

CITY OF

OXNARD



CALIFORNIA

FINAL DRAFT • SEPTEMBER 2015

# Cost of Services STUDY

WATER

WASTEWATER

RECYCLED WATER

STORMWATER

ENVIRONMENTAL RESOURCES





**CITY OF OXNARD**  
**PUBLIC WORKS INTEGRATED MASTER PLAN**  
**COST OF SERVICE STUDY**  
**FINAL DRAFT**  
September, 2015



This Final Draft document is intended to provide an overview of the Water, Wastewater, and Environmental Resources Cost of Service Analyses as of September 30, 2015. The assumptions, methodologies, results, as well as the presented information in this report have been refined based on the results of the Utility Rate Advisory Panel (URAP) process, and reflect the rates that will be included in the upcoming Proposition 218 notice. While the underlying analysis and rates will likely not change, the discussion in this document may be updated pending the City's final review.



**CITY OF OXNARD**  
**PUBLIC WORKS INTEGRATED MASTER PLAN**  
**COST OF SERVICE STUDY**

**TABLE OF CONTENTS**

	<b><u>Page</u></b>
1.0 INTRODUCTION.....	1
1.1 Background.....	1
1.2 Overview of Rate Setting Process.....	2
1.3 General Assumptions and Direction .....	3
1.4 Forward-Looking Statement .....	3
2.0 WATER SERVICES .....	4
2.1 Introduction .....	4
2.2 Water Revenue Requirements .....	7
2.2.1 Introduction.....	7
2.2.2 Growth and Water Demand .....	8
2.2.3 Water Supply .....	10
2.2.4 Existing Operating Expenses .....	10
2.2.5 Capital Improvements, Bonding and Debt Service .....	13
2.2.6 Reserve and Other Requirements.....	18
2.2.7 Existing Revenues .....	20
2.2.8 Cash Flow and Debt Coverage Tests .....	20
2.2.9 Recommended Revenue Requirements .....	22
2.3 Water Cost of Service Analysis .....	25
2.3.1 Functional Cost Components.....	26
2.3.2 Allocation of Functional Components.....	27
2.3.3 Customer Class Allocations .....	28
2.3.4 Current Water Rates .....	31
2.3.5 Proposed Water Rates.....	31
2.3.6 Proposed Fixed Charges .....	33
2.3.7 Single Family Rates.....	35
2.3.8 Proposed Multi-Family Rates .....	36
2.3.9 Proposed Commercial, Industrial, and Institutional Rates .....	37
2.3.10 Proposed Oxnard Irrigation Rates.....	38
2.3.11 Proposed Oceanview Irrigation Rates.....	38
2.3.12 Customer Impacts.....	39
3.0 WASTEWATER.....	39
3.1 Introduction .....	39
3.2 Sewer Revenue Requirements.....	40
3.2.1 Introduction.....	40
3.2.2 Growth and Sewer Use.....	41
3.2.3 Existing and Projected Operating Expenses .....	43
3.2.4 Capital Improvements, Bonding and Debt Service .....	45
3.2.5 Reserve Requirements .....	49
3.2.6 Existing Revenues .....	50
3.2.7 Cash Flow and Debt Coverage Tests .....	50

3.2.8	Recommended Revenue Requirements .....	52
3.3	Cost of Service Analysis.....	54
3.3.1	Allocation to Functional Components .....	55
3.3.2	Customer Class Allocations .....	56
3.3.3	Allocation of Functional Components to Customer Classes .....	57
3.4	Wastewater Rates.....	58
3.4.1	Current Wastewater Rates.....	58
3.4.2	Proposed Wastewater Rates .....	59
3.4.3	Customer Impacts.....	65
4.0	ENVIRONMENTAL RESOURCES .....	65
4.1	Introduction .....	65
4.2	Environmental Resources Revenue Requirements .....	65
4.2.1	Introduction.....	65
4.2.2	Growth and Water Demand .....	66
4.2.3	Existing Operating Expenses .....	67
4.2.4	Capital Improvements and Funding .....	68
4.2.5	Reserve and Other Requirements.....	72
4.2.6	Existing Revenues .....	73
4.2.7	Cash Flow and Debt Coverage Tests .....	73
4.2.8	Recommended Revenue Requirements .....	75
4.3	Environmental Resources Rates .....	77
4.3.1	Current Environmental Resources Rates .....	77
4.3.2	Proposed Environmental Resources Rates.....	77
4.3.3	Customer Impacts.....	78
APPENDIX A	WATER CIP	
APPENDIX B	WATER REVENUE REQUIREMENT	
APPENDIX C	RECYCLED WATER REVENUES	
APPENDIX D	WATER SOURCE OF SUPPLY	
APPENDIX E	WATER FUNCTIONAL ALLOCATION	
APPENDIX F	WASTEWATER CIP	
APPENDIX G	WASTEWATER REVENUE REQUIREMENT	
APPENDIX H	WASTEWATER FUNCTIONAL ALLOCATION	
APPENDIX I	ENVIRONMENTAL RESOURCES FUNCTIONAL ALLOCATION	
APPENDIX J	CUSTOMER IMPACTS	

### **LIST OF TABLES**

Table 2.2.1	Projected Population and In-City Water Usage 2015 through 2040 .....	9
Table 2.2.2	Water Supply Requirements (AFY) .....	9
Table 2.2.3	Oxnard Water Supply Sources (AFY) - FY 2015/16 through FY 2024/25 .....	11
Table 2.2.4	Inflation Rates for Financial Modeling FY 2015/16 through FY 2024/25 .....	11
Table 2.2.5	Water Utility Operating Requirements (\$ thousands) FY 2015/16 through FY 2024/25.....	12
Table 2.2.6	Water Supply Purchases (\$ thousands) FY 2015/16 through FY 2024/25 ....	13
Table 2.2.7	Water Utility Capital Improvement Program FY 2015/16 through FY 2039/40.....	15
Table 2.2.8	Capital Improvement Program Requirements (\$ thousands) FY 2015/16 through FY 2024/25.....	16
Table 2.2.9	Water Revenue Bond Program Requirements (\$ thousands) FY 2015/16 through FY 2024/25.....	17

Table 2.2.10 Water Debt Service Requirements (\$ thousands) FY 2015/16 through FY 2024/25.....	18
Table 2.2.11 Reserve and Other Requirements (\$ thousands) FY 2015/16 through FY 2024/25.....	19
Table 2.2.12 Water Operating Revenues - Existing Water Rates (\$ thousands).....	20
Table 2.2.13 Cash Flow Test (\$ thousands).....	22
Table 2.2.14 Water Operating Revenues, FY 2015/16 through FY 2024/25 (\$ thousands).....	23
Table 2.2.15 Water Operating Revenue Requirements (\$M).....	24
Table 2.2.16 Water Operating Revenue with Recommended User Fee Increase (\$Thousands) FY 2015/16 through FY 2024/25.....	25
Table 2.3.1 Allocation of Water Functional Components FY 2015/16 through FY 2019/20.....	28
Table 2.3.2 Functional Water Allocation Rates and Allocated Revenue Requirements FY 2015/16 through FY 2019/20.....	29
Table 2.3.3 Water Utility Customer Class Characteristics FY 2015/16 through FY 2019/20.....	30
Table 2.3.4 Water Utility Requirements Allocations to Customer Classes (\$ thousands) FY 2015/16 through FY 2019/20.....	31
Table 2.3.5 Current Water Rates and Charges (effective February 5, 2015).....	32
Table 2.3.6 Proposed Monthly Fixed Charges – Single Year Implementation.....	33
Table 2.3.7 Proposed Monthly Fixed Charges with Smoothing - Oceanview Irrigation ....	34
Table 2.3.8 Proposed Monthly Fixed Charges with Smoothing - Oxnard Commercial, Industrial, Institutional, and Irrigation.....	34
Table 2.3.9 Proposed Monthly Fixed Charges with Smoothing - Multi Family.....	35
Table 2.3.10 Proposed Monthly Fixed Charges with Smoothing - Single Family.....	35
Table 2.3.11 Proposed Oxnard Single Family Rates.....	36
Table 2.3.12 Proposed Oxnard Multi-Family Rates.....	37
Table 2.3.13 Proposed Rates for Commercial, Industrial and Institutional Users.....	38
Table 2.3.14 Proposed Rates for Commercial, Industrial and Institutional Users.....	38
Table 2.3.15 Proposed Rates for Oceanview Irrigation Usage.....	39
Table 3.2.1 Projected Population and EDUs of Wastewater Flow.....	41
Table 3.2.2 Growth Escalators for EDUs, Flow, BOD and TSS.....	42
Table 3.2.3 Growth in Wastewater Flow, EDUs, BOD and TSS.....	42
Table 3.2.4 Inflation Rates for Financial Modeling FY 2015/16 through FY 2024/25.....	44
Table 3.2.5 Wastewater Utility Operating Requirements (\$ thousands) FY 2015/16 through FY 2024/25.....	44
Table 3.2.6 Wastewater Utility CIP Requirements (\$ thousands) FY 2015/16 through FY 2024/25.....	46
Table 3.2.7 Wastewater Revenue Bond Program Requirements (\$ thousands) FY 2015/16 through FY 2019/20.....	48
Table 3.2.8 Wastewater Utility Revenue Bond Program Activity FY 2015/16 through FY 2024/25.....	48
Table 3.2.9 Wastewater Debt Service Requirements (\$ thousands) FY 2015/16 through FY 2024/25.....	49
Table 3.2.10 Additions to Wastewater Reserves (\$ thousands) FY 2015/16 through FY 2024/25.....	50
Table 3.2.11 Wastewater Operating Revenues Based on Existing Rates (\$ thousands) FY 2015/16 through FY 2024/25.....	51
Table 3.2.12 Cash Flow Test (\$ thousands).....	51

Table 3.2.13 Wastewater Debt Coverage (\$ thousands)	
FY 2015/16 through FY 2024/25.....	52
Table 3.2.14 Recommended Wastewater Revenue Requirements (\$000s)	
FY 2015/16 through FY 2024/25.....	54
Table 3.3.1 Net Revenue Requirements Allocation .....	56
Table 3.3.2 City of Oxnard Wastewater Utility Functional Components, FY 2015/16 .....	56
Table 3.3.3 Wastewater Utility Service Units by Customer Class, FY 2015/16 .....	57
Table 3.3.4 Wastewater Utility Customer Class Allocation, Single Family Residential, FY 2015/16.....	58
Table 3.3.5 Wastewater Allocation Comparison .....	58
Table 3.4.1 Current Wastewater System User Rates and Charges (effective October 1, 2013) .....	60
Table 3.4.2 Proposed Wastewater System User Rates and .....	62
Table 4.2.1 Projected Population and Environmental Resources Accounts .....	66
Table 4.2.2 Inflation Rates for Financial Modeling FY 2015/16 through FY 2024/25 .....	67
Table 4.2.3 ER Utility O&M Cost Detail (\$ thousands) FY 2015/16 through FY 2024/25.....	68
Table 4.2.4 ER Operating Requirements (\$ thousands) FY 2015/16 through FY 2024/25.....	69
Table 4.2.5 ER Utility Capital Improvement Program FY 2015/16 through FY 2024/25.....	70
Table 4.2.6 Capital Improvement Program Requirements (\$ thousands) FY 2015/16 through FY 2024/25.....	70
Table 4.2.7 ER Revenue Bond Program Requirements (\$ thousands) FY 2015/16 through FY 2024/25.....	71
Table 4.2.8 Water Debt Service Requirements (\$ thousands) FY 2015/16 through FY 2024/25.....	72
Table 4.2.9 ER Utility Reserve and Other Requirements (\$ thousands) FY 2015/16 through FY 2024/25.....	73
Table 4.2.10 ER Utility Operating Revenues - Existing Water Rates (\$ thousands) FY 2015/16 through FY 2024/25.....	74
Table 4.2.11 ER Utility Cash Flow Test (\$ thousands) FY 2015/16 through FY 2024/25.....	75
Table 4.2.12 ER Utility Debt Coverage Test, FY 2015/16 through FY 2024/25 (\$ thousands).....	76
Table 4.2.13 ER Utility Rate Revenue Requirements (\$M) FY 2015/16 through FY 2024/25.....	76
Table 4.2.14 ER Utility Operating Revenue with Recommended User Fee Increase (\$Thousands) FY 2015/16 through FY 2024/25 .....	77
Table 4.3.1 Proposed ER Rates - Residential Customers; Not Using Mechanical Front-End Load Containers.....	79
Table 4.3.2 Proposed ER Rates - Commercial and Industrial Users; Not Using Mechanical Front-End Loaded Containers.....	80
Table 4.3.3 Proposed ER Rates - Commercial and Industrial Users; Using Mechanical Front-End Loaded Containers.....	81
Table 4.3.4 Proposed ER Rates - Commercial and Industrial User; Using Mechanical Front-End Loaded Containers.....	84
Table 4.3.5 Proposed ER Rates - Commercial and Industrial User; Roll-Off Containers .....	86
Table 4.3.6 Proposed ER Rates - Walking Floor Transfer Trailer Pickup Fee.....	87
Table 4.3.7 Proposed ER Rates - Security and Contamination Fee .....	87



## **LIST OF FIGURES**

Figure 2.1.1	Monthly Water Demand, January 2011 through March 2015 .....	4
Figure 2.1.2	Water Demand (HCF) by Major Customer Class, Average Monthly Demand from January 2011 through March 2015 .....	5
Figure 2.1.3	Monthly Pattern of Water Demand (HCF), 2011 - 2015 .....	5
Figure 2.1.4	Projected Average Annual Water Supply in Acre-Feet, FY 2015/16 through FY 2024/25 .....	6
Figure 2.1.5	Water Utility Current Operating Requirements and New Financial Commitments, FY 2014/2015 through FY 2024/25 .....	7
Figure 2.1.6	Water Utility Revenues and Requirements, FY 2015/16 through FY 2024/25 .....	7
Figure 2.2.1	Actual and Projected In-City Water Demand (AFY) .....	10
Figure 2.2.2	Water Utility Operating Requirements (\$ thousands) FY 2015/16 through FY 2024/25 .....	12
Figure 2.2.3	Water Utility Capital Improvement Project Costs (\$M) FY 2015/16 through FY 2039/40 .....	14
Figure 2.2.4	Water Utility Capital Improvement Project Costs (\$ thousands) FY 2015/16 through FY 2024/25 .....	16
Figure 2.2.5	Water Utility Revenue Bond Sales and Proceeds (\$ thousands) FY 2015/16 through FY 2024/25 .....	17
Figure 2.2.6	Debt Service on Existing and Planned Revenue Bond Sales (\$ thousands) FY 2015/16 through FY 2024/25 .....	19
Figure 2.2.7	Water Utility Operating Revenue - Existing User Fee Rates (\$thousands) FY 2015/16 through FY 2024/25 .....	21
Figure 2.2.8	Projected Water Utility Operating Revenue, Operating Requirements (Cash Flow Test) and Bond Coverage Requirements .....	23
Figure 2.3.1	Average Water Utility Function Allocation - FY 2015/16 through FY 2019/20 .....	26
Figure 2.3.2	Single Family Usage Histogram .....	36
Figure 2.3.3	Multi-Family Usage Histogram .....	37
Figure 3.1.1	Indexed Growth in Demand for Wastewater Services FY 2014/15 through FY 2024/25 (FY 2014/15 = 1.000) .....	40
Figure 3.2.1	Indexed Growth in Demand for Wastewater Services (2015=1.000) FY 2015/16 through FY 2024/25 .....	43
Figure 3.2.2	Wastewater Utility Operating Requirements (\$thousands) FY 2015/16 through FY 2024/25 .....	45
Figure 3.2.3	Wastewater Utility CIP Requirements (\$M) FY 2015/16 through FY 2024/25 .....	47
Figure 3.2.4	Wastewater Bond Sales through FY 2019/20 .....	47
Figure 3.2.4	Existing and Recommended Operating Revenue to meet Recommended Operating and Reserve Requirements (\$ thousands), FY 2015/16 through FY 2024/25 .....	53
Figure 3.2.5	Additional Revenue from Rate Increases to finance Recommended Revenue Requirements, FY 2015/16 through FY 2024/25 .....	54
Figure 3.3.1	Allocation of Wastewater Utility Functional Components .....	55
Figure 2.2.3	ER Utility Capital Improvement Project Costs (\$M) FY 2015/16 through FY 2024/25 .....	69



---

# **PUBLIC WORKS INTEGRATED MASTER PLAN COST OF SERVICE STUDY**

## **1.0 INTRODUCTION**

This report presents multi-year revenue requirements, cost of service analysis, and utility rate design recommendations for the water and wastewater utilities of the City of Oxnard. The report provides a factual basis for establishing rates to support the capital and operating requirements of the Public Works Integrated Master Plan for the period from FY 2015/16 through FY 2024/25. The report furthers the following City financial goals:

- Maintain sufficient cash flows to meet current and projected increases in utility operations and maintenance.
- Finance long-term capital improvements to increase operating efficiency, meet regulatory requirements and expand system capacity to serve new development.
- Increase fund balances to meet bond coverage requirements and reduce the interest costs associated with new bond issues.
- Increase the resilience of utility finances to address unexpected demands on utility operations and facilities.
- Adopt utility rate schedules and financial policies to ensure the equitable allocation of utility requirements to the City's ratepayers in keeping with the requirements of California law.

## **1.1 Background**

The City of Oxnard operates water and wastewater utilities 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.

The Water Utility is responsible for a system of water transmission, distribution and storage facilities, blending stations, and a water treatment facility to deliver potable water to City customers. Nearly a third of the City's water supply is imported surface water from the Metropolitan Water District of Southern California through the Calleguas Municipal Water District. Another 26 percent of the water supply comes from regional groundwater sources via the United Water Conservation District. Forty percent comes from City groundwater storage facilities and is treated by reverse osmosis before entering the City water supply. Finally, Public Works operates an Advanced Water Purification Facility that produces recycled water to supplement the City's water supply, representing roughly 2 percent of the water supply.

The City's Wastewater Utility consists of a wastewater treatment facility and associated collection and conveyance facilities that serve city and regional wastewater customers, including the Port of Hueneme.

## **1.2 Overview of Rate Setting Process**

Cities perform periodic reviews of their utility finances and rates in order to ensure that adequate 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. Article X (2) of the State Constitution establishes the need to preserve the State's water supplies and discourage the wasteful or unreasonable use of water by encouraging conservation.

To meet these requirements, California utilities incorporate generally accepted rate-setting methodologies described in American Water Works Association (AWWA) Manual M1 and Water Environmental Federation (WEF) Manual of Practice No. 27 as a standard procedure.

In both AWWA and WEF's manuals, the rate-setting methodologies incorporate three elements: 1) Revenue Requirements, 2) Cost of Service Analyses, and 3) Rate Design. The following is a general description of the three elements.

- 1) *Revenue Requirements*: The revenue requirements 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.
- 2) *Cost of Service Analysis*: The cost of service analyses 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 then reallocated to customer costs. Unit rates are derive for the system as a whole at which point costs are allocated to the specific customer classes based on the burden they place on the system.
- 3) *Rate Design*: The rate design element is the development of rates 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.

Within these broad legal requirements, utilities have a reasonable degree of latitude in the application of cost-of-service principles to develop rates that appropriately and adequately reflect their distinct and unique characteristics, and the values of the communities they serve.

### **1.3 General Assumptions and Direction**

The City of Oxnard has undertaken this cost of service study to achieve the follow primary objectives:

- Adopt utility rates and charges to provide sufficient, predictable and reliable revenues to deliver utility services in response to customer demand.
- Strengthen the financial reserves in order to finance critical capital investments at the lowest possible borrowing costs.
- To increase reserves, beyond that required for the City's capital improvement program, to provide sufficient future resources to address backlogs in equipment replacement, and be able to respond to unforeseen and unexpected operational or financial risks.
- Consistent with Proposition 218, design rates that promote efficient use of water to meet the State's 20x2020 (SB 7x-7) mandate, and effectively distribute the cost of water supply based on each customer's usage pattern.

With these objectives in mind, this cost of service study relies on the following general assumptions during the period from FY 2015/16 through FY 2024/25:

- The City's service population will grow at nearly 1.25 percent per year.
- The statewide water supply crisis will have a measurable impact on the growth in demand for water and wastewater services. Average annual growth in water demand will increase by 0.35 percent per year between FY 2015/16 and FY 2024/25, while wastewater flows will grow by 0.9 percent per year during the same period. Pollutant loadings of BOD and TSS will increase by an average 1.6 percent and 0.7 percent per year, respectively, through FY 2024/25. An Equivalent Dwelling Unit of wastewater demand will increase by 1.1 percent on an annual average basis.
- General inflation rates of 3 to 4 percent will escalate line item operating expenditures. Capital project costs will inflate at an average 3.2 percent per year.
- Capital improvement projects will be financed primarily through the sale of revenue bonds, necessitating the build-up of cash reserves to provide bond coverage ratios in excess of 1.25X.
- In addition to increased bond coverage reserves, the water and wastewater utilities will increase operating reserves to finance planned equipment replacement.

### **1.4 Forward-Looking Statement**

The projections and forecasts of this analysis are based on reasonable expectations of future events. Should the proposed revenue increases be delayed or postponed, or cost escalation, operating expenditures, or capital needs exceed forecasted levels prior to FY 2024/25, the City might be required to begin a new Proposition 218 process to increase

rates above currently projected levels. The City might similarly be required to begin a new Proposition 218 process if revenues do not materialize as projected.

## 2.0 WATER SERVICES

### 2.1 Introduction

The City of Oxnard delivers more than 7.3 million HCF (hundred cubic feet) of potable and recycled water per year to more than 53,000 utility customers, inside and outside of the city. Water demand fluctuates throughout each water year, with average monthly water demand ranging from 558,592 HCF (hundred cubic feet) during winter months, to 661,177 HCF during summer months. Peak demand increased to as much as 731,468 HCF during the month of July, 2012, based on an analysis of water sales between January 2011 and March 2015. Figure 2.1.1 illustrates the monthly fluctuation of water demand from winter to summer between January 2011 and March 2015. Figure 2.1.2 reports average monthly water demand during this period for the major customers classes: single family residential (SFR), multi-family residential (MFR), commercial/industrial/institutional (C/I) and irrigation (IRR). Figure 2.1.3 provides demand profiles for four calendar years (2011-2014), the pattern for the first three months of calendar 2015, and the average monthly pattern for the four-year period from 2011 through 2014.

Figure 2.1.1 Monthly Water Demand, January 2011 through March 2015

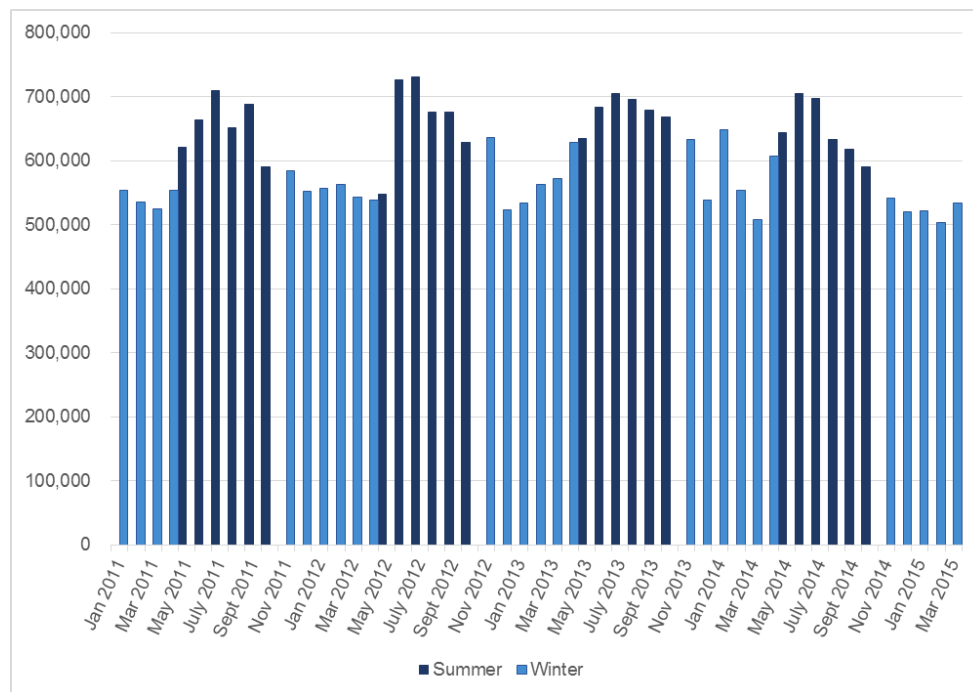


Figure 2.1.2 Water Demand (HCF) by Major Customer Class, Average Monthly Demand from January 2011 through March 2015

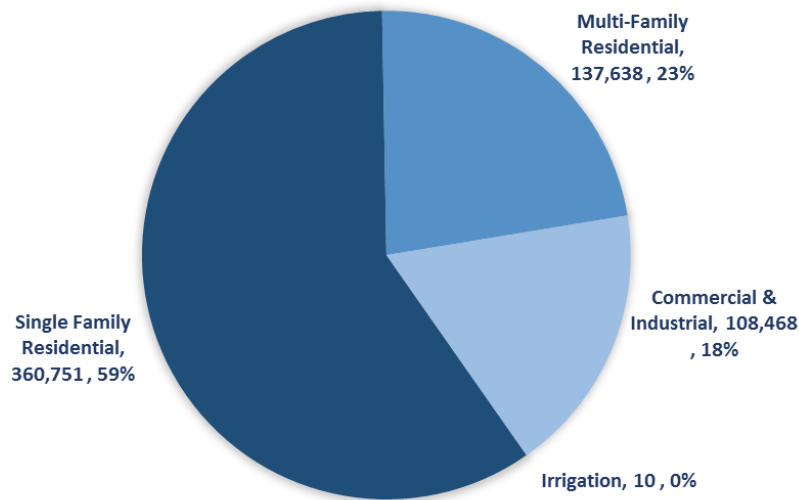
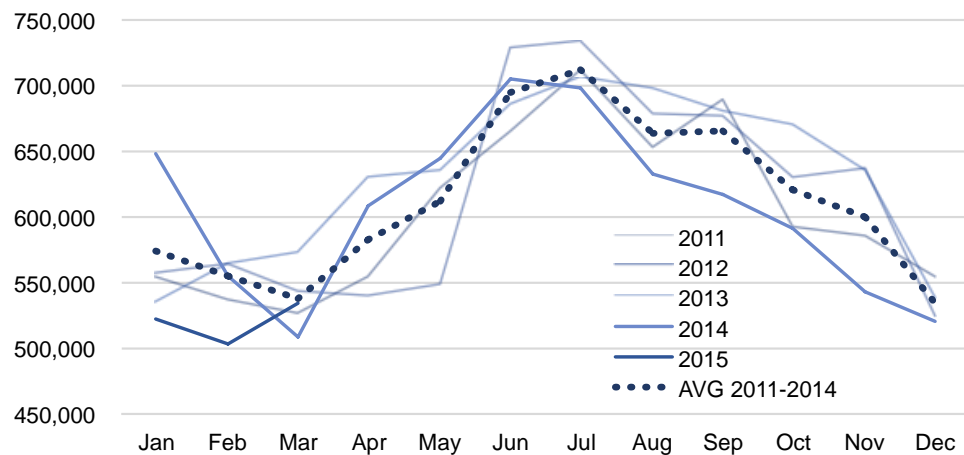
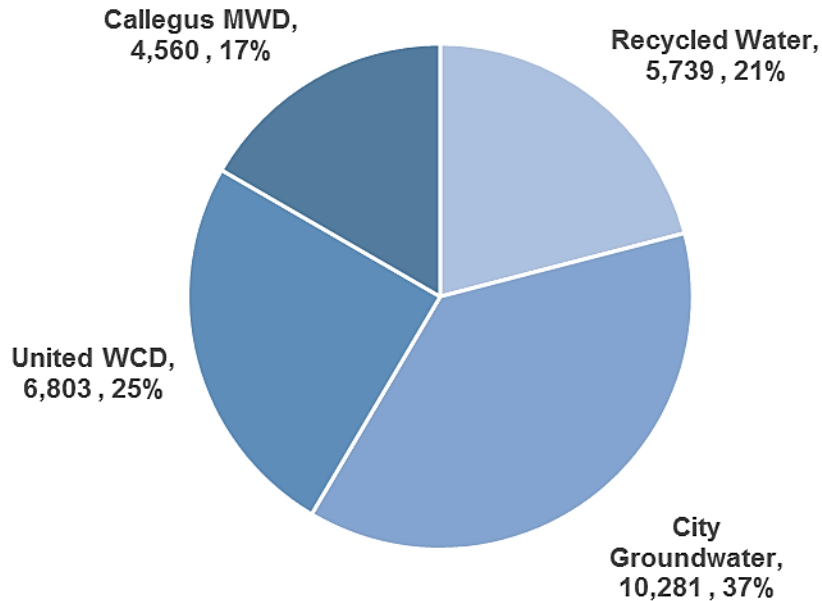


Figure 2.1.3 Monthly Pattern of Water Demand (HCF), 2011 - 2015



In order to meet customer demand, the City relies on water supplies from four major sources. In priority order, the City 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 and to agricultural customers through the City's Aquifer Storage and Recovery (ASR) system. The City also owns and manages local groundwater resources, purchases regional groundwater from United Water Conservation District, and purchases state surface water provided by the Metropolitan Water District of Southern California through the Calleguas Municipal Water District. The projected average allocation of water sources through FY 2024/2025 is illustrated in Figure 2.1.4.

Figure 2.1.4 Projected Average Annual Water Supply in Acre-Feet, FY 2015/16 through FY 2024/25



Providing a safe, adequate and reliable supply of water to meet customer demand is a complex and challenging business, requiring foresight to anticipate changing market conditions, an integrated approach to in-city and regional water sources, and resilient facilities and systems that are adaptive and responsive to constant change. During the next ten years, the City intends to address long-standing staffing shortfalls, deferred investments in equipment and facilities, and inadequate financial reserves for unforeseen operating requirements, and to secure low interest bond financing for needed capital investments (Figure 2.1.5). To meet these challenges, the City expects utility requirements to grow, on average, by about 5.6 percent per year between FY 2014/15 and FY 2024/25.

While some of the increased utility requirements will be offset by sales of recycled water and the City's Procter and Gamble (P&G) water supply agreement, the City will be required to increase user fees and service charges. The City relies on water utility user fees to pay for more than 80 percent of the annual costs of the water utility. By FY 2024/25, the share of costs borne by user fees is expected to increase to 91 percent of annual utility costs. Figure 2.1.6 compares utility revenue sources to projected requirements to illustrate the need for increases in user fees and charges.



