Services costs that are included in the O&M budget in the Recycled division that are related to a capital project.	

Based on this analysis, the City will need to increase water rates to meet projected revenue requirements for FY 2017/18, satisfy both Cash Flow and Debt Coverage tests, and avoid drawing down cash reserves in the water fund. The proposed rates will be based on a 14 percent rate revenue increase to be implemented in September 2017. This rate increase will generate an additional \$5 million in revenues for FY 2017/18 to cover the Water Utilities costs, provide debt coverage, and begin to rebuild reserves toward the Council approved targets.

Based on the projections, this increase will result in a debt coverage factor for FY 2017/18 of 1.14 x, meeting the legal requirement of 1.0 x. While projected coverage falls short of the Council's target of 1.25 x, it was determined that meeting the Council's target in one year was unattainable due to the level of rate increases that would be necessary to do so. It is expected that the combination of the proposed 14 percent increase (to be implemented September 1, 2017), and expected sales growth for FY 2018/19 will allow the water utility to meet the Council's target in FY 2018/19.

The increase will also allow the water utility to begin rebuilding the operating reserve, which has been depleted over the past two fiscal years. The year-end operating reserve for FY 2017/18 is expected to be about \$4.6 million. Table 17 below shows the expected fund balances for FY 2017/18. A table showing the revenue requirement calculations in greater detail is included for reference in Appendix D.

Table 17: Fund Balances

	FY 2017/18
<u>Operating Funds</u>	
Operating Reserve	
Beginning Balance	\$5,128,000
Additions From Rates	1,475,000
Use of Funds (Existing Capital Projects)	(1,954,000)
Year End Transfer for Capital	<u>0</u>
Ending Balance	\$4,649,000
<u>Connection Fee Funds</u>	
Beginning Balance	\$11,894,000
Revenues from Connection Fees	834,000
Use of Funds for Capital	<u>(5,000,000)</u>
Ending Balance	\$7,728,000

4.0 WATER COST OF SERVICE ANALYSIS

Once the water utility's revenue requirements are defined—including needed rate increases—the next step is to link each cost item with a specific service to the system that it supports. This is commonly referred to as the cost of service analysis, or the functional cost allocation, because it connects each cost of the utility with a functional category or purpose that it funds. For instance, expenses related to the billing system are allocated under the umbrella of the customer service function, while baseline water purchases go to support the base demand function.

The costs incurred are generally responsive to the specific service requirements or cost drivers imposed on the system and its water resources by its customers. The principal service requirements that drive costs include the annual volume of water consumed, the peak water demands incurred, and the number of customers or meter equivalents in the system. Accordingly, these service requirements are the basis for the selection of the categories utilized in the functional allocation process.

The American Water Works Association (AWWA) M1 Manual outlines the two most widely used methods for allocation of costs—the base-extra capacity method and the commodity-demand method. Both methods recognize that the cost of serving a customer depends not only on the total volume of water used, but also on the rate of use or peak demand requirements.

The proposed rates presented within this report are developed using a variation of base-extra capacity method. In using this approach, costs are typically separated into four cost components: (1) Base (average), (2) Extra Capacity (related to sources of supply and to system sizing and operational requirements), (3) Customer, and (4) Fire. As noted in the AWWA M1 Manual, in detailed rate studies, such as the one performed for this study, some of these elements might be broken down further into two or more subcomponents.

Based on the City's expenditures and system characteristics, the Customer (or fixed monthly) component was separated into two subcomponents: (1) Customer (accounts) and (2) Capacity (meter equivalents). This bifurcation of the Customer component is done to better identify and allocate costs that vary based on capacity needs (as defined by the size of the meter) from those that should be equally shared by each customer account. Similarly, water supply costs were split into the four sources of supplies. These are designed to better distinguish that not all demand (and peaking) is equal. These calculated peaking factors are used as a proxy for determining and allocating the cost of providing extra-capacity in the system needed to serve those who use more. Different facilities, such as distribution and storage facilities, and the operation and maintenance costs associated with those facilities, are designed to meet the peaking demands of customers. Therefore, extra capacity costs include the operations and maintenance costs and capital costs associated with meeting peak customer demand.

4.1 Net Revenue Requirements

The first step in determining the cost of service is the calculation of net rate revenue requirements for water customers. This is the amount of revenue that needs to be collected through the City's user rates from residential, commercial, industrial, institutional, and irrigation customers to cover the system's costs. The net rate revenue requirement is calculated by adding the costs (requirements) that need to be recovered, then subtracting any offsetting revenues that lessen the amount of revenue needed from user rates. Table 18 shows the calculation of net revenue requirements for the cost of service test year, FY 2017/18.

Table 18: Net Rate Revenue Requirements for FY 2017/18

Net Revenue Requirements	FY 2017/18
<u>Requirements</u>	
Operating Expenditures	\$56,483,000
Rate Funded Capital	1,000,000
Additions to Reserves	2,319,000
<u>Less Offsetting Revenues</u>	
Recycled Water Revenues	(\$2,105,000)
P&G Water	(2,500,000)
Oceanview Volumetric Revenues	(464,000)
Other Water Revenues	(1,664,000)
BABs Refund	(1,809,000)
Connection Fees	(844,000)
Other Revenues	(2,766,000)
Overall Net Revenue Requirement	\$47,650,000
Adjustment for Mid-Year Increase	996,000
Net Revenue Requirement For Rate Design	\$48,646,000

As shown in Table 18, the net revenue requirements to be generated from user rates for FY 2017/18 is \$47,650,000 assuming a September 1 rate implementation.

For the rate design, the net revenue requirements need to be adjusted to account for the timing of the rate increase because unit costs and rates are calculated based on a full year of accounts and water usage. Implementing the rates on September 1 will generate \$996,000 less rate increase revenues than implementing on July 1. Adjusting the net revenue requirements to reflect a full year of increases yields net revenue requirements for the rate design of \$48,646,000.

4.2 Functional Allocation

The functional allocation separates the costs (requirements) of the water utility into categories based on how and why each cost is incurred, and the benefit provided by each. Those functionalized costs can then be distributed among the customer classes. The Water Utility's budget was analyzed line-item by line-item and expenditures were distributed between the following functional categories:

- **Base:** Operating and capital costs incurred by the water system to provide a basic level of service to each customer. Base costs are then allocated to each customer class based on each class's share of total usage.
- **Max Month Peak:** Operating costs incurred to meet peak demands for water in excess of basic demand (base). This category includes a portion of distribution costs, as well as a portion of rate funded capital costs. These costs are then allocated to each customer class based on each class's share of incremental maximum month consumption.
- **Conservation:** This category includes the costs of the City's water conservation program. These costs are later allocated to customer classes based on the amount of Calleguas water allocated to each class since conservation leads to decreased reliance on imported water.
- **Water Supplies:** This category includes the costs associated with the City's water supplies. Costs associated with each supply are allocated to each customer class based on each class's usage patterns as described in Section 2.0.
 - *City Groundwater:* Costs from FCGMA and United related to extraction of the City's groundwater allocations. This category also includes some of the costs associated with the operation of the desalter.
 - *United:* Costs from United for imported water deliveries. A portion of the costs in this category is offset directly by revenues from Oceanview volumetric rates since Oceanview Ag customers pay a pass-through rate.
 - *Calleguas:* Costs from Calleguas for imported water deliveries. A portion of the costs in this category is offset directly by revenues from P&G rates since P&G pays a pass-through rate.
 - *GREAT Water:* This category includes the costs to produce water at the AWPf, as well as other costs associated with the recycled water system and its expansion. The majority of costs in this category (those associated with operating the AWPf and distributing recycled water) are offset by revenues from recycled water sales. Remaining costs are allocated to potable users based on their share of Calleguas costs, since a major goal of the GREAT program is to decrease reliance on imported water. Additionally, use of recycled

water in lieu of potable water frees up lower cost sources of supply for potable users.

- **Customer:** Fixed expenditures that relate to operational support activities including accounting, billing, customer service, and administrative and technical support. These expenditures are essentially common-to-all customers and are reasonably uniform across the different customer classes. Customer costs are allocated to each class based on each class's share of accounts.
- **Capacity:** Meter and capacity related costs, such as meter maintenance and peaking charges, that are included based on the meter's hydraulic capacity (measured in gallons per minute). Additionally, as the system's facilities are designed to meet peak demand, a portion of the capacity related costs are allocated to Capacity. Capacity costs are allocated to each customer class based on each class's share of Meter Equivalent Units (MEUs).
- **Fire Protection:** This category includes a portion of the fixed costs associated with the water system infrastructure in place to meet maximum instantaneous demands and fire flows. This category includes only the portion of fire related costs that is attributable to customers that have private fire protection connections separate from their normal service connections. As such, these costs are allocated entirely to the private fire protection customer class.

4.2.1 Allocation of Functional Components

The functional categories provide a means for segregating revenue requirements that relate to a utility customer's account and access to the City's water services, versus the customer's variable use of water. For example, administrative or billing costs are considered fixed costs and could be recovered through a fixed charge. Alternatively, purchased water is solely related to how much water is sold and therefore could be attributed and recovered via the commodity (variable) portion of the rates.

The allocation is developed by assigning allocation factors to costs line item by line item based on the function served by each cost.

Table 19 shows the allocation factors that are applied to the O&M and revenue requirement line items. Most allocations assign costs to a single functional category, however some line items are split between multiple categories to best reflect how the costs are incurred.

Table 19: Functional Allocation Factors

	Base	Max Month Peak	Conservation	Capacity	Customer	Fire Protection	City GW	GREAT	United	Calleguas
Customer Only					100%					
Capacity Only				100%						
Capacity/Fire				57.7%		42.3%				
Base Only	100%									
Max Month Base/Peak with Fire	64.9%	31.3%				3.8%				
City GW							100%			
GREAT								100%		
United									100%	
Calleguas										100%
Debt Service				97.8%		2.2%				
Conservation			100%							

Capacity/Fire Allocation: The Capacity/Fire allocation is intended to reflect the capacity share attributable to private fire protection customers and other water customers. It is based on the number of MEUs from each type of customer. Private fire protection customers account for 44,918 or 42.3 percent of existing MEUs; other water customers account for 61,342 or 57.7 percent of existing MEUs.

Debt Service Allocation: The debt service allocation was developed to allocate debt service costs to the capacity and fire protection functional components. It is based on an estimate of the amount of the system that is sized for fire flow, the portion of annual debt service that is not related to the recycled water system, and the percent of total MEUs attributable to private fire protection.

Based on Table 8 of Project Memorandum 2.8 of the Integrated Master Plan, in 2020 1.1 million gallons or 8.9 percent of the total required storage of 12.3 million gallons will be attributable to fire flow. About 59 percent of existing debt service is related to the potable system. Multiplying 42.3 percent (MEU share) by 8.9 percent (storage share) by 59 percent (debt service share) yields an allocation to fire protection of 2.2 percent. The remaining 97.8 percent of debt service costs are allocated to the capacity.

Max Month Base/Peak with Fire Allocation: This allocation is used to allocate costs associated with operating and maintaining the distribution system to private fire protection customers and to other water customers, and further splitting the cost for water customers between the base and max month peak functional components. The allocation to fire protection is based on multiplying the amount of the system that is sized for fire flow (8.9

percent) by the private fire protection share of MEUs (42.3 percent) to yield an allocation of 3.8 percent.

The remaining costs that are attributable to water customers (96.2 percent of costs) are split between the base and max month peak components based on historic usage data as shown in Table 20 below.

Table 20: Basis of Max Month Base/Peak with Fire Allocation

	Annualized Min 3 Months	Annualized Max Month	Peak Factor
FY 2015/16 (HCF)	7,393,000	10,966,000	1.48
	Base	Max Month Peak	Total
Percent Allocations	67.4%	32.6%	100%
Less Fire Protection Component	-2.5%	-1.2%	-3.8%
Allocation	64.9%	31.3%	96.2%

Figure 4 shows the functional allocation results. Capacity and customer components are combined to comprise the fixed rates of the utility service charge. These components account for 30.9 percent of total revenue requirements. The remaining 69.1 percent is allocated to the base, peak, and supply functional components and comprise the variable utility rates. Notably supply costs paid to United and Calleguas account for over 33 percent of revenue requirements.

Figure 4: Functional Allocation Results

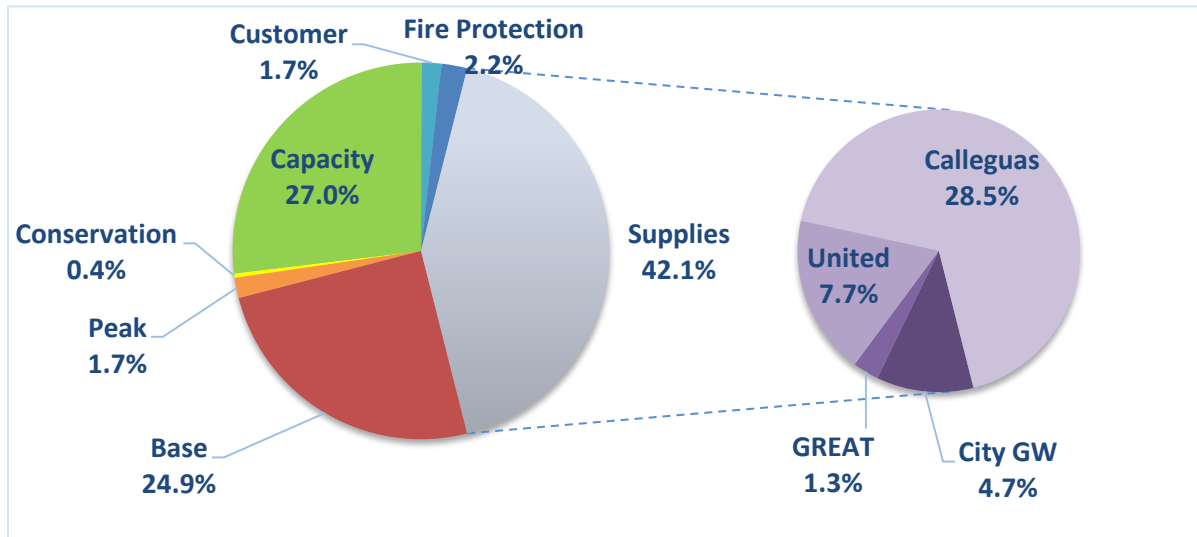


Table 21 shows a summary of the functional allocation by operating division and revenue requirement category. A detailed table showing the allocation of each line item is included for reference in Appendix E.

Table 21: Functional Allocation Summary

	Base	Max Month Peak	Conservation	Capacity	Customer	Fire Protection	City GW	GREAT	United	Calleguas	As All Other
Ongoing Costs											
Production	\$2,629,500	\$0	\$0	\$0	\$87,500	\$0	\$2,364,000	\$0	\$4,356,900	\$16,907,100	\$0
Distribution	1,171,500	566,100	0	0	70,000	68,300	0	0	0	0	0
Metering	0	0	0	921,900	51,400	675,000	0	0	0	0	0
Procurement	5,374,300	0	0	0	391,700	0	0	0	0	0	0
Conservation	0	0	192,200	0	50,800	0	0	0	0	0	0
Recycle	0	0	0	0	0	0	0	2,745,300	0	0	0
Public Information	0	0	0	0	176,300	0	0	0	0	0	0
Security & Contamination Prevention	860,300	0	0	0	12,700	0	0	0	0	0	0
Debt Service Admin	0	0	0	427,900	0	9,700	0	0	0	0	0
Debt Service	0	0	0	14,126,700	0	321,400	0	0	0	0	0
Infrastructure Use Fee	1,924,900	0	0	0	0	0	0	0	0	0	0
Ongoing Costs Total	\$11,961,000	\$566,100	\$192,200	\$15,476,500	\$840,400	\$1,074,400	\$2,364,000	\$2,745,300	\$4,356,900	\$16,907,100	\$0
Additional Requirements											
Rate Funded Capital	\$648,700	\$313,500	\$0	\$0	\$0	\$37,800	\$0	\$0	\$0	\$0	\$0
Net Cash Flows (after rate increase)	0	0	0	0	0	0	0	0	0	0	2,318,700
Less Offsetting Revenues											
Recycled Water Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$2,104,600)	\$0	\$0	\$0
P&G Water	0	0	0	0	0	0	0	0	0	(2,500,000)	0
Oceanview Volumetric Revenues	0	0	0	0	0	0	0	0	(464,200)	0	0
Other Water Revenues	0	0	0	0	0	0	0	0	0	0	(1,664,000)
BABs Refund	0	0	0	(1,809,300)	0	0	0	0	0	0	0
Connection Fees	0	0	0	0	0	0	0	0	0	0	(843,800)
Other Revenues	0	0	0	0	0	0	0	0	0	0	(2,765,600)
Adjustment for Rate Increase Delay	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$995,700
Subtotal Revenue Requirement Allocation	\$12,610,000	\$880,000	\$192,000	\$13,667,000	\$840,000	\$1,112,000	\$2,364,000	\$641,000	\$3,893,000	\$14,407,000	(\$1,959,000)
Reallocation of As All Other	(\$488,000)	(\$34,000)	(\$7,000)	(\$529,000)	(\$33,000)	(\$43,000)	(\$92,000)	(\$25,000)	(\$151,000)	(\$558,000)	\$1,959,000
Total Revenue Requirement Allocation	\$12,122,000	\$846,000	\$185,000	\$13,138,000	\$807,000	\$1,069,000	\$2,272,000	\$616,000	\$3,742,000	\$13,849,000	\$0
Percentage Allocation	24.9%	1.7%	0.4%	27.0%	1.7%	2.2%	4.7%	1.3%	7.7%	28.5%	

4.3 Customer Class Allocations

After costs have been allocated to functional components, they are allocated among the customer classes based on the customer classes' projected use, accounts, and meter equivalents. Consumption data was analyzed by customer class illustrating how each class utilized the system differently throughout the year. This information was then utilized to allocate the functional costs among individual customer classes.

4.3.1 Supply Cost Allocations

Costs associated with the City's water supplies are allocated to each customer class based on usage patterns. The available potable supplies from each source and the allocation of those supplies to each class is used to allocate costs to each customer class and to usage in each tier where applicable. Allocations are based on projected usage for FY 2017/18. Table 22 below shows the available potable supplies from each source. Total production from each source of supply is adjusted based on other water uses and demands to determine the amount available to serve potable users.

Table 22: Available Potable Supplies

<u>Potable Supplies</u>	Acre-Ft	HCF
City GW	7,186	3,130,000
United	7,333	3,194,000
Calleguas	11,643	5,072,000
Total Potable Supplies	26,162	11,396,000
<u>Adjustments</u>	Acre-Ft	HCF
PHWA Transfer	(700)	(305,000)
PHWA Calleguas	(947)	(412,000)
P&G	(1,650)	(719,000)
Unaccounted For Water	(2,193)	(955,000)
Concentrate From Desalter	(855)	(372,000)
Total Adjustments	(6,345)	(2,763,000)
<u>Available for Potable Users</u>		
City GW	5,443	2,371,000
United	5,554	2,420,000
Calleguas	8,820	3,842,000
Total Available	19,817	8,632,000

After the total available supply from each source is defined, they are allocated to each customer class based on each class's consumption patterns. The supply allocation assigns water from each source in a series of five incremental steps. The process is described below:

1. **Allocate dedicated supplies.** The first step is to assign dedicated supplies to the customer classes as necessary. In this step, 393,000 HCF is allocated to the Oceanview Ag customer class, leaving 2,027,000 HCF of united supplies to be allocated to other users.
2. **Allocate supply to the second increment of demand to all classes based on annualized minimum month demand.** The annualized minimum demand is assumed to represent the basic minimum level of usage for each customer class. For classes that were allocated a designated share of supply in Step 1, that dedicated share is subtracted from the minimum month demand prior to the allocation of supply. Step two of the allocation exhausts all available City groundwater water (2,371,000 HCF), all remaining United water (2,027,000 HCF), and a portion of Calleguas water (1,816,000 HCF).
3. **Allocate supply to the third increment of needed supply based on annualized minimum three months demand.** Annualized minimum three months demand is the next increment of demand from each customer class. It represents annual demands associated with usage levels using the three months with the lowest consumption. The supply allocated to each class in Step one and Step two is subtracted from the annualized winter demand prior to the allocation of remaining Calleguas water. Step 3 of the allocation exhausts 652,000 HCF of Calleguas water, leaving 1,374,000 HCF to be allocated in step four.
4. **Allocate supply to the remaining demand based on total usage.** Step four supplies to cover the remaining demand from each customer class based on total usage. The supply allocated to each class in Step one, Step two, and Step three is subtracted from the total annual demand prior to the allocation of remaining Calleguas water. Step 4 of the allocation exhausts all of the remaining Calleguas water (1,374,000 million HCF).
5. **Add allocated supplies for each customer class to determine supply cost allocations.** The supplies allocated to each customer class in Steps 1 through 4 are added to determine each class's share of water from each source. The share of water from each source is then used to allocate the costs associated with each source of supply, and other costs where applicable, to each customer class.

Table 23 through Table 27 show the allocations for each of the steps, and the resulting allocation of water supplies and costs to each class.

Table 23: Supply Allocation Step 1

Step 1	Dedicated Supplies			
	City GW	United	Calleguas	Total
Available Supplies	2,371,000	2,420,000	3,842,000	8,632,000
Dedicated Supplies				
Oceanview Ag	0	(393,000)	0	(393,000)
Remaining Available Supplies	2,371,000	2,027,000	3,842,000	8,240,000

Note: Totals may be imprecise due to rounding.

Table 24: Supply Allocation Step 2

Step 2	Annualized Minimum Month							Step 2 Total	Steps 1 & 2 Cumulative
	Usage	Less Previously Allocated	Amount to be Allocated	City GW	United	Calleguas			
Available to Allocate	n/a	n/a	n/a	2,371,000	2,027,000	3,842,000	n/a	n/a	
Oceanview Ag	193,000	(393,000)	0	0	0	0	0	393,000	
Commercial, Industrial, and Institutional	1,347,000	0	1,347,000	514,000	439,000	394,000	1,347,000	1,347,000	
Irrigation	447,000	0	447,000	171,000	146,000	131,000	447,000	447,000	
Multi-Family	1,322,000	0	1,322,000	504,000	431,000	386,000	1,322,000	1,322,000	
Single Family	3,098,000	0	3,098,000	1,182,000	1,011,000	905,000	3,098,000	3,098,000	
All Classes	6,407,000	(393,000)	6,214,000	2,371,000	2,027,000	1,816,000	6,214,000	6,607,000	
Remaining for Step 3	n/a	n/a	n/a	0	0	2,026,000	n/a	n/a	

Note: Totals may be imprecise due to rounding.

Table 25: Supply Allocation Step 3

Step 3 Annualized Minimum 3 Months								
	Usage	Less Previously Allocated	Amount to be Allocated	City GW	United	Calleguas	Step 2 Total	Steps 1 to 3 Cumulative
Available to Allocate	n/a	n/a	n/a	0	0	2,026,000	n/a	n/a
Oceanview Ag	263,000	(393,000)	0	0	0	0	0	393,000
Commercial, Industrial, and Institutional	1,588,000	(1,347,000)	241,000	0	0	241,000	241,000	1,588,000
Irrigation	518,000	(447,000)	71,000	0	0	71,000	71,000	518,000
Multi-Family	1,414,000	(1,322,000)	92,000	0	0	92,000	92,000	1,414,000
Single Family	3,346,000	(3,098,000)	248,000	0	0	248,000	248,000	3,346,000
All Classes	7,129,000	(6,607,000)	652,000	0	0	652,000	652,000	7,259,000
Remaining for Step 4	n/a	n/a	n/a	0	0	1,374,000	n/a	n/a

Note: Totals may be imprecise due to rounding.

Table 26: Supply Allocation Step 4

Step 4 Total Usage								
	Usage	Less Previously Allocated	Amount to be Allocated	City GW	United	Calleguas	Step 2 Total	Steps 1 to 4 Cumulative
Available to Allocate	n/a	n/a	n/a	0	0	1,374,000	n/a	n/a
Oceanview Ag	393,000	(393,000)	0	0	0	0	0	393,000
Commercial, Industrial, and Institutional	1,959,000	(1,588,000)	371,000	0	0	371,000	371,000	1,959,000
Irrigation	978,000	(518,000)	460,000	0	0	460,000	460,000	978,000
Multi-Family	1,524,000	(1,414,000)	111,000	0	0	111,000	111,000	1,524,000
Single Family	3,779,000	(3,346,000)	433,000	0	0	433,000	433,000	3,779,000
All Classes	8,633,000	(7,259,000)	1,375,000	0	0	1,375,000	1,375,000	8,633,000
Remaining to Allocate	n/a	n/a	n/a	0	0	0	n/a	n/a

Note: Totals may be imprecise due to rounding.

Table 27: Supply Allocation Step 5

Step 5	Total Allocated Supplies			
Allocated HCF	City GW	United	Calleguas	Total
Oceanview Ag	0	393,000	0	393,000
Commercial, Industrial, and Institutional	514,000	439,000	1,006,000	1,959,000
Irrigation	171,000	146,000	661,000	978,000
Multi-Family	504,000	431,000	589,000	1,524,000
Single Family	1,182,000	1,011,000	1,586,000	3,779,000
All Classes	2,371,000	2,420,000	3,842,000	8,633,000
Oceanview Ag	0.0%	16.2%	0.0%	4.5%
Commercial, Industrial, and Institutional	21.7%	18.2%	26.2%	22.7%
Irrigation	7.2%	6.0%	17.2%	11.3%
Multi-Family	21.3%	17.8%	15.3%	17.7%
Single Family	49.9%	41.8%	41.3%	43.8%
All Classes	100%	100%	100%	100%

Note: Totals may be imprecise due to rounding.

The percentage allocations from Step 5 (shown above in Table 27) are applied to the costs that are allocated to each of the supply functional components to allocate costs to each class. The Calleguas allocation is also used to allocate costs in the Conservation and GREAT functional components since those costs are to be collected from the highest levels of usage.

4.3.2 Customer Class Characteristics

For functional components other than supplies, Conservation, or GREAT, costs are allocated based on the account and usage characteristics of each class. Those characteristics include the number of accounts, the number of MEUs, total consumption, and incremental max month consumption.

Table 28 below summarizes the account and usage characteristics that are used in the customer class allocation. Oceanview Ag customers are not allocated a share of variable costs (Base, Max Month Peak, and Supplies) since they are served with water directly from United under the pass-through rate established in City Ordinance 2752.

Table 28: Customer Class Characteristics

Projected Usage	Accounts	MEUs	Total Usage (HCF)	Incremental Max Month (HCF)
Oceanview Ag	49	1,098	n/a	n/a
Commercial, Industrial, and Institutional	2,747	9,112	1,959,000	537,000
Irrigation	1,550	5,921	978,000	505,000
Multi-Family	2,034	5,302	1,524,000	126,000
Single Family	34,130	39,909	3,779,000	439,000
Total	40,510	61,342	8,240,000	1,607,000
Oceanview Ag	0.1%	1.8%	n/a	n/a
Commercial, Industrial, and Institutional	6.8%	14.9%	23.8%	33.4%
Irrigation	3.8%	9.7%	11.9%	31.4%
Multi-Family	5.0%	8.6%	18.5%	7.8%
Single Family	84.3%	65.1%	45.9%	27.3%
Total	100%	100%	100%	100%

4.3.3 Customer Class Allocation Results

Based on the data provided in Table 21, Table 27, and Table 28, functionalized costs are allocated to each customer class. Table 29 presents the results of the customer class allocation. These allocated costs are used together with account and consumption characteristics to develop user rates for each class.

Table 29: Customer Class Allocation

Component	Allocation Basis	Oceanview Ag	Commercial, Industrial, and Institutional	Irrigation	Multi-Family	Single Family	Private Fire Protection
Customer	Accounts	\$1,000	\$55,000	\$31,000	\$41,000	\$681,000	\$0
Capacity	MEUs	235,000	1,952,000	1,268,000	1,136,000	8,548,000	0
Base	Total Use	0	2,881,000	1,438,000	2,243,000	5,559,000	0
Max Month Peak	Incremental Max Month	0	282,000	266,000	66,000	231,000	0
Conservation	Calleguas Supply	0	48,000	32,000	28,000	76,000	0
GREAT	Calleguas Supply	0	161,000	106,000	94,000	254,000	0
City GW	Allocated Supply	0	493,000	163,000	483,000	1,133,000	0
United	Allocated Supply	0	811,000	269,000	796,000	1,866,000	0
Calleguas	Allocated Supply	0	3,625,000	2,384,000	2,123,000	5,717,000	0
Fire Protection	All Allocated Costs	0	0	0	0	0	1,069,000
Total		\$236,000	\$10,308,000	\$5,957,000	\$7,010,000	\$24,065,000	\$1,069,000

Note: Totals may be imprecise due to rounding.

5.0 RATE DESIGN

The rate design analysis links the allocated customer class costs with the water rates necessary to achieve cost recovery. The focus of this process is to achieve full cost recovery and substantiate that each rate class, and individual users within each class, pays its fair and proportionate share of system costs.

5.1 Current Water Rates

The City's current water rates collect revenues from customers using a fixed monthly service charge and volumetric rates. Customers are billed monthly based on their water meter size and the amount of water that they consume. Volumetric rates are imposed based on an inclining block three-tiered rate structure. The City's water rate structure was last updated on January 1, 2013 by Ordinance No. 2859. Since that time, the rates have been adjusted to pass through increased costs from the City's water suppliers. The last such adjustment was implemented on March 15, 2017. Rate Structure Updates

Table 30 details the City's current water rate structure.

5.2 Rate Structure Updates

The proposed water rate structure has been designed to equitably recover costs from each of the City's water customers within each customer class. It is proposed that the overall rate structure be modified in the following ways:

Update Rates to Reflect Cost of Service Allocations: The proposed rates reflect the updated cost of service allocations discussed previously in the report. These allocations have been developed to equitably distribute costs to each customer based on their water consumption characteristics of the system and the reserve capacity required to provide service to each customer.

Separate Irrigation into a Unique Rate Class: Under the current rate structure, irrigation customers are combined with commercial, industrial, and institutional customers. Under the proposed rates, irrigation customers will be separated into a unique class. This will allow rates to better reflect the increased peak demand placed on the system by irrigation customers.

Volumetric Rates: Volumetric rates for each of the City's water rate categories have been updated to reflect current consumption patterns and customer characteristics. Specific updates for each rate class are discussed in detail in the following sections.

Fixed Service Charges: The fixed monthly service charges will be updated to move closer to charges that are the same for all customer classes depending on meter size.

Table 30: Current Water Rates

Fixed Monthly Service Charges							
Meter Size	Single Family	Multi-Family	Commercial /Industrial/ Institutional	Metered Construction	Fireline	Unmetered Construction	Ocean View
3/4"	\$17.33	\$14.78	\$11.94		\$1.84	\$8.62	\$12.05
1"	\$27.31	\$23.29	\$18.37	\$30.43	\$3.17	\$12.67	\$18.37
1.5"	\$50.50	\$42.45	\$33.13		\$6.07	\$19.27	\$33.13
2"	\$84.27	\$65.76	\$51.48		\$9.76	\$25.31	\$51.48
3"	\$172.07	\$147.73	\$110.14	\$102.36	\$21.52	\$31.85	\$110.14
4"	\$292.06	\$240.12	\$188.37		\$36.77	\$38.36	\$188.37
6"	\$605.90	\$502.35	\$385.53		\$76.71	\$51.42	\$385.53
8"	\$870.35	\$721.74	\$562.41		\$110.36	\$64.50	\$562.41
10"	\$1,400.99	\$1,161.46	\$891.74		\$177.88	\$77.54	\$891.74
Variable Commodity Charges							
Single Family		Multi-Family		Commercial/ Institutional/ Industrial/Fireline/ Landscape Irrigation		Metered Construction	
Rate Block	Charge	Rate Block	Charge	Rate Block	Charge	Rate Block	Charge
0-6	\$3.09	0-17	\$2.53	0-17	\$2.53	0-13	\$5.08
7-12	\$3.43	18-32	\$2.81	18-32	\$2.81	14-23	\$5.61
Over 12	\$4.81	Over 32	\$4.18	Over 32	\$4.18	Over 23	\$8.40
Ocean View Agricultural Irrigation		Ocean View Residential/Commercial/ Institutional/Industrial		Recycled Water for Irrigation in lieu of Potable Water		Recycled Water for Industrial in lieu of Potable Water	
Rate Block	Charge	Rate Block	Charge	Rate Block	Charge	Rate Block	Charge
All Usage	\$1.10	0-17	\$3.09	0-17	\$2.53	0-13	\$2.53
		18-32	\$3.43	18-32	\$2.81	14-23	\$2.81
		Over 32	\$4.81	Over 32	\$4.18	Over 23	\$4.18

5.3 Proposed Fixed Charges

The monthly fixed charge component of the rate structure collects the costs that are allocated to the customer and capacity functional components. Currently, the fixed charges vary by customer class, with distinct charges for non-residential, single family, and multifamily customers.

The proposed rates have been designed to move toward fixed charges for each meter size that will be uniform across all of the customer classes. This reflects the nature of the costs that have been allocated to the Capacity functional category, specifically that they are tied to the meter size associated with each account, not the account type.

Because making this change in a single year could lead to rate shock, the City plans to take a phased approach to implementing uniform fixed charges by meter size. The proposed rates represent the first step in the transition. In order to maintain customer equity, the phase-in will be completed by allocating a share of the capacity costs allocated to the effected rate classes to the base component of their variable rates. This will allow the fixed charges to be lower while still collecting each class's full allocated share of revenue requirements.

5.3.1 Commercial, Industrial, and Institutional Fixed Charges

Table 31 on the next page shows the calculation of proposed fixed charges for the commercial, industrial, and institutional customer class. For commercial, industrial, and institutional customers, the fixed charge phase-in is calculated by transferring 30% or \$585,000 of the allocated capacity costs to be collected by the volumetric rates.

The fixed charges are calculated by determining the monthly unit cost per account and MEU, then adding the account unit cost to the MEU unit cost multiplied by the MEU ratio for each meter size. This process is repeated to calculate fixed charges for each of the customer classes.

Table 31: Commercial, Industrial, and Institutional Fixed Charges

	Allocated Costs	Less Allocated to Base	Collected Through Fixed	Units		Monthly Unit Costs
Customer	\$55,000	n/a	\$55,000	2,747	Accounts	\$1.66
Capacity	\$1,952,000	(\$585,000)	\$1,367,000	9,112	MEUs	\$12.49
Meter Size	MEU Ratio		Customer Component	Capacity Component		Monthly Fixed Charge
3/4"	1.0		\$1.66	\$12.49		\$14.16
1"	1.7		1.66	20.86		22.53
1.5"	3.3		1.66	41.60		43.27
2"	5.3		1.66	66.59		68.26
3"	11.7		1.66	145.80		147.47
4"	20.0		1.66	249.87		251.54
6"	41.7		1.66	520.61		522.28
8"	60.0		1.66	749.62		751.29
10"	96.7		1.66	1,207.77		1,209.44

Note: Totals may be imprecise due to rounding.

5.3.2 Irrigation Fixed Charges

Table 32 below shows the calculation of proposed fixed charges for the irrigation customer class. For irrigation customers, the fixed charge phase-in is calculated by transferring 30% or \$380,000 of the allocated capacity costs to be collected by the volumetric rates.

Table 32: Irrigation Fixed Charges

	Allocated Costs	Less Allocated to Base	Collected Through Fixed	Units		Monthly Unit Costs
Customer	\$31,000	n/a	\$31,000	1,550	Accounts	\$1.66
Capacity	\$1,268,000	(\$380,000)	\$888,000	5,921	MEUs	\$12.49
Meter Size	MEU Ratio		Customer Component	Capacity Component		Monthly Fixed Charge
3/4"	1.0		\$1.66	\$12.49		\$14.16
1"	1.7		1.66	20.86		22.53
1.5"	3.3		1.66	41.60		43.27
2"	5.3		1.66	66.59		68.26
3"	11.7		1.66	145.80		147.47
4"	20.0		1.66	249.87		251.54
6"	41.7		1.66	520.61		522.28
8"	60.0		1.66	749.62		751.29
10"	96.7		1.66	1,207.77		1,209.44

Note: Totals may be imprecise due to rounding.

5.3.3 Multi-Family Fixed Charges

Table 33 below shows the calculation of proposed fixed charges for the multi-family customer class. For multi-family customers, the fixed charge phase-in is calculated by transferring 10% or \$114,000 of the allocated capacity costs to be collected by the volumetric rates.

Table 33: Multi-family Fixed Charges

	Allocated Costs	Less Allocated to Base	Collected Through Fixed	Units		Monthly Unit Costs
Customer	\$41,000	n/a	\$41,000	2,034	Accounts	\$1.66
Capacity	\$1,136,000	(\$114,000)	\$1,022,000	5,302	MEUs	\$16.06
Meter Size	MEU Ratio		Customer Component	Capacity Component		Monthly Fixed Charge
3/4"	1.0		\$1.66	\$16.06		\$17.73
1"	1.7		1.66	26.83		28.49
1.5"	3.3		1.66	53.49		55.16
2"	5.3		1.66	85.62		87.28
3"	11.7		1.66	187.46		189.13
4"	20.0		1.66	321.27		322.93
6"	41.7		1.66	669.36		671.03
8"	60.0		1.66	963.80		965.47
10"	96.7		1.66	1,552.85		1,554.51

Note: Totals may be imprecise due to rounding.

5.3.4 Single Family Fixed Charges

Table 34 below shows the calculation of proposed fixed charges for the single family customer class. For single family, no capacity costs are allocated to the volumetric rates.

Table 34: Single Family Fixed Charges

	Allocated Costs	Less Allocated to Base	Collected Through Fixed	Units		Monthly Unit Costs
Customer	\$681,000	n/a	\$681,000	34,130	Accounts	\$1.66
Capacity	\$8,548,000	n/a	\$8,548,000	39,909	MEUs	\$17.85
Meter Size	MEU Ratio		Customer Component	Capacity Component		Monthly Fixed Charge
3/4"	1.0		\$1.66	\$17.85		\$19.52
1"	1.7		1.66	29.81		31.47
1.5"	3.3		1.66	59.43		61.10
2"	5.3		1.66	95.13		96.80
3"	11.7		1.66	208.29		209.96
4"	20.0		1.66	356.96		358.63
6"	41.7		1.66	743.73		745.40
8"	60.0		1.66	1,070.89		1,072.56
10"	96.7		1.66	1,725.38		1,727.05

Note: Totals may be imprecise due to rounding.

5.4 Proposed Volumetric Rates

Volumetric rates are developed specifically for each class and collect the costs that are allocated to the Base, Max Month Peak, Conservation, and water supply functional components. The rates are assessed based each customer’s monthly water usage.

5.4.1 Proposed Oceanview Irrigation Rates

Rates for Oceanview agricultural users are set based on the methodology outlined in Oxnard City Ordinance No. 2752. For FY 2017/18, the rate will be updated based on updated UWCD and FCGMA charges and rates.

Table 35 shows the proposed rates for Oceanview Ag usage. Moving forward, the City will continue to update the Oceanview Ag rates in each year based on the actual rates from UCWD and FCGMA.

Table 35: Oceanview Ag Volumetric Rate

Applicable Costs	Unit Cost	
Oxnard Hueneme Agreement Variable Rate	\$306.60	Per Acre-Ft
Freeman Diversion Charge	24.77	Per Acre-Ft
District Wide In Lieu of Replenishment	45.06	Per Acre-Ft
Fixed Well Replacement Charge	20.65	Per Acre-Ft
FCGMA Charge	12.50	Per Acre-Ft
Pro-Rata portion of Peak Capacity Charge	58.61	Per Acre-Ft
Administrative/Overhead Charge (10 Percent)	46.82	Per Acre-Ft
Total Variable Rate	\$515.01	Per Acre-Ft
Total Variable Rate	\$1.19	Per HCF
Note: Totals may be imprecise due to rounding.		

5.4.2 Proposed Commercial, Industrial, and Institutional Rates

Under the current rate structure all commercial, industrial, and institutional customers are subject to a three tiered inclining block structure. Due to the high degree of variation in the size and usage patterns of customers within the class, applying the same tier structure to all customers is not ideal. It can lead to higher charges for customers who use large quantities of water due to their size or business operations, but that do not necessarily use that water inefficiently. To address this concern, the proposed rates separate the commercial, industrial, and institutional customers based on meter size.

Analysis of customer billing data showed that for customers with meters of 2” or smaller, consumption patterns were relatively consistent, and a tiered rate could be applied. Customers with meters of 3” and larger showed a great degree of variation in monthly consumption, therefore a uniform rate is proposed. This structure has been developed to better reflect the usage characteristics of the commercial, industrial, and institutional users and to avoid overburdening of large users.

Table 36 shows the allocation of costs between customers with 2" or smaller meters and 3" or larger meters based on projected usage.