Figure 2.1.5 Water Utility Current Operating Requirements and New Financial Commitments, FY 2014/2015 through FY 2024/25

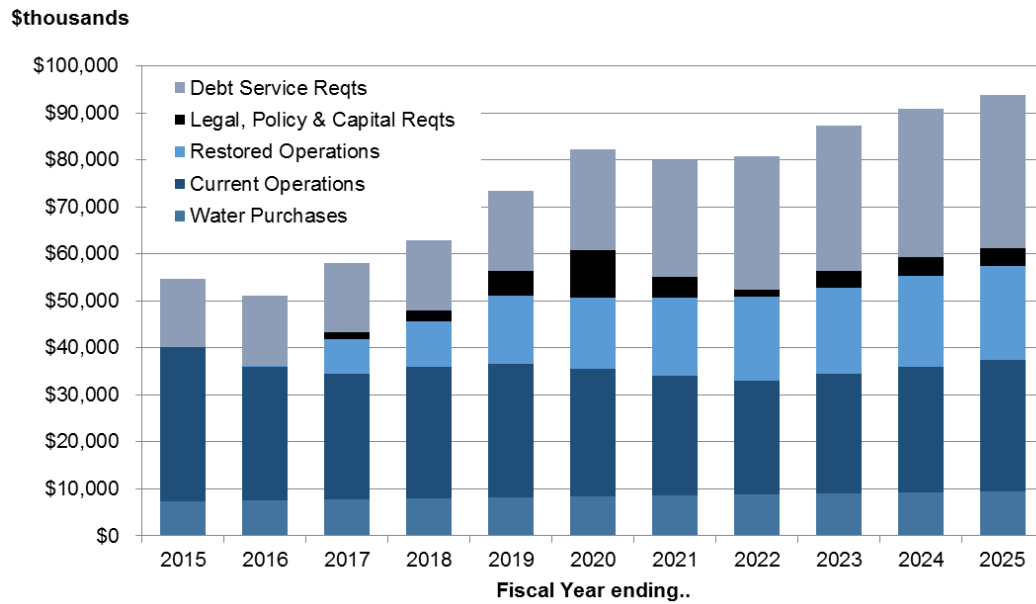
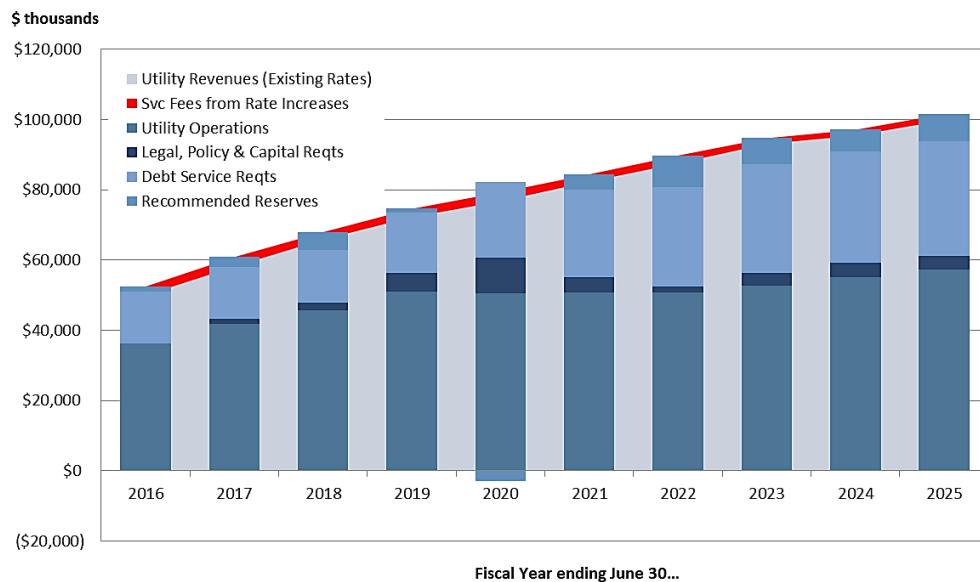


Figure 2.1.6 Water Utility Revenues and Requirements, FY 2015/16 through FY 2024/25



## 2.2 Water Revenue Requirements

### 2.2.1 Introduction

This section presents a detailed analysis of revenue requirements for the City's water utility, including the Water Reuse Program. 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. Particular attention is given to the contributions made to the City's water supply by the Water Reuse Program. 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.

While population, water demand, and utility finances have been projected through FY 2040/41, the planning period for this report is FY 2015/16 through FY 2024/2025.

## **2.2.2 Growth and Water Demand**

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. The City assumed a vacancy rate of 5 percent of dwelling units and an average household size of 4 persons per occupied unit.

The population projections, in turn, served as the basis of estimating future demand for water services. Table 2.2.1 provides a comparison of projected population and water usage (expressed in acre-feet per year) for 2015 through 2040. Both sets of projections reflect a consensus assumption that population growth and water usage will increase at higher annual rates over the next ten years, and then slow over the remaining 25 years of the planning period.

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 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 ongoing 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. This analysis has been developed under the assumption that usage will drop by an

additional 8 percent in FY 2015/16. The analysis assumes no change in FY 2016/17, then a rebound of 5 percent per year in FY 2017/18 and FY 2018/19.

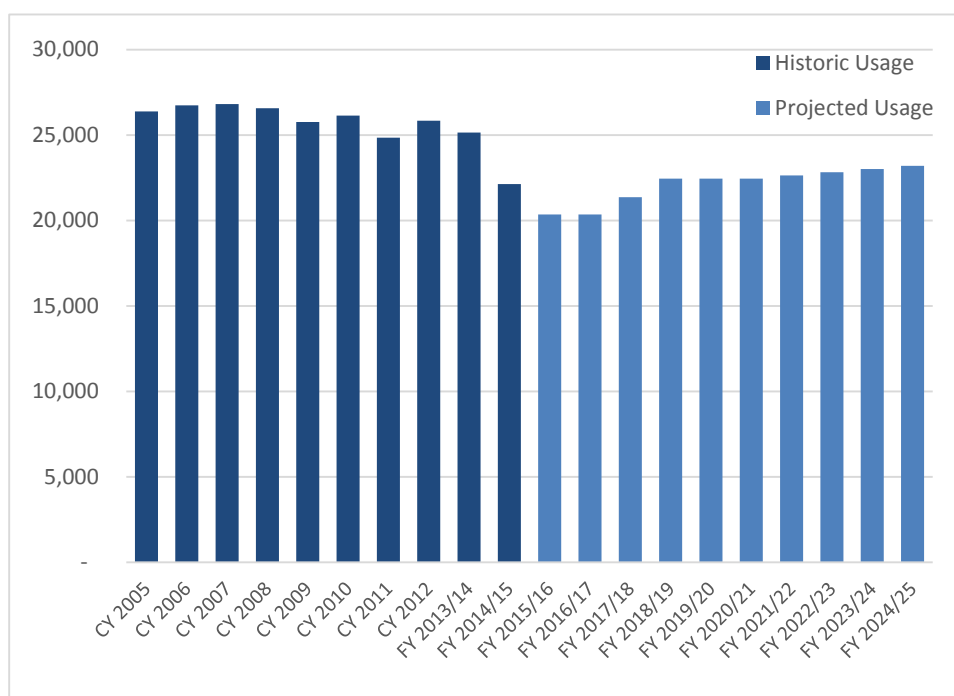
<b>Table 2.2.1 Projected Population and In-City Water Usage 2015 through 2040 Public Works Integrated Master Plan City of Oxnard</b>				
<b>Year</b>	<b>2014 Population Forecast<sup>(1)</sup></b>		<b>Water Usage (AFY)<sup>(2)</sup></b>	
	<b>Estimate</b>	<b>Annual Growth</b>	<b>Estimate</b>	<b>Annual Growth</b>
2015	210,873	0.87%	31,274	0.87%
2020	220,248	0.84%	32,664	0.84%
2025	229,622	0.80%	34,054	0.80%
2030	238,996	0.77%	35,445	0.77%
2035	248,370	0.77%	36,835	0.77%
2040	257,744		38,225	
Notes (1) and (2): Based on Table 11 of PM 2.2 "Water Demand Projections".				

Table 2.2.2 reports projected total water supply requirements, including in-city water demand, transfers to the Port Hueneme Water Agency (PHWA) and allowances for system water losses. The in-City usage projections include demand for recycled water, estimated at 415 AYF in FY 2015/16, and a constant 830 AYF for each fiscal year thereafter, through FY 2024/25.

<b>Table 2.2.2 Water Supply Requirements (AFY) FY 2015/16 through FY 2024/25 Public Works Integrated Master Plan City of Oxnard</b>				
<b>FYE</b>	<b>Projected Oxnard Potable Water Usage</b>	<b>Transfer to PHWA<sup>(1)</sup></b>	<b>System Loss Allowance</b>	<b>Total Water Requirement</b>
2016	20,351	4,700	1,297	26,347
2017	20,351	4,700	1,275	26,326
2018	21,368	4,700	1,328	27,397
2019	22,437	4,700	1,385	28,521
2020	22,437	4,700	1,385	28,521
2021	22,437	4,700	1,385	28,521
2022	22,625	4,700	1,394	28,719
2023	22,814	4,700	1,404	28,918
2024	23,005	4,700	1,414	29,119
2025	23,198	4,700	1,425	29,322
Note: (1) PHWA - Port Hueneme Water Agency				

Figure 2.2.1 presents actual in-city water demand from FY 2005/06 through FY 2014/15, and estimated water demand from FY 2015/16 through FY 2024/25.

Figure 2.2.1 Actual and Projected In-City Water Demand (AFY)



### 2.2.3 Water Supply

The City of Oxnard procures water from a mix of local, regional and statewide sources. During the 10-year period of this study, the City expects to increase its reliance on local sources of water, while reducing purchases of water provided by external agencies. (Table 2.2.3.)

### 2.2.4 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 personal 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 2014/15 operating budgets, adjusted to exclude any unusual or one-time expenses that would distort future cost estimates. Table 2.2.4 presents the inflation rates used to estimate increases in operating expenses, including salaries, fringe benefits, supplies, power, telephone, contracted services, etc.

<b>Table 2.2.3 Oxnard Water Supply Sources (AFY) - FY 2015/16 through FY 2024/25 Public Works Integrated Master Plan City of Oxnard</b>									
<b>FYE</b>	<b>Recycled Water</b>				<b>Potable Water</b>				
	<b>In-City Sales</b>	<b>Agricultural and Golf Course Sales</b>	<b>Aquifer Storage &amp; Recovery</b>	<b>Total Recycled Usage</b>	<b>City Ground-water</b>	<b>Aquifer Storage &amp; Recovery</b>	<b>United WCD</b>	<b>Calleguas MWD</b>	<b>Total Potable Usage</b>
2016	415	1,300	0	1,715	10,281	0	6,803	8,433	25,517
2017	830	4,970	1,200	7,000	10,281	1,200	6,803	6,382	24,666
2018	830	4,560	1,610	7,000	10,281	1,610	6,803	7,043	25,737
2019	830	9,950	3,220	14,000	10,281	3,220	6,803	6,557	26,861
2020	830	8,340	4,830	14,000	10,281	4,830	6,803	4,947	26,861
2021	830	6,730	6,440	14,000	10,281	6,440	6,803	3,337	26,861
2022	830	5,120	8,050	14,000	10,281	8,050	6,803	1,925	27,059
2023	830	5,120	8,050	14,000	10,281	8,050	6,803	2,124	27,258
2024	830	5,120	8,050	14,000	10,281	8,050	6,803	2,325	27,459
2025	830	5,120	8,050	14,000	10,281	8,050	6,803	2,528	27,662

<b>Table 2.2.4 Inflation Rates for Financial Modeling FY 2015/16 through FY 2024/25 Public Works Integrated Master Plan City of Oxnard</b>					
<b>FYE</b>	<b>Capital Inflation</b>	<b>Labor Inflation</b>	<b>General Inflation</b>	<b>Utilities Inflation</b>	<b>Chemicals Cost Inflation</b>
2016	3.20%	7.5%	2.50%	4.00%	4.00%
2017	3.20%	7.5%	2.50%	4.00%	4.00%
2018	3.20%	7.5%	2.50%	4.00%	4.00%
2019	3.20%	2.50%	2.50%	4.00%	4.00%
2020	3.20%	2.50%	2.50%	4.00%	4.00%
2021	3.20%	2.50%	2.50%	4.00%	4.00%
2022	3.20%	2.50%	2.50%	4.00%	4.00%
2023	3.20%	2.50%	2.50%	4.00%	4.00%
2024	3.20%	2.50%	2.50%	4.00%	4.00%
2025	3.20%	2.50%	2.50%	4.00%	4.00%

Table 2.2.5 provides a summary of projected operating requirements from FY 2015/16 through FY 2024/25, presented in thousands of dollars (\$ thousands). Current Operations include projected requirements based on current levels of staffing and effort by the water utility. In addition to this baseline category, the City must support increased operations and maintenance related to new capital facilities and the addition of programs and staff to meet new or evolving program responsibilities and initiatives. These projected Water Utility operating requirements are presented in Figure 2.2.2.

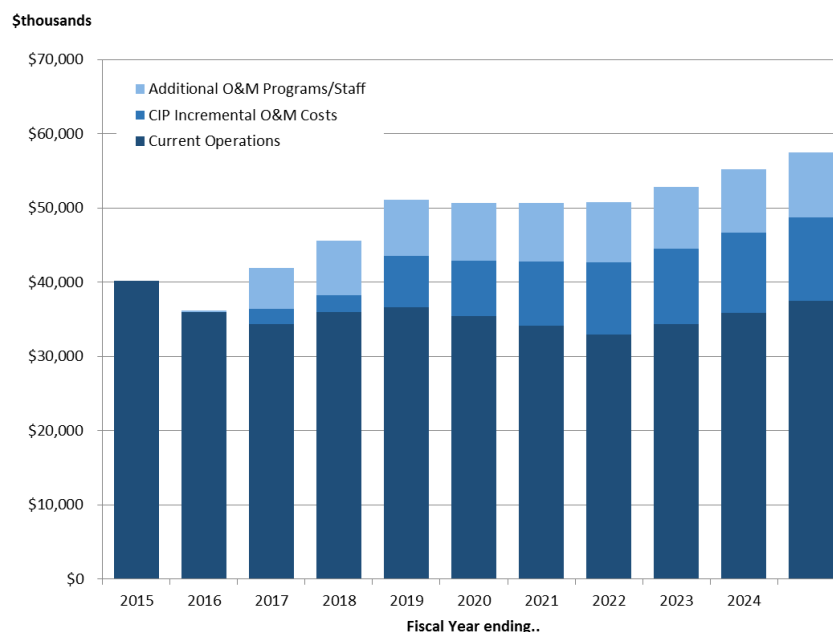
**Table 2.2.5 Water Utility Operating Requirements (\$ thousands)**  
**FY 2015/16 through FY 2024/25**  
**Public Works Integrated Master Plan**  
**City of Oxnard**

FYE	Current Operations <sup>(1)</sup>	CIP Incremental O&M Costs <sup>(2)</sup>	Backfill O&M Programs/Staff <sup>(3)</sup>	Total Operating Requirements
2016	\$35,927	\$0	\$241	\$36,168
2017	\$34,351	\$2,061	\$5,460	\$41,872
2018	\$35,956	\$2,249	\$7,375	\$45,580
2019	\$36,563	\$6,982	\$7,556	\$51,101
2020	\$35,438	\$7,458	\$7,742	\$50,638
2021	\$34,128	\$8,588	\$7,935	\$50,651
2022	\$32,934	\$9,726	\$8,134	\$50,794
2023	\$34,374	\$10,107	\$8,337	\$52,818
2024	\$35,885	\$10,780	\$8,545	\$55,210
2025	\$37,486	\$11,169	\$8,759	\$57,414

Notes:

- (1) Annual O&M expenditures with annual escalation, this category includes the cost of purchased water.
- (2) O&M costs associated with CIP projects, much of the costs are for increased production at the AWPf.
- (3) Filling of vacant and necessary staff positions for operations and CIP activities, replacement of contractors with City personnel (also reflected in reduced consulting costs), and funding of required O&M programs.

**Figure 2.2.2 Water Utility Operating Requirements (\$ thousands) FY 2015/16 through FY 2024/25**



The purchase of water supply from outside agencies represents a significant portion of Water Utility operating requirements. The City recognizes the increasing financial risks associated with these purchases, and has set forth a plan to reduce water purchases as a percentage of total water operating requirements over the next ten years. Table 2.2.6 presents projected water purchases by water source from FY 2015/16 through FY 2024/25.

<b>Table 2.2.6 Water Supply Purchases (\$ thousands) FY 2015/16 through FY 2024/25 Public Works Integrated Master Plan City of Oxnard</b>				
<b>FYE</b>	<b>United Water Conservation District</b>	<b>Calleguas Municipal Water District</b>	<b>Total Water Purchases</b>	<b>Share of Total Water Operations</b>
2016	\$3,987	\$11,804	\$15,791	39%
2017	\$4,186	\$9,726	\$13,912	39%
2018	\$3,540	\$11,136	\$14,676	35%
2019	\$3,717	\$11,004	\$14,721	32%
2020	\$3,901	\$9,122	\$13,023	26%
2021	\$4,096	\$7,024	\$11,120	22%
2022	\$4,298	\$5,023	\$9,321	18%
2023	\$4,513	\$5,623	\$10,136	20%
2024	\$4,736	\$6,273	\$11,009	21%
2025	\$4,973	\$6,978	\$11,951	22%

## **2.2.5 Capital Improvements, Bonding and Debt Service**

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. These capital requirements can be financed from ongoing, annual appropriations, or financed through the sale of revenue bonds. In the case of bond financing, the resulting debt service becomes an "operating" requirement for purposes of calculating water utility user fees. This section of the analysis identifies future capital requirements that necessitate the sale of bonds by the City, the size and timing of bond sales through FY 2024/25, and the existing and anticipated debt services requirements during the same ten-year period.

### **2.2.5.1 Capital Improvements**

The City has identified a back log of capital improvements that must be addressed to protect its investment in existing water infrastructure, increase operational efficiency and reliability, address issues of sustainability and performance, and respond to increasing regulatory requirements. The City's Capital Improvement Plan (CIP) forecasts required investments through 2040 totaling nearly \$475 million, valued in 2015 dollars. Figure 2.2.3 presents the distribution of total capital project costs across four major program areas – water systems, recycled water systems, and applicable stormwater management infrastructure.

Figure 2.2.3 Water Utility Capital Improvement Project Costs (\$M) FY 2015/16 through FY 2039/40

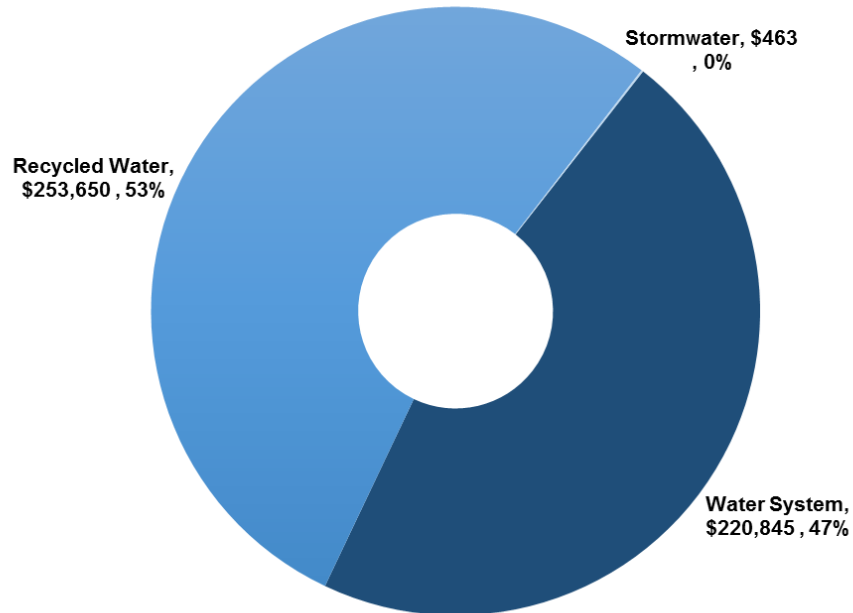


Table 2.2.7 provides a summary of project categories within each of these four major capital program areas. About 53 percent of the CIP is scheduled for implementation between FY 2015/16 through FY 2024/25, costs in that 10 year time frame include \$98.4 million for water system improvements, \$152.4 million for recycled water and supply reliability improvements, and \$0.5 million for stormwater management infrastructure.

Table 2.2.8 and Figure 2.2.4 set forth planned annual capital investments through FY 2024/25, expressed in thousands of dollars. Details are provided in Appendix B.

#### 2.2.5.2 Revenue Bond Sales and Program Requirements

The City's planned investments in capital improvements will be financed through connection fees, the drawing down of capital reserves, contributions from rate-based revenues, and the sale of revenue bonds. During the next 10 years, nearly 82% of planned capital improvements will be financed from the proceeds of water utility revenue bond sales. The bond sales will have a total PAR or face value of \$293.9 million, and produce \$231.1 million in bond proceeds. Figure 2.2.5 shows the size and timing of bond sales through FY 2024/25.



<b>Table 2.2.7 Water Utility Capital Improvement Program FY 2015/16 through FY 2039/40 Public Works Integrated Master Plan City of Oxnard</b>			
Project Description	Estimated Project Costs (2015 \$Thousands)		
	Total CIP	FYE 2015-2025	FYE 2026-2040
<b>Water System</b>			
Automated Meter Readers	\$14,000	\$14,000	\$0
Ops Improvements	\$1,103	\$1,103	\$0
Cathodic Protection	\$1,615	\$1,615	\$0
Treatment Facilities Upgrades / Improvements	\$39,625	\$18,956	\$20,669
Integration With ASR	\$0	\$0	\$0
Existing Blend Station Improvements	\$38,537	\$32,552	\$5,985
Fire Flow Improvements	\$9,040	\$0	\$9,040
Storage Reservoirs	\$0	\$0	\$0
Pressure Zone Modifications	\$5,021	\$5,021	\$0
Age Replacements (Thru 2040)	\$93,141	\$6,420	\$86,721
Concentrate Line For Desalters	\$18,763	\$18,763	\$0
<b>Total - Water System</b>	<b>\$220,845</b>	<b>\$98,429</b>	<b>\$122,415</b>
<b>Recycled Water and Supply Reliability</b>			
Recycled Water Retrofits	\$4,000	\$4,000	\$0
Advanced Water Purification Facility	\$70,360	\$42,249	\$28,111
ASR / IPR Facilities	\$125,622	\$59,079	\$66,542
Recycled Water Pipelines	\$53,668	\$47,084	\$6,585
<b>Total - Recycled Water and Supply Reliability</b>	<b>\$253,650</b>	<b>\$152,412</b>	<b>\$101,238</b>
<b>MBR - Advanced Disinfection</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Stormwater System</b>	<b>\$463</b>	<b>\$463</b>	<b>\$0</b>
<b>Grand Total - Water Utility CIP</b>	<b>\$474,957</b>	<b>\$251,304</b>	<b>\$223,653</b>

<b>Table 2.2.8 Capital Improvement Program Requirements (\$ thousands)</b> <b>FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>				
<b>FYE</b>	<b>Water Systems</b>	<b>Recycled Water Systems</b>	<b>Stormwater Management</b>	<b>Total Water Utility CIP</b>
2016	\$0	\$0	\$0	\$23,110
2017	\$17,410	\$31,328	\$0	\$70,250
2018	\$9,409	\$63,782	\$0	\$58,939
2019	\$9,755	\$29,780	\$0	\$21,312
2020	\$8,443	\$17,036	\$0	\$25,650
2021	\$10,963	\$8,750	\$0	\$19,556
2022	\$4,105	\$1,736	\$46	\$7,736
2023	\$14,141	\$0	\$208	\$11,324
2024	\$8,486	\$0	\$208	\$16,792
2025	\$15,716	\$0	\$0	\$24,274
2026-2040	\$122,415	\$101,238	\$0	\$194,506

Figure 2.2.4 Water Utility Capital Improvement Project Costs (\$ thousands) FY 2015/16 through FY 2024/25

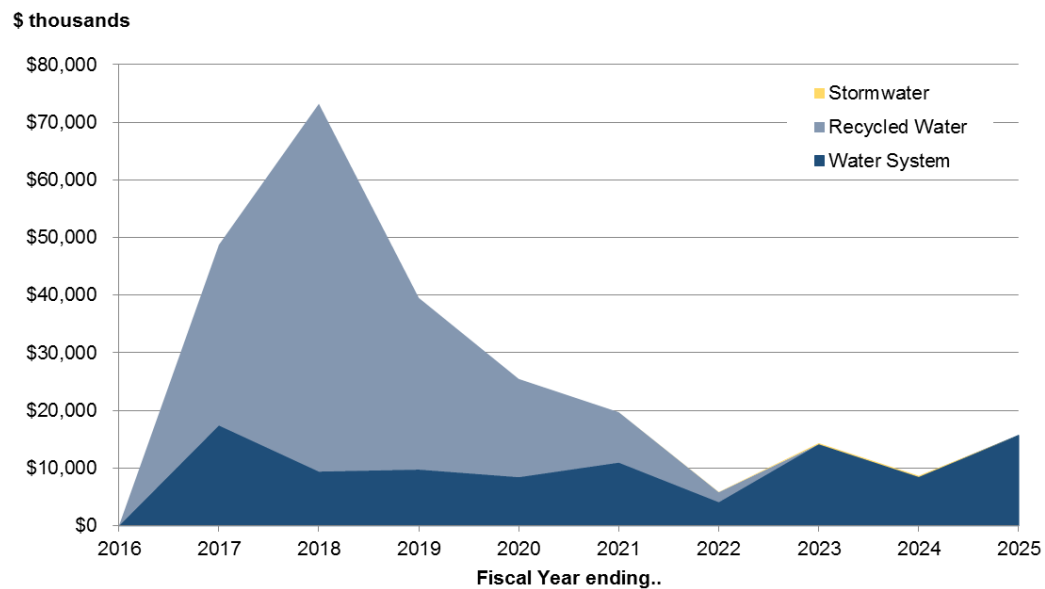


Figure 2.2.5 Water Utility Revenue Bond Sales and Proceeds (\$ thousands) FY 2015/16 through FY 2024/25

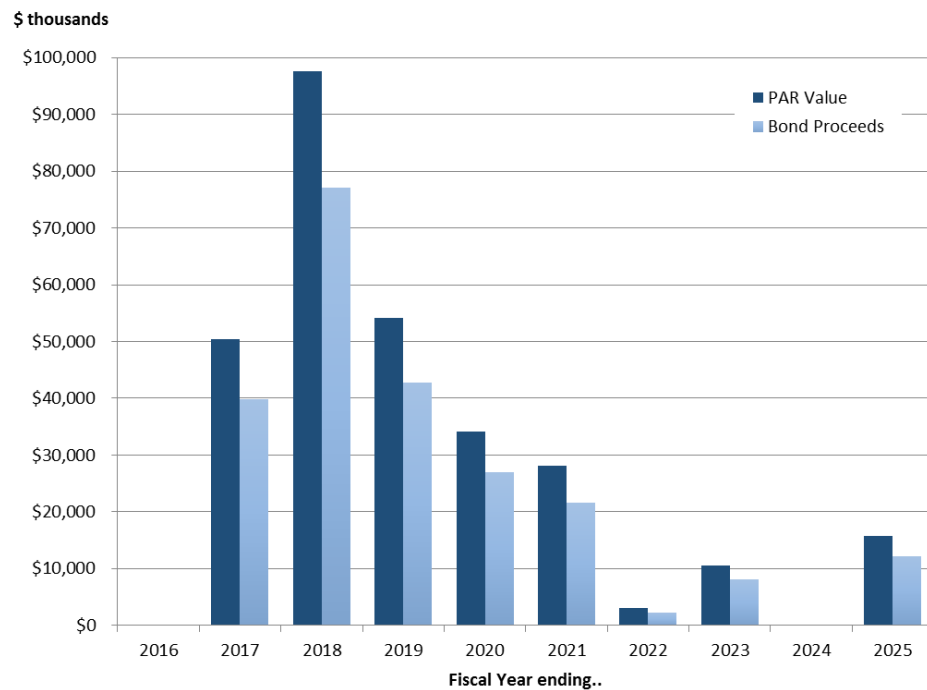


Table 2.2.9 provides a summary of planned bond sales, and associated bond program requirements for the ten-year period from FY 2015/16 through FY 2024/25.

<b>Table 2.2.9 Water Revenue Bond Program Requirements (\$ thousands)</b> <b>FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>				
FYE	PAR Value of Bond Sales	Water Revenue Bond Program Requirements		
		Bond Proceeds	Issuance Costs*	Reserve Requirement
2016	\$0	\$0	\$0	\$0
2017	\$50,478	\$39,878	\$1,010	\$5,048
2018	\$97,691	\$77,176	\$1,954	\$9,769
2019	\$54,141	\$42,771	\$1,083	\$5,414
2020	\$34,100	\$26,939	\$682	\$3,410
2021	\$28,153	\$21,678	\$563	\$2,815
2022	\$2,997	\$2,308	\$60	\$300
2023	\$10,596	\$8,159	\$212	\$1,060
2024	\$0	\$0	\$0	\$0
2025	\$15,782	\$12,152	\$316	\$1,578

\*Includes capitalized interest.

### 2.2.5.3 Debt Service Requirements

The City's planned revenue bond sales will significantly increase the water utility's annual debt services requirements. At present, the utility pays more than \$14 million per year in principal and interest costs toward the retirement of six outstanding utility revenue bonds, and four lease purchase agreements.

The debt service on planned bond sales will add to the City's existing debt obligations. Annual debt service requirements will increase incrementally to just over \$32 million in FY 2024/25. These requirements will be added to the utility's operating requirements for the purpose of calculating future water user fees.

Table 2.2.10 reports current and projected debt service requirements for the ten-year period from FY 2015/16 through FY 2024/25. Figure 2.2.6 compares the growth in current and planned debt service requirements over the same period.

<b>Table 2.2.10 Water Debt Service Requirements (\$ thousands) FY 2015/16 through FY 2024/25 Public Works Integrated Master Plan City of Oxnard</b>			
<b>FYE</b>	<b>Current Debt Service</b>	<b>Added Debt Service</b>	<b>Total Debt Service</b>
2016	\$14,868	\$0	\$14,868
2017	\$14,875	\$0	\$14,875
2018	\$14,889	\$0	\$14,889
2019	\$14,899	\$2,272	\$17,171
2020	\$14,912	\$6,668	\$21,580
2021	\$14,922	\$10,039	\$24,961
2022	\$14,932	\$13,383	\$28,315
2023	\$14,945	\$15,934	\$30,879
2024	\$14,908	\$16,730	\$31,638
2025	\$14,879	\$17,758	\$32,637

### 2.2.6 Reserve and Other Requirements

The City's master planning initiative has identified a critical need for building financial reserves to strengthen the ability of the water utility to better respond to financial risks and unexpected operational or capital requirements. An initiative to increase financial reserves has the added benefit of improving the City's bond rating, increasing the attractiveness of revenue bonds, and reducing the City's cost of borrowing. During the next ten years, the City plans to make annual investments in its cash reserves to anticipate future replacement of utility equipment, increase the financial resilience of utility operations, and increase the debt coverage and security provided to bond purchasers and bondholders. In addition, the City intends to increase contributions of rate-based revenue to address backlogs in equipment replacement and capital improvements.

Figure 2.2.6 Debt Service on Existing and Planned Revenue Bond Sales (\$ thousands) FY 2015/16 through FY 2024/25

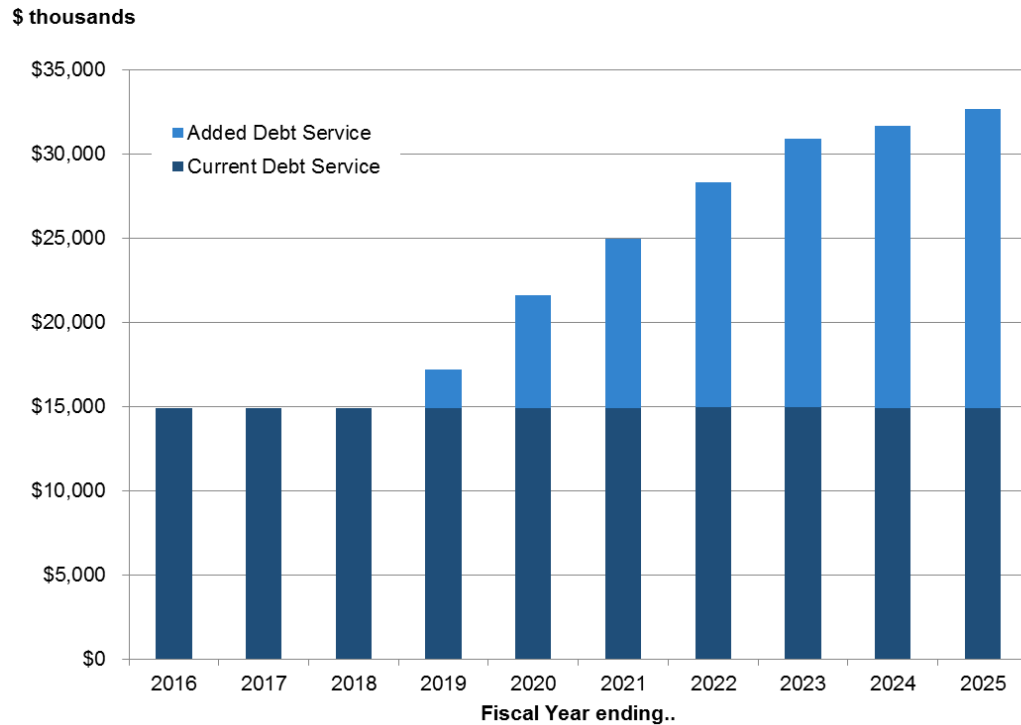


Table 2.2.11 identifies the annual contributions planned for each of these reserve and other requirements. The table reports these requirements in thousands of dollars.

<b>Table 2.2.11 Reserve and Other Requirements (\$ thousands)</b> <b>FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>					
FYE	Rate Funded Capital	Equipment Replacement Funding	Minimum Operating Fund Balance	Available For Capital and Reserves	Total Reserve and Other Requirements
2016	\$0	\$0	\$0	\$1,455	\$1,455
2017	\$1,000	\$323	\$0	\$2,821	\$4,144
2018	\$1,025	\$334	\$968	\$5,185	\$7,512
2019	\$1,051	\$345	\$3,790	\$1,162	\$6,348
2020	\$1,077	\$356	\$8,594	(\$2,904)	\$7,123
2021	\$1,104	\$367	\$2,916	\$4,437	\$8,824
2022	\$1,131	\$379	\$144	\$9,030	\$10,684
2023	\$1,160	\$391	\$2,024	\$7,452	\$11,027
2024	\$1,189	\$403	\$2,393	\$6,301	\$10,286
2025	\$1,218	\$416	\$2,204	\$7,732	\$11,570

### **2.2.7 Existing Revenues**

Water System User Fees are the primary source of revenues to pay for water utility requirements, accounting for 84 percent of utility operating resources in the FY 2014/15 budget. Table 2.2.12 presents projected operating revenues for fiscal years 2015/16 through 2024/25. Projected revenues from water system user fees are based on current rates and projected growth in demand for water system services.

As presented in Table 2.2.12 and illustrated in Figure 2.2.6, the City expects revenue from recycled water sales to increase by 136 percent, with the result of increasing the share of total revenue from recycled water (based on current rates) from 1.2 percent percent in FY 2015/16 to as high as 2 percent in FY 2016/17 and 1.4 percent in FY 204/25.

<b>Table 2.2.12 Water Operating Revenues - Existing Water Rates (\$ thousands) FY 2015/16 through FY 2024/25 Public Works Integrated Master Plan City of Oxnard</b>					
<b>FYE</b>	<b>User Fee Revenue (Existing Rates)</b>	<b>Recycled Water Revenues</b>	<b>P&amp;G Water Supply Agreement</b>	<b>Interest &amp; Other Revenue</b>	<b>Total Revenues based on Existing Water Rates</b>
2016	\$41,270	\$585	\$2,250	\$5,873	\$49,978
2017	\$47,286	\$1,146	\$2,367	\$7,357	\$58,156
2018	\$55,016	\$1,172	\$2,489	\$7,175	\$65,852
2019	\$61,810	\$1,199	\$2,613	\$6,599	\$72,221
2020	\$66,798	\$1,227	\$2,744	\$5,978	\$76,747
2021	\$72,192	\$1,256	\$2,881	\$6,002	\$82,331
2022	\$77,124	\$1,285	\$3,025	\$6,108	\$87,542
2023	\$82,395	\$1,316	\$3,177	\$6,232	\$93,120
2024	\$86,409	\$1,347	\$3,336	\$4,360	\$95,452
2025	\$90,621	\$1,380	\$3,502	\$4,354	\$99,857

### **2.2.8 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. The following sections present the finding of these tests.

Figure 2.2.7 Water Utility Operating Revenue - Existing User Fee Rates (\$thousands) FY 2015/16 through FY 2024/25



### 2.2.8.1 Cash Flow Requirements

The Cash Flow test evaluates the adequacy of utility revenues to pay for all current operating costs, scheduled debt service payments, and any additional operating requirements that result from policy decisions of the City. The purpose of the test is to anticipate and manage financial conditions in order to maintain a prudent financial balance. Table 2.2.13 brings together projected operating revenue from existing rates (Table 2.2.12), total projected operating requirements (Table 2.2.5), projected debt service requirements (Table 2.2.10) and recommended increases in non-debt reserves for equipment replacement and operating balances (Table 2.2.11). The net results indicate that utility revenues based on existing rates will be insufficient to meet all recommended requirements for the next ten fiscal years. This analysis concludes that rate increases are required to raise sufficient resources to pay for growing revenue requirements from FY 2015/16 through FY 2024/25.

### 2.2.8.2 Debt Coverage Requirements

The Debt Coverage test evaluates whether the City is generating sufficient revenues to meet financial reserve commitments made to City bondholders. In addition to a first priority claim on all net utility revenues, the City provides security to its bondholders by pledging to maintain a margin between utility revenues and operating expenses. The Debt Coverage test ensures that the City anticipate and manage financial conditions in order to maintain its legal commitments to bondholders.

<b>Table 2.2.13 Cash Flow Test (\$ thousands)</b> <b>FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>					
<b>FYE</b>	<b>Operating Revenue (Existing Rates)</b>	<b>Operating Requirements</b>	<b>Debt Service</b>	<b>Reserve &amp; Other Requirements</b>	<b>Operating Surplus (Deficit)</b>
2016	\$49,978	\$36,168	\$14,868	\$1,455	(\$2,513)
2017	\$58,156	\$41,872	\$14,875	\$4,144	(\$2,735)
2018	\$65,852	\$45,580	\$14,889	\$7,512	(\$2,129)
2019	\$72,221	\$51,101	\$17,171	\$6,347	(\$2,398)
2020	\$76,747	\$50,638	\$21,580	\$7,123	(\$2,594)
2021	\$82,331	\$50,651	\$24,961	\$8,824	(\$2,105)
2022	\$87,542	\$50,794	\$28,315	\$10,684	(\$2,251)
2023	\$93,120	\$52,818	\$30,879	\$11,026	(\$1,603)
2024	\$95,452	\$55,210	\$31,638	\$10,286	(\$1,682)
2025	\$99,857	\$57,414	\$32,637	\$11,570	(\$1,764)

Table 2.2.14 provides projections of total revenue requirements to meet bond coverage from FY 2015/16 through FY 2024/25. For purposes of this test, operating requirements include the water operations (Table 2.2.5), and debt service requirements (Table 2.2.10). The analysis excludes recommended increases in other cash reserves that were discussed in Section 2.2.6 of this report. These requirements are compared to projected operating revenues based on existing water rates to determine the extent of surplus or deficit resources for each fiscal year through FY 2024/25. The analysis finds that existing water rates do not generate sufficient revenue to provide minimum levels of bond coverage, much less the reserve increases needed to increase the City's bond rating and attract lower interest rates on future bond sales.

## **2.2.9 Recommended Revenue Requirements**

The City's water utility faces moderate increases in system demand, and operating requirements during the next six fiscal years. However, the City will experience significant increases in scheduled debt service payments during this period, and will increase operating expenditures to address equipment replacement requirements, increase investments in water infrastructure, expand the water recycling program, and strengthen cash reserves will add to financial demands on utility revenue from FY 2015/16 through FY 2024/25.

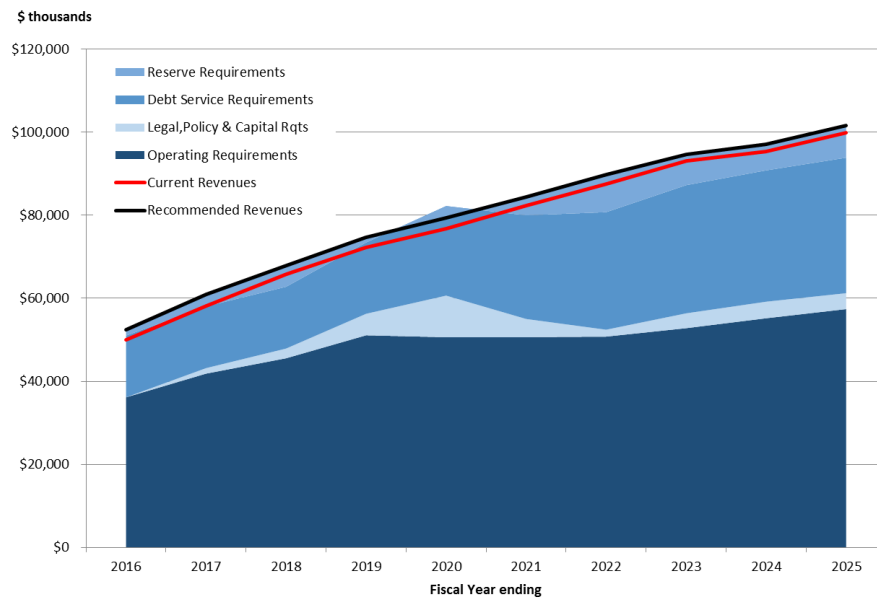
While increased system demands will help generate increased user fee revenues beyond FY 2015/16, the upcoming fiscal year poses a particular problem for the City. Current water rates will not produce sufficient user fee revenue in FY 2015/16 to pay for water system operations, debt service, policy-directed requirements, and reserve requirements. Based on current financial projections, total utility revenues (based on current water rates) fail to meet



the Cash Flow test by in nine of the next ten fiscal years, and fail to meet the Bond Coverage test in three of the next four fiscal years. Figure 12.2.8 illustrates the gap between projected utility revenues and utility requirements to meet both financial tests.

<b>FYE</b>	<b>Water Revenues for Coverage</b>	<b>Water Operating Expenses</b>	<b>Debt Service</b>	<b>Net Surplus (Deficit)</b>	<b>Minimum Debt Coverage Requirement (1.25X)</b>	<b>Variance</b>
2016	\$49,393	\$36,168	\$14,868	(\$1,643)	\$3,717	(\$5,360)
2017	\$57,010	\$41,872	\$14,875	\$263	\$3,719	(\$3,456)
2018	\$64,680	\$45,580	\$14,889	\$4,211	\$3,722	\$489
2019	\$71,022	\$51,101	\$17,171	\$2,750	\$4,293	(\$1,543)
2020	\$75,520	\$50,638	\$21,580	\$3,302	\$5,395	(\$2,093)
2021	\$81,075	\$50,651	\$24,961	\$5,463	\$6,240	(\$777)
2022	\$86,257	\$50,794	\$28,315	\$7,148	\$7,079	\$69
2023	\$91,804	\$52,818	\$30,879	\$8,107	\$7,720	\$387
2024	\$94,105	\$55,210	\$31,638	\$7,257	\$7,910	(\$653)
2025	\$98,477	\$57,414	\$32,637	\$8,426	\$8,159	\$267

Figure 2.2.8 Projected Water Utility Operating Revenue, Operating Requirements (Cash Flow Test) and Bond Coverage Requirements



Based on this analysis, the City will need to increase water rates to meet projected revenue requirements in FY 2015/16, satisfy both Cash Flow and Debt Coverage tests, and avoid drawing down cash reserves in the Water Fund.

Table 2.2.15 summarizes the recommended revenue requirements for FY 2015/16 through FY 2024/25. Revenue requirements that are intended to improve utility operations include the requirements for existing operations and maintenance activities, plus increased costs associated with a revitalized program of capital improvements, and long-delayed increases in utility staffing and operation and maintenance programs. The costs associated with these operating requirements are found in Section 2.2.4 of this report. Revenue requirements that are intended to strengthened capital investments and utility reserves include policy decisions to increase reserves for operations and maintenance, much-needed equipment replacement, debt service commitments associated with a revitalize program of capital investments, and debt reserves to attract favorable bond interest rates for future revenue bond sales. These requirements are discussed in Sections 2.2.5 and 2.2.6 of this report.

<b>Table 2.2.15 Water Operating Revenue Requirements (\$M)</b> <b>FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>					
<b>FYE</b>	<b>Operations</b>	<b>Capital &amp; Reserves</b>	<b>Total Requirements</b>	<b>Less: Non-Rate Revenue</b>	<b>Net Requirements for Ratemaking</b>
2016	\$36,168	\$16,323	\$52,491	(\$8,708)	\$43,783
2017	\$41,872	\$19,019	\$60,891	(\$10,870)	\$50,021
2018	\$45,580	\$22,401	\$67,981	(\$10,836)	\$57,145
2019	\$51,102	\$23,518	\$74,620	(\$10,411)	\$64,209
2020	\$50,638	\$28,703	\$79,341	(\$9,949)	\$69,392
2021	\$50,651	\$33,785	\$84,436	(\$10,139)	\$74,297
2022	\$50,794	\$38,999	\$89,793	(\$10,418)	\$79,375
2023	\$52,818	\$41,905	\$94,723	(\$10,725)	\$83,998
2024	\$55,210	\$41,924	\$97,134	(\$9,043)	\$88,091
2025	\$57,414	\$44,207	\$101,621	(\$9,236)	\$92,385

The recommended increases in utility requirements during the next 10 fiscal years are offset by modest increases in water service user fees. Table 2.2.16 presents a summary of projected water utility operating revenues, including existing and adjusted user fees, revenues from the sale of recycled water, proceeds from the P&G water supply agreement, miscellaneous operating income and interest earned on cash reserves. More details of these resources are found in Section 2.2.7 of this report.

**Table 2.2.16 Water Operating Revenue with Recommended User Fee Increase (\$Thousands) FY 2015/16 through FY 2024/25  
Public Works Integrated Master Plan  
City of Oxnard**

<b>FYE</b>	<b>Rate Revenue Increase</b>	<b>Effective Date</b>	<b>User Fees (Existing Rates)</b>	<b>Added Fees from Rate Increase</b>	<b>Other Water/RW Sales</b>	<b>Other Operating Revenue</b>	<b>Total Utility Revenues</b>
2016	15%	2/1/2016	\$40,213	\$2,513	\$3,892	\$5,873	\$52,491
2017	12%	1/1/2017	\$45,584	\$2,735	\$5,216	\$7,357	\$60,891
2018	8%	1/1/2018	\$53,225	\$2,129	\$5,452	\$7,175	\$67,981
2019	8%	1/1/2019	\$59,926	\$2,397	\$5,697	\$6,599	\$74,619
2020	8%	1/1/2020	\$64,844	\$2,594	\$5,925	\$5,978	\$79,341
2021	6%	1/1/2021	\$70,166	\$2,105	\$6,163	\$6,002	\$84,436
2022	6%	1/1/2022	\$75,017	\$2,251	\$6,417	\$6,108	\$89,793
2023	4%	1/1/2023	\$80,204	\$1,604	\$6,684	\$6,232	\$94,723
2024	4%	1/1/2024	\$84,130	\$1,683	\$6,962	\$4,360	\$97,135
2025	4%	1/1/2025	\$88,249	\$1,765	\$7,253	\$4,354	\$101,621

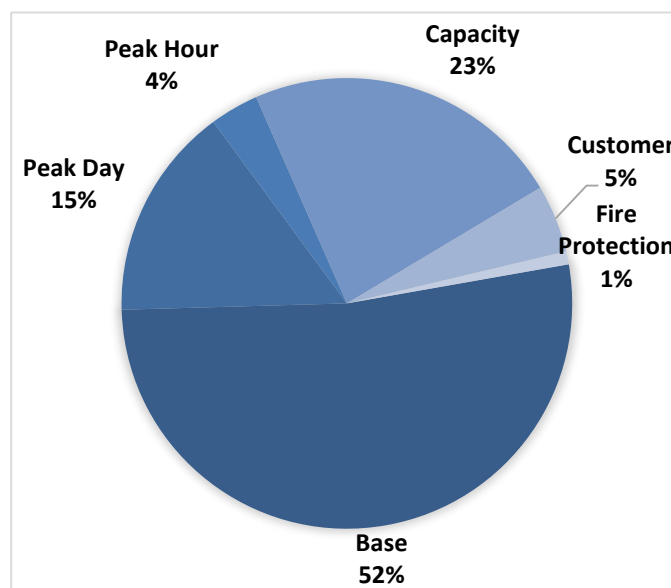
## 2.3 Water Cost of Service Analysis

The section of the report sets forth a rational basis for distributing the full costs of water services to each customer class in proportion to the demands placed on the water system. The detailed cost allocation serves as the basis for proposed rate adjustments. This analysis yields an appropriate and sustainable method for allocating costs based on cost drivers or customer consumption patterns.

The functional allocation distributes revenue requirements by major function. Primary functions include base flow, peak flow, customer costs (customer and capacity). These functional cost pools include the rate paid for water supplied by outside agencies, the system's existing operations and maintenance (O&M) expenditures, rate-funded capital costs, and debt service payments. The cost of service analysis is based on a 5-year average functional cost allocation spanning the period from FY 2015/16 through FY 2024/25. A financial summary of the Water Utility is provided in Figure 2.3.1.

The cost of service allocation completed in this study is established on the base-extra capacity method as defined by the American Water Works Association (AWWA). Under the base-extra capacity method, revenue requirements are allocated based on the demand placed on the water system.

Figure 2.3.1 Average Water Utility Function Allocation - FY 2015/16 through FY 2019/20



### 2.3.1 Functional Cost Components

The Utility's budget was analyzed line-item by line-item and expenditures were distributed between the available functions:

- **Base:** Operating and capital costs incurred by the water system to provide a basic level of service to each customer. This category includes the majority of local groundwater supply costs.
- **Peak Day:** Operating costs incurred to meet peak daily demands for water in excess of basic demand (base). This category includes a portion of water supply costs, as well as a portion of the costs to maintain and operate the water system. Conservation program costs are also allocated to the peak component.
- **Peak Hour:** Operating costs incurred to meet peak hour demand for water in excess of base and peak day demand. This category includes a portion of costs related to the water system infrastructure including distribution system O&M and debt service costs.
- **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.
- **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.

- **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.

### **2.3.2 Allocation of Functional Components**

The functional allocation of revenue requirements is summarized in Figure 2.3.1. Capacity and customer components are combined to comprise the fixed rates of the utility service charge. These components account for 29 percent of total revenue requirements. The remaining 71 percent is allocated to the base and peak functional components and comprise the variable utility rates.

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 sold and therefore could be attributed and recovered via the commodity (variable) portion of the rates.

The California Urban Water Conservation Council (CUWCC) has historically advocated for a 70 percent/30 percent split (variable/fixed) as defined in Best Management Practice 1.4. This split is thought to provide sufficient revenue stability (in the form of fixed charges) while still providing adequate conservation incentives. During times of fiscal stress and uncertainty about future water demand, many water agencies have moved to a higher fixed to variable ratio to provide greater fiscal stability and sustainability.

The proposed functional allocation is consistent with the CUWCC recommendation, and is based on an examination of the utility's existing water revenues. The analysis revealed that the ratios for FY 2014/15 are heavily weighted to variable (79 percent), with only 21 percent of revenues originating from the fixed charge. While acceptable, the allocation leaves the water utility at risk of revenue losses due to fluctuations in water demand. While Carollo recommends that the City shift its functional allocation to align with accepted CUWCC guidance, such an immediate shift could cause abrupt rate impacts for certain users. Table 2.3.1 presents a phase-in approach to adjusting the functional allocations over five years. Such a gradual transition will provide time for utility customers to adjust to changes in their base and variable charges, while increasing the stability and predictability of utility revenues.

**Table 2.3.1 Allocation of Water Functional Components  
FY 2015/16 through FY 2019/20  
Public Works Integrated Master Plan  
City of Oxnard**

Functional Category	FYE					
	Existing (Estimated)	2016	2017	2018	2019	2020
Base	58%	56%	54%	52%	52%	52%
Peak Day	17%	16%	16%	15%	15%	15%
Peak Hour	4%	4%	4%	4%	4%	4%
Capacity	17%	19%	21%	23%	23%	23%
Customer	4%	4%	4%	5%	5%	5%
Fire Protection	1%	1%	1%	1%	1%	1%
Fixed	20%	23%	25%	28%	28%	28%
Variable	79%	76%	74%	71%	71%	71%
Fire	1%	1%	1%	1%	1%	1%

Table 2.3.2 presents the recommended functional allocation rates as well as the resulting allocation of water utility revenue requirements for fiscal year 2014/15 and estimated allocations for the next five fiscal years. In addition, the table includes projected service units by functional category and unit costs that are derived by dividing the allocated revenue requirements by the service units.

### **2.3.3 Customer Class Allocations**

The functional unit costs established in Section 2.3.2 are now applied to each customer class based on customer characteristics, including the number of customer accounts, meter equivalents (EDUs) and volume of water usage. Table 2.3.3 provides annual characteristics for each major customer class, projected through FY 2019/20. Customer accounts and EDUs are expected to increase at an annual rate of 1.18 percent for all customer classes throughout the five-year period. Water usage is expected to decrease by 8 percent in FY2015/16 and then rebound in FY2017/18 and FY2018/19 at annual rates of 5 percent. In addition to these basic characteristics, the table presents the peaking factors calculated for each customer class and tier of water use. The peaking factors ensure an equitable distribution of revenue requirements based on demand for water resources.

<b>Table 2.3.2 Functional Water Allocation Rates and Allocated Revenue Requirements FY 2015/16 through FY 2019/20 Public Works Integrated Master Plan City of Oxnard</b>						
<b>FYE</b>	<b>Base</b>	<b>Peak Day</b>	<b>Peak Hour</b>	<b>Capacity</b>	<b>Customer</b>	<b>Fire Protection</b>
<b>Allocation Rates</b>						
2016	58.1%	17.0%	3.9%	16.8%	3.5%	0.7%
2017	56.2%	16.5%	3.8%	18.9%	4.0%	0.8%
2018	54.2%	15.9%	3.6%	20.9%	4.4%	0.8%
2019	52.3%	15.3%	3.5%	23.0%	4.9%	0.9%
2020	52.3%	15.3%	3.5%	23.0%	4.9%	0.9%
<b>Allocated Revenue Requirements</b>						
2016	\$25,971	\$7,617	\$1,740	\$8,720	\$1,845	\$352
2017	\$26,210	\$7,687	\$1,756	\$10,117	\$2,140	\$409
2018	\$28,966	\$8,495	\$1,941	\$12,742	\$2,695	\$515
2019	\$32,612	\$9,565	\$2,185	\$14,346	\$3,035	\$580
2020	\$35,289	\$10,350	\$2,365	\$15,524	\$3,284	\$627
<b>Projected Service Units by Function</b>						
Units	CCF	CCF	CCF	EDUs	Accounts	Fire EDUs
2016	8,471,681	8,471,681	8,471,681	59,583	39,646	4,230
2017	8,471,681	8,471,681	8,471,681	60,103	39,992	4,272
2018	8,895,265	8,895,265	8,895,265	60,628	40,342	4,315
2019	9,340,028	9,340,028	9,340,028	61,158	40,694	4,358
2020	9,340,028	9,340,028	9,340,028	61,692	41,050	4,402
<b>Unit Costs by Function</b>						
2016	\$3.07	\$0.90	\$0.21	\$146.35	\$46.52	\$83.31
2017	\$3.09	\$0.91	\$0.21	\$168.32	\$53.51	\$95.70
2018	\$3.26	\$0.96	\$0.22	\$210.17	\$66.81	\$119.34
2019	\$3.49	\$1.02	\$0.23	\$234.57	\$74.57	\$133.03
2020	\$3.78	\$1.11	\$0.25	\$251.63	\$79.99	\$142.53

<b>Table 2.3.3 Water Utility Customer Class Characteristics</b> <b>FY 2015/16 through FY 2019/20</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>						
<b>FYE</b>	<b>Single Family Residential</b>	<b>Multi-Family Residential</b>	<b>Commercial/ Industrial</b>	<b>Irrigation Oxnard</b>	<b>Irrigation Oceanview</b>	<b>Total</b>
<b>Accounts</b>						
2015	33,424	2,053	2,745	1,378	45	39,645
2016	33,424	2,053	2,745	1,378	45	39,645
2017	33,716	2,071	2,769	1,390	45	39,991
2018	34,011	2,089	2,793	1,402	46	40,341
2019	34,308	2,107	2,818	1,414	46	40,693
2020	34,608	2,126	2,842	1,427	47	41,049
<b>Meter Equivalents (EDUs)</b>						
2015	39,006	5,154	9,226	5,315	881	59,582
2016	39,006	5,154	9,226	5,315	881	59,582
2017	39,346	5,199	9,307	5,361	889	60,102
2018	39,690	5,245	9,388	5,408	896	60,627
2019	40,037	5,290	9,470	5,455	904	61,157
2020	40,387	5,337	9,553	5,503	912	61,691
<b>Water Usage (HCF)</b>						
2015	3,958,596	1,525,668	2,194,812	1,529,272	427,347	9,635,694
2016	3,641,908	1,403,615	2,019,227	1,406,930	393,159	8,864,838
2017	3,641,908	1,403,615	2,019,227	1,406,930	393,159	8,864,838
2018	3,824,004	1,473,795	2,120,188	1,477,276	412,817	9,308,080
2019	4,015,204	1,547,485	2,226,198	1,551,140	433,458	9,773,484
2020	4,015,204	1,547,485	2,226,198	1,551,140	433,458	9,773,484
<b>Peaking Factors</b>						
Tier 1	1.15	1.12	1.25	1.31		
Tier 2	2.15	1.68	2.43	1.61		
Tier 3	4.37	2.56				

Based on the data provided in Tables 2.3.2 and 2.3.3, fixed and variable revenue requirements are calculated for each customer class. Table 2.3.4 presents allocation estimates for the period from FY 2015/16 through FY 2019/20. Single family residential ratepayers account from roughly 75 percent of fixed costs, 40 percent of variable costs and just under 50 percent of utility costs overall.



<b>Table 2.3.4 Water Utility Requirements Allocations to Customer Classes (\$ thousands)</b> <b>FY 2015/16 through FY 2019/20</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>						
<b>FYE</b>	<b>Single Family Residential</b>	<b>Multi-Family Residential</b>	<b>Commercial/ Industrial</b>	<b>Irrigation Oxnard</b>	<b>Irrigation Oceanview</b>	<b>Total</b>
<b>Fixed Allocations</b>						
2016	\$7,264	\$850	\$1,478	\$842	\$131	\$10,565
2017	\$8,427	\$986	\$1,715	\$977	\$152	\$12,257
2018	\$10,614	\$1,242	\$2,160	\$1,230	\$191	\$15,437
2019	\$11,950	\$1,398	\$2,432	\$1,385	\$216	\$17,381
2020	\$12,931	\$1,513	\$2,631	\$1,499	\$233	\$18,807
<b>Variable Allocations</b>						
2016	\$15,531	\$5,640	\$8,252	\$5,905	\$0	\$35,328
2017	\$15,674	\$5,692	\$8,328	\$5,959	\$0	\$35,653
2018	\$17,322	\$6,291	\$9,203	\$6,586	\$0	\$39,402
2019	\$19,503	\$7,083	\$10,362	\$7,415	\$0	\$44,363
2020	\$21,103	\$7,664	\$11,212	\$8,023	\$0	\$48,002
<b>Total Allocations</b>						
2016	\$22,795	\$6,490	\$9,730	\$6,747	\$131	\$45,893
2017	\$24,101	\$6,678	\$10,043	\$6,936	\$152	\$47,910
2018	\$27,936	\$7,533	\$11,363	\$7,816	\$191	\$54,839
2019	\$31,453	\$8,481	\$12,794	\$8,800	\$216	\$61,744
2020	\$34,034	\$9,177	\$13,843	\$9,522	\$233	\$66,809

#### **2.3.4 Current Water Rates**

The City's Current water rates collect revenues from customers based on a fixed monthly service charge and on 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 rates were last updated on February 4, 2014. Table 2.3.5 details the City's current water rate structure.

#### **2.3.5 Proposed Water Rates**

The proposed water rate structure has been designed equitably recover costs from each of the City's wastewater 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.

<b>Table 2.3.5 Current Water Rates and Charges (effective February 5, 2015)</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>							
FIXED MONTHLY SERVICE CHARGES							
Meter Size	Single Family	Multi-Family	Commercial /Industrial/ Institutional	Metered Construction	Fireline	Unmetered Construction	Ocean View
3/4"	\$16.89	\$14.41	\$11.64		\$1.79	\$8.40	\$11.75
1"	\$26.62	\$22.70	\$17.91	\$29.66	\$3.09	\$12.35	\$17.91
1.5"	\$49.23	\$41.38	\$32.30		\$5.92	\$18.79	\$32.30
2"	\$82.15	\$64.11	\$50.19		\$9.51	\$24.67	\$50.19
3"	\$167.74	\$144.01	\$107.37	\$99.79	\$20.98	\$31.05	\$107.37
4"	\$284.71	\$234.08	\$183.63		\$35.85	\$37.40	\$183.63
6"	\$590.66	\$489.72	\$375.83		\$74.78	\$50.13	\$375.83
8"	\$848.46	\$703.59	\$548.26		\$107.58	\$62.88	\$548.26
10"	\$1,365.75	\$1,132.25	\$869.31		\$173.41	\$75.59	\$869.31
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	\$2.84	0-17	\$2.32	0-17	\$2.32	0-13	\$4.66
7-12	\$3.15	18-32	\$2.58	18-32	\$2.58	14-23	\$5.15
Over 12	\$4.42	Over 32	\$3.84	Over 32	\$3.84	Over 23	\$7.71
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
0-17	\$1.01	0-17	\$2.32	0-17	\$1.96	0-13	\$1.96
18-32	\$1.01	18-32	\$2.58	18-32	\$2.19	14-23	\$2.19
Over 32	\$1.01	Over 32	\$3.84	Over 32	\$3.26	Over 23	\$3.26

**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 such that all customer classes are charged at the same rate depending on meter size.

**Increased Revenue Stability:** The proposed rates phase in a shift of cost to the fixed charge. The City currently collects approximately 21 percent of water revenues through the fixed charge, the percentage of fixed revenues will be increase to about 29 percent by FY 2017/18.

### 2.3.6 Proposed Fixed Charges

The proposed fixed charges are presented in Table 2.3.6. The charge for each meter size 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. As shown, an increase in the percentage of revenues from the fixed charges is phased in from FY 2015/16 through FY 2017/18.

<b>Table 2.3.6 Proposed Monthly Fixed Charges – Single Year Implementation Public Works Integrated Master Plan City of Oxnard</b>						
<b>Meter Size</b>	<b>Existing</b>	<b>FY 2015/16</b>	<b>FY 2016/17</b>	<b>FY 2017/18</b>	<b>FY 2018/19</b>	<b>FY 2019/20</b>
		<b>All Classes</b>	<b>All Classes</b>	<b>All Classes</b>	<b>All Classes</b>	<b>All Classes</b>
3/4"	Varies	\$16.08	\$18.49	\$23.09	\$25.77	\$27.64
1"	by	\$24.25	\$27.89	\$34.82	\$38.87	\$41.69
1.5"	Class	\$44.49	\$51.17	\$63.90	\$71.32	\$76.50
2"		\$68.89	\$79.23	\$98.92	\$110.41	\$118.44
3"		\$125.84	\$144.73	\$180.72	\$201.70	\$216.37
4"		\$207.19	\$238.30	\$297.54	\$332.09	\$356.23
6"		\$451.10	\$518.84	\$647.82	\$723.05	\$775.62
8"		\$735.63	\$846.09	\$1,056.43	\$1,179.11	\$1,264.83
10"		\$1,142.12	\$1,313.61	\$1,640.18	\$1,830.66	\$1,963.74
<b>Percent of Revenue from Fixed Charges</b>		<b>23%</b>	<b>25%</b>	<b>28%</b>	<b>28%</b>	<b>28%</b>

Currently, the charges fixed charges vary by customer class, in order to smooth rate impacts for the customer classes that currently pay lower fixed charges, the City could phase in the change in fixed charges over the study period. Smoothed charges have been calculated such that the total amount of fixed revenue from each customer class over the next five years remains consistent with that under the Single Year Implementation scenario. Phasing in the charges in this manner maintains interclass ratepayer equity over the five year period. It is important to note that under the proposed phase in approach, the city would collect \$350,000 and \$70,000 less fixed revenue in years FY 2015/16 and 2016/17 respectively. Those shortfalls would be made up in years FY 2017/18 and FY 2018/19. By

FY 2019/20, all customer classes will have consistent fixed charges. Tables 2.3.7 through Table 2.3.10 below show the projected fixed charges using this phase in approach.