Table 36: Commercial, Industrial, and Institutional Allocation by Meter Size

	All Comm, Ind, & Inst Customers	2" Meters and Below	3" Meters and Above
Usage	1,959,000	1,111,000	848,000
Percent	100.0%	56.7%	43.3%
Allocated Costs			
<i>Allocated Base Costs</i>	<i>\$2,881,000</i>	<i>\$1,951,000</i>	<i>\$931,000</i>
<i>Capacity Costs to Collect in Base</i>	<i>585,000</i>	<i>396,000</i>	<i>189,000</i>
Total Base Costs	\$3,466,000	\$1,966,000	\$1,501,000
Max Month Peak	282,000	160,000	122,000
Conservation	48,000	27,000	21,000
City GW	493,000	279,000	213,000
GREAT	161,000	91,000	70,000
United	811,000	460,000	351,000
Calleguas	3,625,000	2,055,000	1,570,000
Total	\$8,886,000	\$5,038,000	\$3,849,000
Note: Totals may be imprecise due to rounding.			

5.4.2.1 Commercial, Industrial, and Institutional Customers with 3" or Larger Meters

Uniform rates for users with meters 3" or larger are calculated by dividing their allocated share of costs by their usage. Table 37 below shows the calculation of the proposed rate.

Table 37: Commercial, Industrial, and Institutional 3" Meter and Larger Volumetric Rates

3" Meters and Above	
Allocated Costs	\$3,849,000
Usage	848,000
	All Usage
Rate per HCF	\$4.54

5.4.2.2 Commercial, Industrial, and Institutional Customers with 2" or Smaller Meters

The proposed commercial, industrial, and institutional rate structure for customers with 2" or smaller meters is a two-tiered inclining block rate structure based on the water supplies that have been allocated to the class. The tier breakpoint has been set such that the percentage of overall water use in each tier mirrors the City's overall water supply. Water usage up to 65 HCF per month will be charged the Tier 1 rate; all usage above 65 HCF per month will

be charged the Tier 2 rate. The percentage of overall consumption in Tier 1 is 49 percent and is roughly covered by City groundwater and United supplies. Tier 2 consumption accounts for 51 percent of water and is covered entirely by Calleguas supplies.

Table 38 below shows the allocation of water supplies to each tier and the associated percentage allocations that are used to allocate the costs of each source of supply into the appropriate tier.

Table 38: Commercial, Industrial, and Institutional 2" Meter and Smaller Use by Tier

	Projected Usage	Allocated Supplies		
		City GW	United	Calleguas
Total Allocated Supply FY 2017/18	1,959,000	514,000	439,000	1,006,000
		56.7%	56.7%	56.7%
2" Meter and Below	1,110,000	291,000	249,000	570,000
Allocated Usage and Supply				
Tier 1	544,000	291,000	249,000	4,000
Tier 2	566,000	0	0	566,000
Total	1,110,000	291,000	249,000	570,000
Percentage Allocations				
Tier 1		100%	100%	1%
Tier 2		0%	0%	99%
Total		100%	100%	100%
Note: Totals may be imprecise due to rounding.				

Table 39 on the next page shows the calculation of the proposed rates for each tier. Costs for each functional component are allocated to each tier, then the sum of those costs is divided by the usage in each tier to calculate rates per HCF.

- Base costs are the costs necessary to provide a basic level of service and are the same for each unit of water sold. Therefore, they are allocated to each tier proportionally based on usage.
- Max Month Peak costs are associated with higher levels of demand on the system; they are allocated to the tiers based on each tier's peak factor.
- Supply costs are allocated into each tier based on the amount of each supply necessary to cover demand in each tier as calculated in Table 38 above.
- As discussed previously, Conservation costs and GREAT costs are allocated based on the allocation of Calleguas supply since both programs aim to decrease reliance on imported water.

Table 39: Commercial, Industrial, and Institutional 2" Meter and Smaller Volumetric Rates

Allocated Costs	2" Meters and Below	Cost Allocation to Tiers	
		Tier 1	Tier 2
Allocated Base Costs	\$1,634,000		
Capacity Costs to Collect in Base	332,000		
Total Base Costs	\$1,966,000	49%	51%
Max Month Peak	160,000	36%	64%
Conservation	27,000	0%	100%
City GW	279,000	100%	0%
GREAT	91,000	0%	100%
United	460,000	100%	0%
Calleguas	2,055,000	1%	99%
Total	\$5,038,000	\$1,774,000	\$3,264,000
Usage		544,000	566,000
Proposed Rates		Tier 1:	Tier 2:
Rate per HCF		0 to 65 HCF	>65 HCF
		\$3.26	\$5.77
Note: Totals may be imprecise due to rounding.			

5.4.3 Proposed Oxnard Irrigation Rates

Under the current rate structure all irrigation customers are subject to a three tiered inclining block structure. Due to the high degree of variation in the size and usage patterns of customers within the class, applying the same tier structure to all customers is not ideal. It can lead to higher charges for customers who use large quantities of water due to their size or business operations, but that do not necessarily use that water inefficiently. To address this concern, the proposed rates separate the irrigation customers based on meter size. Analysis of customer billing data showed that for customers with meters of 2" or smaller, consumption patterns were relatively consistent, and a tiered rate could be applied. Customers with meters of 3" and larger showed a great degree of variation in monthly consumption, therefore a uniform rate is proposed. This structure has been developed to better reflect the usage characteristic of the irrigation users and to avoid overburdening of large users.

Table 40 shows the allocation of costs between customers with 2" or smaller meters and 3" or larger meters based on projected usage.

Table 40: Irrigation Allocation by Meter Size

	All Irrigation Customers	2" Meters and Below	3" Meters and Above
Usage	978,000	662,000	316,000
Percent	100.0%	67.7%	32.3%
Allocated Costs			
<i>Allocated Base Costs</i>	<i>\$1,438,000</i>	<i>\$974,000</i>	<i>\$465,000</i>
<i>Capacity Costs to Collect in Base</i>	<i>380,000</i>	<i>258,000</i>	<i>123,000</i>
Base	\$1,818,000	\$1,231,000	\$587,000
Max Month Peak	266,000	180,000	86,000
Conservation	32,000	22,000	10,000
City GW	163,000	111,000	53,000
GREAT	106,000	72,000	34,000
United	269,000	182,000	87,000
Calleguas	2,384,000	1,614,000	770,000
Total	\$5,038,000	\$3,411,000	\$1,628,000
Note: Totals may be imprecise due to rounding.			

5.4.3.1 Irrigation Customers with 3" or Larger Meters

Uniform rates for users with meters 3" or larger are calculated by dividing their allocated share of costs by their usage. Table 41 below shows the calculation of the proposed rate

Table 41: Irrigation 3" Meters and Larger Rates

3" Meters and Above	
Allocated Costs	\$1,628,000
Usage	316,000
Proposed Rate	All Usage
Rate per HCF	\$5.16

5.4.3.2 Irrigation Customers with 2" or Smaller Meters

The proposed irrigation rate structure for customers with 2" or smaller meters is a two-tiered inclining block rate structure based on the water supplies that have been allocated to the class. The tier breakpoint has been set such that the percentage of overall water use in each tier mirrors the City's overall water supply. Water usage up to 24 HCF per month will be charged the Tier 1 rate; all usage above 24 HCF per month will be charged the Tier 2 rate. The percentage of overall consumption in Tier 1 is 32 percent and is roughly covered by City groundwater and United supplies. Tier 2 consumption accounts for 68 percent of water and is roughly covered entirely by Calleguas supplies.

Table 42 below shows the allocation of water supplies to each tier and the associated percentage allocations that are used to allocate the costs of each source of supply into the appropriate tier.

Table 42: Irrigation 2" Meters and Smaller Use by Tier

	Projected Usage	Allocated Supplies		
		City GW	United	Calleguas
Total Allocated Supply FY 2017/18	978,000	171,000 67.7%	146,000 67.7%	661,000 67.7%
2" Meter and Below	662,000	115,000	99,000	448,000
Allocated Usage and Supply				
Tier 1	212,000	115,000	97,000	0
Tier 2	450,000	0	2,000	448,000
Total	662,000	115,000	99,000	448,000
Percentage Allocations				
Tier 1		100%	98%	0%
Tier 2		0%	2%	100%
Total		100%	100%	100%
Note: Totals may be imprecise due to rounding.				

Table 43 on the next page shows the calculation of the proposed rates for each tier. Costs for each functional component are allocated to each tier, then the sum of those costs is divided by the usage in each tier to calculate rates per HCF.

- Base costs are the costs necessary to provide a basic level of service and are the same for each unit of water sold. Therefore, they are allocated to each tier proportionally based on usage.
- Max Month Peak costs are associated with higher levels of demand on the system; they are allocated to the tiers based on each tier's peak factor.
- Supply costs are allocated into each tier based on the amount of each supply necessary to cover demand in each tier as calculated in Table 42 above.
- As discussed previously, Conservation costs and GREAT costs are allocated based on the allocation of Calleguas supply since both programs aim to decrease reliance on imported water.

Table 43: Irrigation 2" Meters and Smaller Volumetric Rates

Allocated Costs	2" Meters and Below	Cost Allocation to Tiers	
		Tier 1	Tier 2
<i>Allocated Base Costs</i>	\$974,000		
<i>Capacity Costs to Collect in Base</i>	258,000		
Base	\$1,231,000	32%	68%
Max Month Peak	180,000	17%	83%
Conservation	22,000	0%	100%
City GW	111,000	100%	0%
GREAT	72,000	0%	100%
United	182,000	98%	2%
Calleguas	1,614,000	0%	100%
Total	\$3,411,000	\$713,000	\$2,699,000
Usage		212,000	450,000
Proposed Rates		Tier 1:	Tier 2:
Rate per HCF		0 to 24 HCF	>24 HCF
		\$3.37	\$6.00
Note: Totals may be imprecise due to rounding.			

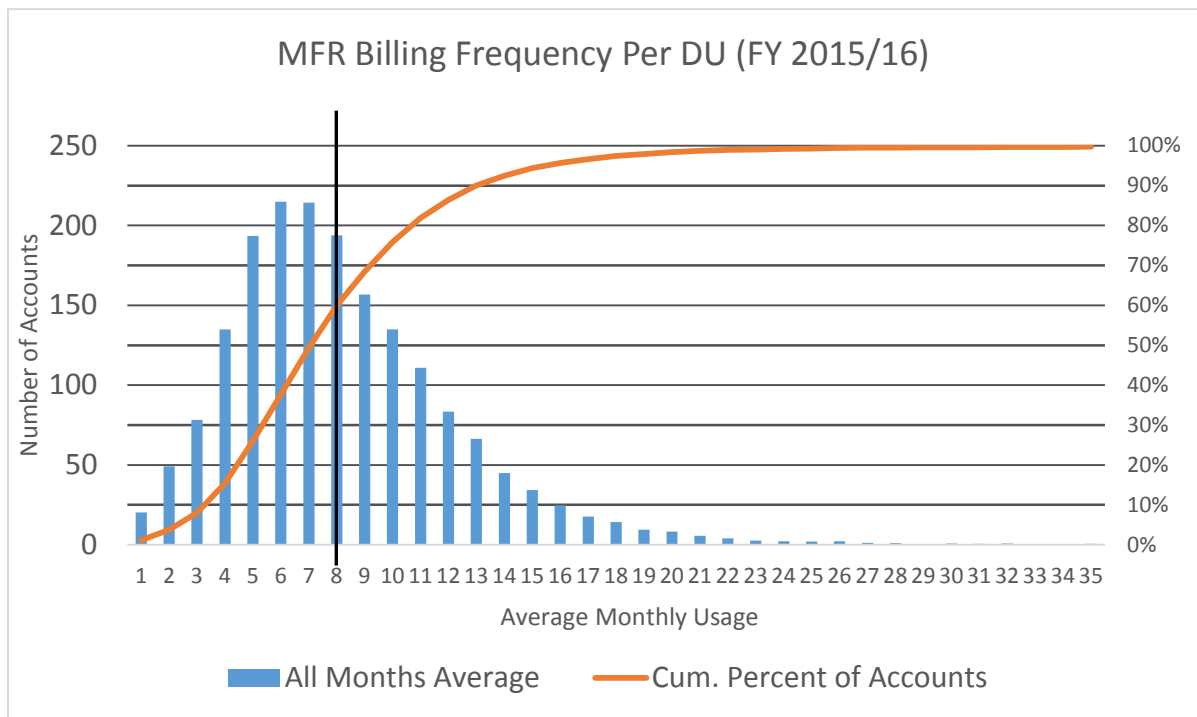
5.4.4 Proposed Multi-Family Rates

The proposed multi-family rate structure has been updated to base tier allotments on the number of dwelling units associated with each account. This methodology avoids placing an undue burden on larger complexes, simply because they contain more units, without considering the water use efficiency on a dwelling unit basis.

Tier breaks per multi-family dwelling unit have been set based on the analyzed billing data.

Figure 5 shows the average number of accounts at each level of monthly consumption per dwelling unit for FY 2015/16. The proposed tier break is based on the approximate average level of consumption per dwelling unit. In an average month, about 60 percent of users will stay within the Tier 1 limit, and 40 percent of users will use water in Tier 1 and Tier 2. If demand were to rebound to FY 2013/14 levels, which is not expected, 50 percent of users would remain within Tier 1, and 50 percent would use water in both tiers.

Figure 5: Multi-Family Usage Distribution



With the proposed tier break, 85 percent of usage will fall within Tier 1, and 15 percent of usage will be in Tier 2. Table 44 below shows the allocation of water supplies to each tier and the associated percentage allocations that are used to allocate the costs of each source of supply into the appropriate tier.

Table 44: Multi-Family Use by Tier

	Projected Usage	Allocated Supplies		
		City GW	United	Calleguas
FY 2017/18	1,524,000	504,000	431,000	589,000
Allocated Usage and Supply				
Tier 1	1,296,000	504,000	431,000	361,000
Tier 2	228,000	0	0	228,000
Total	1,524,000	504,000	431,000	589,000
Percentage Allocations				
Tier 1		100%	100%	61%
Tier 2		0%	0%	39%
Total		100%	100%	100%
Note: Totals may be imprecise due to rounding.				

Table 45 below shows the calculation of the proposed rates for each tier. Costs for each functional component are allocated to each tier, then the sum of those costs is divided by the usage in each tier to calculate rates per HCF.

- Base costs are the costs necessary to provide a basic level of service and are the same for each unit of water sold. Therefore, they are allocated to each tier proportionally based on usage.
- Max Month Peak costs are associated with higher levels of demand on the system; they are allocated to the based on each tier's tiers peak factor.
- Supply costs are allocated into each tier based on the amount of each supply necessary to cover demand in each tier as calculated in Table 44 above.
- As discussed previously, Conservation costs and GREAT costs are allocated based on the allocation of Calleguas supply since both programs aim to decrease reliance on imported water.

Table 45: Multi-Family Volumetric Rates

Allocated Costs	Cost Allocation to Tiers	
	Tier 1	Tier 2
<i>Allocated Base Costs</i> \$2,243,000		
<i>Capacity Costs to Collect in Base</i> 114,000		
Base \$2,356,000	85%	15%
Max Month Peak 66,000	78%	22%
Conservation 28,000	0%	100%
City GW 483,000	100%	0%
GREAT 94,000	0%	100%
United 796,000	100%	0%
Calleguas 2,123,000	61%	39%
Total \$5,946,000	\$4,635,000	\$1,311,000
Usage	1,296,000	228,000
Proposed Rates	Tier 1: 0 to 8 HCF per DU	Tier 2: >8 HCF per DU
Rate per HCF	\$3.58	\$5.76
Note: Totals may be imprecise due to rounding.		

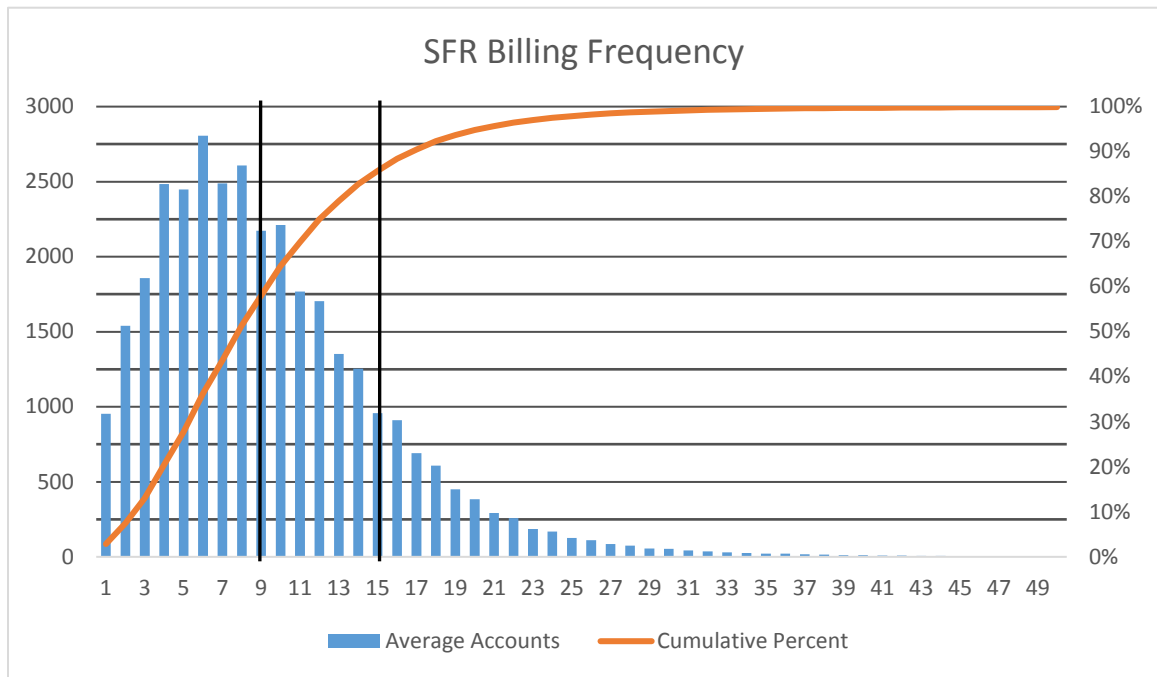
5.4.5 Single Family Rates

The proposed single family rate structure has been updated to reflect current consumption characteristics. Billing data from January 2011 through September 2016 was analyzed to determine usage patterns among single family customers. The customer data analysis used in the rate design is based on FY 2015/16.

Tier breaks for single family customers have been updated based on the analyzed billing data. Figure 6 shows the average number of accounts at each monthly consumption level for FY 2015/16. The updated tier breaks are based on the approximate average level of consumption, 9 HCF, for Tier 1 and the approximate 85th percentile consumption 15 HCF for Tier 2. In an average month, about 58 percent of users will stay within the Tier 1 limit; the next 27 percent of users will maintain usage within Tiers 1 and 2. Lastly the top 15 percent of users will use water in all three tiers.

The tier breaks were also analyzed to test that they would remain appropriate as demands rebound in the coming years. When applied to consumption data from FY 2013/14, the Tier 1 break corresponds to the median level usage, and the Tier 2 break corresponds to the 75th percentile level of usage. This means that even if demands rebound to FY 2013/14 levels, which is not expected, on average 50 percent of users will have usage entirely within Tier 1, the next 25 percent will use water in Tiers 1 and 2, and the top 25 percent of users will use water in all three tiers.

Figure 6: Single Family Usage Distribution



With the proposed tier breaks, 73 percent of usage will fall within Tier 1, 18 percent will fall within Tier 2, and 9 percent of usage will be in Tier 3.

Table 46 below shows the allocation of water supplies to each tier and the associated percentage allocations that are used to allocate the costs of each source of supply into the appropriate tier.

Table 46: Single Family Use by Tier

	Projected Usage	Allocated Supplies		
		City GW	United	Calleguas
FY 2017/18	3,779,000	1,182,000	1,011,000	1,586,000
Allocated Usage and Supply				
Tier 1	2,759,000	1,182,000	1,011,000	566,000
Tier 2	680,000	0	0	680,000
Tier 3	340,000	0	0	340,000
Total	3,779,000	1,182,000	1,011,000	1,586,000
Percentage Allocations				
Tier 1		100%	100%	36%
Tier 2		0%	0%	43%
Tier 3		0%	0%	21%
Total		100%	100%	100%
Note: Totals may be imprecise due to rounding.				

Table 47 on the next page shows the calculation of the proposed rates for each tier. Costs for each functional component are allocated to each tier, then the sum of those costs is divided by the usage in each tier to calculate rates per HCF.

- Base costs are the costs necessary to provide a basic level of service and are the same for each unit of water sold. Therefore, they are allocated to each tier proportionally based on usage.
- Max Month Peak costs are associated with higher levels of demand on the system; they are allocated to the based on each tier's tiers peak factor.

Supply costs are allocated into each tier based on the amount of each supply necessary to cover demand in each tier as calculated in

- Table 46 above.
- As discussed previously, Conservation costs and GREAT costs are allocated based on the allocation of Calleguas supply since both programs aim to decrease reliance on imported water.

Table 47: Single Family Volumetric Rates

Allocated Costs	Cost Allocation to Tiers		
	Tier 1	Tier 2	Tier 3
Base \$5,559,000	73%	18%	9%
Max Month Peak 231,000	65%	22%	13%
Conservation 76,000	0%	0%	100%
City GW 1,133,000	100%	0%	0%
GREAT 254,000	0%	0%	100%
United 1,866,000	100%	0%	0%
Calleguas 5,717,000	36%	43%	21%
Total \$14,836,000	\$9,245,000	\$3,504,000	\$2,087,000
Usage	2,759,000	680,000	340,000
Proposed Rates	Tier 1:	Tier 2:	Tier 3:
	0 to 9 HCF	>9 to 15 HCF	>15 HCF
Rate per HCF	\$3.36	\$5.16	\$6.14
Note: Totals may be imprecise due to rounding.			

5.4.6 Recycled Water In-lieu of Potable Rates

Under the current rate structure recycled water in-lieu of potable customers are subject to a three tiered inclining block structure. Due to the high degree of variation in the size and usage patterns of customers within the class, applying the same tier structure to all customers is not ideal. It can lead to higher charges for customers who use large quantities of water due to their size or business operations, but that do not necessarily use that water inefficiently. To address this concern, the proposed rates will charge recycled water in-lieu of potable customers based on a uniform rate.

The monthly fixed charges paid by recycled water in-lieu of potable customers will depend on whether or not each customer maintains a potable water backup connection. Users of recycled water who maintain a back-up potable connection will only be charged the fixed charge associated with their potable connection, assuming that they will only be using water from one source at a time. Users using recycled water exclusively (those with no potable backup) will pay the appropriate fixed charge for commercial, industrial, and institutional meters or for irrigation meters.

The proposed volumetric rates for recycled water in-lieu of potable customers are developed by combining two components. The first is the cost to produce recycled water at the AWPf, and the second accounts for recycled water users' share of base and max month peak costs. The two components are summed to calculate the proposed rates.

The percent of base and max month peak costs applicable to recycled water was calculated by analyzing the line items that are allocated to those components and determining which were applicable to recycled water. The analysis showed that 86 percent of base costs and 75 percent of max month peak costs are applicable to recycled water rates. Details of this process are shown in Appendix E. No supply costs are applied to recycled water since the demands are all covered by recycled water produced at the AWPf, and those costs are included in the AWPf O&M component.

Table 48 below shows the calculation of the AWPf O&M component. Projected AWPf costs are divided by the expected total production at the AWPf to calculate a unit cost per HCF. This component of the rates is the same for all recycled water customers, regardless of whether they will use water for commercial, industrial, institutional, or irrigation purposes.

Table 48: Recycled Water AWPf O&M Component

FY 2017/18		
Projected AWPf Costs	\$2,745,000	
Less: Professional Service Legal ⁽¹⁾	(513,000)	
AWPF O&M Costs	\$2,232,000	
Projected AWPf Production	3,000	Acre-Ft
Unit Cost	\$744	Per Acre-Ft
Unit Cost	\$1.71	Per HCF
Notes: (1) These projected costs are associated with an ongoing project. If incurred they will likely be capitalized, they are not considered to be O&M costs. Totals may be imprecise due to rounding.		

The second component varies based on whether customers will use recycled water for commercial, industrial, or institutional purposes, or for irrigation. This separation accounts for differences in the expected peak profile of each type of user.

Table 49 on the next page shows the calculation of the base and max month peak component and the proposed rates for recycled water in-lieu of potable for commercial, industrial, or institutional use.

Table 49: Recycled Water for Commercial, Industrial, and Institutional In-lieu of Potable Rates

	Comm, Ind, & Inst Customers	Applicability to Recycled Water	3" Meters and Above
<i>Allocated Base Costs</i>	\$2,881,000		
<i>Capacity Costs to Collect in Base</i>	<u>585,000</u>		
Total Base Costs	\$3,466,000	86%	\$2,983,000
Max Month Peak	282,000	75%	\$211,000
Total Applicable to Recycled Water			\$3,194,000
Comm, Ind, & Inst Usage			1,959,000
Unit Cost Applicable to Recycled Water			\$1.63
Unit Cost for AWPf O&M			\$1.71
Proposed Rate			All Usage
Rate per HCF			\$3.34
Note: Totals may be imprecise due to rounding.			

Table 50 below shows the calculation of the base and max month peak component and the proposed rates for recycled water in-lieu of potable for irrigation use.

Table 50: Recycled Water for Irrigation In-lieu of Potable Rates

	All Irrigation Customers	Applicability to Recycled Water	3" Meters and Above
<i>Allocated Base Costs</i>	\$1,438,000		
<i>Capacity Costs to Collect in Base</i>	<u>380,000</u>		
Base	\$1,818,000	86%	\$1,565,000
Max Month Peak	266,000	75%	\$199,000
Total Applicable to Recycled Water			\$1,764,000
Irrigation Usage			978,000
Unit Cost Applicable to Recycled Water			\$1.81
Unit Cost for AWPf O&M			\$1.71
Proposed Rate			All Usage
Rate per HCF			\$3.52
Note: Totals may be imprecise due to rounding.			

5.5 Fire Protection Charges

Fire protection charges are calculated by determining the monthly unit cost per MEU, then multiplying it by the MEU ratio for each connection size.

Table 51 below shows the calculation and the proposed fire protection charges.

Table 51: Fire Protection Charges

	Allocated Costs	Units	Monthly Unit Costs
Fire Protection	\$1,069,000	44,918 MEUs	\$1.99
Connection Size	MEU Ratio	Monthly Fixed Charge	
3/4"	1.0	\$1.99	
1"	1.7	3.32	
1.5"	3.3	6.61	
2"	5.3	10.58	
3"	11.7	23.15	
4"	20.0	39.68	
6"	41.7	82.66	
8"	60.0	119.02	
10"	96.7	191.76	
Note: Totals may be imprecise due to rounding.			

5.6 Construction Users

5.6.1 Metered Construction

Rates for metered construction customers are based on the rates for commercial, industrial, and institutional users. The volumetric rate is the blended volumetric rate for the commercial, industrial, and institutional class, which is equal to the proposed uniform rate for users with meters 3" or larger. Table 52 below shows the proposed rates for metered construction customers.

Table 52: Metered Construction Rates and Charges

Meter Size	Fixed Charge		Volumetric Rate
		Monthly Charge	
1"		\$22.53	All Usage \$4.54
3"		147.47	

5.6.2 Unmetered Construction

Updated rates for unmetered construction connections have been developed based on the rates for commercial, industrial, and institutional users and assumed consumption for each connection size. Table 53 shows the calculation and the proposed rates.

Table 53: Unmetered Construction Charges

Meter Size	Assumed Usage (HCF)	Usage Rate (based on \$4.54 per HCF)	Fixed Charge	Proposed Monthly Charge
3/4"	5	\$22.70	\$14.16	\$36.86
1"	10	45.40	22.53	67.93
1.5"	25	113.50	43.27	156.77
2"	50	227.00	68.26	295.26

6.0 CUSTOMER IMPACTS

The impact of the proposed rates on the City's water customers will vary based on each customer's rate class, meter size, and monthly usage. The following figure and tables show a sample of the analyzed bill impacts.

Figure 7: Single Family Monthly Bill Impacts

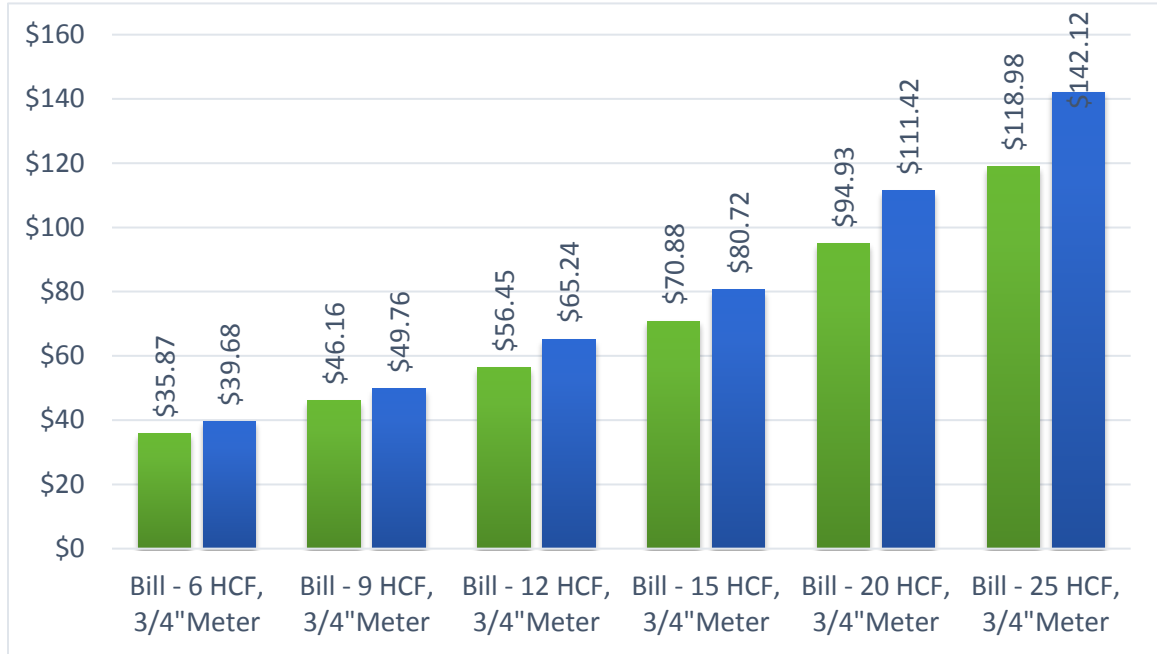


Table 54: Single Family Monthly Bill Impacts

Meter Size	Assumed Use (HCF)	Existing Rates Charges	Proposed Rates Charges	Increase
3/4\"Meter	6	\$35.87	\$39.68	\$3.81
3/4\"Meter	9	\$46.16	\$49.76	\$3.60
3/4\"Meter	12	\$56.45	\$65.24	\$8.79
3/4\"Meter	15	\$70.88	\$80.72	\$9.84
3/4\"Meter	20	\$94.93	\$111.42	\$16.49
3/4\"Meter	25	\$118.98	\$142.12	\$23.14

Table 55: Commercial, Industrial, and Institutional Monthly Bill Impacts

Meter Size	Average Use (HCF)	Existing Rates Charges	Proposed Rates Charges	Increase
3/4" Meter	8.4	\$33.23	\$41.59	\$8.36
1" Meter	17.3	\$62.14	\$78.82	\$16.68
1.5" Meter	47.6	\$183.38	\$198.33	\$14.95
2" Meter	97.6	\$411.00	\$475.79	\$64.79
3" Meter	377	\$1,637	\$1,858	\$221
4" Meter	944	\$4,085	\$4,534	\$449
6" Meter	464	\$2,274	\$2,625	\$351
8" Meter	1,374	\$6,259	\$6,987	\$729

Table 56: Irrigation Monthly Bill Impacts

Meter Size	Average Use (HCF)	Existing Rates Charges	Proposed Rates Charges	Increase
3/4" Meter	4.3	\$22.76	\$28.55	\$5.78
1" Meter	17.2	\$62.05	\$80.52	\$18.47
1.5" Meter	40.4	\$153.30	\$222.20	\$68.90
2" Meter	78.7	\$331.73	\$476.81	\$145.08
3" Meter	247	\$1,094	\$1,420	\$326
4" Meter	638	\$2,806	\$3,540	\$733
6" Meter	761	\$3,516	\$4,442	\$926

Table 57: Multi-Family Monthly Bill Impacts

Meter Size	Dwelling Units	Use per DU	Average Use (HCF)	Existing Rates Charges	Proposed Rates Charges	Increase
1" Meter	2	8	16	\$63.77	\$85.77	\$22.00
1" Meter	4	8	32	\$108.45	\$143.05	\$34.60
1" Meter	6	8	48	\$175.33	\$200.33	\$25.00
2" Meter	10	8	80	\$351.56	\$373.68	\$22.12
2" Meter	20	8	160	\$685.96	\$660.08	(\$25.88)
2" Meter	30	8	240	\$1,020	\$946	(\$74)
4" Meter	50	8	400	\$1,758	\$1,567	(\$191)
4" Meter	100	8	800	\$3,430	\$2,999	(\$431)
4" Meter	150	8	1,200	\$5,102	\$4,431	(\$671)

APPENDIX A – CUSTOMER DATA

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FY 2015/16 Customer Data

OV: Irr Total	Accounts	Meter Ratio	EDUs	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total	Average Consumption per Account Bimonthly	
				Summer	Summer	Summer	Summer	Winter	Winter	Winter	Winter	Winter	Winter	Summer	Summer		Winter	Summer
OV IRR	← For Alt Rate Class																	
5/8"	0	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
3/4"	9	1.0	9	275	269	572	438	475	279	352	279	344	382	465	391	25,009	96	99
1"	4	1.7	7	174	192	204	137	196	113	104	70	116	123	152	175	8,573	67	86
1.5"	8	3.3	27	282	233	266	174	236	172	187	129	172	196	206	236	14,771	60	72
2"	1	5.3	6	149	135	170	98	172	176	166	32	104	68	174	192	11,673	324	450
3"	4	11.7	47	2,151	2,343	2,502	2,217	3,010	1,962	1,593	887	2,088	1,823	2,468	2,522	97,124	701	1033
4"	1	20.0	20	2,423	3,457	4,037	2,732	3,033	1,791	1,381	1,004	1,710	2,295	2,640	2,488	75,390	2267	3118
6"	16	41.7	683	18,803	19,094	36,923	22,572	46,913	21,049	17,867	11,502	16,930	17,434	25,459	22,912	1,385,572	2789	3252
8"	5	60.0	300	2,158	1,001	2,165	4,178	9,064	6,083	3,439	2,221	3,051	3,123	5,724	7,990	383,672	2772	2709
10"	0	96.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals	49		1,098	26,414	26,725	46,839	32,545	63,098	31,626	25,089	16,124	24,515	25,444	37,288	36,906	2,001,784	47%	53%

OX: C/I Total	Accounts	Meter Ratio	EDUs	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total	Average Consumption per Account Bimonthly	
				Summer	Summer	Summer	Summer	Winter	Winter	Winter	Winter	Winter	Winter	Summer	Summer		Winter	Summer
Commercial/Institutional	← For Alt Rate Class																	
5/8"	0	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
3/4"	1,002	1.0	1,002	9,094	8,392	8,723	8,984	8,751	8,301	7,598	7,626	8,139	9,163	7,880	8,507	492,075	18	18
1"	565	1.7	944	10,394	9,908	10,107	9,945	9,908	9,504	8,478	7,914	9,290	9,556	10,401	11,551	566,384	34	37
1.5"	506	3.3	1,684	30,436	23,851	23,516	22,926	22,244	21,505	18,363	18,666	23,072	22,628	27,317	34,117	1,432,783	91	112
2"	515	5.3	2,746	53,031	48,282	48,748	48,283	46,698	43,956	46,115	42,533	52,896	50,986	55,827	66,221	2,670,612	172	198
3"	100	11.7	1,162	50,259	41,261	36,444	39,206	36,330	32,262	27,455	34,787	38,121	16,172	44,008	53,881	2,099,404	653	853
4"	47	20.0	937	49,263	55,229	50,262	46,534	51,735	46,082	39,019	41,666	51,735	44,111	11,811	47,905	2,583,913	1904	2036
6"	8	41.7	334	1,134	1,207	1,008	1,183	3,894	8,611	7,252	7,852	9,572	723	1,017	1,079	112,076	627	373
8"	5	60.0	305	10,671	10,850	13,480	7,937	7,604	4,971	3,579	3,560	4,110	6,166	3,343	7,460	205,524	1362	1530
10"	0	96.7	0	11	38	26	33	1	10	23	278	116	0	70	14	3,237		
Totals	2,747		9,112	214,293	199,019	192,314	185,030	187,360	175,201	157,882	164,882	189,427	127,205	197,768	229,757	10,166,009	47%	53%

OX: Irr Total	Accounts	Meter Ratio	EDUs	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total	Average Consumption per Account Bimonthly	
				Summer	Summer	Summer	Summer	Winter	Winter	Winter	Winter	Winter	Winter	Summer	Summer		Winter	Summer
Irrigation	← For Alt Rate Class																	
5/8"	0	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
3/4"	244	1.0	244	1,286	1,275	1,387	1,114	1,152	1,073	752	535	605	912	1,010	1,418	69,882	8	12
1"	338	1.7	564	6,290	5,951	6,047	6,809	6,621	6,868	4,302	3,809	4,389	4,909	6,119	7,731	377,205	34	46
1.5"	408	3.3	1,360	20,043	18,134	18,404	18,628	17,992	18,570	10,091	8,200	12,950	14,942	17,886	22,029	1,074,919	74	114
2"	476	5.3	2,537	47,933	44,111	43,864	42,328	40,444	42,581	17,561	19,442	24,035	31,335	42,407	53,329	2,567,962	138	247
3"	64	11.7	748	22,419	19,554	22,781	15,784	16,178	13,442	8,033	4,222	6,481	11,730	20,631	28,668	1,173,401	418	890
4"	17	20.0	340	13,040	14,686	15,275	12,670	10,510	10,203	4,493	3,469	5,992	10,539	13,040	16,230	823,888	1123	2339
6"	3	41.7	128	2,798	2,183	2,729	2,366	2,239	5,685	488	1,387	2,239	1,853	2,419	2,506	132,396	1136	1937
8"	0	60.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
10"	0	96.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals	1,550		5,921	113,808	105,893	110,487	99,698	95,135	98,422	45,720	41,064	55,884	76,220	103,512	131,911	6,219,652	36%	64%

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OX: MFR Total	Accounts	Meter Ratio	EDUs													Total	Average Consumption per Account Bimonthly	
				Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16		Winter	Summer
				Summer	Summer	Summer	Summer	Winter	Winter	Winter	Winter	Winter	Winter	Summer	Summer			
Multi-Family Residence	← For Alt Rate Class																	
5/8"	0	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/4"	615	1.0	615	13,980	12,954	13,449	12,544	12,592	12,245	11,773	10,412	11,800	13,281	11,993	13,682	831,983	47	50
1"	750	1.7	1,253	30,579	29,432	30,060	27,756	29,865	27,012	29,533	25,022	27,776	29,533	27,831	30,204	1,709,053	82	81
1.5"	400	3.3	1,332	31,775	29,286	30,265	28,380	30,208	27,904	29,984	25,673	28,736	30,777	27,304	29,827	1,709,567	154	151
2"	231	5.3	1,233	32,029	29,636	32,044	29,751	30,395	29,683	28,773	26,397	29,458	30,278	27,241	33,387	1,690,998	262	261
3"	15	11.7	173	5,147	4,786	4,882	4,478	5,049	4,882	4,778	4,722	5,020	5,824	5,170	5,949	229,650	559	546
4"	14	20.0	285	12,061	11,039	11,585	10,482	11,052	10,786	10,343	8,920	9,832	10,798	10,492	11,806	677,425	1624	1776
6"	7	41.7	292	9,045	8,514	9,376	8,135	8,389	8,809	8,275	7,381	8,345	8,551	8,655	9,726	505,418	2553	2604
8"	2	60.0	120	2,927	2,668	2,765	2,215	2,255	2,262	1,603	1,606	1,674	2,137	1,962	2,442	146,123	2367	2852
10"	0	96.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals	2,034		5,302	137,543	128,316	134,425	123,740	129,533	123,749	125,510	110,133	122,641	131,179	120,648	137,023	7,500,216	50%	50%

OX: SFR Total	Accounts	Meter Ratio	EDUs													Total	Average Consumption per Account Bimonthly	
				Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16		Winter	Summer
				Summer	Summer	Summer	Summer	Winter	Winter	Winter	Winter	Winter	Winter	Summer	Summer			
Single-Family Residence	← For Alt Rate Class																	
5/8"	0	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/4"	25,665	1.0	25,665	256,205	239,548	252,567	230,039	238,682	221,655	225,034	190,321	212,673	240,506	222,152	259,079	14,191,717	19	21
1"	8,401	1.7	14,029	91,556	88,280	88,693	81,989	85,080	80,253	67,321	67,531	72,631	84,457	84,248	91,942	4,990,925	20	23
1.5"	63	3.3	210	576	518	532	417	474	365	309	355	370	473	509	446	30,910	16	19
2"	1	5.3	5	225	225	208	195	227	0	0	0	0	0	30	61	11,076	373	419
3"	0	11.7	0	0	0	0	0	0	0	0	0	0	0	0	0	250		
4"	0	20.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
6"	0	41.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8"	0	60.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
10"	0	96.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals	34,130		39,909	348,562	328,571	342,000	312,640	324,462	302,274	292,664	258,207	285,674	325,436	306,939	351,528	19,224,878	47%	53%