<b>Table 2.3.7 Proposed Monthly Fixed Charges with Smoothing - Oceanview Irrigation Public Works Integrated Master Plan City of Oxnard</b>						
<b>Meter Size</b>	<b>Existing</b>	<b>FY 2015/16</b>	<b>FY 2016/17</b>	<b>FY 2017/18</b>	<b>FY 2018/19</b>	<b>FY 2019/20</b>
3/4"	\$10.86	\$14.16	\$17.97	\$23.94	\$27.30	\$27.64
1"	\$16.55	\$21.36	\$27.10	\$36.10	\$41.18	\$41.69
1.5"	\$29.85	\$39.19	\$49.73	\$66.25	\$75.56	\$76.50
2"	\$46.39	\$60.68	\$77.00	\$102.57	\$116.99	\$118.44
3"	\$99.23	\$110.85	\$140.66	\$187.37	\$213.71	\$216.37
4"	\$169.71	\$182.51	\$231.58	\$308.49	\$351.87	\$356.23
6"	\$347.35	\$397.37	\$504.22	\$671.68	\$766.12	\$775.62
8"	\$506.71	\$648.00	\$822.26	\$1,095.33	\$1,249.34	\$1,264.83
10"	\$803.43	\$1,006.07	\$1,276.61	\$1,700.58	\$1,939.68	\$1,963.74

<b>Table 2.3.8 Proposed Monthly Fixed Charges with Smoothing - Oxnard Commercial, Industrial, Institutional, and Irrigation Public Works Integrated Master Plan City of Oxnard</b>						
<b>Meter Size</b>	<b>Existing</b>	<b>FY 2015/16</b>	<b>FY 2016/17</b>	<b>FY 2017/18</b>	<b>FY 2018/19</b>	<b>FY 2019/20</b>
3/4"	\$10.76	\$14.16	\$17.97	\$23.94	\$27.30	\$27.64
1"	\$16.55	\$21.36	\$27.10	\$36.10	\$41.18	\$41.69
1.5"	\$29.85	\$39.19	\$49.73	\$66.25	\$75.56	\$76.50
2"	\$46.39	\$60.68	\$77.00	\$102.57	\$116.99	\$118.44
3"	\$99.23	\$110.85	\$140.66	\$187.37	\$213.71	\$216.37
4"	\$169.71	\$182.51	\$231.58	\$308.49	\$351.87	\$356.23
6"	\$347.35	\$397.37	\$504.22	\$671.68	\$766.12	\$775.62
8"	\$506.71	\$648.00	\$822.26	\$1,095.33	\$1,249.34	\$1,264.83
10"	\$803.43	\$1,006.07	\$1,276.61	\$1,700.58	\$1,939.68	\$1,963.74

<b>Table 2.3.9 Proposed Monthly Fixed Charges with Smoothing - Multi Family Public Works Integrated Master Plan City of Oxnard</b>						
<b>Meter Size</b>	<b>Existing</b>	<b>FY 2015/16</b>	<b>FY 2016/17</b>	<b>FY 2017/18</b>	<b>FY 2018/19</b>	<b>FY 2019/20</b>
3/4"	\$13.32	\$16.08	\$18.49	\$23.09	\$25.77	\$27.64
1"	\$20.98	\$24.25	\$27.89	\$34.82	\$38.87	\$41.69
1.5"	\$38.24	\$44.49	\$51.17	\$63.90	\$71.32	\$76.50
2"	\$59.25	\$68.89	\$79.23	\$98.92	\$110.41	\$118.44
3"	\$166.10	\$125.84	\$144.73	\$180.72	\$201.70	\$216.37
4"	\$216.34	\$207.19	\$238.30	\$297.54	\$332.09	\$356.23
6"	\$452.61	\$451.10	\$518.84	\$647.82	\$723.05	\$775.62
8"	\$650.27	\$735.63	\$846.09	\$1,056.43	\$1,179.11	\$1,264.83
10"	\$1,046.44	\$1,142.12	\$1,313.61	\$1,640.18	\$1,830.66	\$1,963.74

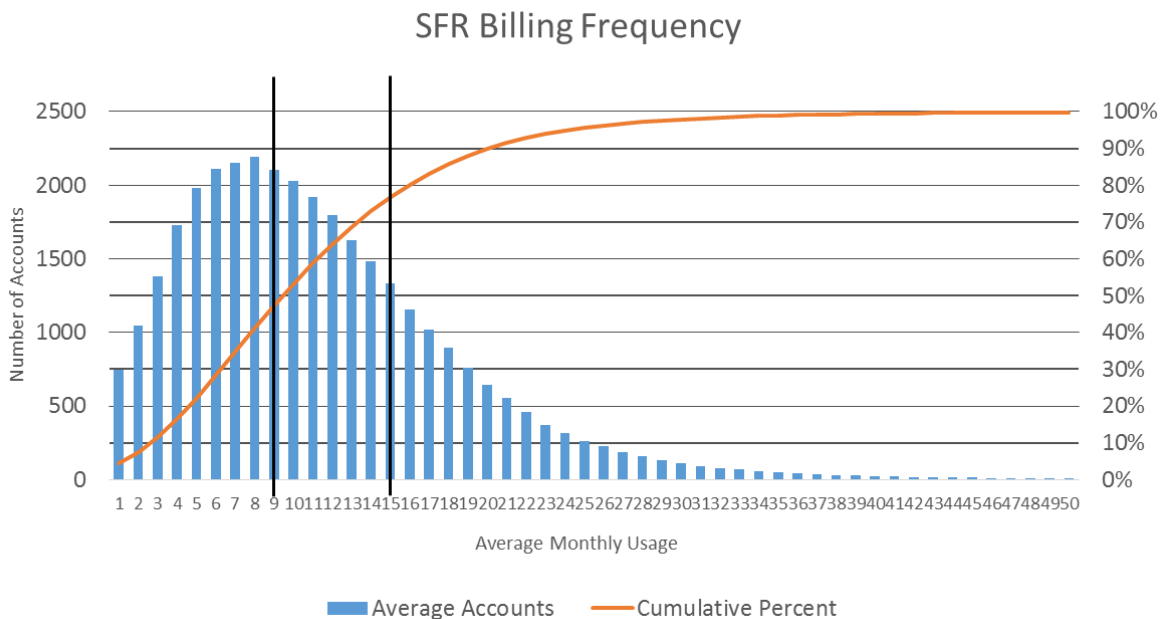
<b>Table 2.3.10 Proposed Monthly Fixed Charges with Smoothing - Single Family Public Works Integrated Master Plan City of Oxnard</b>						
<b>Meter Size</b>	<b>Existing</b>	<b>FY 2015/16</b>	<b>FY 2016/17</b>	<b>FY 2017/18</b>	<b>FY 2018/19</b>	<b>FY 2019/20</b>
3/4"	\$15.61	\$16.08	\$18.49	\$23.09	\$25.77	\$27.64
1"	\$24.60	\$24.25	\$27.89	\$34.82	\$38.87	\$41.69
1.5"	\$45.50	\$44.49	\$51.17	\$63.90	\$71.32	\$76.50
2"	\$75.92	\$68.89	\$79.23	\$98.92	\$110.41	\$118.44
3"	\$155.03	\$125.84	\$144.73	\$180.72	\$201.70	\$216.37
4"	\$263.13	\$207.19	\$238.30	\$297.54	\$332.09	\$356.23
6"	\$545.90	\$451.10	\$518.84	\$647.82	\$723.05	\$775.62
8"	\$784.16	\$735.63	\$846.09	\$1,056.43	\$1,179.11	\$1,264.83
10"	\$1,262.25	\$1,142.12	\$1,313.61	\$1,640.18	\$1,830.66	\$1,963.74

### **2.3.7 Single Family Rates**

The proposed single family rate structure has been updated to reflect current consumption characteristics. Billing data from January 2011 through Feb 2015 was analyzed to determine usage patterns among single family customers. It was determined that FY 2013/14 was the best year analyzed to serve as a basis for the calculation of user rates. Consumption levels were adjusted on a tier-by-tier basis to reflect the 12 percent reduction in demands that the City experienced in FY 2014/15, and to reflect an expected further reduction of 8 percent in FY 2015/16.

Tier breaks for Single Family customers have been updated based on the analyzed billing data. Figure 2.3.2 shows the average number of accounts at each monthly consumption level for FY 2013/14. The updated tier breaks are based on the approximate median level of consumption and approximate 75 percentile consumption. Thus, in an average month, 50 percent of users will stay within the tier 1 limit, the next 25 percent of users will maintain usage within tiers 1 and 2. Lastly the top 25 percent of users will use water in all three tiers. Table 2.3.11 shows the proposed Oxnard single family rates.

Figure 2.3.2 Single Family Usage Histogram



<b>Table 2.3.11 Proposed Oxnard Single Family Rates</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>						
Proposed Oxnard Single Family Rates		FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
Rate per HCF - Tier 1	0 to 9 HCF	\$3.87	\$3.91	\$4.11	\$4.41	\$4.77
Rate per HCF - Tier 2	10 to 15 HCF	\$4.57	\$4.61	\$4.85	\$5.21	\$5.63
Rate per HCF - Tier 3	16 + HCF	\$6.12	\$6.18	\$6.51	\$6.98	\$7.55

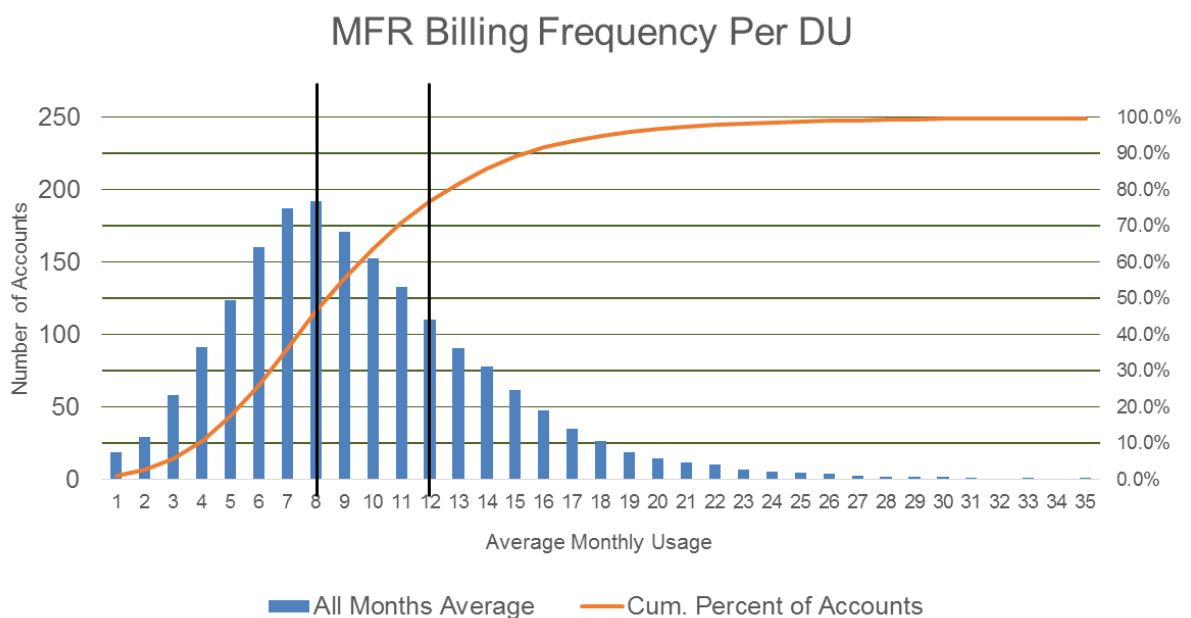
### 2.3.8 Proposed Multi-Family Rates

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. Like single family, the usage projection and rate design relies on data from FY 2013/14 and consumption levels were adjusted on a tier-by-tier basis to reflect the 12 percent reduction in demands that the City

experienced in FY 2014/15, and to reflect an expected further reduction of 8 percent in FY 2015/16.

Tier breaks per multi-family dwelling unit have been set based on the analyzed billing data. Figure 2.3.3 shows the average number of accounts at each level of monthly consumption per dwelling unit for FY 2013/14. The updated tier breaks are based on the approximate median level of consumption and approximate 75 percentile consumption. Thus, in an average month, 50 percent of users will stay within the tier 1 limit, the next 25 percent of users will maintain usage within tiers 1 and 2. Lastly the top 25 percent of users will use water in all three tiers. Table 2.3.12 shows the proposed Oxnard multi-family rates.

Figure 2.3.3 Multi-Family Usage Histogram



<b>Table 2.3.12 Proposed Oxnard Multi-Family Rates Public Works Integrated Master Plan City of Oxnard</b>						
<b>Proposed Oxnard Multi-Family Rates</b>		<b>FY 2015/16</b>	<b>FY 2016/17</b>	<b>FY 2017/18</b>	<b>FY 2018/19</b>	<b>FY 2019/20</b>
Rate per HCF - Tier 1	0 to 8 HCF per DU	\$3.90	\$3.94	\$4.14	\$4.44	\$4.81
Rate per HCF - Tier 2	9 to 12 HCF per DU	\$4.32	\$4.35	\$4.58	\$4.91	\$5.32
Rate per HCF - Tier 3	13 + HCF per DU	\$4.97	\$5.01	\$5.28	\$5.66	\$6.12

### 2.3.9 Proposed Commercial, Industrial, and Institutional Rates

The proposed commercial, industrial, and institutional rates consist of two-tiered inclining block tier structure rather than the three-tier currently in place. This structure has been

developed to better reflect the usage characteristic of the commercial and industrial users and to avoid overburdening of large users. The tier breakpoint have been set such that the percentage of overall commercial water use in each tier mirrors the City's overall water Supply. The percentage of overall consumption in Tier 1 is 40 percent, set to reflect the amount of water produced form the City's internal water rights. Tier 2 consumption accounts for 60% of water, reflecting the higher cost water from United, Calleguas, and eventually ASR supplies.

Table 2.3.13 presents the proposed rates for commercial, industrial, and institutional users.

<b>Table 2.3.13 Proposed Rates for Commercial, Industrial and Institutional Users Public Works Integrated Master Plan City of Oxnard</b>						
<b>Proposed Commercial, Industrial, and Oxnard Irrigation Rates</b>						
		<b>FY 2015/16</b>	<b>FY 2016/17</b>	<b>FY 2017/18</b>	<b>FY 2018/19</b>	<b>FY 2019/20</b>
<b>Tier 1</b>	0 to 100 HCF	\$3.72	\$3.75	\$3.95	\$4.23	\$4.58
<b>Tier 2</b>	Over 100 HCF	\$4.33	\$4.37	\$4.60	\$4.93	\$5.34

### **2.3.10 Proposed Oxnard Irrigation Rates**

The proposed Irrigation rates consist of two-tiered inclining block tier structure rather than the three-tier currently in place. This structure has been developed to better reflect the usage characteristic of the commercial and industrial users and to avoid overburdening of large users. The tier breakpoint have been set such that the percentage of overall commercial water use in each tier mirrors the City's overall water Supply. The percentage of overall consumption in Tier 1 is 40 percent, set to reflect the amount of water produced form the City's internal water rights. Tier 2 consumption accounts for 60 percent of water, reflecting the higher cost water from United, Calleguas, and eventually ASR supplies.

Table 2.3.14 presents the proposed rates for commercial, industrial, and institutional users.

<b>Table 2.3.14 Proposed Rates for Commercial, Industrial and Institutional Users Public Works Integrated Master Plan City of Oxnard</b>						
<b>Proposed Commercial, Industrial, and Oxnard Irrigation Rates</b>						
		<b>FY 2015/16</b>	<b>FY 2016/17</b>	<b>FY 2017/18</b>	<b>FY 2018/19</b>	<b>FY 2019/20</b>
<b>Tier 1</b>	0 to 50 HCF	\$4.06	\$4.10	\$4.31	\$4.62	\$5.00
<b>Tier 2</b>	Over 100 HCF	\$4.29	\$4.33	\$4.55	\$4.88	\$5.28

### **2.3.11 Proposed Oceanview Irrigation Rates**

Rates for Oceanview agricultural users are set based on the methodology outlined in Oxnard City Ordinance No. 2752. For FY 2015/16, the rate will be updated based on



updated UWCD and FCGMA charges and rates. Table 2.3.15 shows the proposed rates for Oceanview Irrigation usage. This analysis has assumed that the UWCD and FCGMA rates and charges will increase by 5 percent per year in each year after FY 2015/16. Proposed rates shown for FY 2016/17 through FY 2019/20 are intended to be illustrative of the potential rates with the assumed UWCD and FCGMA increases. In practice, the City will continue to update the Oceanview Irrigation rates in each year based on the actual rates from UCWD and FCGMA.

<b>Table 2.3.15 Proposed Rates for Oceanview Irrigation Usage</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>					
<b>Proposed Oceanview Irrigation Rates</b>					
	<b>FY 2015/16</b>	<b>FY 2016/17</b>	<b>FY 2017/18</b>	<b>FY 2018/19</b>	<b>FY 2019/20</b>
All Usage	\$1.20	\$1.26	\$1.32	\$1.38	\$1.45

### **2.3.12 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. Detailed tables showing the impact on a variety of customers are included for reference in Appendix J.

## **3.0 WASTEWATER**

### **3.1 Introduction**

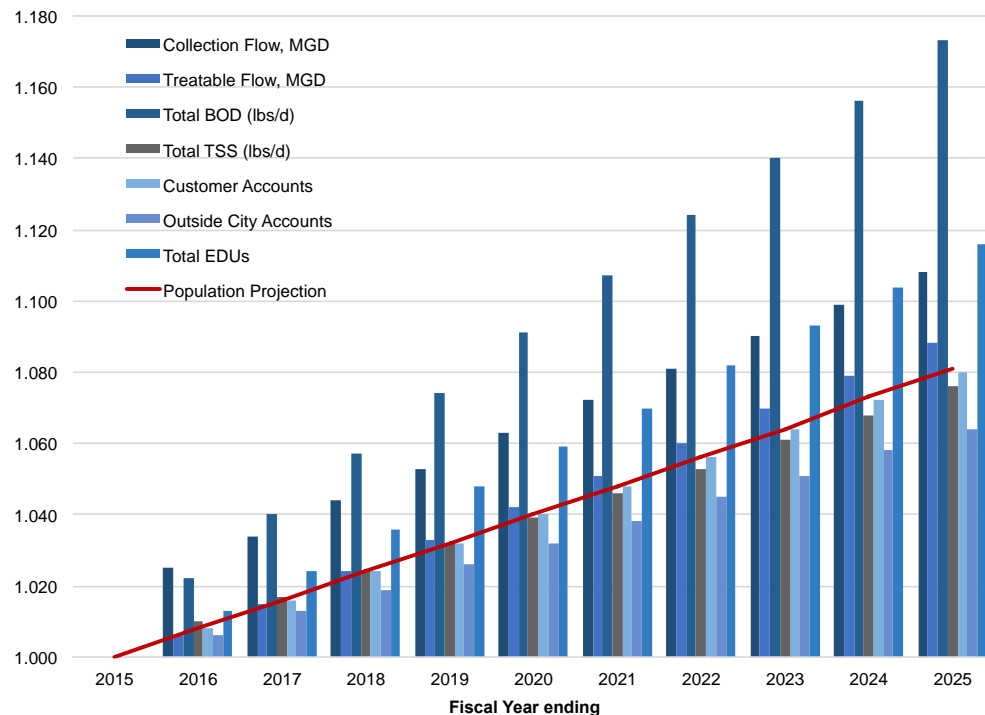
The City of Oxnard operates a wastewater utility to collect, treat, recycle and safely discharge more than 19 million gallons (MG) of sewage per day from nearly 40,000 customers. The utility's service area includes the City residents and businesses, the City of Port Hueneme and Naval Base Ventura County. The total service population exceeds 230,000 persons.

Customers are served by the City's regional treatment plant, an ocean outfall, and a collection system consisting of 430 miles of sewer pipes and 15 pump stations. The treatment plant has a design capacity of 31.7 million gallons per day (mgd). A portion of the treatment plant discharge is directed to the City's Advanced Water Purification Facility. The facility has a current capacity to produce 6.25 mgd of recycled water. The recycled water is made available for non-potable industrial processes, irrigation and indirect potable reuse through groundwater injection. The facility is designed to accommodate expansion to produce up to 25 mgd.

As illustrated in Figure 3.1.1, the City anticipates moderate annual growth (<1%) in the utility's service population and annual collection and treatment flows during the 10-year period from FY 2015/16 through FY 2024/25. By contrast, stronger annual growth is

anticipated for Equivalent Dwelling Units (EDUs) (1.1%), Biological Oxygen Demand (BOD) (1.6%), and the number of customers located outside of the City (2.3%).

Figure 3.1.1 Indexed Growth in Demand for Wastewater Services FY 2014/15 through FY 2024/25 (FY 2014/15 = 1.000)



Carollo conducted a comprehensive assessment of wastewater system assets and processes for the development of the Public Works Integrated Master Plan. The assessment revealed significant risks of system failure due to aging utility infrastructure. Of the City's two major utilities (water and wastewater), the wastewater system received the lowest assessment scores and a determination that nearly 30 percent of system assets are in poor or very poor condition. The system overall was given a grade of "D" based on an assessment of visible assets at the treatment plant and lift stations. This assessment weighed heavily on the development of investment recommendations contained in this cost of service study.

## 3.2 Sewer Revenue Requirements

### 3.2.1 Introduction

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

The analysis begins with projections of growth in City population, and its impact on future demand for wastewater services. Next the analysis evaluates existing wastewater utility operating expenses, debt service requirements, reserve balances, and ongoing reserve requirements, beginning with the FY 2014/15 budget and projecting forward through FY 2024/25. Similar estimates are calculated for 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 wastewater 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.

### **3.2.2 Growth and Sewer Use**

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. The City assumed a vacancy rate of 5 percent of dwelling units and an average household size of 4 persons per occupied unit.

The population projections, in turn, served as the basis of estimating future demand for wastewater services. Table 3.2.1 provides a comparison of projected population and wastewater flow (expressed in EDUs or equivalent dwelling units) for 2015 through 2040. Both sets of projections reflect a consensus assumption that population growth and demand for wastewater services will increase at higher annual rates over the next ten years, and then slow over the remaining 25 years of the planning period.

<b>Table 3.2.1    Projected Population and EDUs of Wastewater Flow 2015 through 2040 Public Works Integrated Master Plan City of Oxnard</b>				
Year	2014 Population Forecast		EDUs of Wastewater Flow	
	Estimate	Annual Growth	Estimate	Annual Growth
2015	210,873	0.87%	107,257	1.03%
2020	220,248	0.84%	112,905	1.18%
2025	229,622	0.80%	119,698	1.11%
2030	238,996	0.77%	126,491	1.05%
2035	248,370	0.77%	133,286	1.00%
2040	257,744		140,082	

Tables 3.2.2 reports projected annual rates of increase for each category of wastewater demand. As with population growth projects, the City anticipates higher rates of growth in

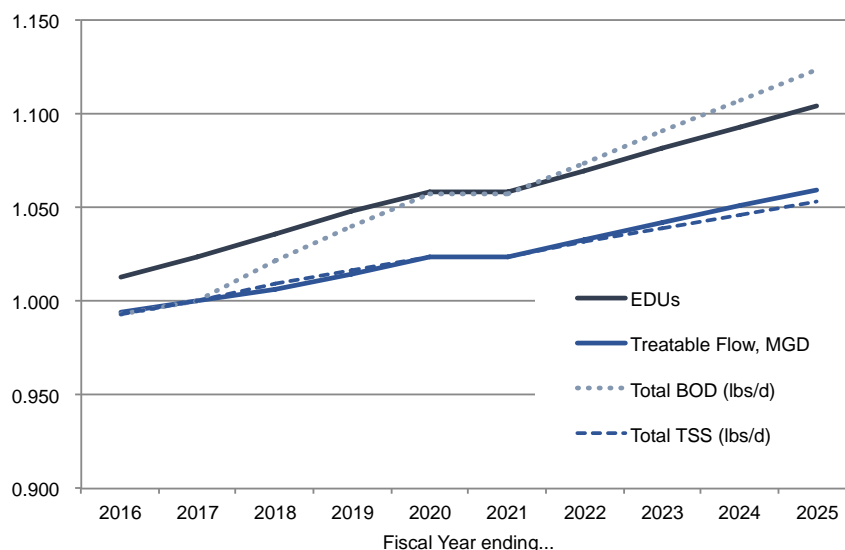
wastewater demand in the near-term, followed by a gradual slowing of growth rates over the longer term.

<b>Table 3.2.2 Growth Escalators for EDUs, Flow, BOD and TSS FY 2015/26 through FY 2034/35 Public Works Integrated Master Plan City of Oxnard</b>				
<b>FYE</b>	<b>EDUs</b>	<b>Treatable Flow, mgd</b>	<b>Total BOD (lbs/d)</b>	<b>Total TSS (lbs/d)</b>
2016	0.00%	0.00%	0.00%	0.00%
2017	0.93%	0.93%	1.67%	1.80%
2018	0.92%	0.92%	1.64%	1.77%
2019	0.91%	0.91%	1.62%	1.74%
2020	0.90%	0.90%	1.59%	1.71%
2021	0.86%	0.87%	1.50%	1.60%
2022	0.86%	0.86%	1.48%	1.58%
2023	0.85%	0.85%	1.46%	1.55%
2024	0.84%	0.85%	1.43%	1.53%
2025	0.84%	0.84%	1.41%	1.51%

Table 3.2.3 reports, and Figure 3.2.1 illustrates, estimated wastewater demand over the next ten fiscal years based on the escalators listed in Table 3.2.2. Wastewater demand is measured in numbers of EDUs, mgd of wastewater flow, and pounds per day of BOD and TSS. EDU projections are based on average gallons of wastewater flow discharged by a typical single-family residence.

<b>Table 3.2.3 Growth in Wastewater Flow, EDUs, BOD and TSS FY 2015/26 through FY 2034/35 Public Works Integrated Master Plan City of Oxnard</b>				
<b>FYE</b>	<b>EDUs</b>	<b>Treatable Flow, mgd</b>	<b>Total BOD (lbs/d)</b>	<b>Total TSS (lbs/d)</b>
2016	107,257	19.7	50.6	45.8
2017	108,669	19.9	51.5	46.7
2018	110,081	20.0	52.3	47.5
2019	111,493	20.2	53.1	48.3
2020	112,905	20.4	54.0	49.1
2021	114,264	20.6	54.8	49.9
2022	115,623	20.8	55.6	50.7
2023	116,981	20.9	56.4	51.5
2024	118,340	21.1	57.2	52.3
2025	119,698	21.3	58.0	53.1

Figure 3.2.1 Indexed Growth in Demand for Wastewater Services (2015=1.000) FY 2015/16 through FY 2024/25



### 3.2.3 Existing and Projected Operating Expenses

The financial costs of the City's wastewater utility include 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 wastewater utility.

Operating expenses include the costs of day-to-day utility functions including personal 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 2014/15 operating budgets, adjusted to exclude any unusual or one-time expenses that would distort future cost estimates. Table 3.2.4 presents the inflation rates used to estimate increases in operating expenses, including salaries, fringe benefits, supplies, power, telephone, contracted services, etc.

Table 3.2.5 provides a summary of projected operating requirements from FY 2015/16 through FY 2024/25, presented in thousands of dollars (\$000s). Current Operations include projected requirements based on current levels of staffing and effort by the wastewater utility. Along with this baseline category, the City must fund, increased support to fully meet current operating requirements, increased operations and maintenance related to new capital facilities, and the addition of programs and staff to meet new or evolving program responsibilities and initiatives.

<b>Table 3.2.4 Inflation Rates for Financial Modeling FY 2015/16 through FY 2024/25 Public Works Integrated Master Plan City of Oxnard</b>					
<b>FYE</b>	<b>Capital Inflation</b>	<b>Labor Inflation</b>	<b>General Inflation</b>	<b>Utilities Inflation</b>	<b>Chemicals Cost Inflation</b>
2016	3.2%	7.5%	2.5%	4.0%	4.0%
2017	3.2%	7.5%	2.5%	4.0%	4.0%
2018	3.2%	7.5%	2.5%	4.0%	4.0%
2019	3.2%	2.5%	2.5%	4.0%	4.0%
2020	3.2%	2.5%	2.5%	4.0%	4.0%
2021	3.2%	2.5%	2.5%	4.0%	4.0%
2022	3.2%	2.5%	2.5%	4.0%	4.0%
2023	3.2%	2.5%	2.5%	4.0%	4.0%
2024	3.2%	2.5%	2.5%	4.0%	4.0%
2025	3.2%	2.5%	2.5%	4.0%	4.0%

<b>Table 3.2.5 Wastewater Utility Operating Requirements (\$ thousands) FY 2015/16 through FY 2024/25 Public Works Integrated Master Plan City of Oxnard</b>				
<b>FYE</b>	<b>Current Operations<sup>(1)</sup></b>	<b>Incremental O&amp;M Costs<sup>(2)</sup></b>	<b>Backfill O&amp;M Programs/Staff<sup>(3)</sup></b>	<b>Total Operating Requirements</b>
2016	\$24,387	\$0	\$100	\$24,487
2017	\$25,431	\$1,440	\$5,059	\$31,930
2018	\$26,533	\$1,309	\$7,085	\$34,927
2019	\$27,252	\$1,237	\$6,656	\$35,146
2020	\$27,992	\$1,464	\$6,823	\$36,280
2021	\$28,753	\$1,565	\$6,993	\$37,311
2022	\$29,535	\$1,920	\$7,168	\$38,623
2023	\$30,339	\$1,775	\$7,347	\$39,462
2024	\$31,166	\$1,884	\$7,531	\$40,581
2025	\$32,017	\$1,997	\$7,719	\$41,733

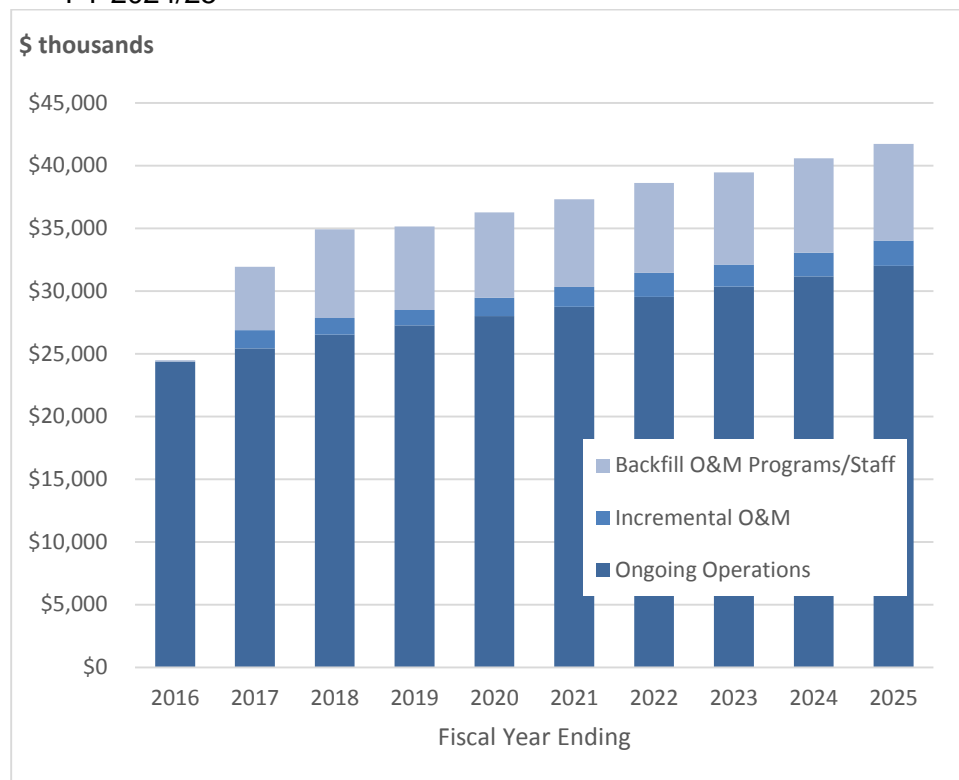
Notes:

(1) Annual O&M expenditures with annual escalation.

(2) Incremental O&M costs associated with existing operations and with CIP projects, costs include: Starting in years 1 to 5: CEPT, increased aeration air requirements, cothickening, CMMS, ocean outfall maintenance, and cathodic protection. Starting in years 6 to 10: Fog receiving station and solar energy production.

(3) Filling of vacant and necessary staff positions for operations and CIP activities, replacement of contractors with City personnel, and funding of required O&M programs.