Fire Service	Accounts	Meter Ratio	EDUs													Total	Average Consumption per Account Bimonthly	
				Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16		Winter	Summer
				Summer	Summer	Summer	Summer	Winter	Winter	Winter	Winter	Winter	Winter	Summer	Summer			
[New Class 1]	← For Alt Rate Class																	
5/8"		1.0	0													0		
3/4"	8	1.0	8													0	0	0
1"	6	1.7	10													0	0	0
1.5"	2	3.3	7													0	0	0
2"	334	5.3	1,780													0	0	0
3"	22	11.7	257													0	0	0
4"	571	20.0	11,420													0	0	0
6"	389	41.7	16,210													0	0	0
8"	199	60.0	11,940													0	0	0
10"	34	96.7	3,287													0	0	0
Totals	1,565		44,918	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0%

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Summary	Accounts	Meter Ratio	EDUs	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
OV: Irr Total	49		1,098	26,414	26,725	46,839	32,545	63,098	31,626	25,089	16,124	24,515	25,444	37,288	36,906	392,613
OX: C/I Total	2,747		9,112	214,293	199,019	192,314	185,030	187,360	175,201	157,882	164,882	189,427	127,205	197,768	229,757	2,220,139
OX: Irr Total	1,550		5,921	113,808	105,893	110,487	99,698	95,135	98,422	45,720	41,064	55,884	76,220	103,512	131,911	1,077,753
OX: MFR Total	2,034		5,302	137,543	128,316	134,425	123,740	129,533	123,749	125,510	110,133	122,641	131,179	120,648	137,023	1,524,439
OX: SFR Total	34,130		39,909	348,562	328,571	342,000	312,640	324,462	302,274	292,664	258,207	285,674	325,436	306,939	351,528	3,778,957
	40,510		61,342	840,620	788,524	826,065	753,652	799,589	731,272	646,865	590,410	678,141	685,484	766,155	887,125	8,993,902

Percent Summary	Accounts	Meter Ratio	EDUs	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
OV: Irr Total	0.12%		2%	3%	3%	6%	4%	8%	4%	4%	3%	4%	4%	5%	4%	
OX: C/I Total	6.78%		15%	25%	25%	23%	25%	23%	24%	24%	28%	28%	19%	26%	26%	
OX: Irr Total	3.83%		10%	14%	13%	13%	13%	12%	13%	7%	7%	8%	11%	14%	15%	
OX: MFR Total	5.02%		9%	16%	16%	16%	16%	16%	17%	19%	19%	18%	19%	16%	15%	
OX: SFR Total	84.25%		65%	41%	42%	41%	41%	41%	41%	45%	44%	42%	47%	40%	40%	
	100%		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Summary (winter usage)	Accounts	Meter Ratio	EDUs	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
OV: Irr Total				0	0	0	0	63,098	31,626	25,089	16,124	24,515	25,444	0	0	185,896
OX: C/I Total				0	0	0	0	187,360	175,201	157,882	164,882	189,427	127,205	0	0	1,001,957
OX: Irr Total				0	0	0	0	95,135	98,422	45,720	41,064	55,884	76,220	0	0	412,445
OX: MFR Total				0	0	0	0	129,533	123,749	125,510	110,133	122,641	131,179	0	0	742,745
OX: SFR Total				0	0	0	0	324,462	302,274	292,664	258,207	285,674	325,436	0	0	1,788,717
				0	0	0	0	799,589	731,272	646,865	590,410	678,141	685,484	0	0	4,131,760

Summary (summer usage)	Accounts	Meter Ratio	EDUs	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
OV: Irr Total				26,414	26,725	46,839	32,545	0	0	0	0	0	0	37,288	36,906	206,717
OX: C/I Total				214,293	199,019	192,314	185,030	0	0	0	0	0	0	197,768	229,757	1,218,182
OX: Irr Total				113,808	105,893	110,487	99,698	0	0	0	0	0	0	103,512	131,911	665,308
OX: MFR Total				137,543	128,316	134,425	123,740	0	0	0	0	0	0	120,648	137,023	781,695
OX: SFR Total				348,562	328,571	342,000	312,640	0	0	0	0	0	0	306,939	351,528	1,990,240
				840,620	788,524	826,065	753,652	0	0	0	0	0	0	766,155	887,125	4,655,425

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Excludes Fire Accounts

All Metered Accounts Summary	Accounts	Meter Ratio	EDUs	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
				Summer	Summer	Summer	Summer	Winter	Winter	Winter	Winter	Winter	Winter	Summer	Summer	
[New Class 1]	← For Alt Rate Class															
5/8"	0	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/4"	27,535	1.0	27,535	280,840	262,439	276,698	253,119	261,651	243,554	245,509	209,173	233,561	264,244	243,500	283,077	3,057,365
1"	10,058	1.7	16,796	138,992	133,764	135,112	126,635	131,864	123,750	109,738	104,346	114,202	128,578	128,751	141,603	1,517,335
1.5"	1,385	3.3	4,612	83,112	72,023	72,982	70,524	71,154	68,517	58,934	53,023	65,300	69,016	73,222	86,655	844,461
2"	1,225	5.3	6,527	133,368	122,390	125,035	120,654	117,937	116,396	92,615	88,404	106,493	112,667	125,679	153,190	1,414,827
3"	182	11.7	2,129	79,976	67,944	66,608	61,684	60,296	52,715	42,307	44,618	51,710	35,549	72,277	91,020	726,703
4"	79	20.0	1,582	76,787	84,410	81,158	72,418	76,330	68,861	55,236	55,059	61,645	35,443	74,077	77,451	818,874
6"	34	41.7	1,436	31,780	30,997	50,036	34,255	61,435	44,155	33,882	28,122	36,279	28,561	37,550	36,223	453,275
8"	12	60.0	725	15,757	14,520	18,411	14,329	18,923	13,315	8,621	7,387	8,835	11,426	11,029	17,892	160,444
10"	0	96.7	0	11	38	26	33	1	10	23	278	116	0	70	14	620
Totals	40,510		61,342	840,621	788,524	826,065	753,652	799,589	731,272	646,865	590,410	678,141	685,484	766,155	887,125	8,993,904

Winter	Summer
229%	273%

Summary				Annualized Minimum Month												Total	FY 2015/16 Total Use	Annualized Min Month Percent	
				Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16				
OV: Irr Total				16,124	16,124	16,124	16,124	16,124	16,124	16,124	16,124	16,124	16,124	16,124	16,124	16,124	193,488	392,613	49%
OX: C/I Total				127,205	127,205	127,205	127,205	127,205	127,205	127,205	127,205	127,205	127,205	127,205	127,205	127,205	1,526,460	2,220,139	69%
OX: Irr Total				41,064	41,064	41,064	41,064	41,064	41,064	41,064	41,064	41,064	41,064	41,064	41,064	41,064	492,768	1,077,753	46%
OX: MFR Total				110,133	110,133	110,133	110,133	110,133	110,133	110,133	110,133	110,133	110,133	110,133	110,133	110,133	1,321,596	1,524,439	87%
OX: SFR Total				258,207	258,207	258,207	258,207	258,207	258,207	258,207	258,207	258,207	258,207	258,207	258,207	258,207	3,098,484	3,778,957	82%
				552,733	552,733	552,733	552,733	552,733	552,733	552,733	552,733	552,733	552,733	552,733	552,733	6,632,796	8,993,902	73.75%	

Summary				Annualized Minimum 3 Months												Total	FY 2015/16 Total Use	Annualized Min Month Percent	
				Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16				
OV: Irr Total				21,909	21,909	21,909	21,909	21,909	21,909	21,909	21,909	21,909	21,909	21,909	21,909	21,909	262,912	392,613	67%
OX: C/I Total				149,990	149,990	149,990	149,990	149,990	149,990	149,990	149,990	149,990	149,990	149,990	149,990	149,990	1,799,876	2,220,139	81%
OX: Irr Total				47,556	47,556	47,556	47,556	47,556	47,556	47,556	47,556	47,556	47,556	47,556	47,556	47,556	570,672	1,077,753	53%
OX: MFR Total				117,807	117,807	117,807	117,807	117,807	117,807	117,807	117,807	117,807	117,807	117,807	117,807	117,807	1,413,688	1,524,439	93%
OX: SFR Total				278,848	278,848	278,848	278,848	278,848	278,848	278,848	278,848	278,848	278,848	278,848	278,848	278,848	3,346,180	3,778,957	89%
				616,111	616,111	616,111	616,111	616,111	616,111	616,111	616,111	616,111	616,111	616,111	616,111	7,393,328	8,993,902	82.20%	

Summary				Annualized Max Month												Total	FY 2015/16 Total Use	Annualized Min Month Percent	
				Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16				
OV: Irr Total				63,098	63,098	63,098	63,098	63,098	63,098	63,098	63,098	63,098	63,098	63,098	63,098	63,098	757,180	392,613	193%
OX: C/I Total				229,757	229,757	229,757	229,757	229,757	229,757	229,757	229,757	229,757	229,757	229,757	229,757	229,757	2,757,084	2,220,139	124%
OX: Irr Total				131,911	131,911	131,911	131,911	131,911	131,911	131,911	131,911	131,911	131,911	131,911	131,911	131,911	1,582,932	1,077,753	147%
OX: MFR Total				137,543	137,543	137,543	137,543	137,543	137,543	137,543	137,543	137,543	137,543	137,543	137,543	137,543	1,650,521	1,524,439	108%
OX: SFR Total				351,528	351,528	351,528	351,528	351,528	351,528	351,528	351,528	351,528	351,528	351,528	351,528	351,528	4,218,336	3,778,957	112%
				913,838	913,838	913,838	913,838	913,838	913,838	913,838	913,838	913,838	913,838	913,838	913,838	10,966,052	8,993,902	121.93%	

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Projected Customer Data

OV: Irr Total	Meter Ratio	Accounts						
		FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
5/8"	1.0	0	0	0	0	0	0	0
3/4"	1.0	9	9	9	9	9	9	9
1"	1.7	4	4	4	4	4	4	4
1.5"	3.3	8	8	8	8	8	8	8
2"	5.3	1	1	1	1	1	1	1
3"	11.7	4	4	4	4	4	4	4
4"	20.0	1	1	1	1	1	1	1
6"	41.7	16	16	16	17	17	17	17
8"	60.0	5	5	5	5	5	5	5
10"	96.7	0	0	0	0	0	0	0
Total Accounts		49	49	49	49	49	50	50
Total EDUs		1098	1098	1098	1107	1117	1127	1136

OX: C/I Total	Meter Ratio	Accounts						
		FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
5/8"	1.0	0	0	0	0	0	0	0
3/4"	1.0	1,002	1,002	1,002	1,010	1,019	1,028	1,037
1"	1.7	565	565	565	570	575	580	585
1.5"	3.3	506	506	506	510	514	519	523
2"	5.3	515	515	515	520	524	529	533
3"	11.7	100	100	100	100	101	102	103
4"	20.0	47	47	47	47	48	48	48
6"	41.7	8	8	8	8	8	8	8
8"	60.0	5	5	5	5	5	5	5
10"	96.7	0	0	0	0	0	0	0
Total Accounts		2,747	2,747	2,747	2,771	2,795	2,820	2,843
Total EDUs		9112	9112	9112	9191	9272	9353	9431

OX: Irr Total	Meter Ratio	Accounts						
		FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
5/8"	1.0	0	0	0	0	0	0	0
3/4"	1.0	244	244	244	246	248	250	252
1"	1.7	338	338	338	341	344	347	349
1.5"	3.3	408	408	408	412	416	419	423
2"	5.3	476	476	476	480	484	489	493
3"	11.7	64	64	64	65	65	66	66
4"	20.0	17	17	17	17	17	17	18
6"	41.7	3	3	3	3	3	3	3
8"	60.0	0	0	0	0	0	0	0
10"	96.7	0	0	0	0	0	0	0
Total Accounts		1,550	1,550	1,550	1,564	1,577	1,591	1,604
Total EDUs		5921	5921	5921	5972	6025	6077	6128

OX: MFR Total	Meter Ratio	Accounts						
		FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
5/8"	1.0	0	0	0	0	0	0	0
3/4"	1.0	615	615	615	620	626	631	636
1"	1.7	750	750	750	757	763	770	777
1.5"	3.3	400	400	400	403	407	410	414
2"	5.3	231	231	231	233	235	237	239
3"	11.7	15	15	15	15	15	15	15
4"	20.0	14	14	14	14	14	15	15
6"	41.7	7	7	7	7	7	7	7
8"	60.0	2	2	2	2	2	2	2
10"	96.7	0	0	0	0	0	0	0
Total Accounts		2,034	2,034	2,034	2,052	2,070	2,088	2,106
Total EDUs		5302	5302	5302	5348	5395	5442	5488

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Projected Customer Data

OX: SFR Total	Meter Ratio	Accounts						
		FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
5/8"	1.0	0	0	0	0	0	0	0
3/4"	1.0	25,665	25,665	25,665	25,890	26,116	26,344	26,565
1"	1.7	8,401	8,401	8,401	8,474	8,548	8,623	8,695
1.5"	3.3	63	63	63	64	64	65	65
2"	5.3	1	1	1	1	1	1	1
3"	11.7	0	0	0	0	0	0	0
4"	20.0	0	0	0	0	0	0	0
6"	41.7	0	0	0	0	0	0	0
8"	60.0	0	0	0	0	0	0	0
10"	96.7	0	0	0	0	0	0	0
Total Accounts		34,130	34,130	34,130	34,428	34,729	35,032	35,326
Total EDUs		39909	39909	39909	40258	40610	40965	41308

Summary of Accounts Projection Summary								
	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	
OV: Irr Total	49	49	49	49	49	50	50	
OX: C/I Total	2,747	2,747	2,747	2,771	2,795	2,820	2,843	
OX: Irr Total	1,550	1,550	1,550	1,564	1,577	1,591	1,604	
OX: MFR Total	2,034	2,034	2,034	2,052	2,070	2,088	2,106	
OX: SFR Total	34,130	34,130	34,130	34,428	34,729	35,032	35,326	
Fire Service	1,565	1,565	1,565	1,579	1,592	1,606	1,620	
Projected Accounts	42,075	42,075	42,075	42,443	42,814	43,188	43,549	

MEU Projection								
	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	
CA: S - SFR	0	0	0	0	0	0	0	
OV: A - Irr	1,098	1,098	1,098	1,107	1,117	1,127	1,136	
OX: C - C/I	6,537	6,537	6,537	6,594	6,652	6,710	6,766	
OX: C1 - C/I	127	127	127	128	129	130	131	
OX: CC- C/I	336	336	336	339	342	345	348	
OX: CI- C/I	3,703	3,703	3,703	3,736	3,768	3,801	3,833	
OX: CM - C/I	5	5	5	5	5	5	6	
OX: CS - C/I	12	12	12	12	12	12	12	
OX: GB - C/I	447	447	447	451	455	459	463	
OX: GI- C/I	2,062	2,062	2,062	2,080	2,098	2,117	2,134	
OX: I - C/I	667	667	667	672	678	684	690	
OX: I3 - C/I	124	124	124	125	126	127	128	
OX: II - Irr	155	155	155	157	158	159	161	
OX: LS - SFR	605	605	605	610	615	621	626	
OX: M - MFR	5,068	5,068	5,068	5,113	5,157	5,202	5,246	
OX: MH - MFR	234	234	234	236	238	240	242	
OX: S - SFR	39,249	39,249	39,249	39,592	39,938	40,287	40,624	
OX: SH - SFR	56	56	56	56	57	57	58	
OX: SS - C/I	857	857	857	865	872	880	887	
Fire Service	44,918	44,918	44,918	45,311	45,706	46,106	46,492	
Projected EDUs	106,260	106,260	106,260	107,188	108,125	109,069	109,982	

OXNARD
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Appendix A

Projected Customer Data

Summary of MEU Projection							
	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
OV: Irr Total	1,098	1,098	1,098	1,107	1,117	1,127	1,136
OX: C/I Total	9,112	9,112	9,112	9,191	9,272	9,353	9,431
OX: Irr Total	5,921	5,921	5,921	5,972	6,025	6,077	6,128
OX: MFR Total	5,302	5,302	5,302	5,348	5,395	5,442	5,488
OX: SFR Total	39,909	39,909	39,909	40,258	40,610	40,965	41,308
Fire Service	44,918	44,918	44,918	45,311	45,706	46,106	46,492
Projected EDUs	106,260	106,260	106,260	107,188	108,125	109,069	109,982

Consumption Projection, CCF							
	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
CA: S - SFR	1	1	1	1	2	2	2
OX: C - C/I	1,430,857	1,430,857	1,430,857	1,502,400	1,577,520	1,591,304	1,604,624
OX: C1 - C/I	101,981	101,981	101,981	107,080	112,434	113,416	114,365
OX: CC - C/I	79,156	79,156	79,156	83,114	87,270	88,032	88,769
OX: CI - C/I	751,000	751,000	751,000	788,550	827,978	835,212	842,204
OX: CM - C/I	3,832	3,832	3,832	4,023	4,224	4,261	4,297
OX: CS - C/I	3,718	3,718	3,718	3,904	4,099	4,135	4,170
OX: GB - C/I	36,427	36,427	36,427	38,248	40,161	40,512	40,851
OX: GI - C/I	302,682	302,682	302,682	317,817	333,707	336,623	339,441
OX: I - C/I	239,070	239,070	239,070	251,023	263,575	265,878	268,103
OX: I3 - C/I	260,740	260,740	260,740	273,777	287,466	289,978	292,405
OX: II - Irr	24,071	24,071	24,071	25,274	26,538	26,770	26,994
OX: LS - SFR	71,632	71,632	71,632	75,213	78,974	79,664	80,331
OX: M - MFR	1,450,737	1,450,737	1,450,737	1,523,273	1,599,437	1,613,412	1,626,918
OX: MH - MFR	73,703	73,703	73,703	77,388	81,257	81,967	82,654
OX: S - SFR	3,697,496	3,697,496	3,697,496	3,882,371	4,076,489	4,112,108	4,146,530
OX: SH - SFR	9,830	9,830	9,830	10,321	10,837	10,932	11,023
OX: SS - C/I	64,358	64,358	64,358	67,576	70,955	71,575	72,174
Projected Consumption	8,601,291	8,601,291	8,601,291	9,031,355	9,482,923	9,565,781	9,645,855

Summary of OX: LS - SFR								
	FY 2013/14	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
OV: Irr Total		392,613	392,613	392,613	412,244	432,856	436,638	440,293
OX: C/I Total	2,494,104	2,220,139	2,220,139	2,220,139	2,331,146	2,447,704	2,469,091	2,489,759
OX: Irr Total	1,737,809	1,077,753	1,077,753	1,077,753	1,131,641	1,188,223	1,198,605	1,208,639
OX: MFR Total	1,733,714	1,524,439	1,524,439	1,524,439	1,600,661	1,680,694	1,695,380	1,709,572
OX: SFR Total	4,498,404	3,778,957	3,778,957	3,778,957	3,967,905	4,166,300	4,202,703	4,237,884
0	10,464,031	8,993,902	8,993,902	8,993,902	9,443,597	9,915,777	10,002,417	10,086,146
Acre Ft	24,022	20,647	20,647	20,647	21,680	22,763	22,962	23,155

Recycled Water Potable Offsets								
	FY 2013/14	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
OV: Irr Total								
OX: C/I Total			261,360	261,360	261,360	261,360	261,360	261,360
OX: Irr Total			100,188	100,188	100,188	100,188	100,188	100,188
OX: MFR Total								
OX: SFR Total								
OX: I3 - C/I	0	0	361,548	361,548	361,548	361,548	361,548	361,548
Acre Ft	-	-	830	830	830	830	830	830

Summary of Consumption Projection, CCF								
	Year	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
OV: Irr Total		392,613	392,613	392,613	412,244	432,856	436,638	440,293
OX: C/I Total		2,220,139	1,958,779	1,958,779	2,069,786	2,186,344	2,207,731	2,228,399
OX: Irr Total		1,077,753	977,565	977,565	1,031,453	1,088,035	1,098,417	1,108,451
OX: MFR Total		1,524,439	1,524,439	1,524,439	1,600,661	1,680,694	1,695,380	1,709,572
OX: SFR Total		3,778,957	3,778,957	3,778,957	3,967,905	4,166,300	4,202,703	4,237,884
Projected Consump	0	8,993,902	8,632,354	8,632,354	9,082,049	9,554,229	9,640,869	9,724,598
Acre Ft	24,022	20,647	19,817	19,817	20,850	21,933	22,132	22,325

Summary of Projected Consumption								
	FY 2013/14	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
OV Irr	485,621	392,613	392,613	392,613	412,244	432,856	436,638	440,293
Projected Consump	485,621	392,613	392,613	392,613	412,244	432,856	436,638	440,293
Acre Ft	1,115	901	901	901	946	994	1,002	1,011

Total Potable With OV								
	FY 2013/14	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
Projected Consump	10,949,652	9,386,515	9,024,967	9,024,967	9,494,293	9,987,085	10,077,507	10,164,891
Acre Ft	25,137	21,548	20,718	20,718	21,796	22,927	23,135	23,335

APPENDIX B – SUPPLY COST CALCULATION

**OXNARD
2017 Water Cost of Service Study**

**Appendix B
Source of Supply Costs**

FY 2016/17 FY 2017/18

Usage Summary			
In-City Recycled Water Sales Offsetting Purchases	0%	830	830
City Groundwater	26%	7,186	7,186
ASR (AWPF)	0%	-	-
United - Included Oceanview	29%	7,333	7,333
Callegus Tier 1	45%	11,643	11,643
Callegus Tier 2	0%	-	-
Total In-City Usage		26,992	26,992
Total Without PHWA Transfer		26,234	26,234
New Recycled Water Sales			
In-City: No Potable Offset		705	705
Ag/Other: No Credit Swap		400	400
Ag/Other: With Credit Swap		5,065	1,065
Total Recycled Water w/o Potable Offsets		6,170	2,170

Cost Summary			
In-City Recycled Water Sales Offsetting	Costs included in O&M, No Supply	\$ -	\$ -
City Groundwater		1,551,457	1,595,292
ASR (AWPF)	Costs included in O&M, No Supply	Cost to Outside Entities	
United - Included Oceanview		4,315,834	4,356,897
Callegaus		16,479,260	16,907,148
Total Cost to Outside Entities		\$ 22,346,552	\$ 22,859,337

**OXNARD
2017 Water Cost of Service Study**

**Appendix B
Source of Supply Costs**

FY 2016/17 FY 2017/18

Desalter Operation			
Desalter Capacity (AFY/Year)		8,400	8,400
City Groundwater Desalted	Percent of Allocation	50%	50%
United Water Desalted	Percent of Allocation	0%	0%
City Groundwater Desalted		3,593.00	3,593.00
United Water Desalted		-	-
Total Raw Water Desalted		3,593	3,593
Recovery	76%		
Permeate (AF)		2,738	2,738
Concentrate (Loss) (AF)		855	855
Concentrate (Loss) (MG)		278.63	278.63
Concentrate to Sewer		278.63	278.63
Concentrate to Concentrate Line		-	-

**OXNARD
2017 Water Cost of Service Study**

**Appendix B
Source of Supply Costs**

FY 2016/17 FY 2017/18

Water Usage			
			8,993,902
Projected Oxnard Water Usage	20,647	20,647	20,647
Less: In-City Recycled Water Sales		(830)	(830)
Oxnard Water Usage	20,647	19,817	19,817
Potable Water Change		-4.02%	0.00%
Port Hueneme Water Agency Transfer		700	700
PHWA CMWD Production		947	947
Proctor and Gamble Calleguas Usage		1,650	1,650
Oxnard and PHWA Combined		23,944	23,944
System Loss Factor		8.4%	8.4%
Losses At Desalter (Concentrate)		855	855
Total Supply Required		26,992	26,992
		<i>System Loss (Unaccounted for plus Concentrate)</i>	<i>3,048</i>
			<i>3,048</i>
Water Usage by Source			
In-City Recycled Water Sales Offsetting Purchases		830	830
Potable Source Priority 1 City Groundwater		7,186	7,186
Potable Source Priority 2 ASR (AWPF)		-	-
Potable Source Priority 3 United - Included Oceanview		7,333	7,333
Potable Source Priority 4 Callegus Tier 1		11643	11643
Callegus Tier 2		-	-
Total Water Usage		26,992	26,992
		<i>TRUE</i>	<i>TRUE</i>

**OXNARD
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**Appendix B
Source of Supply Costs**

FY 2016/17 FY 2017/18

Supply Costs			
Potable Source Priority 1			
City Groundwater	AF	7,186	7,186
Fox canyon groundwater management agency - UPDATE			
Annual Rate Increase		0%	0%
GMA Charge (Groundwater Sustainab per AF)		\$12.50	\$12.50
Applicable UWCD Charges			
Freeman In Lieu of Replenishment		\$72.15	\$74.31
District Wide In Lieu of Replenishment		\$131.25	\$135.19
United Water Conservation District - UPDATE	Budget Document		
Total Charge for City Pumping		\$ 1,551,457	\$ 1,595,292

Potable Source Priority 3			
United	Total AF	7,333	7,333
	Oceanview Use	901	901
City Usage		0.88	0.88
Oceanview AG Usage		12%	12%
Subject to Variable Rate	Below	6,725.5	6,725.5
Subject to Marginal Rate	Above	607.5	607.5
Subject to Unrecovered Variable Rate		-	-
City of Oxnard Usage			
Subject to Variable Rate		5,824.2	5,824.2
Subject to Marginal Rate		607.5	607.5
Ocean View AG Usage			
Subject to Variable Rate		901.3	901.3

**OXNARD
2017 Water Cost of Service Study**

**Appendix B
Source of Supply Costs**

FY 2016/17 FY 2017/18

United - Continued				
Annual Rate Increase			5%	0%
M&I Rates				
Variable Rate	per AF	\$191.74	\$306.60	\$306.60
Marginal Rate	per AF	\$133.01	\$163.38	\$163.38
Unrecovered Variable Rate		\$191.74	\$306.60	\$306.60
Freeman In Lieu of Replenishment		\$54.00	\$72.15	\$74.31
District Wide In Lieu of Replenishment		\$119.25	\$131.25	\$135.19
Ag Rates				
Freeman In Lieu of Replenishment	per AF	\$18.00	\$24.05	\$24.77
District Wide In Lieu of Replenishment	per AF	\$39.75	\$43.75	\$45.06
Fixed Charges				
Peak Capacity Units	CFS		25	25
75% Sub-Allocation	AF		6,725.5	6,725.5
Fixed Charge Per Unit of Peak Capacity		\$13,924.00	\$14,737.00	\$14,737.00
Fixed Well Replacement Charge per AF Allocated		\$14.08	\$20.65	\$20.65
Fiscal Year Charges			FY 2016/17	FY 2017/18
Variable Rate Charges	<i>Total Use</i>		\$ 2,248,298	\$ 2,248,298
Marginal Rate Charges	<i>Above Allocation</i>		99,253	99,253
Unrecovered Variable Rate Charges	<i>Below Allocation</i>		-	-
GMA Charge	<i>Total Use</i>		91,663	91,663
Freeman Diversion Charge			485,723	500,264
District Wide In Lieu of Replenishment			883,591	910,113
Assigned Capacity Annual Cost			\$ 368,425	\$ 368,425
Well Replacement Annual Contribution			\$ 138,882	\$ 138,882
Oxnard UWCD Charges			\$ 4,315,834	\$ 4,356,897

Oceanview Variable Rate				
OH Agreement Variable Rate			\$306.60	\$306.60
Freeman Diversion Charge			\$24.05	\$24.77
District Wide In Lieu of Replenishment			\$43.75	\$45.06
Fixed Well Replacement Charge			\$20.65	\$20.65
GMA Charge			\$12.50	\$12.50
Pro-Rata portion of Peak Capacity Charge			\$58.61	\$58.61
Administrative/Overhead Charge	10%		\$46.62	\$46.82
Total Oceanview Volumetric Rate			\$512.78	\$515.01
Projected Oceanview Revenues			\$ 462,178	\$ 464,190

**OXNARD
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**Appendix B
Source of Supply Costs**

FY 2016/17 FY 2017/18

Potable Source Priority 4			
Calleguas			
Callegus Tier 1	AF	11,643	11,643
Callegus Tier 2	AF	-	-
		CY 2015	CY 2017
Annual MWD Rate Increase		0.0%	5.0%
Annual Calleguas Rate Increase		0.0%	5.8%
			CY 2018
			0.0%
			Proposed
MWD RATES			
Tier 1 Supply Rate (\$/af)		\$158	\$201
Delta Supply Surcharge - Tier 1 only (\$/af)		\$0	\$0
Tier 2 Supply Rate (\$/af)		\$290	\$295
System Access Rate (\$/af)		\$257	\$289
System Power Rate (\$/af)		\$126	\$124
Water Stewardship Rate (\$/af)		\$41	\$52
Treatment Surcharge (\$/af full-service)		\$341	\$313
MWD Tier 1		\$923	\$979
MWD Tier 2		\$1,055	\$1,073
RTS Charge		\$ 910,434	\$ 1,003,753
		37.15	\$ 1,003,753
CALLEGUAS RATES			
		CY 2015	CY 2017
O&M Surcharge (\$/af)		\$60	\$77
Capital Construction Surcharge (\$/af)		\$227	\$244
Capacity Reservation Charge per cfs		\$21,840	\$40,948
Oxnard cfs		18.73	18.73
Oxnard Capacity Reservation Charge		\$ 409,049	\$ 766,929
		\$ 766,929	\$ 766,929
COMBINED RATES			
Combined Tier 1		\$1,210	\$1,300
Combined Tier 2		\$1,342	\$1,394
RTS Charge		\$ 910,434	\$ 1,003,753
CMWD Capacity Reservation		\$ 409,049	\$ 766,929
Fiscal Year Charges			
		FY 2016/17	FY 2017/18
Tier 1 Charges		\$ 14,886,132	\$ 15,136,466
Tier 2 Charges		\$ -	\$ -
RTS Charge		\$ 979,855	\$ 1,003,753
CMWD Capacity Reservation		\$ 613,273	\$ 766,929
Total Calleguas Charges		\$ 16,479,260	\$ 16,907,148

APPENDIX C – REVENUES AND EXPENDITURES DETAIL

OXNARD
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Appendix C
Revenue and Expenditure Projection

		FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18
O&M SUMMARY		2014	2015	2016	2017	2018
Revenues						
Water Rate Revenues				\$ 39,985,371	\$ 39,778,822	\$ 42,672,315
Recycled Water Revenues	Potable Offset			-	742,000	1,304,385
Recycled Water Revenues	New Users			-	-	800,197
P&G Water Supply Agreement				2,447,496	2,500,000	2,500,000
Oceanview Volumetric Revenues				465,603	462,178	464,190
Other Water Revenues				822,098	1,664,000	1,664,000
BABs Refund				1,938,000	1,938,000	1,809,305
Connection Fees				812,277	843,800	843,800
Other Revenues				3,270,914	2,731,200	2,765,587
Total Revenues				\$ 49,741,759	\$ 50,660,000	\$ 54,823,780
Expenditures						
				INPUT FROM BUDGET		
PRODUCTION				\$ 24,429,553	\$ 25,300,807	\$ 26,345,164
DISTRIBUTION	-			1,702,079	1,830,168	1,875,922
METERING	-			1,308,886	1,608,056	1,648,257
PROCUREMENT	-			5,177,031	5,625,353	5,765,987
CONSERVATION	-			129,593	237,125	243,053
RECYCLE	-			2,315,537	2,678,299	2,745,256
PUBLIC INFORMATION	-			109,564	171,980	176,280
Security and Contamination Prevention	-			794,211	851,686	872,978
Debt Service	-			14,920,168	14,872,828	14,885,672
Other Expenditures				-	-	-
CIP Incremental O&M Costs				-	-	-
Infrastructure Use Fees				2,698,081	1,877,978	1,924,928
Additional Staff				-	-	-
Policy Expenditures (Not Included in Coverage Calc)				-	-	-
Total Expenditures				\$ 53,584,703	\$ 55,054,280	\$ 56,483,498
Net Operating Surplus (Deficit)				\$ (3,842,944)	\$ (4,394,280)	\$ (1,659,718)

Revenues	Escalator	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18
		2014	2015	2016	2017	2018
		Actual	Actual	Actual	Projection	Projection
Line Item						
SERVICE TO OTHER PROGRAMS	Growth and Usage Revenue Impact			\$ 120,099	\$ 97,100	97,355
SINGLE FAMILY RESIDENTIAL	Growth and Usage Revenue Impact			\$ 19,474,389	\$ 19,600,000	\$ 21,026,973
MULTI-FAMILY RESIDENTIAL	Growth and Usage Revenue Impact			\$ 5,674,868	\$ 5,700,000	\$ 6,114,987
COMMERCIAL/INDUSTRIAL	Growth and Usage Revenue Impact			\$ 13,915,258	\$ 13,553,822	\$ 14,540,605
FIRELINE SERVICE	Account and ME Growth			\$ 920,856	\$ 925,000	\$ 989,750
P&G WATER SUPPLY AGREEMNT	P&G Increase			2,447,496	2,500,000	2,500,000
OCEANVIEW VOLUMETRIC REVENUES	No Annual Increase			465,603	462,178	464,190
OTHER WATER REVENUES	Account and ME Growth			822,098	1,664,000	1,664,000
PENALTIES AND FORFEITURE	No Annual Increase				400,000	400,000
SERVICE TO OTHER PROGRAMS	Account and ME Growth			44,971	-	-
RESOURCE DEVELOPMENT FEES	Account and ME Growth			798,477	830,000	830,000
WATER RESOURCE FEE	Account and ME Growth			248,853	248,000	248,000
SECURITY PREVENTION FEE	Account and ME Growth			617,155	617,000	617,000
ANNUAL CROSS CONTAM.PREVE	Account and ME Growth			314,305	322,300	322,300
Recycled Water Revenues (Potable Offetts)	[Calculated]			\$ -	\$ 742,000	\$ 1,304,385
Recycled Water Revenues (New Usage)	[Calculated]			\$ -	\$ -	\$ 800,197
CAPITAL FACILITY CHARGE	Account and ME Growth			13,800	13,800	13,800
CAPITAL FACILITY CHARGE	Account and ME Growth			91,056		-
Other Revenue	No Annual Increase					
RCYCL WATER INCEN PROG	No Annual Increase					
MISCELLANEOUS REVENUES	No Annual Increase			103,500	120,000	120,000
MISCELLANEOUS REVENUES / GENERAL SETTLEMENT	No Annual Increase			\$5,100	3,400	3,400
MISCELLANEOUS SERVICES	No Annual Increase			\$185,417	-	-
MISCELLANEOUS REVENUES	No Annual Increase			1,016,561	616,600	616,600
TOILET REBATE PROGRAM	No Annual Increase			260,500	500	500
OTHER REIMBURSEMENTS	No Annual Increase			-	-	-
INTEREST INCOME-OTHER				239	300	
INTEREST INCOME-INVESTMENT				-	-	
INTEREST INCOME-OTHER				246,158	247,000	
INT INCOME/INVESTMENT-FMV				-	-	
INTEREST INCOME-OTHER					42,000	
INTEREST INCOME-INVESTMENT				17,000	17,000	
Projected Interest Earnings	[Calculated]					340,433
BABs Refund	[Calculated]			1,938,000	1,938,000	1,809,305
Other Water Revenues	General Inflation				-	-
Total Operating Revenue		\$ -	\$ -	\$ 49,741,759	\$ 50,660,000	\$ 54,823,780
Total Revenues		\$ -	\$ -	\$ 49,741,759	\$ 50,660,000	\$ 54,823,780

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Appendix C
Revenue and Expenditure Projection

Expenditures

			FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18
			2014	2015	2016	2017	2018
			Actual	Actual	Actual	Projection	Projection
Routine Capital	General Inflation			-	-	-	-
PRODUCTION							
ACCOUNT DESCRIPTION			2013/14				
			ACTUALS				
601-6001-808.87-21	TRANSFERS - OUT / TSFR TO GOLF COURSE FD	Labor Inflation			-	-	-
601-6001-841.80-01	DIRECT LABOR-REGULAR	Labor Inflation	417,211	415,139	416,261	422,429	432,990
601-6001-841.80-02	DIRECT LABOR-TEMPORARY	Labor Inflation	395	2,534	-	-	-
601-6001-841.80-03	OVERTIME	Labor Inflation	160,269	171,444	158,519	125,115	128,243
601-6001-841.80-06	ACCRUED SALARY & BENEFITS	Labor Inflation	(19,833)	(63,112)	(63,175)	-	-
601-6001-841.80-40	PARS	Labor Inflation	40,751	59,096	53,098	61,089	62,616
601-6001-841.80-41	EMPLOYEE BENEFITS	Labor Inflation	81,678	74,334	65,436	76,065	77,967
601-6001-841.80-42	WORKERS COMP INSURANCE	Labor Inflation	30,222	29,979	29,759	28,364	29,073
601-6001-841.80-43	PERS	Labor Inflation	85,250	89,618	96,842	101,896	104,443
601-6001-841.80-44	WORKERS COMP/SAFETY	Labor Inflation			2,764	2,799	2,869
601-6001-841.80-99	VACANCY SAVINGS	General Inflation			-	-	-
601-6001-842.82-09	SERVICES-OTHER PROF/CONTR	General Inflation	14,910	1,360,816	1,320,064	500,000	512,500
601-6001-842.82-12	SVC-PERSONNEL/RECRUIT	General Inflation	-	12,390	1,233	5,000	5,125
601-6001-843.81-04	SHOP AND FIELD	General Inflation	147,891	182,038	189,229	200,000	205,000
601-6001-843.81-06	CHEMICALS	General Inflation			-	91,220	93,501
601-6001-843.81-09	OTHER SUPPLIES	General Inflation	84,873	145,414	153,094	141,400	144,935
601-6001-843.81-21	REPAIR PARTS	General Inflation	8,997	-	2,472	10,000	10,250
601-6001-843.81-41	WATER ACQUISITION-UMCD	General Inflation	3,428,098	3,196,196	4,051,503	4,000,000	4,356,897
601-6001-843.81-42	WATER ACQUISITION-MWD	General Inflation	17,998,667	15,439,909	15,367,383	16,500,000	16,907,148
601-6001-843.81-43	WATER ACQUISITION-CITY	General Inflation	1,316,054	1,332,520	1,318,538	1,400,000	1,595,292
601-6001-843.82-09	OTHER PROF/CONTRACTUAL	General Inflation	-	147	-	-	-
601-6001-843.82-38	FUEL EXPENSE - DIESEL	General Inflation			-	-	-
601-6001-843.82-66	WASTEWATER-DESALTER	General Inflation			525,214	750,000	768,750
601-6001-844.82-61	ELECTRICITY	General Inflation			680,598	800,000	820,000
601-6001-846.83-21	RENTAL-VEHIC & EQUIPMENT	General Inflation			-	-	-
601-6001-846.84-02	PHOTOCOPY CHARGES	General Inflation			35	37	38
601-6001-846.85-19	ISSUANCE COSTS	General Inflation			-	-	-
601-6001-846.84-51	SERVICE FROM OTHER PROGRAM	General Inflation	369,832	-	-	-	-
601-6001-846.85-22	DATA PROCESSING-OPERATION	General Inflation	-	4,692	4,693	20,700	21,218
601-6001-846.85-25	GENERAL & ADMINISTRATIVE / LIABILITY INSURANCE	General Inflation			-	8,700	8,918
601-6001-846.85-32	INDIRECT PRORATED CST CHG	General Inflation			55,993	55,993	57,393
TOTAL PRODUCTION COSTS			\$ 24,165,265	\$ 22,453,154	\$ 24,429,553	\$ 25,300,807	\$ 26,345,164
DISTRIBUTION							
601-6002-841.80-01	DIRECT LABOR-REGULAR	Labor Inflation	811,920	819,464	737,780	778,070	797,522
601-6002-841.80-02	DIRECT LABOR-TEMPORARY	General Inflation	337	89	4,121	-	-
601-6002-841.80-03	OVERTIME	Labor Inflation	177,115	158,442	97,901	97,077	99,504
601-6002-841.80-05	SALARY CONTIN/WORKER COMP	Labor Inflation	3,472	-	-	-	-
601-6002-841.80-21	AUTO ALLOWANCE	Labor Inflation			-	-	-
601-6002-841.80-40	PARS	Labor Inflation	76,904	124,911	93,604	104,110	106,713
601-6002-841.80-41	EMPLOYEE BENEFITS	Labor Inflation	163,366	150,001	150,462	151,334	155,117
601-6002-841.80-42	WORKERS COMP INSURANCE	Labor Inflation	52,533	48,786	43,254	43,304	44,387
601-6002-841.80-43	PERS	General Inflation	156,581	162,514	157,686	169,819	174,064
601-6002-841.80-44	WORKERS COMP/SAFETY	General Inflation	5,400	5,327	4,911	5,154	5,283
601-6002-841.80-47	PARS - ERIP	General Inflation	21,705	21,705	13,792	18,000	18,450
601-6002-841.80-99	VACANCY SAVINGS	General Inflation			-	-	-
601-6002-842.82-09	SERVICES-OTHER PROF/CONTR	General Inflation	34,318	42,976	16,445	35,000	35,875
601-6002-843.81-04	SHOP AND FIELD	General Inflation	147,616	125,146	167,641	200,000	205,000
601-6002-843.81-21	REPAIR PARTS	General Inflation	-	178	-	-	-
601-6002-846.81-04	SHOP AND FIELD SUPPLIES	General Inflation	-	47	-	-	-
601-6002-846.84-51	SERVICE FROM OTHER PROGRAM	General Inflation	34,359	9,963	-	-	-
601-6002-846.85-22	DATA PROCESSING-OPERATION	General Inflation	60,168	61,380	61,373	55,300	56,683
601-6002-846.85-25	GENERAL & ADMINISTRATIVE / LIABILITY INSURANCE	General Inflation			-	13,000	13,325
601-6002-847.83-08	OTHER	General Inflation	77,659	99,944	153,109	160,000	164,000
601-6002-891.86-06	MACHINERY & EQUIP-NEW	General Inflation			-	-	-
TOTAL DISTRIBUTION COSTS			\$ 1,823,453	\$ 1,830,873	\$ 1,702,079	\$ 1,830,168	\$ 1,875,922