Figure 3.2.2 Wastewater Utility Operating Requirements (\$thousands) FY 2015/16 through FY 2024/25



### 3.2.4 **Capital Improvements, Bonding and Debt Service**

In addition to the operational requirements identified in Section 3 of this analysis, the City's wastewater utility must plan for the renewal, replacement, improvement and expansion of capital facilities and infrastructure to meet current and future system needs. These capital requirements can be financed from ongoing, annual appropriations, or financed through the sale of revenue bonds. In the case of bond financing, the resulting debt service becomes an "operating" requirement for purposed of calculating wastewater utility user fees. This section of the analysis identifies future capital requirements that necessitate the sale of bonds by the City, the size and timing of bond sales through FY 2024/25, and the existing and anticipated debt services requirements during the same ten-year period.

#### 3.2.4.1 ***Capital Improvements***

The City has identified a back log of capital improvements that must be addressed to protect its investment in existing wastewater infrastructure, increase operational efficiency and reliability, address issues of sustainability and performance, and respond to increasing regulatory requirements. The Public Works Integrated Master Plan found deficiencies that were significant enough to warrant full replacement of the City's existing treatment plant. That finding influenced the recommendations by Carollo regarding near-term capital investments, the sale of bonds and resulting debt service, as well as the building of

sufficient capital reserves to prepare for a major capital improvement program, five to ten years hence.

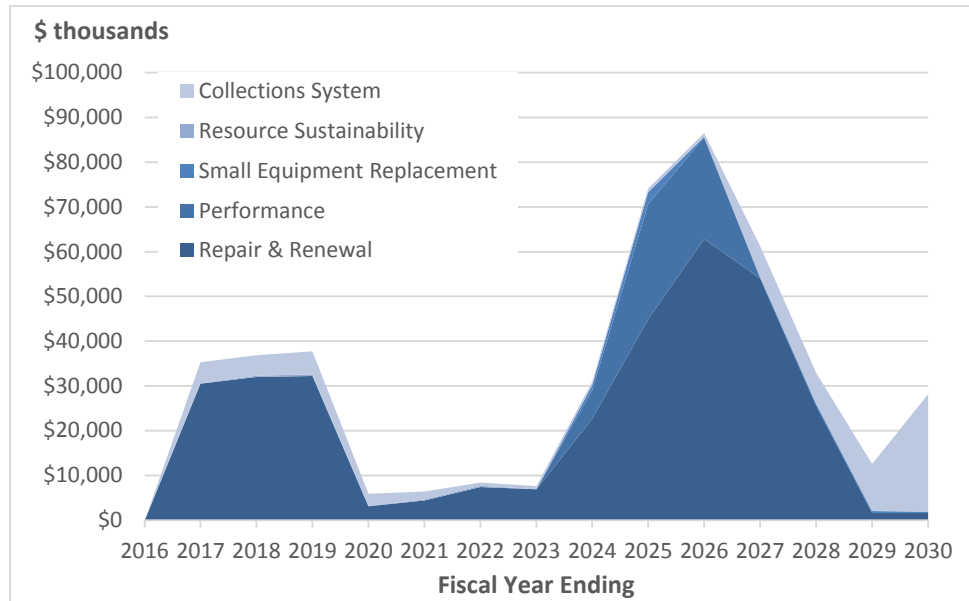
The City's Capital Improvement Plan (CIP) forecasts required investments through 2040 totaling nearly \$675 million. Of that total approximately 515 million will be spent at the OWTP and 158 million will be required for the collection system. Nearly 36% of the CIP is scheduled for implementation between FY 2015/16 through FY 2024/25, and includes \$184 million for Treatment System Repair and Renewal (R&R), \$32.1 million for System Performance Improvements, \$1.5 million for Small Equipment Replacement, \$3.75 million for Resource Sustainability, and \$21.75 million for Collection System R&R.

Table 3.2.6 presents these capital investments by fiscal year. They are illustrated in Figure 3.2.3. A detailed analysis of the City's CIP is included in the City's Integrated Public Works Master Plan.

<b>Table 3.2.6 Wastewater Utility CIP Requirements (\$ thousands)</b> <b>FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>						
<b>FYE</b>	<b>Repair &amp; Renewal</b>	<b>Performance</b>	<b>Small Equipment Replacement</b>	<b>Resource Sustainability</b>	<b>Total CIP Requirements</b>	<b>Total CIP Requirements</b>
2016	\$0	\$0	\$0	\$0	\$0	\$0
2017	\$30,509	\$0	\$0	\$70	\$4,700	\$35,279
2018	\$31,992	\$0	\$0	\$315	\$4,570	\$36,877
2019	\$32,252	\$0	\$0	\$315	\$5,146	\$37,713
2020	\$3,103	\$0	\$0	\$60	\$2,767	\$5,930
2021	\$4,373	\$0	\$0	\$270	\$1,767	\$6,410
2022	\$7,413	\$0	\$0	\$270	\$700	\$8,383
2023	\$6,893	\$0	\$0	\$0	\$700	\$7,593
2024	\$22,659	\$6,340	\$1,127	\$40	\$700	\$30,866
2025	\$44,887	\$25,735	\$2,624	\$180	\$700	\$74,126
2026	\$62,798	\$22,725	\$119	\$180	\$700	\$86,522
2027	\$54,028	\$0	\$340	\$0	\$6,860	\$61,228
2028	\$25,593	\$0	\$510	\$0	\$6,860	\$32,963
2029	\$1,613	\$0	\$425	\$0	\$10,510	\$12,548
2030	\$1,613	\$0	\$255	\$0	\$26,285	\$28,153



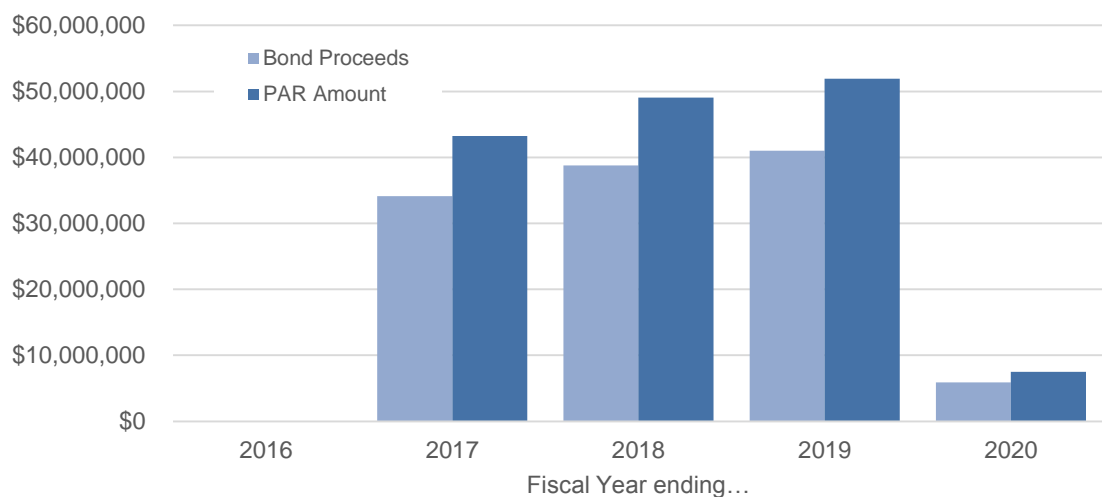
Figure 3.2.3 Wastewater Utility CIP Requirements (\$M) FY 2015/16 through FY 2024/25



#### 3.2.4.2 Revenue Bond Sales and Program Requirements

The City's planned investments in capital improvements will be financed through a mixture of cash from user rates and the sale of revenue bonds. The bond sales for years 1 through 5 will have a total PAR or face value of \$152 million, and produce nearly \$120 million in bond proceeds. Figure 3.2.4 and Table 3.2.7 shows the size and timing of bond sales through FY 2019/20.

Figure 3.2.4 Wastewater Bond Sales through FY 2019/20



<b>Table 3.2.7 Wastewater Revenue Bond Program Requirements (\$ thousands)</b> <b>FY 2015/16 through FY 2019/20</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>				
FYE	PAR Value of Bond Sales	Wastewater Revenue Bond Program Requirements		
		Bond Proceeds	Issuance Costs*	Reserve Requirement
2016	\$0	\$0	\$0	\$0
2017	\$43,224	\$34,147	\$4,755	\$4,322
2018	\$49,073	\$38,767	\$5,398	\$4,907
2019	\$51,902	\$41,003	\$5,709	\$5,190
2020	\$7,500	\$5,925	\$825	\$750
*Includes capitalized interest.				

Additional bonds will be required after that time in order to complete the rehabilitation of the OWTP and the collection system. The amount of bond proceeds required during that time will be refined as the designs of the OWTP are completed. Based on this analysis, preliminary estimates for the amount of bond proceeds required to complete the OWTP rehabilitation and planned collections system projects could range from \$500 million to \$600 million in total for years FY 2020/21 through FY 2031/32.

Table 3.2.8 provides a summary planned bond sales, and associated bond program requirements for the ten-year period from FY 2015/16 through FY 2019/20.

<b>Table 3.2.8 Wastewater Utility Revenue Bond Program Activity</b> <b>FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>					
Bond Program Requirement	Fiscal Year ending...				Five-Year Bonding Requirements
	2016	2017	2018	2019 and 2020	
PAR Amount of Bonds	\$0	\$43,224	\$49,073	\$59,402	\$151,699
Bond Proceeds	\$0	\$34,147	\$38,767	\$46,927	\$119,842
Issuance Costs	\$0	\$864	\$981	\$1,188	\$3,034
Reserve Requirement	\$0	\$4,322	\$4,907	\$5,940	\$15,170
Capitalized Interest	\$0	\$3,890	\$4,417	\$5,346	\$13,653

### 3.2.4.3 Debt Service Requirements

City bond sales increase the City's annual obligation to pay debt service and maintain significant cash reserves as a condition of each sale. At present, the utility pays nearly \$10 million per year in principal and interest costs toward the retirement of outstanding wastewater utility revenue bonds, including Wastewater Revenue Refunding Bonds (Series

2013), Wastewater Revenue Bonds (Series 2004A), Wastewater Revenue Bonds (Series 2004B), and Wastewater Revenue Bonds (Series 2006).

The projected debt issuances within the next five years and associated debt service will cover the costs of the immediate needs at the OWTP and for the collection system. Completion of the partial replacement of the OWTP after that time will require further debt issuances, possibly significant.

Table 3.2.9 reports current and projected debt service requirements for the ten-year period from FY 2015/16 through FY 2024/25.

<b>Table 3.2.9 Wastewater Debt Service Requirements (\$ thousands)</b> <b>FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>			
<b>FYE</b>	<b>Current Debt Service</b>	<b>Added Debt Service</b>	<b>Total Debt Service</b>
2016	\$9,755	\$0	\$9,755
2017	\$9,723	\$0	\$9,723
2018	\$9,696	\$0	\$9,696
2019	\$9,670	\$1,945	\$11,615
2020	\$9,638	\$4,153	\$13,791
2021	\$9,507	\$7,290	\$16,797
2022	\$9,485	\$8,536	\$18,021
2023	\$9,467	\$9,643	\$19,111
2024	\$9,448	\$10,083	\$19,531
2025	\$9,421	\$10,284	\$19,705

### **3.2.5 Reserve Requirements**

The City's master planning initiative has identified a critical need for building financial reserves to strengthen the ability of the wastewater utility to better respond to financial risks and unexpected operational or capital requirements. An initiative to increase financial reserves has the added benefit of improving the City's bond rating, increasing the attractiveness of revenue bonds, and reducing the City's cost of borrowing. During the next ten years, the City plans to make annual investments in its cash reserves to anticipate future replacement of utility equipment, increase the financial resilience of utility operations, and increase the debt coverage and security provided to bond purchasers and bondholders.

Table 3.2.10 identifies the annual contributions planned for each of these three reserve requirements.

<b>Table 3.2.10 Additions to Wastewater Reserves (\$ thousands)</b> <b>FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>				
<b>FYE</b>	<b>Equipment Replacement</b>	<b>Minimum Operating Balance</b>	<b>Added Capital &amp; Debt Reserves</b>	<b>Total Additions to Reserves</b>
2016	\$0	\$0	\$554	\$554
2017	\$42	\$2,446	\$0	\$2,488
2018	\$86	\$3,420	\$0	\$3,506
2019	\$89	\$4,655	\$116	\$4,860
2020	\$92	\$850	\$4,434	\$5,376
2021	\$95	\$774	\$4,847	\$5,716
2022	\$98	\$984	\$6,161	\$7,243
2023	\$101	\$629	\$8,939	\$9,669
2024	\$104	\$840	\$11,859	\$12,803
2025	\$107	\$864	\$15,496	\$16,467

### **3.2.6 Existing Revenues**

Wastewater System User Fees are the primary source of revenues to pay for wastewater utility requirements, accounting for 96 percent of utility operating resources in the FY 2014/15 budget. Table 3.2.11 presents projected operating revenues for fiscal years 2015/16 through 2020/21. Projected revenues from wastewater system user fees are based on current rates and projected growth in demand for wastewater system services.

### **3.2.7 Cash Flow and Debt Coverage Tests**

The wastewater 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. The following sections present the finding of these tests.

#### **3.2.7.1 *Cash Flow Requirements***

The Cash Flow test evaluates the adequacy of utility revenues to pay for all current operating costs, scheduled debt service payments, and any additional operating requirements that result from policy decisions of the City. The purpose of the test is to anticipate and manage financial conditions in order to maintain a prudent financial balance. Table 3.2.12 brings together projected operating revenue from existing rates (Table 3.2.11), total projected operating requirements (Table 3.2.5), projected debt service requirements (Table 3.2.9) and recommended increases in non-debt reserves for equipment replacement and operating balances (Table 3.2.10). The net result is an estimated operating surplus or deficit for each fiscal year through FY 2024/25. This analysis concludes that current

revenue sources and rates are insufficient to cover requirements from FY 2016/17 through FY 2024/25.

<b>Table 3.2.11 Wastewater Operating Revenues Based on Existing Rates (\$ thousands) FY 2015/16 through FY 2024/25 Public Works Integrated Master Plan City of Oxnard</b>				
<b>FYE</b>	<b>Interest on Investments</b>	<b>Other Revenue</b>	<b>User Fee Revenue (Existing Rates)</b>	<b>Total Operating Revenue (Existing Rates)</b>
2016	\$45	\$1,150	\$29,324	\$30,520
2017	\$29	\$2,545	\$39,588	\$42,161
2018	\$1	\$2,421	\$43,949	\$46,372
2019	\$3	\$1,801	\$47,901	\$49,705
2020	\$5	\$1,150	\$52,203	\$53,358
2021	\$81	\$1,150	\$56,887	\$58,118
2022	\$88	\$1,150	\$60,824	\$62,062
2023	\$111	\$1,150	\$65,029	\$66,290
2024	\$160	\$1,150	\$69,519	\$70,829
2025	\$211	\$1,150	\$74,315	\$75,676

<b>Table 3.2.12 Cash Flow Test (\$ thousands) FY 2015/16 through FY 2024/25 Public Works Integrated Master Plan City of Oxnard</b>					
<b>FYE</b>	<b>Operating Revenue (Existing Rates)</b>	<b>Operating Requirements</b>	<b>Debt Service</b>	<b>Capital &amp; Reserve Requirements</b>	<b>Operating Surplus (Deficit)</b>
2016	\$30,520	(\$24,487)	(\$9,755)	(\$554)	(\$4,276)
2017	\$42,161	(\$31,930)	(\$9,723)	(\$2,488)	(\$1,979)
2018	\$46,372	(\$34,927)	(\$9,696)	(\$3,506)	(\$1,758)
2019	\$49,705	(\$35,146)	(\$11,615)	(\$4,860)	(\$1,916)
2020	\$53,358	(\$36,280)	(\$13,791)	(\$5,376)	(\$2,088)
2021	\$58,118	(\$37,311)	(\$16,797)	(\$5,716)	(\$1,707)
2022	\$62,062	(\$38,623)	(\$18,021)	(\$7,243)	(\$1,825)
2023	\$66,290	(\$39,462)	(\$19,111)	(\$9,669)	(\$1,951)
2024	\$70,829	(\$40,581)	(\$19,531)	(\$12,803)	(\$2,086)
2025	\$75,676	(\$41,733)	(\$19,705)	(\$16,467)	(\$2,229)

### 3.2.7.2 Debt Coverage Requirements

The Debt Coverage test evaluates whether the City is generating sufficient revenues to meet financial reserve commitments made to City bondholders. In addition to a first priority

claim on all net utility revenues, the City provides security to its bondholders by pledging to maintain a margin between utility revenues and operating expenses. The Debt Coverage test ensures that the City anticipate and manage financial conditions in order to maintain its legal commitments to bondholders.

Table 3.2.13 provides projections of total revenue requirements to meet debt coverage from FY 2015/16 through FY 2024/25. For purposes of this test, operating requirements include the wastewater operations (Table 3.2.5), debt service requirements (Table 3.2.9), and recommended increases in reserves for debt coverage (Table 3.2.10). The analysis excludes recommended increases in other cash reserves that were discussed in Section 3.2.5 of this report. These requirements are compared to projected operating revenues based on existing wastewater rates to determine the extent of surplus or deficit resources for each fiscal year through FY 2024/25. The analysis suggests that existing wastewater rates do not generate sufficient revenue in FY 2015/16 to provide recommended levels of debt coverage to increase the City's bond rating and attract lower interest rates on future bond sales.

<b>Table 3.2.13 Wastewater Debt Coverage (\$ thousands)</b> <b>FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>					
<b>FYE</b>	<b>Operating Revenue (Existing Rates)</b>	<b>Operating Requirements</b>	<b>Debt Service</b>	<b>Minimum Debt Coverage (1.25x)</b>	<b>Operating Surplus (Deficit)</b>
2016	\$30,520	(\$24,487)	(\$9,755)	(\$2,439)	(\$6,161)
2017	\$42,161	(\$31,930)	(\$9,723)	(\$2,431)	(\$1,922)
2018	\$46,372	(\$34,927)	(\$9,696)	(\$2,424)	(\$676)
2019	\$49,705	(\$35,146)	(\$11,615)	(\$2,904)	\$40
2020	\$53,358	(\$36,280)	(\$13,791)	(\$3,448)	(\$160)
2021	\$58,118	(\$37,311)	(\$16,797)	(\$4,199)	(\$190)
2022	\$62,062	(\$38,623)	(\$18,021)	(\$4,505)	\$913
2023	\$66,290	(\$39,462)	(\$19,111)	(\$4,778)	\$2,940
2024	\$70,829	(\$40,581)	(\$19,531)	(\$4,883)	\$5,835
2025	\$75,676	(\$41,733)	(\$19,705)	(\$4,926)	\$9,312

### **3.2.8 Recommended Revenue Requirements**

The City's wastewater utility faces moderate increases in system demand, and operating requirements during the next ten fiscal years. However, the City will experience significant increases in scheduled debt service payments during this period, particularly in FY 2016/17 and FY 2017/18. Policy decisions to address equipment replacement requirements and increase operating reserves will add to financial demands on utility revenue from FY 2017/18 through FY 2024/25.

While increased system demands will help generate increased user fee revenues beyond FY 2015/16, the upcoming fiscal year poses a significant problem for the City. Current wastewater rates will not produce sufficient user fee revenue in FY 2015/16 to pay for wastewater system operations, debt service, policy-directed requirements, and recommended increases in reserves for operations and debt coverage. Without these additional resources, the City faces increased costs of borrowing to finance much needed capital improvements, and decreasing ability to respond to unforeseen and extraordinary risks to utility operations.

Based on current financial projections, total utility revenues in FY 2015/16 (based on current wastewater rates) will meet the Cash Flow test and produce a net surplus of \$1.3 million. By contrast, current revenues fail to meet the Debt Coverage test by more than \$5 million in FY 2015/16. Figure 3.2.4 illustrates the gap between projected utility revenues and utility requirements to meet both financial tests.

Figure 3.2.4 Existing and Recommended Operating Revenue to meet Recommended Operating and Reserve Requirements (\$ thousands), FY 2015/16 through FY 2024/25

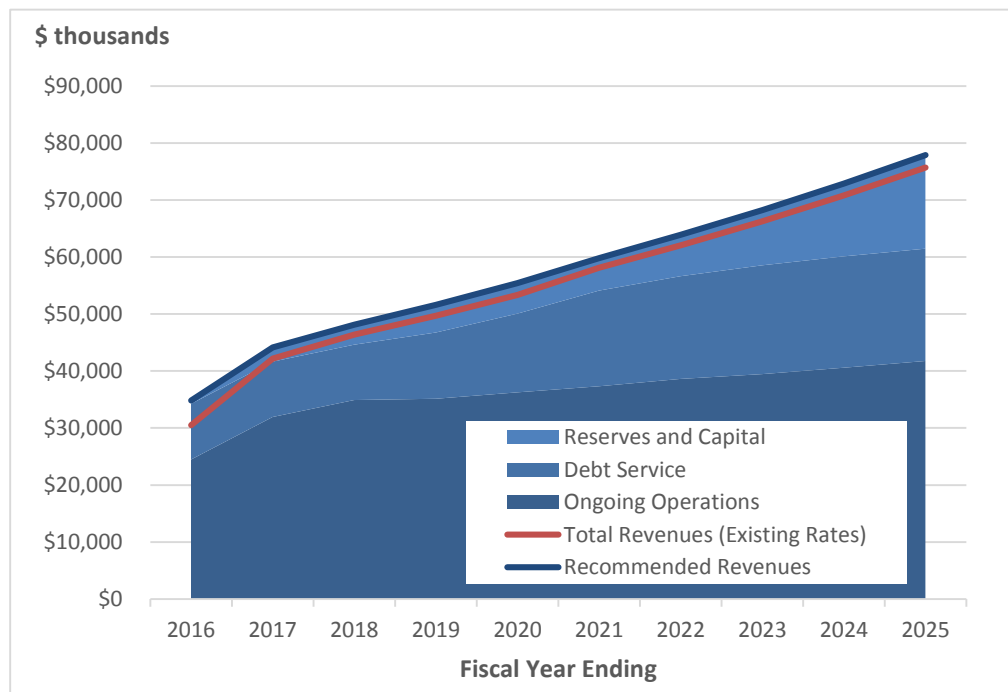
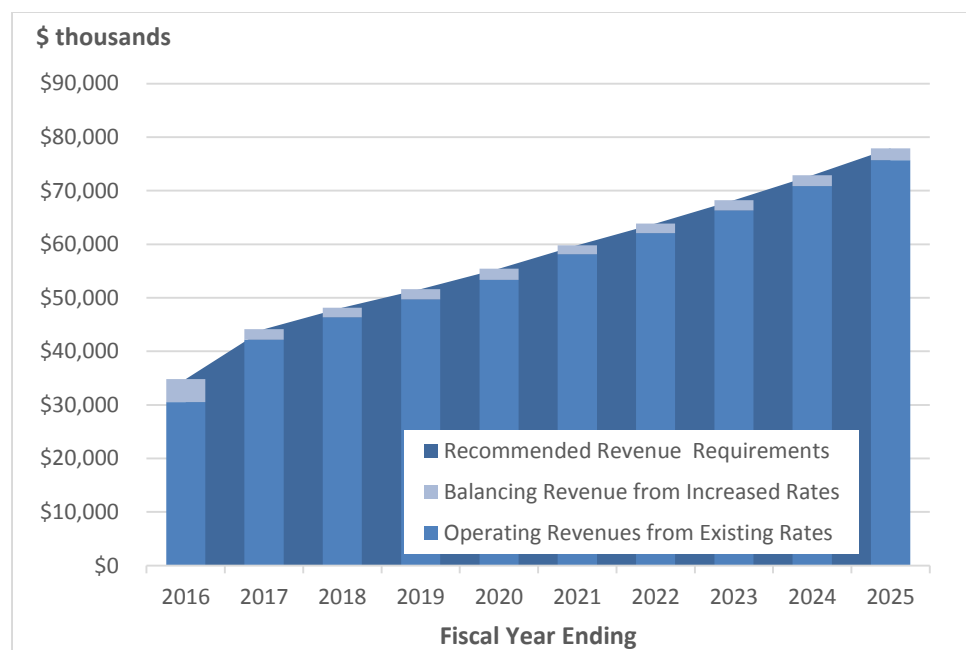


Table 3.2.14 (Figure 3.2.5) compares recommended revenue requirements for the wastewater utility to revenues from existing service charge rates through FY 2024/25. The difference between requirements and revenues represents the amount of new revenue required from rate increases to balance utility finances. The calculations suggest that a significant increase in rates is required for FY 2015/16, followed by moderate rate increases through FY 2019/20, and slower rates of increase during the last five years of the planning period.

<b>FYE</b>	<b>Rate Revenue Increase</b>	<b>Effective Date</b>	<b>User Fees (Existing Rates)</b>	<b>Added Fees from Rate Increase</b>	<b>Other Operating Revenue</b>	<b>Total Utility Revenues</b>
2016	35%	2/1/2016	\$29,324	\$4,276	\$1,195	\$34,796
2017	10%	1/1/2017	\$39,588	\$1,979	\$2,574	\$44,141
2018	8%	1/1/2018	\$43,949	\$1,758	\$2,422	\$48,130
2019	8%	1/1/2019	\$47,901	\$1,916	\$1,804	\$51,621
2020	8%	1/1/2020	\$52,203	\$2,088	\$1,155	\$55,446
2021	6%	1/1/2021	\$56,887	\$1,707	\$1,231	\$59,824
2022	6%	1/1/2022	\$60,824	\$1,825	\$1,238	\$63,887
2023	6%	1/1/2023	\$65,029	\$1,951	\$1,261	\$68,241
2024	6%	1/1/2024	\$69,519	\$2,086	\$1,310	\$72,915
2025	6%	1/1/2025	\$74,315	\$2,229	\$1,361	\$77,905

Figure 3.2.5 Additional Revenue from Rate Increases to finance Recommended Revenue Requirements, FY 2015/16 through FY 2024/25



### 3.3 Cost of Service Analysis

A cost of service analysis was performed in order to validate the City's wastewater rate structure. The main components of the validation analysis were an allocation of wastewater

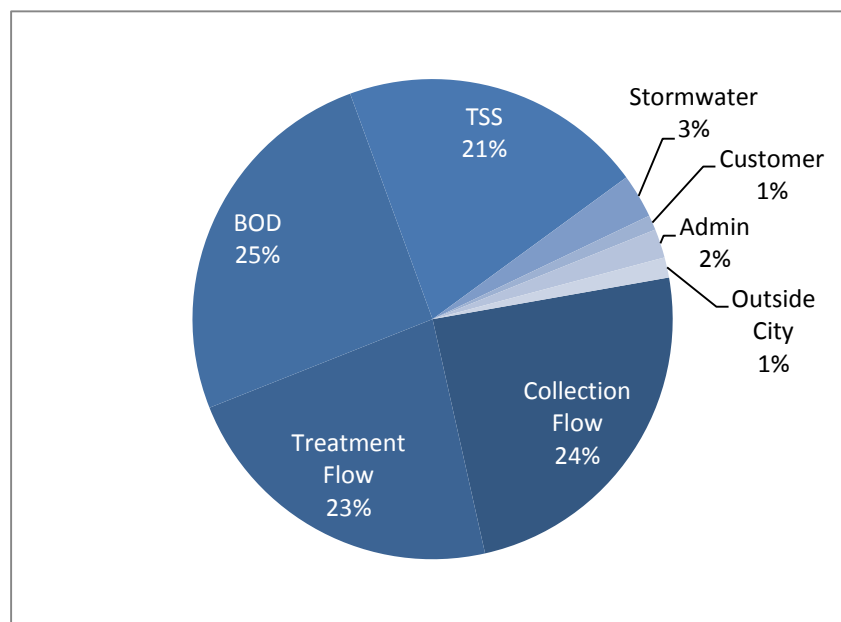


costs to functional components and a subsequent allocation of functional costs to customer classes.

### 3.3.1 Allocation to Functional Components

The first step in the analysis identifies functional cost components that capture the various services used by utility customers. Once identified, recommended revenue requirements are allocated to each functional component at a line item level of detailed. Service metrics are identified for each functional cost component that accurately and equitably capture customer use of the service. The service metrics are used to allocate the functional costs to each customer class. Figure 3.3.1 identifies the functional components of Oxnard's wastewater utility and the corresponding share of total revenue requirements allocated to each component.

Figure 3.3.1 Allocation of Wastewater Utility Functional Components



After costs have been allocated to functional components, they are split between regional and in-city customers based on the methodology set forth in [waiting on specific agreement form Marsha]. Table 3.3.1 shows the allocation of net revenue requirements for FY 2015/16 to each functional category and to regional users. Operational and maintenance costs of the OWTP are allocated to regional customers based on the split of capacity shares owned by the City of Oxnard and the outside regional customers. The unit costs of service for regional customers are based on a 14.25 percent share of OWTP O&M.

Similarly, OWTP capital costs are allocated to regional customers based on each customer's capacity rights. Rather than collecting capital costs through ongoing rates, regional customers are assessed for their respective share of OWTP capital projects and contribute directly to fund applicable projects. This analysis assumes that the regional

customers will participate in the debt issuances projected for funding the OWTP CIP, and that they will be allocated a share of the associated annual debt service.

<b>Table 3.3.1 Net Revenue Requirements Allocation Public Works Integrated Master Plan City of Oxnard</b>					
<b>Functional Category</b>	<b>Overall Allocation</b>	<b>Overall Net Rev. Reqt.</b>	<b>Regional O&amp;M Net Rev. Reqt</b>	<b>Regional Capital Net Rev. Reqt.</b>	<b>City of Oxnard Net Rev. Reqt.</b>
Collection Flow	24.27%	\$9,607	\$0	\$0	\$9,607
Treatment Flow	22.50%	\$8,905	\$1,053	\$35	\$7,818
BOD	25.43%	\$10,068	\$1,050	\$6	\$9,011
TSS	20.53%	\$8,126	\$787	\$6	\$7,334
Stormwater	2.96%	\$1,174	\$0	\$0	\$1,174
Customer	1.00%	\$396	\$0	\$0	\$396
Admin	1.95%	\$771	\$0	\$0	\$771
Outside City	1.36%	\$539	\$0	\$0	\$539
Total	100%	\$39,588	\$2,890	\$47	\$36,651

### **3.3.1.1 City Customer Functional Allocation**

Table 3.3.2 reports for each functional component, its cost allocation rate, allocated net revenue requirements (for FY 2015/16 ratemaking), total number of service units generated by City of Oxnard ratepayers, unit of measure or service metric used to allocate charges to ratepayers, and FY 2015/16 unit cost of service.

<b>Table 3.3.2 City of Oxnard Wastewater Utility Functional Components, FY 2015/16 Public Works Integrated Master Plan City of Oxnard</b>					
<b>Functional Component</b>	<b>Allocation Rate</b>	<b>Net Revenue Requirement</b>	<b>Service Units</b>	<b>Service Metric</b>	<b>Unit Cost of Service</b>
Collection Flow	26%	\$9,607	8,168,180	HCF	\$1.18
Treatment Flow	21%	\$7,818	8,168,180	HCF	\$0.96
BOD	25%	\$9,011	15,958,497	LBS	\$0.56
TSS	20%	\$7,334	14,322,190	LBS	\$0.51
Stormwater	3%	\$1,174	38,793	Account (monthly)	\$2.52
Customer	1%	\$396	39,104	Account (monthly)	\$0.84
Admin	2%	\$771	55,096	Dwelling Unit (monthly)	\$1.17
Outside City	1%	\$539	311	Account (monthly)	\$144.50

### **3.3.2 Customer Class Allocations**

Customer classes aggregate groups of customers with similar service requirements who can be served at similar unit costs. Each class represents a particular type of demand and

similar system load characteristics for purposes of recovering the costs of wastewater services. Customer classes include single family residential (baseline and large lot\* sub-classes), multi-family residential, commercial, restaurant, laundry, contract customers, industrial (including water purifiers/desalters), and regional customers located outside of the city. For each customer class, Carollo has developed detailed multi-year data on service demand and system. An analysis of the data confirms the current customer classifications for purposes of setting wastewater utility rates, and equitable allocating wastewater revenue requirements to each customer class.

\* Large residential lots include all single family residences with lot size in excess of 7,000 square feet.

### **3.3.3 Allocation of Functional Components to Customer Classes**

The functional unit costs, calculated in Section 3.3.2, are now applied to each customer class based on customer service characteristics of each class, including the number of customer accounts, sewer flow (HCFs), and pounds of BOD and TSS. Table 3.3.3 reports the service units produced by each customer class for each of the functional components identified in Section 3.3.1. The table reports data for FY 2015/16. Projections of these service units by customer class are repeated for each subsequent fiscal year. The service units, when multiplied time the corresponding unit cost of service, produces an allocation of wastewater revenue requirements by functional component for each customer class. That data is in turned used to calculate rates for each class.

<b>Table 3.3.3 Wastewater Utility Service Units by Customer Class, FY 2015/16 Public Works Integrated Master Plan City of Oxnard</b>						
<b>Customer Class</b>	<b>Service Units</b>					
	<b>Collection Flow</b>	<b>Treatment Flow</b>	<b>BOD</b>	<b>TSS</b>	<b>Accts</b>	<b>DUs*</b>
Single Family	3,518,751	3,518,751	6,810,429	6,435,051	34,562	35,318
Multi-Family	1,594,575	1,594,575	3,086,247	2,916,139	2,015	17,251
CM - Commercial	797,510	797,510	1,260,044	1,190,593	2,016	2,016
CL - Commercial Laundry	102,628	102,628	162,149	153,212	35	35
RS – Commercial Restaurant	197,648	197,648	780,695	737,664	379	379
Commercial Schools	41,679	41,679	74,083	62,222	75	75
* DUs = Dwelling Units Single Family includes rate classes R, S, LS, and SH. Multi-Family includes rate classes M and MH.						

Table 3.3.4 provides an example for the Single Family Residential category. The table reports the Service Units based on previous performance and anticipated future use trends, and the Unit Cost of Service factors derived from the Functional Analysis set forth in Section 3.3.2. The allocation of wastewater revenue requirements to this class of

ratepayers is the product of multiplying the service units times their corresponding unit cost of service. This set of calculations is repeated for all customer classes To assess each class's share of costs.

<b>Table 3.3.4 Wastewater Utility Customer Class Allocation, Single Family Residential, FY 2015/16 Public Works Integrated Master Plan City of Oxnard</b>				
<b>Functional Component</b>	<b>Service Units</b>	<b>Metric</b>	<b>Unit Cost</b>	<b>Allocated Rev. Reqt. (thousands)</b>
Collection Flow	3,518,751	HCF	\$1.36	\$4,791
Treatment Flow	3,518,751	HCF	\$1.18	\$4,152
BOD	6,810,429	LBS	\$0.67	\$4,573
TSS	6,435,051	LBS	\$0.61	\$3,895
Stormwater	34,259	Accts (Monthly)	\$2.17	\$891
Customer	34,562	Accts (Monthly)	\$0.79	\$326
Admin	35,318	DUs (Monthly)	\$1.07	\$453

Table 3.3.5 compares the overall percentage of costs allocated to each customer class to the overall percentage of revenue generated under the existing rate structure. As shown, revenues generated under the existing rate structure are in close alignment with the results of the cost of service allocation. Thus, the City's existing rate structure is considered to be valid.

<b>Table 3.3.5 Wastewater Allocation Comparison Public Works Integrated Master Plan City of Oxnard</b>		
	<b>Revenue Under Existing Rates</b>	<b>Allocation Results</b>
Single Family	56%	54%
Multi-Family	16%	19%
Commercial	16%	15%
Industrial	12%	12%

### 3.4 Wastewater Rates

#### 3.4.1 Current Wastewater Rates

The City's current wastewater rate structure was last updated on October 1, 2013. The rates use a combination of fixed and variable rates and charges to collect revenues from customers. Customers are split into three major groups: Regional Users, Formula Users, and Non-Formula Users.

Regional customers are the users that own capacity rights at the Oxnard Wastewater Treatment Plant. The City is the majority owner and the operator of the plant. The City of

Port Hueneme, Point Mugu, and CBC Naval Base Ventura County each own a lesser share of the plant's capacity. Regional users are charged for services monthly based on their measured flow and loading and the Regional Monthly User Charge (RMUC) equation. The RMUC reflects that regional users contribute to capital projects at the plan based on their respective shares of capacity ownership, rather than paying for a portion of capital projects through their ongoing rates.

Formula customers are typically large industrial users that do not readily fit into one of the City's Non-Formula rate classes due to their unique flow and loading characteristics. Formula customers are charged for services monthly based on their measured flow and loading and the Oxnard Monthly User Charge (OMUC) equation. The City Currently serves 22 formula users that combined discharge approximately 2.4 mgd into the wastewater system, accounting for about 12 percent of the average treatment plant flows.

Non-Formula customers include residential, commercial, and institutional users of the wastewater system. They are charged monthly for wastewater service based on their estimated wastewater discharge and their account characteristics.

Rates for residential users consist of a flat fee and a volumetric fee. The flat fee for single family customers is imposed on a per account basis, for multi-family and multi-unit customers it is based on dwelling units. Volumetric charges applying estimated monthly wastewater discharge to inclining block tiered rates.

Rates for commercial and institutional users consist of a volumetric fee and a minimum monthly charge. Volumetric charges applying estimated monthly wastewater discharge to inclining block tiered rates. If the calculated volumetric charge is less than the minimum monthly charge, the minimum monthly charge is imposed. The minimum monthly charge is intended to recover costs that are required to provide service regardless of the amount of wastewater discharged.

Table 3.4.1 presents the City's existing wastewater rates.

### **3.4.2 Proposed Wastewater Rates**

The proposed wastewater rates retain the City's current rate structure, adjusting the rates in each year based on the recommended revenue requirements. Given that the City's operations have not changed considerably since the last comprehensive cost of service adjustment, the existing structure still provides an adequate level ratepayer equity. Table 3.4.2 shows the proposed rates for FY 2015/16 through FY 2019/20.

The Public Works Integrated Master Plan currently being completed by the City has identified extensive capital projects at the wastewater treatment plant and throughout the collection system. Over the coming months, the City will be reviewing options for the treatment plant including rehabilitation of the existing facilities as well as the construction of replacement facilities at a site adjacent to the existing plant. The implemented capital

projects will likely impact the wastewater system and operations in a manner that will affect the allocation of expenditures to functional components and ultimately to each rate class. It is recommended that the City undertake a full cost of service adjustment once the capital program is defined and the associated capital and operational costs are better understood.

**Table 3.4.1 Current Wastewater System User Rates and Charges (effective October 1, 2013)  
Public Works Integrated Master Plan  
City of Oxnard**

MONTHLY RATES FOR FORMULA USERS				
Customer Class	Non-Metered Return Rate	Discharge MG	BOD KLBS	SS KLBS
Regional Treatment and Disposal Facility Users (RMUC)		\$1,165.69	\$132.06	\$193.53
Oxnard Wastewater System Users (OMUC)	90%	\$2,154.65	\$490.95	\$388.28
Formula Users are regional and in-city users that apply the "formula" method to calculate monthly user charges. Regional Users: Oxnard, Port Hueneme, Naval Base Ventura County Oxnard Users: Commercial/ Industrial Users Only MG = million gallons of wastewater discharge KLBS = 1000 pounds of pollutant load (BOD or SS)				
MONTHLY RATES FOR NON-FORMULA USERS HCF = 100 cubic feet of wastewater discharge				
Commercial Customer Class	Wastewater Return Rate	Flow Rate Tiers based on HCF/Month		
		\$2.45	\$3.06	\$6.13
Commercial/School	85%	0-50 HCF	51-930 HCF	Over 930 HCF
Restaurant	80%	0-20 HCF	21-160 HCF	Over 160 HCF
Laundry/Laundromat	90%	0-105 HCF	106-525 HCF	Over 525 HCF
Residential Customer Class	Wastewater Return Rate	Flow Rate Tiers based on HCF/Month		
		\$1.37	\$1.52	\$2.12
Single Family Residential	80%	0-9 HCF	10-18 HCF	Over 18 HCF
Single Family Residential (Large Lots - in excess of 7,000 square feet)	60%	0-16 HCF	17-25 HCF	Over 25 HCF
Multi-Family Residential Class	Wastewater Return Rate	Flow Rate Tiers based on HCF/Month		
		\$1.11	\$1.24	\$1.73
Multi-Family Residential	90%	0-6 HCF	7-12 HCF	Over 12 HCF

Los Posas Sewer Line Users:	Wastewater	Flow Rate Tiers based on HCF/Month		
	Return Rate	\$4.90	\$6.13	\$12.25
Commercial and Industrial Users		0-50 HCF	51-930 HCF	Over 930 HCF
MONTHLY BASE RATES				
Single Family Residential	\$21.07			
Multi-Family Residential - 1-6 Units	\$15.41			
Multi-Family Residential - Over 6 Units	\$7.68			
Non-Residential/Non-Metered Users	\$36.18			
Outside City Users - Single Family	\$73.02			
Outside City Users - Multi-Family	\$48.93			
MINIMUM MONTHLY USER FEE				
Commercial	\$14.00			
Restaurant	\$12.98			
Laundry/Laundromat	\$64.44			
School	\$49.15			
MONTHLY SECURITY & CONTAMINATION PREVENTION FEE				
Fixed Fee per Customer Account	\$0.65			

<b>Table 3.4.2 Proposed Wastewater System User Rates and Public Works Integrated Master Plan City of Oxnard</b>								
			FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	
<b>Annual Rate Increase (All Rates)</b>			<b>35.0%</b>	<b>10.0%</b>	<b>8.0%</b>	<b>8.0%</b>	<b>8.0%</b>	
<b>Regional Users</b>								
City of Oxnard User Charge Formula:			RMUC=e(Vm)+f(Bm)+g(Sm)					
Where:								
RMUC= Regional Monthly User Charge in dollars								
Vm=monthly wastewater discharge in millions of gallons								
Bm= monthly BOD discharge in thousands of pounds								
Sm= monthly SS discharge in thousands of pounds								
<b>Regional Users - Proposed Rates</b>			<b>Effective Date</b>					
<b>Service</b>			<b>Current Rates</b>	<b>2/1/2016</b>	<b>1/1/2017</b>	<b>1/1/2018</b>	<b>1/1/2019</b>	<b>1/1/2020</b>
Monthly Wastewater Discharge/Millions of Gallons	p =	\$1,165.69	\$1,573.69	\$1,731.06	\$1,869.55	\$2,019.12	\$2,180.65	
Monthly Biological Oxygen Demand Discharge/Thousands of Lbs.	q =	\$132.06	\$178.29	\$196.12	\$211.81	\$228.76	\$247.07	
Monthly Suspended Solids (SS) Discharge/Thousands of Lbs.	r =	\$193.53	\$261.27	\$287.40	\$310.40	\$335.24	\$362.06	
<b>Formula Users</b>								
City of Oxnard User Charge Formula:		OMUC=p(Vm)+q(Bm)+r(Sm)						
Where:								
OMUC= Oxnard Monthly User Charge in dollars								
Vm=monthly wastewater discharge in millions of gallons								
Bm= monthly BOD discharge in thousands of pounds								
Sm= monthly SS discharge in thousands of pounds								
<b>Formula Users - Proposed Rates</b>			<b>Effective Date</b>					
<b>Service</b>			<b>Current Rates</b>	<b>2/1/2016</b>	<b>1/1/2017</b>	<b>1/1/2018</b>	<b>1/1/2019</b>	<b>1/1/2020</b>
Monthly Wastewater Discharge/Millions of Gallons	p =	\$2,154.65	\$2,908.78	\$3,199.66	\$3,455.64	\$3,732.10	\$4,030.67	
Monthly Biological Oxygen Demand Discharge/Thousands of Lbs.	q =	\$490.95	\$662.79	\$729.07	\$787.40	\$850.40	\$918.44	
Monthly Suspended Solids (SS) Discharge/Thousands of Lbs.	r =	\$388.28	\$524.18	\$576.60	\$622.73	\$672.55	\$726.36	
<b>Non-Formula Users (Industrial, Commercial, &amp; Governmental)</b>								
<b>Commercial/Schools Wastewater Use - Proposed Rates</b>								
Percentage Wastewater Return = 85%			<b>Effective Date</b>					
<b>Rate Per Hundred Cubic Feet (HCF)</b>			<b>Current Rates</b>	<b>2/1/2016</b>	<b>1/1/2017</b>	<b>1/1/2018</b>	<b>1/1/2019</b>	<b>1/1/2020</b>



<b>Table 3.4.2 Proposed Wastewater System User Rates and Public Works Integrated Master Plan City of Oxnard</b>							
0 to 50 HCF/Month		\$2.45	\$3.31	\$3.65	\$3.95	\$4.27	\$4.62
51 to 930 HCF/Month		\$3.06	\$4.14	\$4.56	\$4.93	\$5.33	\$5.76
Over 930 HCF/Month		\$6.13	\$8.28	\$9.11	\$9.84	\$10.63	\$11.49
<b>Restaurants Wastewater Use - Proposed Rates</b>							
Percentage Wastewater Return = 80%			<b>Effective Date</b>				
<b>Rate Per Hundred Cubic Feet (HCF)</b>		<b>Current Rates</b>	<b>2/1/2016</b>	<b>1/1/2017</b>	<b>1/1/2018</b>	<b>1/1/2019</b>	<b>1/1/2020</b>
0 to 20 HCF/Month		\$2.45	\$3.31	\$3.65	\$3.95	\$4.27	\$4.62
21 to 160 HCF/Month		\$3.06	\$4.14	\$4.56	\$4.93	\$5.33	\$5.76
Over 160 HCF/Month		\$6.13	\$8.28	\$9.11	\$9.84	\$10.63	\$11.49
<b>Laundry/Laundromat Wastewater Use - Proposed Rates</b>							
Percentage Wastewater Return = 90%			<b>Effective Date</b>				
<b>Rate Per Hundred Cubic Feet (HCF)</b>		<b>Current Rates</b>	<b>2/1/2016</b>	<b>1/1/2017</b>	<b>1/1/2018</b>	<b>1/1/2019</b>	<b>1/1/2020</b>
0 to 105 HCF/Month		\$2.45	\$3.31	\$3.65	\$3.95	\$4.27	\$4.62
106 to 525 HCF/Month		\$2.71	\$3.66	\$4.03	\$4.36	\$4.71	\$5.09
Over 525 HCF/Month		\$3.38	\$4.57	\$5.03	\$5.44	\$5.88	\$6.36
<b>Non-Formula Users (Residential)</b>							
<b>Single Family Wastewater Use - Proposed Rates</b>							
Percentage Wastewater Return = 80%			<b>Effective Date</b>				
<b>Rate Per Hundred Cubic Feet (HCF)</b>		<b>Current Rates</b>	<b>2/1/2016</b>	<b>1/1/2017</b>	<b>1/1/2018</b>	<b>1/1/2019</b>	<b>1/1/2020</b>
0 to 9 HCF/Month		\$1.37	\$1.85	\$2.04	\$2.21	\$2.39	\$2.59
10 to 18 HCF/Month		\$1.52	\$2.06	\$2.27	\$2.46	\$2.66	\$2.88
Over 18 HCF/Month		\$2.12	\$2.87	\$3.16	\$3.42	\$3.70	\$4.00
<b>Single Family Wastewater Use; Large Lots* - Proposed Rates</b>							
Percentage Wastewater Return = 60%			<b>Effective Date</b>				
<b>Rate Per Hundred Cubic Feet (HCF)</b>		<b>Current Rates</b>	<b>2/1/2016</b>	<b>1/1/2017</b>	<b>1/1/2018</b>	<b>1/1/2019</b>	<b>1/1/2020</b>
0 to 16 HCF/Month		\$1.37	\$1.85	\$2.04	\$2.21	\$2.39	\$2.59
17 to 25 HCF/Month		\$1.52	\$2.06	\$2.27	\$2.46	\$2.66	\$2.88
Over 25 HCF/Month		\$2.12	\$2.87	\$3.16	\$3.42	\$3.70	\$4.00
*Lot Size of over 7,000 square feet							

Table 3.4.2 Proposed Wastewater System User Rates and Public Works Integrated Master Plan City of Oxnard								
<b>Multi-Family and Multi-Unit Wastewater Use - Proposed Rates</b>								
Percentage Wastewater Return = 90%			<b>Effective Date</b>					
<b>Rate Per Hundred Cubic Feet (HCF)</b>		<b>Current Rates</b>	<b>2/1/2016</b>	<b>1/1/2017</b>	<b>1/1/2018</b>	<b>1/1/2019</b>	<b>1/1/2020</b>	
0 to 6 HCF/Month*		\$1.11	\$1.50	\$1.65	\$1.79	\$1.94	\$2.10	
7 to 12 HCF/Month*		\$1.24	\$1.68	\$1.85	\$2.00	\$2.16	\$2.34	
Over 12 HCF/Month*		\$1.73	\$2.34	\$2.58	\$2.79	\$3.02	\$3.27	
*Tiers for Multi-Family/Multi-Unit Residential wastewater rates are variable and are determined by multiplying each tier allotment by the number of units.								
<b>Monthly Base Rates (Residential)</b>								
<b>Monthly Base Rates (Residential) - Proposed Rates</b>				<b>Effective Date</b>				
<b>Service</b>		<b>Current Rates</b>	<b>2/1/2016</b>	<b>1/1/2017</b>	<b>1/1/2018</b>	<b>1/1/2019</b>	<b>1/1/2020</b>	
Single Family		\$21.07	\$28.45	\$31.30	\$33.81	\$36.52	\$39.45	
Multi-Family/Unit	Units 1 to 6	\$20.81	\$22.90	\$24.74	\$26.72	\$28.86	\$31.62	
	Units 7+	\$10.37	\$11.41	\$12.33	\$13.32	\$14.39	\$15.78	
<b>Minimum Monthly Fees (Non-Residential)</b>								
<b>Minimum Monthly Fees (Non-Residential) - Proposed Rates</b>				<b>Effective Date</b>				
<b>Service</b>		<b>Current Rates</b>	<b>2/1/2016</b>	<b>1/1/2017</b>	<b>1/1/2018</b>	<b>1/1/2019</b>	<b>1/1/2020</b>	
Commercial		\$14.00	\$18.90	\$20.79	\$22.46	\$24.26	\$26.21	
Restaurant		\$12.98	\$17.53	\$19.29	\$20.84	\$22.51	\$24.32	
Laundry/Laundromat		\$64.44	\$87.00	\$95.70	\$103.36	\$111.63	\$120.57	
School		\$49.15	\$66.36	\$73.00	\$78.84	\$85.15	\$91.97	
<b>Security and Contamination Fee</b>								
<b>Security and Contamination Fee - Proposed Rates</b>				<b>Effective Date</b>				
		<b>Current Rates</b>	<b>2/1/2016</b>	<b>1/1/2017</b>	<b>1/1/2018</b>	<b>1/1/2019</b>	<b>1/1/2020</b>	
Monthly Charge Per Account		\$0.65	\$0.65	\$0.65	\$0.65	\$0.65	\$0.65	
<b>Non-Metered Water Users</b>								
<b>Non-Metered Water Users - Proposed Rates</b>				<b>Effective Date</b>				
		<b>Current Rates</b>	<b>2/1/2016</b>	<b>1/1/2017</b>	<b>1/1/2018</b>	<b>1/1/2019</b>	<b>1/1/2020</b>	
Monthly Charge Per Account		\$36.18	\$48.85	\$53.74	\$58.04	\$62.69	\$67.71	

<b>Table 3.4.2 Proposed Wastewater System User Rates and Public Works Integrated Master Plan City of Oxnard</b>								
<b>Outside City Users</b>								
<b>Outside City Users - Proposed Rates</b>			<b>Effective Date</b>					
<b>Service</b>		<b>Current Rates</b>	<b>2/1/2016</b>	<b>1/1/2017</b>	<b>1/1/2018</b>	<b>1/1/2019</b>	<b>1/1/2020</b>	
Outside City - Residential Monthly Charge Per Account		\$73.02	\$98.58	\$108.44	\$117.12	\$126.49	\$136.61	
Outside City - Multi Monthly Charge Per Account		\$48.93	\$66.06	\$72.67	\$78.49	\$84.77	\$91.56	
<b>Las Posas Commercial/Institutional Wastewater Use - Proposed Rates</b>								
			<b>Effective Date</b>					
<b>Service</b>		<b>Current Rates</b>	<b>2/1/2016</b>	<b>1/1/2017</b>	<b>1/1/2018</b>	<b>1/1/2019</b>	<b>1/1/2020</b>	
0 to 50 HCF/Month		\$4.36	\$5.89	\$6.48	\$7.00	\$7.56	\$8.17	
51 to 930 HCF/Month		\$5.45	\$7.36	\$8.10	\$8.75	\$9.45	\$10.21	
Over 930 HCF/Month		\$10.91	\$14.73	\$16.21	\$17.51	\$18.92	\$20.44	

### 3.4.3 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. Detailed tables showing the impact on a variety of customers are included for reference in Appendix J.

## 4.0 ENVIRONMENTAL RESOURCES

### 4.1 Introduction

The City's Environmental resource division is responsible for solid waste collection, processing, and disposal. The main waste streams handled by the City include refuse, recyclables, and green waste. The City operates a fleet to collect solid waste from over 44,000 customers, and the Materials Recovery Facility to process the collected waste. Once processed, refuse is hauled to a third party landfill for disposal, recyclables are sold, and green waste is converted to compost or for other uses.

### 4.2 Environmental Resources Revenue Requirements

#### 4.2.1 Introduction

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

Future ER utility revenue requirements are calculated based on projected increases in the costs of current operations, capital expenditures to maintain the City's mobile equipment fleet and stationary facilities, as well as increases in operating costs to serve projected growth in population and economic activity. The analysis includes an evaluation of existing ER 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 ER 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.

#### **4.2.2 Growth and Water Demand**

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. The City assumed a vacancy rate of 5 percent of dwelling units and an average household size of 4 persons per occupied unit. Table 4.2.1 presents the population and account growth projections used in the ER cost of service analysis.

<b>Table 4.2.1 Projected Population and Environmental Resources Accounts Public Works Integrated Master Plan City of Oxnard</b>				
<b>Year</b>	<b>2014 Population Forecast<sup>(1)</sup></b>		<b>ER Accounts <sup>(2)</sup></b>	
	<b>Estimate</b>	<b>Annual Growth</b>	<b>Estimate</b>	<b>Annual Growth</b>
2015	210,873	0.87%	44,304	0.87%
2020	220,248	0.84%	46,275	0.84%
2025	229,622	0.80%	48,246	0.80%
2030	238,996	0.77%	50,216	0.77%
2035	248,370	0.77%	52,187	0.77%
2040	257,744		53,818	
<b>Notes:</b> (1) Based on Table 11 of PM 2.2 "Water Demand Projections". (2) Based on Customer Billing Data, includes residential, commercial, and industrial roll-off units, extra containers are counted as separate accounts.				

#### **4.2.3 Existing Operating Expenses**

The financial costs of the City's ER utility include current operating expenses, debt service payments on bonds used to pay for major investments in system facilities and equipment, rate funded capital expenditures, and other financial requirements established by the City to ensure the financial integrity and sustainability of the ER utility.

Operating expenses include the costs of day-to-day utility functions including personal and professional services, energy and fuel, general maintenance of equipment, information and monitoring systems, and indirect costs associated with utility administration and finance. Projected operating expenses were based on the City's FY 2015/16 operating budgets, adjusted to exclude any unusual or one-time expenses that would distort future cost estimates. Table 4.2.2 presents the inflation rates used to estimate increases in operating expenses, including salaries, fringe benefits, supplies, power, telephone, contracted services, etc.

<b>Table 4.2.2 Inflation Rates for Financial Modeling FY 2015/16 through FY 2024/25 Public Works Integrated Master Plan City of Oxnard</b>				
<b>FYE</b>	<b>Capital Inflation</b>	<b>Labor Inflation</b>	<b>General Inflation</b>	<b>Utilities Inflation</b>
2016	3.20%	7.5%	2.50%	4.00%
2017	3.20%	7.5%	2.50%	4.00%
2018	3.20%	7.5%	2.50%	4.00%
2019	3.20%	2.50%	2.50%	4.00%
2020	3.20%	2.50%	2.50%	4.00%
2021	3.20%	2.50%	2.50%	4.00%
2022	3.20%	2.50%	2.50%	4.00%
2023	3.20%	2.50%	2.50%	4.00%
2024	3.20%	2.50%	2.50%	4.00%
2025	3.20%	2.50%	2.50%	4.00%

Prior to February 2014, the City retained a private contractor to manage, operate, and maintain the City owned Material Recovery Facility (MRF). On February 1, 2014 control of the MRF was transitioned to the City, with the City assuming responsibilities internally. Transitioning of the MRF will allow the City to better control the costs associated with processing, recycling, and disposal of the various solid waste streams. The City experienced MRF associated cost savings of about \$900,000 for FY 2014/15 as compared to FY 2013/14, and expects to see additional savings of about \$800,000 in FY 2015/16. Table 4.2.3 presents a breakdown of ER utility operating costs for FY 2013/14 through FY 2015/16. The transition of the MRF facility operations to the City is illustrated by the shift of costs from Division 4 – Processing and Disposal to Divisions 12, 13, 14, and 16 all of which are associated with MRF operations.

<b>Table 4.2.3 ER Utility O&amp;M Cost Detail (\$ thousands)</b> <b>FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>			
	<b>FY 2013/14 Actual</b>	<b>FY 2014/15 Adjusted Budget</b>	<b>FY 2015/16 Adopted Budget</b>
<b>General Utility Costs</b>			
Division 1 - Administrative & Planning	\$2,906	\$5,466	\$4,340
Division 2 - Waste Reduction & Education	231	275	238
Division 45 - Public Info-Special Project	151	188	188
Division 28 - Other	0	106	(0)
Fund 633 and 638	0	135	135
<b>Subtotal General Utility Costs</b>	<b>\$3,288</b>	<b>\$6,169</b>	<b>\$4,900</b>
<b>Waste Collection Costs</b>			
Division 7 - Residential Collection	\$4,637	\$4,841	\$4,256
Division 8 - Commercial Collection	4,297	4,529	5,080
Division 9 - Industrial Collection	1,515	1,563	1,405
Division 10 - Inspection Services	615	659	630
Division 11 - Container Maintenance	330	399	401
<b>Subtotal Waste Collection Costs</b>	<b>\$11,393</b>	<b>\$11,990</b>	<b>\$11,771</b>
<b>MRF Associated Costs</b>			
Division 4 - Processing And Disposal	\$17,224	\$0	\$0
Division 12 - Tipping Floor Processing/Disposal	1,056	3,492	3,725
Division 13 - Mrf	2,752	7,579	6,611
Division 14 - Waste Transfer Hauling	2,711	10,741	10,696
Division 16 - Greenwaste Conversion	602	1,587	1,595
<b>Subtotal MRF Associated Costs</b>	<b>\$24,345</b>	<b>\$23,400</b>	<b>\$22,627</b>
<b>Total ER O&amp;M Costs</b>	<b>\$39,027</b>	<b>\$41,560</b>	<b>\$39,299</b>

Table 4.2.4 provides a summary of projected operating requirements from FY 2015/16 through FY 2024/25, presented in thousands of dollars (\$ thousands).

#### **4.2.4 Capital Improvements and Funding**

The City plans to make significant investments in ER utility capital improvements, including the replacement of the aging mobile equipment fleet, rehabilitation and replacement equipment at the MRF and other facilities, and energy conversion. These capital requirements can be financed from ongoing, annual appropriations, or financed through the sale of revenue bonds. In the case of bond financing, the resulting debt service becomes an annual requirement for purposes of calculating ER utility user fees. The analysis used the ER capital expenditures identified by the City to determine and the funding necessary for those projects. The ER CIP plan will necessitate the sale of bonds by the City, as well as the generation of cash funds to pay for capital expenditures.

<b>Table 4.2.4 ER Operating Requirements (\$ thousands)</b> <b>FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>				
<b>FYE</b>	<b>General ER Utility Costs</b>	<b>Waste Collection Costs</b>	<b>MRF Associated Costs</b>	<b>Total Operating Requirements</b>
2016	\$4,900	\$11,771	\$22,627	\$39,299
2017	\$5,035	\$11,475	\$21,313	\$37,823
2018	\$5,239	\$12,113	\$22,152	\$39,505
2019	\$5,371	\$12,459	\$22,858	\$40,688
2020	\$5,506	\$12,815	\$23,587	\$41,908
2021	\$5,644	\$13,181	\$24,341	\$43,166
2022	\$5,785	\$13,556	\$25,118	\$44,460
2023	\$5,930	\$13,942	\$25,922	\$45,794
2024	\$6,079	\$14,340	\$26,752	\$47,171
2025	\$6,232	\$14,748	\$27,610	\$48,590

#### 4.2.4.1 Capital Improvements

The City's Capital Improvement Plan (CIP) forecasts required investments through 2025 totaling nearly \$80 million, valued in 2015 dollars. Figure 2.2.3 presents the distribution of total capital project costs across each major program area.

Figure 2.2.3 ER Utility Capital Improvement Project Costs (\$M) FY 2015/16 through FY 2024/25

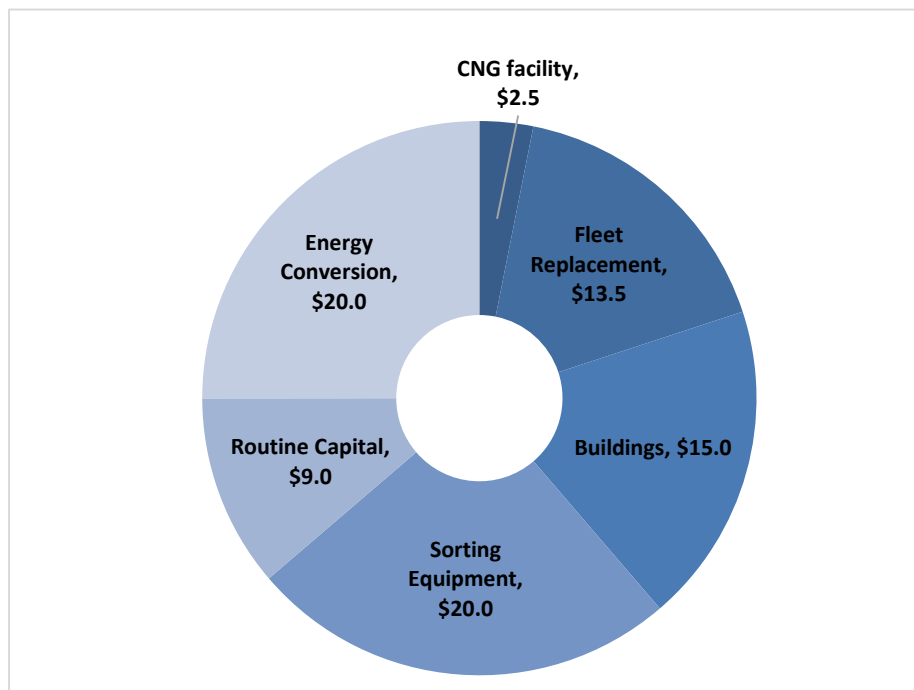


Table 4.2.5 provides a summary of project categories and a brief description of the projects to be completed.

<b>Table 4.2.5 ER Utility Capital Improvement Program FY 2015/16 through FY 2024/25 Public Works Integrated Master Plan City of Oxnard</b>		
<b>Project Type</b>	<b>Project Description</b>	<b>Estimated Project Costs</b>
		<b>(2015 \$Thousands)</b>
		<b>FYE 2015-2025</b>
CNG facility	Construction of compressed natural gas fueling facility for the new natural gas fleet vehicles.	\$2,500
Fleet Replacement	Replacement of aging mobile equipment fleet, 50 new vehicles in total.	\$13,450
Buildings	Fleet maintenance, storage, sorting, welding, thrift store, City Corps	\$15,000
Sorting Equipment	Rehabilitation and replacement of sorting equipment at the MRF.	\$20,000
Routine Capital	Ongoing funding of equipment repair and replacement.	\$9,000
Energy Conversion	Construction of facilities to convert green-waste and food waste into energy via the digesters at the OWTP.	\$20,000
<b>Total CIP Expenditures</b>		<b>\$79,950</b>

Table 4.2.6 presents the planned annual capital investments through FY 2024/25, expressed in thousands of dollars.