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Appendix C
Revenue and Expenditure Projection

METERING							
601-6003-841.80-01	DIRECT LABOR-REGULAR	Labor Inflation	674,525	731,004	608,509	573,998	588,348
	Process Change O/T reduction				-	-	
601-6003-841.80-02	DIRECT LABOR-TEMPORARY	Labor Inflation	55,772	61,594	87,780	160,016	164,016
601-6003-841.80-03	OVERTIME	Labor Inflation	180,312	158,350	93,239	11,014	11,289
601-6003-841.80-21	AUTO ALLOWANCE	Labor Inflation					
601-6003-841.80-40	PARS	Labor Inflation	69,193	107,395	87,324	94,365	96,724
601-6003-841.80-41	EMPLOYEE BENEFITS	Labor Inflation	148,888	153,196	160,027	131,679	134,971
601-6003-841.80-42	WORKERS COMP INSURANCE	Labor Inflation	52,437	53,013	45,078	42,182	43,237
601-6003-841.80-43	PERS	Labor Inflation	144,170	158,769	153,770	148,056	151,757
601-6003-841.80-44	WORKERS COMP/SAFETY	Labor Inflation	4,835	5,017	4,609	4,855	4,976
601-6003-841.80-48	PERSONNEL SERVICES / PEMCA-RETIREE	General Inflation	-	18,681	20,403	19,791	20,286
601-6003-841.80-80	BENEFITS - TEMPORARY	General Inflation	-	-	-	-	-
601-6003-841.80-99	VACANCY SAVINGS	General Inflation	-	-	-	-	-
601-6003-842.82-09	SERVICES-OTHER PROF/CONTR	General Inflation	4,795	8,847	6,869	12,000	12,300
601-6003-843.81-04	SHOP AND FIELD	General Inflation	19,055	20,733	18,870	60,000	61,500
601-6003-843.81-21	REPAIR PARTS	General Inflation	661,280	272,887	22,294	300,000	307,500
601-6003-846.83-43	TRAINING/WORKSHOP/MEETING	General Inflation			114	-	-
601-6003-843.86-06	MACHINERY AND EQUIP NEW	General Inflation			-	-	-
601-6003-846.84-51	SERVICE FROM OTHER PROGAM	General Inflation	-	3,140	-	-	-
601-6003-846.85-22	GENERAL & ADMINISTRATIVE / DATA PROCESSING-OPERATI	General Inflation			-	37,500	38,438
601-6003-846.85-25	GENERAL & ADMINISTRATIVE / LIABILITY INSURANCE	General Inflation			-	12,600	12,915
601-6003-891.86-06	MACHINERY & EQUIP-NEW	General Inflation			-	-	-
	TOTAL METERING COSTS		\$ 2,015,261	\$ 1,752,626	\$ 1,308,886	\$ 1,608,056	\$ 1,648,257
PROCUREMENT							
601-6010-841.80-01	DIRECT LABOR-REGULAR	Labor Inflation	161,473	138,868	445,715	772,376	791,685
601-6010-841.80-02	DIRECT LABOR-TEMPORARY	Labor Inflation	62,216	158,807	180,073	81,764	83,808
601-6010-841.80-03	PERSONAL SERVICES / OVERTIME	Labor Inflation	2,265	8,211	18,481	15,753	16,147
601-6010-841.80-21	AUTO ALLOWANCE	Labor Inflation			945	(1,729)	(1,772)
601-6010-841.80-22	UNIFORM ALLOWANCE	Labor Inflation			-	-	-
601-6010-841.80-40	PARS	Labor Inflation	17,991	19,814	54,222	29,391	30,126
601-6010-841.80-41	EMPLOYEE BENEFITS	Labor Inflation	52,701	129,088	100,247	139,021	142,497
601-6010-841.80-42	WORKERS COMP INSURANCE	Labor Inflation	4,050	5,251	10,823	14,820	15,191
601-6010-841.80-43	PERS	General Inflation	43,216	40,248	115,841	199,302	204,285
601-6010-841.80-44	WORKERS COMP/SAFETY	General Inflation	1,481	1,957	4,063	5,629	5,770
601-6010-841.80-47	PARS - ERIP	General Inflation	28,313	90,495	-	-	-
601-6010-841.80-80	BENEFITS - TEMPORARY	General Inflation	-	-	-	-	-
601-6010-841.80-99	VACANCY SAVINGS	General Inflation	-	-	-	-	-
601-6010-842.82-03	SERVICES - AUDIT	General Inflation	5,625	5,625	5,625	5,625	5,766
601-6010-842.82-04	SERVICES-LEGAL COUNSEL	General Inflation	97,719	170,276	62,064	213,429	218,765
601-6010-842.82-05	SERVICES-ACCOUNTING/FINAN	General Inflation	11,000	11,000	11,000	11,500	11,788
601-6010-842.82-07	SVCS-REAL ESTATE	General Inflation	1,164	1,140	-	-	-
601-6010-842.82-09	SERVICES-OTHER PROF/CONTR	General Inflation	342,501	546,523	849,431	837,577	858,516
601-6010-842.82-16	SERVICES-PRINTING/BINDING	General Inflation	1,390	8,375	6,362	5,100	5,228
601-6010-842.82-31	CONTRACTUAL SERVICES / CAR WASH	General Inflation	1,044	565	305	370	379
601-6010-842.82-73	LABOR RECRUITMENT	Utilities Cost Inflation	-	7,609	-	-	-
601-6010-843.81-02	SUPPLIES-OFFICE	General Inflation	12,434	11,642	10,341	10,000	10,250
601-6010-843.81-04	SHOP AND FIELD	General Inflation	14,864	28,668	16,465	15,000	15,375
601-6010-843.81-05	SAFETY SUPPLIES	General Inflation	23,439	24,454	10,075	15,000	15,375
601-6010-843.81-09	SUPPLIES-OTHER	Utilities Cost Inflation					
601-6010-843.81-13	UNIFORMS	Utilities Cost Inflation	2,581	6,644	6,312	15,000	15,375
601-6010-843.81-43	WATER ACQUISITION-CITY	Utilities Cost Inflation	15,017	19,724	-	-	-
601-6010-843.82-09	OTHER PROF/CONTRACTUAL	Utilities Cost Inflation	480,600	-	-	-	-
601-6010-843.86-05	IMPRV OTHER BLDG/MAJR RPR	Utilities Cost Inflation	-	28,607	3,656	-	-
601-6010-843.86-06	MACHINERY AND EQUIP NEW	Utilities Cost Inflation	-	22,449	1,182	24,732	25,350
601-6010-844.82-62	NATURAL GAS	Utilities Cost Inflation	2,774	1,370	754	2,000	2,050
601-6010-844.82-66	WASTEWATER	General Inflation	3,065	2,296	3,367	5,000	5,125
601-6010-844.82-67	WATER	General Inflation	34,597	19,702	20,004	30,000	30,750
601-6010-844.82-68	REFUSE AND DISPOSAL	General Inflation	9,292	9,627	8,787	15,000	15,375
601-6010-844.84-21	TELEPHONE-BASIC SERVICE	General Inflation	2,435	634	26	5,000	5,125
601-6010-844.84-25	TELEPHONE-CELL AND PAGER	General Inflation	11,668	14,464	16,623	15,000	15,375
601-6010-844.85-30	TELEPHONE CHGS/HIPC	General Inflation	45,000	46,380	45,000	43,200	44,280
601-6010-846.81-01	POSTAGE	General Inflation	4,588	10,967	4,271	6,000	6,150
601-6010-846.81-02	OFFICE SUPPLIES	General Inflation			300	-	-

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601-6010-846.81-11	SUBSCRIPTION & PUBLICATIONS	General Inflation	1,802	1,767	1,094	5,000	5,125
601-6010-846.81-32	MINOR EQUIPMENT-OFFICE	General Inflation	1,072	22,258	2,732	20,000	20,500
601-6010-846.81-36	MINOR EQUIPMENT-OTHER	General Inflation	4,839	-	-	-	-
601-6010-846.82-26	SERVICES-ADV & PROMOTION	General Inflation	152	6,284	1,081	2,000	2,050
601-6010-846.83-21	RENTAL-VEHIC & EQUIPMENT	General Inflation	-	46	1,898	1,000	1,025
601-6010-846.83-43	TRAINING/WORKSHOP/MEETING	General Inflation	14,116	16,503	22,767	30,000	30,750
601-6010-846.83-50	PUBLIC INFORMATION	General Inflation	68	-	-	-	-
601-6010-846.83-57	MEMBERSHIPS-OTHER	General Inflation	27,738	28,261	27,923	30,000	30,750
601-6010-846.83-71	TAXES AND FILING FEES	General Inflation	13,492	44,627	39,019	43,750	44,844
601-6010-846.83-78	BAD DEBT EXPENSE	General Inflation	76,229	60,302	62,830	100,000	102,500
601-6010-846.83-90	ORGANIZATION DEVELOPMENT	General Inflation	-	-	4,981	15,000	15,375
601-6010-846.84-02	PHOTOCOPY CHARGES	General Inflation	9,874	8,207	8,079	10,000	10,250
601-6010-846.84-51	SERVICE FROM OTHER PROGRAM	General Inflation	2,862	-	648	-	-
601-6010-846.84-62	LEGAL ADVOCACY	General Inflation	17,511	21,326	22,606	22,000	22,550
601-6010-846.85-21	CUSTOMER BILLING CHARGES	General Inflation	496,524	500,004	515,000	333,700	342,043
601-6010-846.85-22	DATA PROCESSING-OPERATION	General Inflation	161,388	164,616	167,904	34,000	34,850
601-6010-846.85-23	DATA PROCESSING-WPC	General Inflation	852	900	849	849	870
601-6010-846.85-25	LIABILITY INSURANCE	General Inflation	18,112	30,144	30,611	13,600	13,940
601-6010-846.85-26	FIRE & PROPERTY INSURANCE	General Inflation	14,904	15,144	14,900	14,900	15,273
601-6010-846.85-32	INDIRECT PRORATED CST CHG	General Inflation	1,881,969	1,829,460	1,813,736	1,886,000	1,933,150
601-6010-846.85-33	INTER-FUND PRORATED CHGS	General Inflation	84,106	56,856	57,994	162,000	166,050
601-6010-846.87-02	INFRASTRUCTURE USE FEE	General Inflation					
601-6010-847.83-05	OTHER EQUIPMENT	General Inflation			758	-	-
601-6010-847.84-39	EQUIPMENT MAINT. CHARGES	General Inflation	314,841	290,577	283,686	290,000	297,250
601-6010-847.85-35	FACILITY CHG-MAINTENANCE	General Inflation	83,580	83,580	83,575	80,694	82,711
601-6010-849.87-31	OPERATING TRANSFERS OUT/ PROJ #123104	General Inflation	-	-	-	-	-
601-6010-891.86-06	MACHINERY & EQUIP-NEW	General Inflation	8,338	45,121	-	-	-
TOTAL PROCUREMENT COSTS			\$ 4,730,868	\$ 4,817,463	\$ 5,177,031	\$ 5,625,353	\$ 5,765,987

INCLUDED BELOW

CONSERVATION

601-6011-841.80-01	DIRECT LABOR-REGULAR	Labor Inflation	46,359	47,374	47,258	46,878	48,050
601-6011-841.80-02	DIRECT LABOR-TEMPORARY	Labor Inflation	-	-	419	-	-
601-6011-841.80-03	OVERTIME	Labor Inflation	4,665	8,383	6,492	543	557
601-6011-841.80-40	PARS	Labor Inflation	4,710	7,552	6,734	7,708	7,901
601-6011-841.80-41	EMPLOYEE BENEFITS	Labor Inflation	9,695	9,406	10,627	9,944	10,193
601-6011-841.80-42	WORKERS COMP INSURANCE	Labor Inflation	997	1,061	1,053	950	974
601-6011-841.80-43	PERS	Labor Inflation	9,365	10,091	11,191	11,191	11,471
601-6011-841.80-44	WORKERS COMP/SAFETY	General Inflation	307	311	317	311	319
601-6011-841.80-99	VACANCY SAVINGS	General Inflation	-	-	-	-	-
601-6011-842.82-09	SERVICES-OTHER PROF/CONTR	General Inflation	1,019	2,984	13,434	9,000	9,225
601-6011-843.81-04	SHOP AND FIELD	General Inflation	2,976	1,026	812	1,000	1,025
601-6011-843.82-16	PRINTING AND BINDING	General Inflation	16,078	25,605	7,581	25,000	25,625
601-6011-846.83-43	TRAINING/WORKSHOP/MEETING	General Inflation	-	-	70	-	-
601-6011-846.83-45	MILEAGE REIMBURSEMENT	General Inflation	-	39	-	-	-
601-6011-846.83-50	PUBLIC INFORMATION	General Inflation	233,808	133,756	22,729	75,000	76,875
601-6011-846.84-51	SERVICE FROM OTHER PROGRAM	General Inflation	21,087	3,420	-	-	-
601-6011-846.85-22	DATA PROCESSING-OPERATION	General Inflation	-	-	-	46,300	47,458
601-6011-846.85-23	DATA PROCESSING-WPC	General Inflation	876	924	876	1,000	1,025
601-6011-846.85-25	LIABILITY INSURANCE	General Inflation	-	-	-	2,300	2,358
TOTAL CONSERVATION COSTS			\$ 351,943	\$ 251,932	\$ 129,593	\$ 237,125	\$ 243,053

RECYCLE

601-6012-841.80-01	DIRECT LABOR-REGULAR	Labor Inflation	228,364	287,810	56,452	176,339	180,747
601-6012-841.80-02	DIRECT LABOR-TEMPORARY	Labor Inflation	33,700	3,763	10,001	33,184	34,014
601-6012-841.80-03	OVERTIME	Labor Inflation	8,098	17,795	7,297	7,128	7,306
601-6012-841.80-40	PARS	Labor Inflation	24,895	35,434	8,036	28,782	29,502
601-6012-841.80-41	EMPLOYEE BENEFITS	Labor Inflation	41,618	43,454	15,697	42,980	44,055
601-6012-841.80-42	WORKERS COMP INSURANCE	Labor Inflation	6,811	7,358	3,977	11,786	12,081
601-6012-841.80-43	PERS	Labor Inflation	53,405	61,015	14,618	47,456	48,642
601-6012-841.80-44	WORKERS COMP/SAFETY	General Inflation	1,735	1,793	440	1,384	1,419
601-6012-841.80-80	BENEFITS - TEMPORARY	General Inflation	-	-	-	-	-
601-6012-841.80-99	VACANCY SAVINGS	General Inflation	-	-	-	-	-
601-6012-842.82-04	SERVICES-LEGAL COUNSEL	General Inflation	-	147,133	470,804	500,000	512,500
601-6012-842.82-09	SERVICES-OTHER PROF/CONTR	General Inflation	157,210	603,359	1,223,883	600,000	615,000
601-6012-842.82-10	OFFICE SUPPLIES	General Inflation	-	-	-	-	-

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Appendix C
Revenue and Expenditure Projection

601-6012-842.82-16	SERVICES-PRINTING/BINDING	General Inflation			420	-	-
601-6012-843.81-02	SUPPLIES-OFFICE	General Inflation	2,808	224	1,068	5,000	5,125
601-6012-843.81-04	SHOP AND FIELD	General Inflation	10,023	127,912	110,060	263,000	269,575
601-6012-843.81-05	SAFETY SUPPLIES	General Inflation			709	5,000	5,125
601-6012-843.81-06	CHEMICALS	General Inflation			-	308,610	316,325
601-6012-843.81-21	REPAIR PARTS	General Inflation			55,895	100,000	102,500
601-6012-843.86-06	MACHINERY AND EQUIP NEW	General Inflation			103,575	-	-
601-6012-844.82-61	ELECTRICITY	General Inflation			177,520	350,000	358,750
601-6012-844.82-62	NATURAL GAS	General Inflation			-	2,000	2,050
601-6012-844.82-66	WASTEWATER	General Inflation			13,196	27,000	27,675
601-6012-844.82-67	WATER	General Inflation			20,905	34,000	34,850
601-6012-844.82-68	REFUSE AND DISPOSAL	General Inflation			-	-	-
601-6012-844.82-69	OTHER UTILITIES	General Inflation			5,420	100,000	102,500
601-6012-846.81-01	POSTAGE	General Inflation			-	-	-
601-6012-846.81-04	SUPPLIES SHOP AND FIELD	General Inflation			-	-	-
601-6012-846.81-32	MINOR EQUIPMENT-OFFICE	General Inflation			-	-	-
601-6012-846.83-21	RENTAL-VEHIC & EQUIPMENT	General Inflation			1,635	5,000	5,125
601-6012-846.83-43	TRAINING/WORKSHOP/MEETING	General Inflation			-	500	513
601-6012-846.83-71	TAXES AND FILING FEES	General Inflation	1,512	4,328	1,512	10,250	10,506
601-6012-846.84-51	SERVICE FROM OTHER PROGAM	General Inflation	-	7,474	12,417	15,000	15,375
601-6012-847.83-05	OTHER EQUIPMENT	General Inflation			-	-	-
601-6012-846.85-22	DATA PROCESSING-OPERATION	General Inflation			-	2,400	2,460
601-6012-846.85-25	LIABILITY INSURANCE	General Inflation			-	1,500	1,538
601-6012-849.87-31	OPERATING TRANSFERS OUT/ PROJ #123104	General Inflation	-	-	-	-	-
TOTAL RECYCLE COSTS			\$ 570,179	\$ 1,348,852	\$ 2,315,537	\$ 2,678,299	\$ 2,745,256

PUBLIC INFORMATION

601-6045-841.80-01	DIRECT LABOR-REGULAR	Labor Inflation	56,611	58,915	33,908	48,581	49,796
601-6045-841.80-02	DIRECT LABOR-TEMPORARY	Labor Inflation	37,462	38,325	36,659	35,105	35,983
601-6045-841.80-03	OVERTIME	Labor Inflation	571	567	509	539	552
601-6045-841.80-40	PARS	Labor Inflation	6,473	9,678	4,520	7,500	7,688
601-6045-841.80-41	EMPLOYEE BENEFITS	Labor Inflation	16,284	20,729	15,592	15,024	15,400
601-6045-841.80-42	WORKERS COMP INSURANCE	Labor Inflation	1,705	1,693	1,330	2,800	2,870
601-6045-841.80-43	PERS	General Inflation	17,193	18,728	14,088	18,069	18,521
601-6045-841.80-44	WORKERS COMP/SAFETY	General Inflation	623	635	467	600	615
601-6045-841.80-80	BENEFITS - TEMPORARY	General Inflation	-	-	-	-	-
601-6045-841.80-99	VACANCY SAVINGS	General Inflation	-	-	-	-	-
601-6045-843.81-09	OTHER SUPPLIES	General Inflation	-	-	-	-	-
601-6045-843.81-11	SUBSCRIPTION & PUBLICATIO	General Inflation	172	253	-	-	-
601-6045-846.81-32	MINOR EQUIPMENT-OFFICE	General Inflation	-	-	25	-	-
601-6045-842.82-09	SERVICES-OTHER PROF/CONTR	Utilities Cost Inflation	3,753	340	329	33,523	34,361
601-6045-843.82-16	PRINTING AND BINDING	General Inflation	-	-	-	2,000	2,050
601-6045-843.82-26	MISCELLANEOUS AD/PROMO	General Inflation	31	-	-	2,150	2,204
601-6045-843.82-36	FUEL EXPENSE - UNLEADED	General Inflation	-	-	-	-	-
601-6045-846.81-01	POSTAGE	General Inflation	-	-	-	-	-
601-6045-846.83-43	TRAINING/WORKSHOP/MEETING	General Inflation	-	390	-	-	-
601-6045-846.83-57	MEMBERSHIPS-OTHER	General Inflation	-	-	-	389	399
601-6045-846.85-22	DATA PROCESSING-OPERATION	General Inflation	-	-	-	4,200	4,305
601-6045-846.85-25	LIABILITY INSURANCE	General Inflation	-	-	-	1,500	1,538
601-6045-846.85-35	FACILITY CHG-MAINTENANCE	General Inflation	2,100	2,100	2,137	-	-
TOTAL PUBLIC INFORMATION COSTS			\$ 142,978	\$ 152,353	\$ 109,564	\$ 171,980	\$ 176,280