<b>Table 4.2.6 Capital Improvement Program Requirements (\$ thousands) FY 2015/16 through FY 2024/25 Public Works Integrated Master Plan City of Oxnard</b>							
<b>FYE</b>	<b>CNG facility</b>	<b>Fleet Replacement</b>	<b>Buildings</b>	<b>Sorting Equipment</b>	<b>Routine Capital</b>	<b>Energy Conversion</b>	<b>Total ER CIP</b>
2016	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
2017	\$2,500	\$4,483	\$7,500	\$15,000	\$1,000	\$2,000	<b>\$32,483</b>
2018	\$0	\$4,483	\$7,500	\$5,000	\$1,000	\$9,000	<b>\$26,983</b>
2019	\$0	\$4,483	\$0	\$0	\$1,000	\$9,000	<b>\$14,483</b>
2020	\$0	\$0	\$0	\$0	\$1,000	\$0	<b>\$1,000</b>
2021	\$0	\$0	\$0	\$0	\$1,000	\$0	<b>\$1,000</b>
2022	\$0	\$0	\$0	\$0	\$1,000	\$0	<b>\$1,000</b>
2023	\$0	\$0	\$0	\$0	\$1,000	\$0	<b>\$1,000</b>
2024	\$0	\$0	\$0	\$0	\$1,000	\$0	<b>\$1,000</b>
2025	\$0	\$0	\$0	\$0	\$1,000	\$0	<b>\$1,000</b>



#### 4.2.4.2 Capital Funding

The City's planned investments in capital improvements will be financed through a combination of cash funding and debt funding in the form of revenue bonds. While the City intends to seek grant funding as available to offset project costs, this analysis has been developed assuming no grant funds. If significant grant funds become available, the City can revisit the capital funding strategy.

The City hopes to fund all capital expenditures for shorter lived assets (such as mobile equipment) using cash. The revenue requirement analysis has been developed assuming that all fleet replacement costs are cash funded using a pay-as-you-go or PAYGO approach. The retirement of the 2005 Solid Waste Revenue Refunding Bonds in FY 2015/16 will free up cash capacity for PAYGO projects.

Remaining capital costs will be funded using a combination of cash, bond proceeds, and grants when available. Over the next ten years, the City will require about \$64.3 million in bond proceeds to fund ER capital projects. Table 4.2.7 provides a summary of planned bond sales, and associated bond program requirements for the ten-year period from FY 2015/16 through FY 2024/25.

<b>Table 4.2.7 ER Revenue Bond Program Requirements (\$ thousands) FY 2015/16 through FY 2024/25 Public Works Integrated Master Plan City of Oxnard</b>				
<b>FYE</b>	<b>PAR Value of Bond Sales</b>	<b>Water Revenue Bond Program Requirements</b>		
		<b>Bond Proceeds</b>	<b>Issuance Costs*</b>	<b>Reserve Requirement</b>
2016	\$0	\$0	\$0	\$0
2017	\$34,606	\$28,896	\$2,249	\$3,461
2018	\$28,364	\$23,684	\$1,844	\$2,836
2019	\$12,737	\$10,635	\$828	\$1,274
2020	\$1,357	\$1,133	\$88	\$136
2021	\$0	\$0	\$0	\$0
2022	\$0	\$0	\$0	\$0
2023	\$0	\$0	\$0	\$0
2024	\$0	\$0	\$0	\$0
2025	\$0	\$0	\$0	\$0
*Includes capitalized interest.				

#### 4.2.4.3 Debt Service Requirements

The City's existing ER utility debt obligations include the 2005 Solid Waste Revenue Refunding Bonds, the Upton & Oliver Funding Corp Lease, a 2009 interfund loan from the Water Fund, and a small obligation for DNF Parcel per A-5586. All existing debt obligations

are set to retire within the next five years. For FY 2015/16, the total debt service obligation for the ER Utility is expected to be about \$3.2 million.

The City's planned revenue bond sales will increase the ER utility's annual debt service requirements. At present, the utility pays about \$3.2 million per year in principal and interest costs toward the retirement of six outstanding utility revenue bonds, and four lease purchase agreements.

The debt service on planned bond sales will add to the City's existing debt obligations. Annual debt service requirements will increase incrementally to just over \$6.3 million in FY 2024/25. These requirements will be added to the utility's operating requirements for the purpose of calculating future water user fees.

Table 4.2.8 reports current and projected debt service requirements for the ten-year period from FY 2015/16 through FY 2024/25.

<b>Table 4.2.8 Water Debt Service Requirements (\$ thousands)</b> <b>FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>			
<b>FYE</b>	<b>Current Debt Service</b>	<b>Added Debt Service</b>	<b>Total Debt Service</b>
2016	\$3,242	\$0	\$3,242
2017	\$1,667	\$0	\$1,667
2018	\$1,617	\$1,557	\$3,175
2019	\$1,194	\$2,834	\$4,028
2020	\$1,194	\$4,695	\$5,890
2021	\$0	\$5,813	\$5,813
2022	\$0	\$6,287	\$6,287
2023	\$0	\$6,338	\$6,338
2024	\$0	\$6,338	\$6,338
2025	\$0	\$6,338	\$6,338

#### **4.2.5 Reserve and Other Requirements**

The City's master planning initiative has identified a critical need for building financial reserves to strengthen the ability of the water utility to better respond to financial risks and unexpected operational or capital requirements. An initiative to increase financial reserves has the added benefit of improving the City's bond rating, increasing the attractiveness of revenue bonds, and reducing the City's cost of borrowing. During the next ten years, the City plans to make annual investments in its cash reserves to anticipate future replacement of utility equipment, increase the financial resilience of utility operations, and increase the debt coverage and security provided to bond purchasers and bondholders. In addition, the City intends to increase contributions of rate-based revenue to address backlogs in equipment replacement and capital improvements.

Table 4.2.9 identifies the annual contributions planned for each of these reserve and other requirements. The table reports these requirements in thousands of dollars.

<b>Table 4.2.9 ER Utility Reserve and Other Requirements (\$ thousands)</b> <b>FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>				
<b>FYE</b>	<b>Rate Funded Capital</b>	<b>Minimum Operating Fund Balance</b>	<b>Available For Capital and Reserves</b>	<b>Total Reserve and Other Requirements</b>
2016	\$0	\$1,690	\$553	\$2,243
2017	\$4,627	\$2,363	\$279	\$7,269
2018	\$4,775	\$560	\$356	\$5,691
2019	\$4,928	\$394	\$1	\$5,323
2020	\$0	\$407	\$3,392	\$3,798
2021	\$0	\$419	\$3,634	\$4,054
2022	\$0	\$431	\$3,332	\$3,763
2023	\$0	\$445	\$3,453	\$3,898
2024	\$0	\$459	\$3,627	\$4,085
2025	\$0	\$473	\$3,802	\$4,275

#### **4.2.6 Existing Revenues**

ER User Fees are the primary source of revenues to pay for ER utility requirements, accounting for 66 percent of utility operating resources in the FY 2014/15 budget.

Table 4.2.10 presents projected operating revenues for fiscal years 2015/16 through 2024/25. Usage fees include special pickup and container fees, rental charges, and most significantly tipping fees at the MRF. Pass-through revenues are generated by pass through charges associated with industrial waste pickup and walking floor trailers.

#### **4.2.7 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. The following sections present the finding of these tests.

<b>Table 4.2.10 ER Utility Operating Revenues - Existing Water Rates (\$ thousands)</b> <b>FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>						
<b>FYE</b>	<b>User Fee Revenue (Existing Rates)</b>	<b>Usage Fees</b>	<b>MRF Recycled Materials Sales</b>	<b>Pass-Throughs</b>	<b>Other Revenue</b>	<b>Total Revenues Based on Existing ER Rates</b>
2016	\$28,930	\$5,608	\$7,175	\$1,999	\$350	\$44,061
2017	\$30,666	\$5,728	\$7,354	\$2,049	\$350	\$46,147
2018	\$31,892	\$5,851	\$7,538	\$2,100	\$350	\$47,732
2019	\$33,168	\$5,978	\$7,727	\$2,152	\$350	\$49,375
2020	\$34,495	\$6,108	\$7,920	\$2,206	\$350	\$51,079
2021	\$35,530	\$6,241	\$8,118	\$2,261	\$350	\$52,500
2022	\$36,596	\$6,377	\$8,321	\$2,318	\$350	\$53,961
2023	\$37,693	\$6,516	\$8,529	\$2,376	\$350	\$55,465
2024	\$38,824	\$6,660	\$8,742	\$2,435	\$350	\$57,011
2025	\$39,989	\$6,806	\$8,961	\$2,496	\$350	\$58,602

#### **4.2.7.1 Cash Flow Requirements**

The Cash Flow test evaluates the adequacy of utility revenues to pay for all current operating costs, scheduled debt service payments, and any additional operating requirements that result from policy decisions of the City. The purpose of the test is to anticipate and manage financial conditions in order to maintain a prudent financial balance. Table 4.2.11 brings together projected operating revenue from existing rates (Table 4.2.10), total projected operating requirements (Table 4.2.4), projected debt service requirements (Table 4.2.8) and recommended increases in non-debt reserves for equipment replacement and operating balances (Table 4.2.9). The net results indicate that utility revenues based on existing rates will be insufficient to meet all recommended requirements for the next ten fiscal years. This analysis concludes that rate increases are required to raise sufficient resources to pay for growing revenue requirements from FY 2015/16 through FY 2024/25.

#### **4.2.7.2 Debt Coverage Requirements**

The Debt Coverage test evaluates whether the City is generating sufficient revenues to meet financial reserve commitments made to City bondholders. In addition to a first priority claim on all net utility revenues, the City provides security to its bondholders by pledging to maintain a margin between utility revenues and operating expenses. The Debt Coverage test ensures that the City anticipate and manage financial conditions in order to maintain its legal commitments to bondholders.

<b>Table 4.2.11 ER Utility Cash Flow Test (\$ thousands)</b> <b>FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>					
<b>FYE</b>	<b>Operating Revenue (Existing Rates)</b>	<b>Operating Requirements</b>	<b>Debt Service</b>	<b>Reserve &amp; Other Requirements</b>	<b>Operating Surplus (Deficit)</b>
2016	\$44,061	\$39,299	\$3,242	\$2,243	(\$2,513)
2017	\$46,147	\$37,823	\$1,667	\$7,269	(\$2,735)
2018	\$47,732	\$39,505	\$3,175	\$5,691	(\$2,129)
2019	\$49,375	\$40,688	\$4,028	\$5,323	(\$2,398)
2020	\$51,079	\$41,908	\$5,890	\$3,798	(\$2,594)
2021	\$52,500	\$43,166	\$5,813	\$4,054	(\$2,105)
2022	\$53,961	\$44,460	\$6,287	\$3,763	(\$2,251)
2023	\$55,465	\$45,794	\$6,338	\$3,898	(\$1,603)
2024	\$57,011	\$47,171	\$6,338	\$4,085	(\$1,682)
2025	\$58,602	\$48,590	\$6,338	\$4,275	(\$1,764)

Table 4.2.12 provides projections of total revenue requirements to meet bond coverage from FY 2015/16 through FY 2024/25. For purposes of this test, operating requirements include the water operations (Table 4.2.4), and debt service requirements (Table 4.2.8). The analysis excludes recommended increases in other cash reserves that were discussed previously in this report. These requirements are compared to projected operating revenues based on existing water rates to determine the extent of surplus or deficit resources for each fiscal year through FY 2024/25. The analysis finds that existing water rates do not generate sufficient revenue to provide minimum levels of bond coverage, much less the reserve increases needed to increase the City's bond rating and attract lower interest rates on future bond sales.

Based on this analysis, and as shown by Tables 4.2.13 and 4.2.14, the projected revenue requirements needs for each year are driven by the Cash flow test.

#### **4.2.8 Recommended Revenue Requirements**

Overall, the ER Utility is in a strong financial position. Table 4.2.14 summarizes the recommended revenue requirements for FY 2015/16 through FY 2024/25. The main driver of revenue requirements in the short term is the capital program, specifically cash funding of fleet replacement expenditures. Increases are driven to a lesser extent by increased debt service due to the funding of other capital projects.

<b>Table 4.2.12 ER Utility Debt Coverage Test, FY 2015/16 through FY 2024/25 (\$ thousands) Public Works Integrated Master Plan City of Oxnard</b>						
<b>FYE</b>	<b>ER Revenues for Coverage</b>	<b>ER Operating Expenses</b>	<b>Debt Service</b>	<b>Net Surplus (Deficit)</b>	<b>Minimum Debt Coverage Requireme nt (1.25X)</b>	<b>Variance</b>
2016	\$44,061	\$39,299	\$3,242	\$1,520	\$811	\$710
2017	\$46,147	\$37,823	\$1,667	\$6,656	\$417	\$6,239
2018	\$47,732	\$39,505	\$3,175	\$5,053	\$794	\$4,259
2019	\$49,375	\$40,688	\$4,028	\$4,659	\$1,007	\$3,652
2020	\$51,079	\$41,908	\$5,890	\$3,281	\$1,472	\$1,808
2021	\$52,500	\$43,166	\$5,813	\$3,521	\$1,453	\$2,068
2022	\$53,961	\$44,460	\$6,287	\$3,214	\$1,572	\$1,642
2023	\$55,465	\$45,794	\$6,338	\$3,333	\$1,584	\$1,748
2024	\$57,011	\$47,171	\$6,338	\$3,503	\$1,584	\$1,919
2025	\$58,602	\$48,590	\$6,338	\$3,675	\$1,584	\$2,090

<b>Table 4.2.13 ER Utility Rate Revenue Requirements (\$M) FY 2015/16 through FY 2024/25 Public Works Integrated Master Plan City of Oxnard</b>					
<b>FYE</b>	<b>Operations</b>	<b>Capital &amp; Reserves</b>	<b>Total Requirements</b>	<b>Less: Non- Rate Revenue</b>	<b>Net Requirements for Ratemaking</b>
2016	\$39,299	\$5,486	\$44,785	(\$15,131)	\$29,653
2017	\$37,823	\$8,937	\$46,760	(\$15,481)	\$31,279
2018	\$39,505	\$8,865	\$48,370	(\$15,840)	\$32,530
2019	\$40,688	\$9,351	\$50,039	(\$16,207)	\$33,831
2020	\$41,908	\$9,688	\$51,596	(\$16,584)	\$35,012
2021	\$43,166	\$9,866	\$53,032	(\$16,970)	\$36,063
2022	\$44,460	\$10,050	\$54,510	(\$17,366)	\$37,145
2023	\$45,794	\$10,236	\$56,030	(\$17,771)	\$38,259
2024	\$47,171	\$10,423	\$57,594	(\$18,187)	\$39,407
2025	\$48,590	\$10,612	\$59,202	(\$18,613)	\$40,589

Though funding fleet replacement with cash results in slightly higher revenue requirement increases than those that would be necessary if the cost were financed, using cash is a more sustainable funding option for the long term as it reduces overall lifecycle cost and long-term rate impacts. Additionally, the rate adjustment associated with cash funding the

fleet replacement at this time will allow the City to set funds aside in the future to fund other capital projects with minimal rate impacts.

Table 2.2.14 presents a summary of projected ER utility operating revenues, including existing and adjusted user fees and all other revenue sources.

<b>Table 4.2.14 ER Utility Operating Revenue with Recommended User Fee Increase (\$Thousands) FY 2015/16 through FY 2024/25</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>						
<b>FYE</b>	<b>Rate Revenue Increase</b>	<b>Effective Date</b>	<b>User Fees (Existing Rates)</b>	<b>Added Fees from Rate Increase</b>	<b>All Other Revenues</b>	<b>Total Utility Revenues</b>
2016	6%	2/1/2016	\$28,930	\$723	\$15,131	\$44,785
2017	4%	1/1/2017	\$30,666	\$613	\$15,481	\$46,760
2018	4%	1/1/2018	\$31,892	\$638	\$15,840	\$48,370
2019	4%	1/1/2019	\$33,168	\$663	\$16,207	\$50,039
2020	3%	1/1/2020	\$34,495	\$517	\$16,584	\$51,596
2021	3%	1/1/2021	\$35,530	\$533	\$16,970	\$53,032
2022	3%	1/1/2022	\$36,596	\$549	\$17,366	\$54,510
2023	3%	1/1/2023	\$37,693	\$565	\$17,771	\$56,030
2024	3%	1/1/2024	\$38,824	\$582	\$18,187	\$57,594
2025	3%	1/1/2025	\$39,989	\$600	\$18,613	\$59,202

### 4.3 Environmental Resources Rates

While the City's takeover of MRF operations has shifted costs into new categories, the manner in which those cost are incurred has remained relatively constant. As a result, the proposed rates are calculated based on applying the revenue requirements increase proportionally to the rates for each rate class.

#### 4.3.1 Current Environmental Resources Rates

The City's current environmental resources rates are set forth in Ordinance No. 2861 and went into effect on January 1, 2013. The rates were then adjusted under the ordinances pass-through provision on March 1, 2013. At that time, the rates were increased by 2.9 percent to reflect increased costs for waste hauling and landfill disposal.

#### 4.3.2 Proposed Environmental Resources Rates

The proposed rates have been developed based revenue requirements projection. That projection assumed that third part costs would increase by 2.5 percent per year. Thus, as the City reviews the need for a pass-through increase in each year, that increase should only be necessary if the increase in third party costs exceeds the 2.5 percent escalator

assumed in the rate study. The proposed rates are presented in the Tables 4.3.1 through 4.3.7.

#### **4.3.3 Customer Impacts**

The monthly dollar impact of the proposed rates on the City's water customers will vary based on each customer's rate class and level of service. Because the proposed rates retain the current rate structure and apply revenue requirement increases proportionally, each users rate will increase by the same percentage.



<b>Table 4.3.1 Proposed ER Rates - Residential Customers; Not Using Mechanical Front-End Load Containers</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>								
<b>Customer</b>	<b>Effective October 18, 2012</b>	<b>Effective January 1, 2013</b>	<b>March 2013 Pass- Through</b>	<b>FY 2015/16</b>	<b>FY 2016/17</b>	<b>FY 2017/18</b>	<b>FY 2018/19</b>	<b>FY 2019/20</b>
Single family variable service (individually billed single and multiple unit dwellings that generate lesser amounts of waste, recyclables, and green waste or have medical disabilities that limit ability to maneuver larger containers (65 gallon refuse, 65 gallon recycle and 65 gallon green waste containers))	\$23.90	\$24.13	\$24.83	<b>\$26.32</b>	\$27.38	\$28.48	\$29.62	\$30.51
Single family standard service (individually billed single and multiple unit dwellings (65 or 95 gallon refuse, 95 gallon recycle, and 95 gallon green waste containers))	\$29.86	\$30.15	\$31.02	<b>\$32.89</b>	\$34.21	\$35.58	\$37.01	\$38.13
Jointly billed multiple-unit dwellings (such as apartments, duplexes, triplexes, boarding houses, mobile home parks, hotels or motels):								
First Unit	\$29.86	\$30.15	\$31.02	<b>\$32.89</b>	\$34.21	\$35.58	\$37.01	\$38.13
Second Unit	\$26.88	\$27.13	\$27.92	<b>\$29.60</b>	\$30.79	\$32.03	\$33.32	\$34.32
Third Unit	\$25.39	\$25.64	\$26.38	<b>\$27.97</b>	\$29.09	\$30.26	\$31.48	\$32.43
Each Unit in excess of three	\$23.90	\$24.13	\$24.83	<b>\$26.32</b>	\$27.38	\$28.48	\$29.62	\$30.51
Each Extra Container (Trash, Recycling, or Green Waste)	\$10.96	\$11.07	\$11.39	<b>\$12.08</b>	\$12.57	\$13.08	\$13.61	\$14.02

<b>Table 4.3.2 Proposed ER Rates - Commercial and Industrial Users; Not Using Mechanical Front-End Loaded Containers</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>								
<b>Weekly Collection Service For Commercial And Industrial Businesses Not Using Mechanical Front-End Loaded Containers:</b>								
<b>Customer</b>	<b>Effective October 18, 2012</b>	<b>Effective January 1, 2013</b>	<b>March 2013 Pass- Through</b>	<b>FY 2015/16</b>	<b>FY 2016/17</b>	<b>FY 2017/18</b>	<b>FY 2018/19</b>	<b>FY 2019/20</b>
One 95-gallon refuse container	\$41.87	\$42.29	\$43.52	<b>\$46.13</b>	\$47.98	\$49.90	\$51.90	\$53.46
Two 95-gallon refuse containers	\$73.24	\$73.96	\$76.10	<b>\$80.68</b>	\$83.91	\$87.27	\$90.77	\$93.50
Three 95-gallon refuse containers	\$94.14	\$95.07	\$97.83	<b>\$103.70</b>	\$107.85	\$112.17	\$116.66	\$120.16
Four 95-gallon refuse containers	\$115.05	\$116.19	\$119.56	<b>\$126.74</b>	\$131.81	\$137.09	\$142.58	\$146.86
Five 95-gallon refuse containers	\$135.96	\$137.30	\$141.28	<b>\$149.76</b>	\$155.76	\$162.00	\$168.48	\$173.54
Five 95-gallon refuse containers (2 collections per week)	\$237.88	\$240.23	\$247.20	<b>\$262.03</b>	\$272.52	\$283.43	\$294.77	\$303.62
<b>Weekly Recyclables and Green Waste Collection Service For Commercial and Industrial Businesses Not Using Mechanical Front-End Loaded Containers:</b>								
<b>Customer</b>	<b>Effective October 18, 2012</b>	<b>Effective January 1, 2013</b>	<b>March 2013 Pass- Through</b>	<b>FY 2015/16</b>	<b>FY 2016/17</b>	<b>FY 2017/18</b>	<b>FY 2018/19</b>	<b>FY 2019/20</b>
One 95-gallon refuse container	\$20.97	\$21.18	\$21.79	<b>\$23.11</b>	\$24.04	\$25.01	\$26.02	\$26.81

<b>Table 4.3.3 Proposed ER Rates - Commercial and Industrial Users; Using Mechanical Front-End Loaded Containers</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>								
<b>Weekly And Daily Refuse Collection Service For Multiple Unit Dwellings and Commercial and Industrial Businesses Using Mechanical Front-End Loaded Containers:</b>								
<b>Container Size</b>	<b>Effective October 18, 2012</b>	<b>Effective January 1, 2013</b>	<b>March 2013 Pass- Through</b>	<b>FY 2015/16</b>	<b>FY 2016/17</b>	<b>FY 2017/18</b>	<b>FY 2018/19</b>	<b>FY 2019/20</b>
<b>Number of Collections Per Week</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
2-cubic yard	\$127.97	\$129.23	\$132.98	<b>\$140.96</b>	\$146.60	\$152.47	\$158.57	\$163.33
2-cubic yard shared	\$63.98	\$64.62	\$66.49	<b>\$70.49</b>	\$73.31	\$76.25	\$79.30	\$81.68
2-cubic yard compactor	\$274.22	\$276.93	\$284.96	<b>\$302.06</b>	\$314.15	\$326.72	\$339.79	\$349.99
4-cubic yard	\$222.60	\$224.81	\$231.33	<b>\$245.21</b>	\$255.02	\$265.23	\$275.84	\$284.12
4-cubic yard shared	\$111.29	\$112.39	\$115.65	<b>\$122.59</b>	\$127.50	\$132.60	\$137.91	\$142.05
4-cubic yard compactor	\$448.43	\$452.87	\$466.00	<b>\$493.97</b>	\$513.73	\$534.28	\$555.66	\$572.33
<b>Number of Collections Per Week</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
2-cubic yard	\$223.95	\$226.18	\$232.74	<b>\$246.71</b>	\$256.58	\$266.85	\$277.53	\$285.86
2-cubic yard shared	\$111.97	\$113.08	\$116.36	<b>\$123.35</b>	\$128.29	\$133.43	\$138.77	\$142.94
2-cubic yard compactor	\$479.88	\$484.63	\$498.68	<b>\$528.61</b>	\$549.76	\$571.76	\$594.64	\$612.48
4-cubic yard	\$389.55	\$393.40	\$404.81	<b>\$429.10</b>	\$446.27	\$464.13	\$482.70	\$497.19
4-cubic yard shared	\$194.78	\$196.71	\$202.41	<b>\$214.56</b>	\$223.15	\$232.08	\$241.37	\$248.62
4-cubic yard compactor	\$784.74	\$792.51	\$815.49	<b>\$864.43</b>	\$899.01	\$934.98	\$972.38	\$1,001.56
<b>Number of Collections Per Week</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
2-cubic yard	\$287.92	\$290.77	\$299.20	<b>\$317.16</b>	\$329.85	\$343.05	\$356.78	\$367.49
2-cubic yard shared	\$143.98	\$145.40	\$149.62	<b>\$158.60</b>	\$164.95	\$171.55	\$178.42	\$183.78
2-cubic yard compactor	\$616.98	\$623.09	\$641.16	<b>\$679.63</b>	\$706.82	\$735.10	\$764.51	\$787.45
4-cubic yard	\$500.84	\$505.80	\$520.47	<b>\$551.70</b>	\$573.77	\$596.73	\$620.60	\$639.22
4-cubic yard shared	\$250.43	\$252.91	\$260.24	<b>\$275.86</b>	\$286.90	\$298.38	\$310.32	\$319.63
4-cubic yard compactor	\$1,008.95	\$1,018.94	\$1,048.49	<b>\$1,111.40</b>	\$1,155.86	\$1,202.10	\$1,250.19	\$1,287.70

<b>Table 4.3.3 Proposed ER Rates - Commercial and Industrial Users; Using Mechanical Front-End Loaded Containers Public Works Integrated Master Plan City of Oxnard</b>								
<b>Number of Collections Per Week</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>
2-cubic yard	\$351.90	\$355.39	\$365.70	<b>\$387.64</b>	\$403.15	\$419.28	\$436.06	\$449.15
2-cubic yard shared	\$175.96	\$177.70	\$182.85	<b>\$193.83</b>	\$201.59	\$209.66	\$218.05	\$224.60
2-cubic yard compactor	\$754.09	\$761.55	\$783.63	<b>\$830.66</b>	\$863.89	\$898.45	\$934.39	\$962.43
4-cubic yard	\$612.14	\$618.20	\$636.13	<b>\$674.30</b>	\$701.28	\$729.34	\$758.52	\$781.28
4-cubic yard shared	\$306.07	\$309.10	\$318.06	<b>\$337.15</b>	\$350.64	\$364.67	\$379.26	\$390.64
4-cubic yard compactor	\$1,233.16	\$1,245.37	\$1,281.49	<b>\$1,358.38</b>	\$1,412.72	\$1,469.23	\$1,528.00	\$1,573.84
<b>Number of Collections Per Week</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>
2-cubic yard	\$415.90	\$420.02	\$432.20	<b>\$458.14</b>	\$476.47	\$495.53	\$515.36	\$530.83
2-cubic yard shared	\$207.95	\$210.01	\$216.10	<b>\$229.07</b>	\$238.24	\$247.77	\$257.69	\$265.43
2-cubic yard compactor	\$891.20	\$900.03	\$926.13	<b>\$981.70</b>	\$1,020.97	\$1,061.81	\$1,104.29	\$1,137.42
4-cubic yard	\$723.44	\$730.61	\$751.80	<b>\$796.91</b>	\$828.79	\$861.95	\$896.43	\$923.33
4-cubic yard shared	\$361.72	\$365.30	\$375.89	<b>\$398.45</b>	\$414.39	\$430.97	\$448.21	\$461.66
4-cubic yard compactor	\$1,457.37	\$1,471.80	\$1,514.48	<b>\$1,605.36</b>	\$1,669.58	\$1,736.37	\$1,805.83	\$1,860.01
<b>Number of Collections Per Week</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>
2-cubic yard	\$479.88	\$484.63	\$498.68	<b>\$528.61</b>	\$549.76	\$571.76	\$594.64	\$612.48
2-cubic yard shared	\$239.95	\$242.32	\$249.35	<b>\$264.31</b>	\$274.89	\$285.89	\$297.33	\$306.25
2-cubic yard compactor	\$1,028.30	\$1,038.48	\$1,068.60	<b>\$1,132.72</b>	\$1,178.03	\$1,225.16	\$1,274.17	\$1,312.40
4-cubic yard	\$834.74	\$843.01	\$867.46	<b>\$919.51</b>	\$956.30	\$994.56	\$1,034.35	\$1,065.39
4-cubic yard shared	\$417.37	\$421.50	\$433.72	<b>\$459.75</b>	\$478.14	\$497.27	\$517.17	\$532.69
4-cubic yard compactor	\$1,681.58	\$1,698.23	\$1,747.48	<b>\$1,852.33</b>	\$1,926.43	\$2,003.49	\$2,083.63	\$2,146.14

<b>Table 4.3.3 Proposed ER Rates - Commercial and Industrial Users; Using Mechanical Front-End Loaded Containers</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>							
Each container in excess of the regular service level on an established account	Effective January 1, 2013	March 2013 Pass-Through	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
<b>Solid Waste</b>							
2-cubic yard	\$56.50	\$58.14	<b>\$61.63</b>	\$64.10	\$66.67	\$69.34	\$71.43
4-cubic yard	\$98.50	\$101.36	<b>\$107.44</b>	\$111.74	\$116.21	\$120.86	\$124.49
<b>Recyclables or Green Waste</b>							
2-cubic yard	\$28.25	\$29.07	<b>\$30.82</b>	\$32.06	\$33.35	\$34.69	\$35.74
4-cubic yard	\$49.25	\$50.68	<b>\$53.72</b>	\$55.87	\$58.11	\$60.44	\$62.26

<b>Table 4.3.4 Proposed ER Rates - Commercial and Industrial User; Using Mechanical Front-End Loaded Containers</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>								
Weekly and daily recyclables and green waste collection service for multiple unit dwellings and commercial and industrial businesses using mechanical front-end loaded containers:								
	Effective October 18, 2012	Effective January 1, 2013	March 2013 Pass- Through	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
<b>Container Size</b>								
<b>Number of Collections Per Week</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
2-cubic yard	\$63.98	\$64.62	\$66.49	<b>\$70.49</b>	\$73.31	\$76.25	\$79.30	\$81.68
2-cubic yard shared	\$31.99	\$32.30	\$33.24	<b>\$35.24</b>	\$36.65	\$38.12	\$39.65	\$40.84
2-cubic yard compactor	\$137.11	\$138.47	\$142.49	<b>\$151.04</b>	\$157.09	\$163.38	\$169.92	\$175.02
4-cubic yard	\$111.29	\$112.39	\$115.65	<b>\$122.59</b>	\$127.50	\$132.60	\$137.91	\$142.05
4-cubic yard shared	\$55.65	\$56.20	\$57.83	<b>\$61.30</b>	\$63.76	\$66.32	\$68.98	\$71.05
4-cubic yard compactor	\$224.21	\$226.43	\$233.00	<b>\$246.98</b>	\$256.86	\$267.14	\$277.83	\$286.17
<b>Number of Collections Per Week</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
2-cubic yard	\$111.97	\$113.08	\$116.36	<b>\$123.35</b>	\$128.29	\$133.43	\$138.77	\$142.94
2-cubic yard shared	\$55.98	\$56.54	\$58.18	<b>\$61.68</b>	\$64.15	\$66.72	\$69.39	\$71.48
2-cubic yard compactor	\$239.95	\$242.32	\$249.35	<b>\$264.31</b>	\$274.89	\$285.89	\$297.33	\$306.25
4-cubic yard	\$194.78	\$196.71	\$202.41	<b>\$214.56</b>	\$223.15	\$232.08	\$241.37	\$248.62
4-cubic yard shared	\$97.38	\$98.35	\$101.20	<b>\$107.28</b>	\$111.58	\$116.05	\$120.70	\$124.33
4-cubic yard compactor	\$392.37	\$396.26	\$407.75	<b>\$432.22</b>	\$449.51	\$467.50	\$486.20	\$500.79
<b>Number of Collections Per Week</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
2-cubic yard	\$143.98	\$145.40	\$149.62	<b>\$158.60</b>	\$164.95	\$171.55	\$178.42	\$183.78
2-cubic yard shared	\$71.98	\$72.70	\$74.81	<b>\$79.30</b>	\$82.48	\$85.78	\$89.22	\$91.90
2-cubic yard compactor	\$308.49	\$311.55	\$320.58	<b>\$339.83</b>	\$353.43	\$367.57	\$382.28	\$393.75
4-cubic yard	\$250.43	\$252.91	\$260.24	<b>\$275.86</b>	\$286.90	\$298.38	\$310.32	\$319.63