Security and Contamination Prevention

608-6015-841.80-01	DIRECT LABOR-REGULAR	Labor Inflation	234,194	255,698	238,539	236,678	242,595
608-6015-841.80-02	DIRECT LABOR-TEMPORARY	Labor Inflation	6,729	6,860	16,257	15,000	15,375
608-6015-841.80-03	OVERTIME	Labor Inflation	27,030	29,610	28,885	30,000	30,750
608-6015-841.80-40	PARS	Labor Inflation	22,972	36,740	32,825	37,555	38,494
608-6015-841.80-41	EMPLOYEE BENEFITS	Labor Inflation	41,019	37,959	43,143	41,251	42,282
608-6015-841.80-42	WORKERS COMP INSURANCE	Labor Inflation	4,908	5,009	5,192	4,671	4,788
608-6015-841.80-43	PERS	Labor Inflation	46,574	50,228	55,049	54,522	55,885
608-6015-841.80-44	WORKERS COMP/SAFETY	General Inflation	1,595	1,618	1,671	1,609	1,649
608-6015-841.80-99	VACANCY SAVINGS	General Inflation	-	-	-	-	-
608-6015-842.82-09	SERVICES-OTHER PROF/CONTR	General Inflation	308,655	335,834	247,454	300,000	307,500
608-6015-842.82-10	TEST/MONITOR COMPLIANCE	General Inflation	25,982	68,860	80,907	70,000	71,750
608-6015-842.82-16	SERVICES-PRINTING/BINDING	General Inflation	11,448	10,822	4,966	10,000	10,250

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Appendix C
Revenue and Expenditure Projection

608-6015-843.81-04	SHOP AND FIELD	General Inflation	9,415	5,461	2,958	7,000	7,175
608-6015-846.81-01	POSTAGE	General Inflation	10,064	10,660	10,092	10,000	10,250
608-6015-846.83-78	BAD DEBT EXPENSE	General Inflation	333	912	421	1,000	1,025
608-6015-846.84-51	SERVICE FROM OTHER PROGAM	General Inflation	19,810	22,570	20,047	20,000	20,500
608-6015-846.85-22	DATA PROCESSING-OPERATION	General Inflation			-	7,800	7,995
608-6015-846.85-23	DATA PROCESSING-WPC	General Inflation	768	804	762	1,000	1,025
608-6015-846.85-25	LIABILITY INSURANCE	General Inflation	5,040	4,968	5,043	3,600	3,690
TOTAL Security and Contamination Prevention COSTS			\$ 776,537	\$ 884,613	\$ 794,211	\$ 851,686	\$ 872,978
Debt Service							
	Debt Service - Principal	[Calculated]	\$ 13,961,971	\$ 14,453,406			\$ 14,448,052
	Debt Service - Interest	[Calculated]					
601-6004-846.85-32	INDIRECT PRORATED CST CHG	General Inflation		420,060	419,246	420,000	430,500
601-6004-848.85-02	BOND INTEREST PAYMENT				10,347,365	10,155,463	
601-6004-848.85-04	L/P INTEREST PAYMENTS	No Annual Increase			758	300	300
601-6004-896.85-01	BOND PRINCIPAL PAYMENTS				4,138,443	4,290,245	
601-6004-896.85-03	L/P PRINCIPAL PAYMENT	No Annual Increase			14,356	6,820	6,820
	[Other]	General Inflation	-	-	-	-	-
Total of Debt Service			\$ 13,961,971	\$ 14,873,466	\$ 14,920,168	\$ 14,872,828	\$ 14,885,672
Other Expenditures							
	Salaries and Benefits	Labor Inflation	\$ -	\$ -	\$ -	\$ -	\$ -
	Other Expenses	General Inflation	-	-	-	-	-
Total of Other Expenditures			\$ -	\$ -	\$ -	\$ -	\$ -
Infrastructure Use Fees							
601-6010-846.87-02	INFRASTRUCTURE USE FEE	General Inflation	1,304,748	3,200,049	2,698,081		
	Streets					1,877,978	1,924,928
	Public Safety					-	-
Total of Infrastructure Use Fees			\$ -	\$ 3,200,049	\$ 2,698,081	\$ 1,877,978	\$ 1,924,928
Additional Staff							
	Filling of Vacant Positions & New Positions	Labor Inflation			\$ -	\$ -	\$ -
	Additional CIP Staff	Labor Inflation			\$ -	\$ -	\$ -
Total of Additional Staff			\$ -	\$ -	\$ -	\$ -	\$ -
Policy Expenditures (Not Included in Coverage Calc)							
	Equipment Replacement Funding	[Calculated]	\$ -	\$ -	\$ -	\$ -	\$ -
	[Other]	General Inflation	-	-	-	-	-
Total of Policy Expenditures (Not Included in Coverage Calc)			\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures			\$ 48,538,455	\$ 51,565,381	\$ 53,584,703	\$ 55,054,280	\$ 56,483,498

APPENDIX D – REVENUE REQUIREMENTS

	FY 2016/17	FY 2017/18
CASH FLOW TEST		
Revenues	FY 2016/17	FY 2017/18
<i>Revenues from Water Operations</i>		
Water Rate Revenues	\$ 39,778,822	\$ 42,672,315
Recycled Water Revenues Potable Offset	742,000	1,304,385
Recycled Water Revenues New Users	-	800,197
P&G Water Supply Agreement	2,500,000	2,500,000
Oceanview Volumetric Revenues	462,178	464,190
Other Water Revenues	1,664,000	1,664,000
BABs Refund	1,938,000	1,809,305
Connection Fees	843,800	843,800
Other Revenues	2,731,200	2,765,587
Total Revenues	\$ 50,660,000	\$ 54,823,780
Expenditures		
<i>Ongoing Water Operating Expenses</i>		
PRODUCTION	\$ 25,300,807	\$ 26,345,164
DISTRIBUTION	1,830,168	1,875,922
METERING	1,608,056	1,648,257
PROCUREMENT	5,625,353	5,765,987
CONSERVATION	237,125	243,053
RECYCLE	2,678,299	2,745,256
PUBLIC INFORMATION	171,980	176,280
Security and Contamination Prevention	851,686	872,978
Debt Service - Indirect Charge Only	427,120	437,620
CIP Incremental O&M Costs	-	-
Infrastructure Use Fees	1,877,978	1,924,928
Additional Staff	-	-
Subtotal: Operating Expenditures	\$ 40,608,572	\$ 42,035,446
<i>Other Operating Expenses</i>		
Debt Service	\$ 14,445,708	\$ 14,448,052
Rate Funded Capital	-	1,000,000
Subtotal: Other Operating Expenditures	\$ 14,445,708	\$ 15,448,052
Total Operating Expenditures	\$ 55,054,280	\$ 57,483,498
<i>Policy Expenditures</i>		
Equipment Replacement Funding	\$ -	\$ -
Minimum Operating Fund Balance	-	-
Subtotal: Total Policy Expenditures	\$ -	\$ -
Total Expenditures for Cash Flow Test	\$ 55,054,280	\$ 57,483,498
Cash Flow Surplus (Deficit)	\$ (4,394,280)	\$ (2,659,718)

2017 Water Cost of Service Study Revenue Requirement Calculation

DEBT COVERAGE TEST			
		FY 2016/17	FY 2017/18
Revenues			
Water Revenues for Coverage	\$	47,878,200	\$ 52,170,675
BABs Refund		-	-
Connection Fees	Do Not Include	-	-
	Include	843,800	843,800
Total Revenues	\$	48,722,000	\$ 53,014,475
Expenditures			
Expenses To Include In Coverage Calculation	\$	40,608,572	\$ 42,035,446
Less Capital in O&M Budget			\$ (512,500)
Debt Service		14,445,708	14,448,052
Coverage		3,611,427	-
Total Expenditures	\$	58,665,707	\$ 55,970,998
Bond Coverage Surplus (Deficit)	\$	(9,943,707)	\$ (2,956,523)
Coverage Factor w/o Reserve		0.56 x	0.80 x

REVENUE REQUIREMENT			
		FY 2016/17	FY 2017/18
Total Surplus (Deficit)	\$	(9,943,707)	\$ (2,956,523)
Rate Increase Drive		Coverage	Coverage
Month of Adoption		March	September
Calculated Rate Increase (%)		74.99%	8.31%
		Overriden	Overriden
Rate Increases			
Rate Increase (%)		7.00%	14.00%
Cumulative Rate Increase (%)		0.00%	14.00%
Cash Flows			
Revenues Before Rate Increase	\$	50,660,000	\$ 54,823,780
Revenues From Rate Increase			
Revenues From Full Year of Rate Increase (Potable)	\$	2,784,518	\$ 5,974,124
Less: Rate Increase Delay (Potable)		(1,856,345)	(995,687)
Resulting Revenues from Rate Increase	\$	928,173	\$ 4,978,437
Total Revenues (with Rate Increase)	\$	51,588,173	\$ 59,802,217
Less: Expenditures		(55,054,280)	(57,483,498)
Cash Flow	\$	(3,466,108)	\$ 2,318,719
Coverage			
Revenue Only Coverage Factor		0.63 x	1.14 x
Coverage Factor with Operating Reserve		0.98 x	1.43 x

APPENDIX E - FUNCTIONAL ALLOCATION

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Appendix E
Functional Allocation

601-6010-843.82-09	OTHER PROF/CONTRACTUAL	100%	\$ -	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-843.86-05	IMPRV OTHER BLDG/MAJR RPR	100%	\$ -	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-843.86-06	MACHINERY AND EQUIP NEW	100%	\$ 25,350	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-844.82-62	NATURAL GAS	100%	\$ 2,050	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-844.82-66	WASTEWATER	100%	\$ 5,125	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-844.82-67	WATER	100%	\$ 30,750	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-844.82-68	REFUSE AND DISPOSAL	100%	\$ 15,375	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-844.84-21	TELEPHONE-BASIC SERVICE	100%	\$ 5,125	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-844.84-25	TELEPHONE-CELL AND PAGER	100%	\$ 15,375	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-844.85-30	TELEPHONE CHGS/HIPC	100%	\$ 44,280	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.81-01	POSTAGE	100%	\$ 6,150	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.81-02	OFFICE SUPPLIES	100%	\$ -	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.81-11	SUBSCRIPTION & PUBLICAT'S	100%	\$ 5,125	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.81-32	MINOR EQUIPMENT-OFFICE	100%	\$ 20,500	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.81-36	MINOR EQUIPMENT-OTHER	100%	\$ -	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.82-26	SERVICES-ADV & PROMOTION	100%	\$ 2,050	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.83-21	RENTAL-VEHIC & EQUIPMENT	100%	\$ 1,025	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.83-43	TRAINING/WORKSHOP/MEETING	100%	\$ 30,750	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.83-50	PUBLIC INFORMATION	100%	\$ -	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.83-57	MEMBERSHIPS-OTHER	100%	\$ 30,750	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.83-71	TAXES AND FILING FEES	100%	\$ 44,844	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.83-78	BAD DEBT EXPENSE	100%	\$ 102,500	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.83-90	ORGANIZATION DEVELOPMENT	100%	\$ 15,375	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.84-02	PHOTOCOPY CHARGES	100%	\$ 10,250	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.84-51	SERVICE FROM OTHER PROGAM	100%	\$ -	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.84-62	LEGAL ADVOCACY	100%	\$ 22,550	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.85-21	CUSTOMER BILLING CHARGES	100%	\$ 342,043	Customer Only	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.85-22	DATA PROCESSING-OPERATION	100%	\$ 34,850	Customer Only	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.85-23	DATA PROCESSING-WPC	100%	\$ 870	Customer Only	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.85-25	LIABILITY INSURANCE	100%	\$ 13,940	Customer Only	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.85-26	FIRE & PROPERTY INSURANCE	100%	\$ 15,273	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.85-32	INDIRECT PRORATED CST CHG	100%	\$ 1,933,150	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.85-33	INTER-FUND PRORATED CHGS	100%	\$ 166,050	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-846.87-02	INFRASTRUCTURE USE FEE	100%	\$ -	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-847.83-05	OTHER EQUIPMENT	100%	\$ -	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-847.84-39	EQUIPMENT MAINT. CHARGES	100%	\$ 297,250	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-847.85-35	FACILITY CHG-MAINTENANCE	100%	\$ 82,711	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-849.87-31	OPERATING TRANSFERS OUT/ PROJ #123104	100%	\$ -	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6010-891.86-06	MACHINERY & EQUIP-NEW	100%	\$ -	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

CONSERVATION																			
601-6011-841.80-01	DIRECT LABOR-REGULAR	0%	\$ 48,050	Conservation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-841.80-02	DIRECT LABOR-TEMPORARY	0%	\$ -	Conservation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-841.80-03	OVERTIME	0%	\$ 557	Conservation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-841.80-40	PARS	0%	\$ 7,901	Conservation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-841.80-41	EMPLOYEE BENEFITS	0%	\$ 10,193	Conservation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-841.80-42	WORKERS COMP INSURANCE	0%	\$ 974	Conservation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-841.80-43	PERS	0%	\$ 11,471	Conservation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-841.80-44	WORKERS COMP/SAFETY	0%	\$ 319	Conservation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-841.80-99	VACANCY SAVINGS	0%	\$ -	Conservation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-842.82-09	SERVICES-OTHER PROF/CONTR	0%	\$ 9,225	Conservation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-843.81-04	SHOP AND FIELD	0%	\$ 1,025	Conservation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-843.82-16	PRINTING AND BINDING	0%	\$ 25,625	Conservation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-846.83-43	TRAINING/WORKSHOP/MEETING	0%	\$ -	Conservation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-846.83-45	MILEAGE REIMBURSEMENT	0%	\$ -	Conservation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-846.83-50	PUBLIC INFORMATION	0%	\$ 76,875	Conservation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-846.84-51	SERVICE FROM OTHER PROGAM	0%	\$ -	Conservation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-846.85-22	DATA PROCESSING-OPERATION	0%	\$ 47,458	Customer Only	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-846.85-23	DATA PROCESSING-WPC	0%	\$ 1,025	Customer Only	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
601-6011-846.85-25	LIABILITY INSURANCE	0%	\$ 2,358	Customer Only	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

RECYCLE																			
601-6012-841.80-01	DIRECT LABOR-REGULAR	100%	\$ 180,747	GREAT	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
601-6012-841.80-02	DIRECT LABOR-TEMPORARY	100%	\$ 34,014	GREAT	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
601-6012-841.80-03	OVERTIME	100%	\$ 7,306	GREAT	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
601-6012-841.80-40	PARS	100%	\$ 29,502	GREAT	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
601-6012-841.80-41	EMPLOYEE BENEFITS	100%	\$ 44,055	GREAT	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
601-6012-841.80-42	WORKERS COMP INSURANCE	100%	\$ 12,081	GREAT	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
601-6012-841.80-43	PERS	100%	\$ 48,642	GREAT	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
601-6012-841.80-44	WORKERS COMP/SAFETY	100%	\$ 1,419	GREAT	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
601-6012-841.80-80	BENEFITS - TEMPORARY	100%	\$ -	GREAT	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
601-6012-841.80-99	VACANCY SAVINGS	100%	\$ -	GREAT	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
601-6012-842.82-04	SERVICES-LEGAL COUNSEL	100%																	

OXNARD
2017 Water Cost of Service Study

Appendix E
Functional Allocation

Debt Service																											
Debt Service - Principal	100%	\$	14,448,052	Debt Service	0%	0%	0%	98%	0%	2%	0%	0%	0%	0%	100.0%												
Debt Service - Interest	100%	\$	-	Debt Service	0%	0%	0%	98%	0%	2%	0%	0%	0%	0%	100.0%												
601-6004-846.85-32 INDIRECT PRORATED CST CHG	100%	\$	430,500	Debt Service	0%	0%	0%	98%	0%	2%	0%	0%	0%	0%	100.0%												
601-6004-848.85-02 BOND INTEREST PAYMENT	100%	\$	-	Debt Service	0%	0%	0%	98%	0%	2%	0%	0%	0%	0%	100.0%												
601-6004-848.85-04 L/P INTEREST PAYMENTS	100%	\$	300	Debt Service	0%	0%	0%	98%	0%	2%	0%	0%	0%	0%	100.0%												
601-6004-896.85-01 BOND PRINCIPAL PAYMENTS	100%	\$	-	Debt Service	0%	0%	0%	98%	0%	2%	0%	0%	0%	0%	100.0%												
601-6004-896.85-03 L/P PRINCIPAL PAYMENT	100%	\$	6,820	Debt Service	0%	0%	0%	98%	0%	2%	0%	0%	0%	0%	100.0%												
Infrastructure Use Fee																											
Streets	100%	\$	1,924,928	Base Only	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100.0%												
Subtotal O&M Allocation		\$	56,483,498		\$	11,960,551	\$	566,122	\$	192,213	\$	15,476,417	\$	840,420	\$	1,074,432	\$	2,364,042	\$	2,745,256	\$	4,356,897	\$	16,907,148	\$	-	
Reallocation of As All Other			-																								
Total O&M Allocation		\$	56,483,498		\$	11,960,551	\$	566,122	\$	192,213	\$	15,476,417	\$	840,420	\$	1,074,432	\$	2,364,042	\$	2,745,256	\$	4,356,897	\$	16,907,148	\$	-	
O&M Allocation Percentages					21%	1.0%	0.3%	27.4%	1.5%	2%	4%	5%	8%	30%	0%												

O&M Allocation Check	
Total Allocated O&M	\$ 56,483,498
Total Applicable O&M Costs	56,483,498
Difference	\$ -

Revenue Requirement Allocation		Cost	Allocation	Base	Max Month Peak	Conservation	Capacity	Customer	Fire Protection	City GW	GREAT	United	Calleguas	As All Other	Total											
Allocated O&M		\$	56,483,498	[Calculated]	21%	1%	0%	27%	1%	2%	4%	5%	8%	30%	0%	100.0%										
Rate Funded Capital	100%	1,000,000	Max Month Base/Peak With Fire	65%	31%	0%	0%	0%	4%	0%	0%	0%	0%	0%	0%	100.0%										
Equipment Replacement Funding	100%	-	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100.0%											
Minimum Operating Fund Balance	100%	-	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100.0%											
Adjustment for Rate Increase Delay	100%	995,687	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100.0%											
Net Cash Flows (after rate increase)	100%	2,318,719	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100.0%											
Less Offsetting Revenues																										
Recycled Water Revenues Potable Offset		(1,304,385)	GREAT	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100.0%											
Recycled Water Revenues New Users		(800,197)	GREAT	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100.0%											
P&G Water Supply Agreement		(2,500,000)	Calleguas	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	100.0%											
Oceanview Volumetric Revenues		(464,190)	United	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100.0%											
Other Water Revenues		(1,664,000)	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%											
BABs Refund	100%	(1,809,305)	Capacity Only	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100.0%											
Connection Fees		(843,800)	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%											
Other Revenues		(2,765,587)	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%											
Subtotal Revenue Requirement Allocation		\$	(7,837,058)		\$	12,609,265	\$	879,604	\$	192,213	\$	13,667,112	\$	840,420	\$	1,112,236	\$	2,364,042	\$	640,675	\$	3,892,707	\$	14,407,148	\$	(1,958,981)
Reallocation of As All Other			-		(488,116)	(34,050)	(7,441)	(529,066)	(32,533)	(43,056)	(91,514)	(24,801)	(150,690)	(557,714)	1,958,981											
Total Revenue Requirement Allocation		\$	48,646,440		\$	12,121,149	\$	845,554	\$	184,772	\$	13,138,046	\$	807,887	\$	1,069,180	\$	2,272,528	\$	615,874	\$	3,742,016	\$	13,849,435	\$	-
Revenue Requirement Allocation Percentages					24.9%	1.7%	0.4%	27.0%	1.7%	2.2%	4.7%	1.3%	7.7%	28.5%												

Revenue Requirement Allocation Check	
Total Allocated Revenue Requirement	\$ 48,646,440
Total Revenue Requirement Less Offsetting Revenues	47,650,752
Difference	\$ 995,687 Difference Due to Mid Year Rate Increase