<b>Table 4.3.4 Proposed ER Rates - Commercial and Industrial User; Using Mechanical Front-End Loaded Containers</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>								
4-cubic yard shared	\$125.22	\$126.46	\$130.13	<b>\$137.94</b>	\$143.46	\$149.20	\$155.17	\$159.83
4-cubic yard compactor	\$504.48	\$509.48	\$524.25	<b>\$555.72</b>	\$577.95	\$601.07	\$625.12	\$643.88
<b>Number of Collections Per Week</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>
2-cubic yard	\$175.96	\$177.70	\$182.85	<b>\$193.83</b>	\$201.59	\$209.66	\$218.05	\$224.60
2-cubic yard shared	\$87.97	\$88.84	\$91.42	<b>\$96.91</b>	\$100.79	\$104.83	\$109.03	\$112.31
2-cubic yard compactor	\$377.05	\$380.79	\$391.83	<b>\$415.35</b>	\$431.97	\$449.25	\$467.22	\$481.24
4-cubic yard	\$306.07	\$309.10	\$318.06	<b>\$337.15</b>	\$350.64	\$364.67	\$379.26	\$390.64
4-cubic yard shared	\$153.04	\$154.55	\$159.03	<b>\$168.58</b>	\$175.33	\$182.35	\$189.65	\$195.34
4-cubic yard compactor	\$616.58	\$622.69	\$640.75	<b>\$679.20</b>	\$706.37	\$734.63	\$764.02	\$786.95
<b>Number of Collections Per Week</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>
2-cubic yard	\$207.95	\$210.01	\$216.10	<b>\$229.07</b>	\$238.24	\$247.77	\$257.69	\$265.43
2-cubic yard shared	\$103.97	\$105.00	\$108.05	<b>\$114.53</b>	\$119.12	\$123.89	\$128.85	\$132.72
2-cubic yard compactor	\$445.60	\$450.01	\$463.06	<b>\$490.85</b>	\$510.49	\$530.91	\$552.15	\$568.72
4-cubic yard	\$361.72	\$365.30	\$375.89	<b>\$398.45</b>	\$414.39	\$430.97	\$448.21	\$461.66
4-cubic yard shared	\$180.87	\$182.66	\$187.96	<b>\$199.24</b>	\$207.21	\$215.50	\$224.12	\$230.85
4-cubic yard compactor	\$728.41	\$735.62	\$756.95	<b>\$802.38</b>	\$834.48	\$867.86	\$902.58	\$929.66
<b>Number of Collections Per Week</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>
2-cubic yard	\$239.95	\$242.32	\$249.35	<b>\$264.31</b>	\$274.89	\$285.89	\$297.33	\$306.25
2-cubic yard shared	\$119.96	\$121.15	\$124.66	<b>\$132.15</b>	\$137.44	\$142.94	\$148.66	\$153.12
2-cubic yard compactor	\$514.15	\$519.24	\$534.30	<b>\$566.36</b>	\$589.02	\$612.59	\$637.10	\$656.22
4-cubic yard	\$417.37	\$421.50	\$433.72	<b>\$459.75</b>	\$478.14	\$497.27	\$517.17	\$532.69
4-cubic yard shared	\$208.68	\$210.74	\$216.85	<b>\$229.87</b>	\$239.07	\$248.64	\$258.59	\$266.35
4-cubic yard compactor	\$840.80	\$849.13	\$873.75	<b>\$926.19</b>	\$963.24	\$1,001.77	\$1,041.85	\$1,073.11

<b>Table 4.3.5 Proposed ER Rates - Commercial and Industrial User; Roll-Off Containers</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>								
Per pickup charge for businesses regularly using roll-off containers. In addition to the fees for use of the container(s) presented below, the user shall pay all disposal fees. Minimum pickup is twice per month. If use is for less than one month, user shall pay a container rental fee of \$15.00 per day , plus all disposal fees:								
Charge per Refuse Pickup	Effective October 18, 2012	Effective January 1, 2013	March 2013 Pass- Through	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
10-cubic yard	\$151.58	\$153.08	\$157.52	<b>\$166.98</b>	\$173.66	\$180.61	\$187.84	\$193.48
13.4-cubic yard	\$151.58	\$153.08	\$157.52	<b>\$166.98</b>	\$173.66	\$180.61	\$187.84	\$193.48
20-cubic yard compactor	\$197.86	\$199.84	\$205.64	<b>\$217.98</b>	\$226.70	\$235.77	\$245.21	\$252.57
30-cubic yard	\$198.62	\$200.58	\$206.40	<b>\$218.79</b>	\$227.55	\$236.66	\$246.13	\$253.52
30-cubic yard compactor	\$224.76	\$226.98	\$233.56	<b>\$247.58</b>	\$257.49	\$267.79	\$278.51	\$286.87
(2) 30-cubic yard single pickup	\$381.56	\$385.34	\$396.51	<b>\$420.31</b>	\$437.13	\$454.62	\$472.81	\$487.00
40-cubic yard compactor	\$277.02	\$279.77	\$287.88	<b>\$305.16</b>	\$317.37	\$330.07	\$343.28	\$353.58
Charge per Recyclables or Green Waste Pickup	Effective October 18, 2012	Effective January 1, 2013	March 2013 Pass- Through	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
10-cubic yard	\$75.79	\$76.54	\$78.76	<b>\$83.49</b>	\$86.83	\$90.31	\$93.93	\$96.75
13.4-cubic yard	\$75.79	\$76.54	\$78.76	<b>\$83.49</b>	\$86.83	\$90.31	\$93.93	\$96.75
20-cubic yard compactor	\$98.93	\$99.82	\$102.71	<b>\$108.88</b>	\$113.24	\$117.77	\$122.49	\$126.17
30-cubic yard	\$99.31	\$100.30	\$103.21	<b>\$109.41</b>	\$113.79	\$118.35	\$123.09	\$126.79
30-cubic yard compactor	\$112.37	\$113.49	\$116.78	<b>\$123.79</b>	\$128.75	\$133.90	\$139.26	\$143.44
(2) 30-cubic yard single pickup	\$190.78	\$192.67	\$198.26	<b>\$210.16</b>	\$218.57	\$227.32	\$236.42	\$243.52
40-cubic yard compactor	\$138.51	\$139.88	\$143.94	<b>\$152.58</b>	\$158.69	\$165.04	\$171.65	\$176.80



<b>Table 4.3.6 Proposed ER Rates - Walking Floor Transfer Trailer Pickup Fee</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>								
Walking Floor Transfer Trailer. Each customer making use of a walking floor transfer trailer shall pay the following per pickup fee, along with all disposal charges:								
Container Size	Effective October 18, 2012	Effective January 1, 2013		FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
Walking Floor Transfer Trailer	\$381.56	\$385.34	\$385.34	<b>\$408.47</b>	\$424.81	\$441.81	\$459.49	\$473.28

<b>Table 4.3.7 Proposed ER Rates - Security and Contamination Fee</b> <b>Public Works Integrated Master Plan</b> <b>City of Oxnard</b>								
Monthly Security and Contamination Fee: In addition to any other applicable charges, each customer shall pay a monthly security and contamination prevention fee, per container in use, as follows:								
Service	Effective October 18, 2012	Effective January 1, 2013		FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
Security and Contamination Fee	\$0.00	\$0.12	\$0.12	<b>\$0.13</b>	\$0.14	\$0.15	\$0.16	\$0.17

## APPENDIX A - WATER CIP

Project ID	Phase	Project Description	Project Description				Baseline	Estimated	Estimated	Calendar Start year	Years	Calendar End year	Future	Existing
			Size/Dia. (in)	Replace/ New	Length (ft)	Unit Cost (\$)	Construction Cost (2015 \$M)	Construction Cost (2015 \$M)	Project Cost (2015 \$M)		to Implement		Users Benefit	Users Benefit
WATER SYSTEM CAPITAL IMPROVEMENT PROGRAM														
AUTOMATED METER READERS			Project Description											
AMR-01	1	Replacement of AMR Devices	City's GREAT Program CIP, February 2015			\$14M	\$8.68	\$11.29	\$14.0	2016	3	2019	0%	100%
		Subtotal					\$8.68	\$11.29	\$14.0					
OPS IMPROVEMENTS			Project Description											
OPS-01	1	Electrical Rehabilitation - Well Nos. 30, 32, 33 & 34	AECOM Operations Contract			\$1M	\$0.64	\$0.83	\$1.0	2015	1	2016	0%	100%
OPS-02	1	Sodium Hypochlorite Piping Replacement	AECOM Operations Contract			\$28K	\$0.02	\$0.02	\$0.03	2015	1	2016	0%	100%
OPS-03	1	Emergency Turn-outs Service	AECOM Operations Contract			\$26.5K	\$0.02	\$0.02	\$0.03	2015	1	2016	0%	100%
OPS-04	1	Generator and ATS Service	AECOM Operations Contract			\$21K	\$0.01	\$0.02	\$0.02	2015	1	2016	0%	100%
Subtotal							\$0.68	\$0.89	\$1.1					
CATHODIC PROTECTION			Project Description											
EP-01	1	Del Norte Forced Main - Install 20 missing test stations	Asset Corrosion Assesement & Corrosion P			\$240K		\$0.02	\$0.03	2015	2	2017	0%	100%
EP-02	1	Del Norte Forced Main - Replace rectifiers and anodes; resurvey	Asset Corrosion Assesement & Corrosion P			\$300K		\$0.32	\$0.39	2015	2	2017	0%	100%
EP-03	1	Del Norte Forced Main - Locate and repair discontinuity near the east end of the Del Norte PI						\$0.02	\$0.03	2015	2	2017	0%	100%
EP-04	1	Oxnard Conduit - Excavate & install new test stations at BFV near Del Norte connection, 9+10, 39+10, 57+45, 69+50, 111+50, 165+20.	Asset Corrosion Assesement & Corrosion P			\$270K+\$50K		\$0.02	\$0.02	2015	2	2017	0%	100%
EP-05	1	Oxnard Conduit - Install new test stations in ex manhole at 284+80.	Asset Corrosion Assesement & Corrosion P			\$125K		\$0.00	\$0.00	2015	2	2017	0%	100%
EP-06	1	Oxnard Conduit - Corrosion engineer to conduct Close Interval Survey (CIS)						\$0.00	\$0.01	2015	2	2017	0%	100%
EP-07	1	Oxnard Conduit - Replace deep anode beds at Rectifiers #1 , #2, & #3.						\$0.27	\$0.33	2015	2	2017	0%	100%
EP-08	1	Oxnard Conduit - Locate, excavate, and bond across approximately three (3) points of electrical isolation.						\$0.10	\$0.12	2015	2	2017	0%	100%
EP-09	1	Wooley Road / United - Replace 5 test stations	Asset Corrosion Assesement & Corrosion P			\$50K		\$0.02	\$0.03	2015	2	2017	0%	100%
EP-10	1	Wooley Road / United - Replace rectifier and anode; resurvey	Asset Corrosion Assesement & Corrosion P			\$125K		\$0.10	\$0.13	2015	2	2017	0%	100%
EP-11	1	3rd Street Lateral - Replace rectifierand ground bed	Asset Corrosion Assesement & Corrosion P			\$240K		\$0.09	\$0.11	2015	2	2017	0%	100%
EP-12	1	3rd Street Lateral - Locate & repair discontinuity between 27+88 and South Hayes WTP						\$0.03	\$0.04	2015	2	2017	0%	100%
EP-13	1	3rd Street Lateral - Provide electrical isolation at the main treatment plant						\$0.01	\$0.01	2015	2	2017	0%	100%
EP-14	1	3rd St 27" UWCD						\$0.01	\$0.01	2015	2	2017	0%	100%
EP-15	1	Industrial Lateral - Replace all test stations; resurvey	Asset Corrosion Assesement & Corrosion P			\$125K		\$0.01	\$0.02	2015	2	2017	0%	100%
EP-16	1	WTP - Replacement of CPS system at WTP	Asset Corrosion Assesement & Corrosion P			\$65K		\$0.03	\$0.04	2015	2	2017	0%	100%
EP-17	1	WTP - Investigate requirements for electrical isolation and CP of buried piping, and design and install capital project as warranted	Asset Corrosion Assesement & Corrosion P			\$37.5K		\$0.04	\$0.07	2015	2	2017	0%	100%
Subtotal							\$0.00	\$1.07	\$1.37					
TREATMENT FACILITIES UPGRADES / IMPROVEMENTS			Project Description											
TFU-01	2	Expand desalter at BS 1/6 to 3.75 mgd (11.25 mgd expansion)	Groundwater				\$6.78	\$8.81	\$10.9	2022	2.5	2025	17%	83%
TFU-02	2	Blend Station Tie-In (@ BS 1/6)	Groundwater				\$0.15	\$0.20	\$0.2	2022	0.5	2023	17%	83%
TFU-03	2	Disinfection System Upgrade (@ BS 1/6)	Groundwater				\$0.12	\$0.15	\$0.2	2022	1	2023	17%	83%
TFU-04	3	Expand desalter at BS 1/6 to 3.75 mgd (15 mgd expansion)					\$4.52	\$5.87	\$7.3	2028	2.5	2031	17%	83%
TFU-05	2	Ongoing Repair and Replacement	facilities and				\$13.0	\$16.93	\$21.0	2015	0	2015	0%	100%
Subtotal							\$24.58	\$31.96	\$39.6					
INTEGRATION WITH ASR			Dia. (in)		Length (ft)									
IWA-01	4	Drill/Construct Potable Well (@ BS 7)												
IWA-01	1	Piping from ASR Well at Campus Park to Potable Line in Ventura Road												
Subtotal							\$0.00	\$0.00	\$0.0					



Project ID	Phase	Project Description				Baseline	Estimated	Estimated	Calendar Start year	Years	Calendar End year	Future	Existing		
		Project Description	Size/Dia. (in)	Replace/ New	Length (ft)	Unit Cost (\$)	Construction Cost (2015 \$M)	Construction Cost (2015 \$M)		Project Cost (2015 \$M)		to Implement	Users Benefit	Users Benefit	
		EXISTING BLEND STATION IMPROVEMENTS				Project Description									
EBS-01	1	Blending Stations #1 and #6	mechanical,			\$2.1	\$2.76	\$3.4	2016	1.5	2018	0%	100%		
EBS-02	1	Blending Station #2	mechanical,			\$0.1	\$0.10	\$0.1	2016	2	2018	0%	100%		
EBS-03	2	Well 23 & 31 Rehab	City's GREAT Program CIP, February 2015			\$210K	\$0.13	\$0.17	\$0.21	2018	1	2019	0%	100%	
EBS-04	2	Wells Electrical & VFD Replacement	City's GREAT Program CIP, February 2015			\$770K	\$0.48	\$0.62	\$0.77	2018	1	2019	0%	100%	
EBS-05	2	Connection to OH / United pipeline	Maximize Groundwater Allocation				\$0.19	\$0.3	\$0.31	2016	1	2017	0%	100%	
EBS-06	2	Construct 3 new potable wells (BS 1/6) & booster pump station	Maximize Groundwater Allocation				\$6.25	\$8.1	\$10.08	2021	2	2023	0%	100%	
EBS-07	2	Construct booster pump station (BS 1/6)	Maximize Groundwater Allocation				\$2.23	\$2.9	\$3.60	2021	2	2023	0%	100%	
EBS-08	1	Water System SCADA Improvements	R&R of SCADA				\$3.08	\$4.0	\$4.96	2016	2.25	2019	0%	100%	
EBS-09	1	Water System CMMS					\$0.16	\$0.2	\$0.25	2016	1	2017	100%	0%	
EBS-10	2	Blending Station #3	mechanical,				\$1.6	\$2.02	\$2.5	2019	2	2021	0%	100%	
EBS-11	2	Blending Station #4	pumps,				\$0.2	\$0.30	\$0.4	2019	1.5	2021	0%	100%	
EBS-12	2	Blending Station #5	mechanical,				\$0.1	\$0.16	\$0.2	2019	1.5	2021	0%	100%	
EBS-13	2	Construct 2 new potable wells (BS 1/6) and 1 new stainless steel well at BS 3	Maximize Groundwater Allocation				\$7.30	\$9.5	\$11.76	2023	2	2025	100%	0%	
		Subtotal					\$23.92	\$31.09	\$38.55						
		Fire Flow Improvements				Dia. (in)		Length (ft)		\$/LF					
FF-01	3	Install/replace 18,500 feet of 8" pipe	8"		Replace	18,500	\$155	\$2.9	\$3.73	\$4.622	2031	4	2035	0%	100%
FF-02	3	Install/replace 13,500 feet of 12" pipe	12"		Replace	13,500	\$203	\$2.7	\$3.56	\$4.418	2032	3	2035	0%	100%
FF-03	3	Install 250 feet of 14" pipe	14"		Replace	250	\$242	\$0.1	\$0.08	\$0.098	2032	3	2035	0%	100%
		Subtotal					\$5.61	\$7.29	\$9.04						
		Storage Reservoirs				Capacity		\$/MG							
STO-01		New 0.5 MG Storage for North PZ (2040)	0			\$1.00	\$0.00	\$0.00	\$0.0		1		17%	83%	
		Subtotal					\$0.00	\$0.00	\$0.0						
		Pressure Zone Modifications				Dia. (in)		Length (ft)		Unit Cost					
		North Zone Modifications													
PZ-11	2	BS#3 Reconfigure Pipeline to feed North Zone	24"			1,000	\$400	\$0.4	\$0.52	\$0.6	2016	2	2018	17%	83%
PZ-12	2	Rehab 3 PRS	3				\$75,000	\$0.2	\$0.29	\$0.4	2016	2	2018	17%	83%
PZ-13	2	Minor Piping Modification	1				\$50,000	\$0.1	\$0.07	\$0.1	2016	2	2018	17%	83%
		Coast Zone Modifications													
PZ-21	2	3 new PRS	3				\$150,000	\$0.5	\$0.59	\$0.7	2016	2	2018	17%	83%
PZ-22	2	3,000 ft of 8" Parallel Pipeline	8"			3,000	\$160	\$0.5	\$0.62	\$0.8	2016	2	2018	17%	83%
PZ-23	2	Minor Piping Modification	1				\$50,000	\$0.1	\$0.07	\$0.1	2016	2	2018	17%	83%
		South Zone Modifications													
PZ-31	2	3 new PRS	3				\$150,000	\$0.5	\$0.59	\$0.7	2016	2	2018	17%	83%
PZ-32	2	6,000 ft of 8" Parallel Pipeline	8"			6,000	\$160	\$1.0	\$1.25	\$1.5	2016	2	2018	17%	83%
PZ-33	2	Minor Piping Modification	1				\$50,000	\$0.1	\$0.07	\$0.1	2016	2	2018	17%	83%
		Subtotal					\$3.1	\$4.05	\$5.0						
		Age Replacements (thru 2040)				Dia. (in)		Length (ft)		Unit Cost					
AR-01	3	Replace 109,200 feet of 6" pipe	6"			109,200	\$145	\$15.8	\$20.58	\$25.5	2033	1	2034	17%	83%
AR-02	3	Replace 47,800 feet of 8" pipe	8"			47,800	\$160	\$7.6	\$9.94	\$12.3	2034	1	2035	17%	83%
AR-03	3	Replace 57,000 feet of 10" pipe	10"			57,000	\$194	\$11.1	\$14.38	\$17.8	2035	1	2036	17%	83%
AR-04	3	Replace 27,800 feet of 12" pipe	12"			27,800	\$203	\$5.6	\$7.34	\$9.1	2036	1	2037	17%	83%
AR-05	3	Replace 4,900 feet of 14" pipe	14"			4,900	\$242	\$1.2	\$1.54	\$1.9	2037	1	2038	17%	83%
AR-06	3	Replace 4,000 feet of 16" pipe	16"			4,000	\$271	\$1.1	\$1.41	\$1.7	2037	1	2038	17%	83%
AR-07	3	Replace 7,700 feet of 24" pipe	24"			7,700	\$387	\$3.0	\$3.87	\$4.8	2037	1	2038	17%	83%
AR-08	3	Replace 5,000 feet of 36" pipe	36"			5,000	\$484	\$2.4	\$3.15	\$3.9	2038	1	2039	17%	83%
AR-09	3	Replace 5,300 feet of 42" pipe	42"			5,300	\$639	\$3.4	\$4.40	\$5.5	2039	1	2040	17%	83%
AR-10	3	Replace 3,800 feet of 48" pipe	48"			3,800	\$673	\$2.6	\$3.32	\$4.1	2039	1	2040	17%	83%
AR-11	1	Freemont North Neighborhood CIP Replacement	City's GREAT Program CIP, February 2015			\$1.73M	\$1.1	\$1.40	\$1.7	2016	0.5	2017	17%	83%	
AR-12	1	Bryce Canyon South Neighborhood CIP Replacement	City's GREAT Program CIP, February 2015			\$1.13M	\$0.7	\$0.91	\$1.1	2016	0.5	2017	17%	83%	
AR-13	1	Redwood Neighborhood CIP Replacement	City's GREAT Program CIP, February 2015			\$2.06M	\$1.3	\$1.66	\$2.1	2016	0.5	2017	17%	83%	
AR-14	1	La Colonia Neighborhood CIP Replacement	City's GREAT Program CIP, February 2015			\$1.5M	\$0.9	\$1.21	\$1.5	2016	0.5	2017	17%	83%	
		Subtotal					\$57.78	\$75.11	\$93.1						
		Concentrate Line for Desalters				Dia. (in)		Length (ft)		Unit Cost					
CL-01	2	Construct new concentrate line from OWTP to BS 1/6	14"		New	5,400	\$242	\$1.3	\$1.70	\$2.1	2018	3	2021	17%	83%
	2	Construct new concentrate line from OWTP to BS 1/6	24"		New	26,700	\$387	\$10.3	\$13.43	\$16.7	2018	3	2021	17%	83%
CL-02	3	Construct concentrate line extension from BS 1/6 to BS 3 (with-connection to P&G)	14"		New	14,300	\$242					2		17%	83%
		Subtotal					\$11.64	\$15.13	\$18.76						
TOTAL WATER SYSTEM COST							\$136.0	\$177.9	\$220.6						

**WATER AND RECYCLED WATER**  
Public Works Integrated Master Plan  
City of Oxnard, CA

[illegible]

Project ID	Phase	Project Description	Project Description				Baseline	Estimated	Estimated	Calendar Start year	Years to Implement	Calendar End year	Future Users Benefit	Existing Users Benefit	
			Size/Dia. (in)	Replace/ New	Length (ft)	Unit Cost (\$)	Construction Cost (2015 \$M)	Construction Cost (2015 \$M)	Project Cost (2015 \$M)						
RECYCLED WATER SYSTEM CAPITAL IMPROVEMENT PROGRAM															
AR-14	1	Recycled Water Retrofits	City's GREAT Program CIP, February 2015				\$1.5M	\$2.48	\$3.23	\$4.0	2015	7	2022	0%	100%
Subtotal								\$2.48	\$3.23	\$4.0					
ADVANCED WATER PURIFICATION FACILITY			Project Description												
AWPF-01	1	Phase 1 Improvements	Disinfection conversion, security, A/V					\$0.62	\$0.8	\$1.0	2017	1.5	2018	0%	100%
AWPF-02	2	Phase 2	Additional Water Supply; Backup Power					\$17.08	\$22.2	\$27.5	2017	2	2018	0%	100%
AWPF-03	2	Phase 3	Additional Water Supply; Backup Power					\$17.44	\$22.7	\$28.1	2027	3	2030	0%	100%
AWPF-04	2	RW Storage	Cost per Jan 2015 RW Presentation to the City					\$4.96	\$6.5	\$8.0	2017	2	2019	0%	100%
AWPF-05	2	UV/AOP Brine Treatment	the outfall					\$3.5	\$4.6	\$5.7	2018	3	2021	0%	100%
Subtotal								\$43.65	\$56.74	\$70.36					
ASR / IPR FACILITIES			Project Description												
ASR-01	1	Construct ASR Well @ Campus Park Site (and associated monitoring wells)	Additional Water Supply					\$2.7	\$3.6	\$4.4	2016	1	2017	0%	100%
ASR-02	1	Land Acquisition And Improvements - Near BS 1/6 & 3	Additional Water Supply							\$10.0	2016	2	2018	0%	100%
ASR-03	1	RW Pond for Off-Spec/Flushing Water	Additional Water Supply					\$1.0	\$1.3	\$1.6	2016	1.5	2018	0%	100%
ASR-04	2	associated monitoring wells						\$4.8	\$6.3	\$7.8	2016	2	2018	0%	100%
ASR-05	2	Construct 1 duty + 1 standby ASR Wells @ Campus Park (and associated monitoring wells)	Additional Water Supply					\$4.8	\$6.3	\$7.8	2017	1.5	2019	0%	100%
	2	Construct 1 duty + 1 standby ASR Wells @ BS 1/6 (and associated monitoring wells)						\$4.8	\$6.3	\$7.8	2018	2	2020		100%
ASR-06	2	Chemical Feed Expansion at BS 1/6	Additional Water Supply					\$0.2	\$0.3	\$0.3	2018	2	2020	0%	100%
ASR-07	2	Operational Storage for ASR Wells @ BS 1/6	Additional Water Supply					\$1.3	\$1.7	\$2.1	2018	2	2020	0%	100%
ASR-08	2	Booster Pumping for ASR @ BS 1/6	Additional Water Supply					\$4.5	\$5.8	\$7.2	2018	2	2020	0%	100%
	2	monitoring wells						\$4.8	\$6.3	\$7.8	2019	1.5	2021	0%	100%
ASR-09	2	Rehab Well 18 to IPR	Additional Water Supply					\$1.5	\$2.0	\$2.5	2020	2	2022	0%	100%
ASR-11	3	Construct 2 duty + 1 standby ASR Wells @ BS 1/6 (and associated monitoring wells)						\$7.1	\$9.3	\$11.5	2027	2	2029	0%	100%
ASR-12	3	Construct 2 duty + 1 standby ASR Wells @ BS 3 (and associated monitoring wells)	Additional Water Supply					\$7.1	\$9.3	\$11.5	2027	2	2029	0%	100%
ASR-13	3	Chemical Feed Expansion at BS 3	Additional Water Supply					\$0.3	\$0.4	\$0.5	2027	2	2029	0%	100%
ASR-14	3	Operational Storage for ASR Wells @ BS 3	Additional Water Supply					\$1.3	\$1.7	\$2.1	2027	2	2029	0%	100%
ASR-15	3	Booster Pumping for ASR @ BS 3	Additional Water Supply					\$4.5	\$5.8	\$7.2	2027	2	2029	0%	100%
	3	Construct 2 duty + 1 standby ASR Wells @ BS 3 (and associated monitoring wells)	Additional Water Supply					\$7.1	\$9.3	\$11.5	2029	1.5	2031	0%	100%
ASR-16	3	DPR - 3.1 MG Storage Tanks	Additional Water Supply					\$11.6	\$15.0	\$22.2	2034	3	2037	0%	100%
Subtotal								\$69.49	\$90.34	\$125.62					
RECYCLED WATER PIPELINES			Dia. (in)		Length (ft)	Unit Cost									
RWP-01	1	Connect Initial ASR Well at Campus Park to RWBS Line in Ventura Road	20"	New	2,000	\$339	\$0.4	\$0.53	\$0.7	2016	2	2018	0%	100%	
RWP-02	1	Construct Dedicated IPR Pipeline from Campus Park to BS 1/6	24"	New	4,000	\$387	\$1.5	\$2.01	\$2.5	2016	2	2018	0%	100%	
	2	Hueneme - Phase 2 (to Ag Users)	36"	New	16,000	\$484	\$7.7	\$10.07	\$12.5	2016	2	2018	0%	100%	
RWP-03	2		24"	New	20,700	\$387	\$8.0	\$10.41	\$12.9	2016	2	2018	0%	100%	
	2	Recycled Water Loop (to ASR Sites)	30"	New	15,600	\$407	\$8.0	\$10.44	\$12.9	2017	2	2019	0%	100%	
	2		20"	New	13,800	\$339	\$3.5	\$4.51	\$5.6	2017	2	2019	0%	100%	
RWP-04	3	Recycled Water Loop to BS 3 Connection	16"	New	12,700	\$271	\$4.1	\$5.31	\$6.6	2027	1	2028	0%	100%	
	3	Subtotal			56,300		\$33.29	\$43.28	\$53.67						
TOTAL RECYCLED WATER SYSTEM							\$148.91	\$193.59	\$253.65						
MBR															
SW-01	1	MBR Process													
SW-04	1	ADAVANCED DISINFECTION													
TOTAL STORMWATER SYSTEM							\$0.00	\$0.00	\$0.00						
STORMWATER CAPITAL IMPROVEMENT PROGRAM															
SW-01	1	SW Diversion Structure					\$0.29	\$0.37	\$0.5	2021	3	2024	0%	100%	
TOTAL STORMWATER SYSTEM							\$0.29	\$0.37	\$0.46						



**WATER AND RECYCLED WATER**  
*Public Works Integrated Master Plan*  
*City of Oxnard, CA*

[illegible]



## **APPENDIX B - WATER REVENUE REQUIREMENT**





City of Oxnard  
Water Financial Model  
Revenue Requirement

	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
CASH FLOW TEST										
<b>Revenues</b>	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
<i>Revenues from Wastewater Operations</i>										
Service Fees	\$ 40,213,006	\$ 45,583,667	\$ 53,225,406	\$ 59,925,619	\$ 64,843,880	\$ 70,165,879	\$ 75,017,081	\$ 80,203,518	\$ 84,130,454	\$ 88,249,475
Recycled Water Revenues (Pota Potable Offset	586,395	1,208,963	1,246,251	1,284,688	1,324,310	1,365,152	1,407,254	1,450,653	1,495,389	1,541,504
Recycled Water Revenues (New New Users	585,000	1,146,310	1,172,423	1,199,363	1,227,157	1,255,831	1,285,414	1,315,934	1,347,421	1,379,906
P&G Water Supply Agreement	2,250,000	2,366,751	2,489,023	2,613,475	2,744,148	2,881,356	3,025,424	3,176,695	3,335,530	3,502,306
Oceanview Volumetric Revenues	470,172	493,681	543,955	599,710	629,334	660,801	699,265	740,375	783,492	829,553
Interest on Investments	145,478	98,921	8,706	19,780	16,964	6,157	76,747	164,343	134,399	90,126
Connection/Development Fees	-	-	-	-	-	-	-	-	-	-
Other	5,727,743	7,257,769	7,165,801	6,579,014	5,961,272	5,995,769	6,031,129	6,067,373	4,225,523	4,263,602
<b>Total Revenues</b>	<b>\$ 49,977,794</b>	<b>\$ 58,156,062</b>	<b>\$ 65,851,566</b>	<b>\$ 72,221,649</b>	<b>\$ 76,747,065</b>	<b>\$ 82,330,945</b>	<b>\$ 87,542,313</b>	<b>\$ 93,118,891</b>	<b>\$ 95,452,208</b>	<b>\$ 99,856,472</b>
<b>Expenditures</b>										
<i>Ongoing Water Operating Expenses</i>										
PRODUCTION	\$ 20,339,667	\$ 18,686,621	\$ 19,685,114	\$ 19,882,653	\$ 18,338,639	\$ 16,598,692	\$ 14,964,505	\$ 15,952,280	\$ 17,000,680	\$ 18,126,311
DISTRIBUTION	1,870,558	1,993,543	2,125,320	2,178,453	2,232,914	2,288,737	2,345,956	2,404,605	2,464,720	2,526,338
METERING	1,719,023	1,828,636	1,945,986	1,994,636	2,044,502	2,095,614	2,148,005	2,201,705	2,256,748	2,313,166
PROCUREMENT	7,460,794	7,664,456	7,874,427	8,073,442	8,277,520	8,486,789	8,701,382	8,921,438	9,147,096	9,378,500
CONSERVATION	248,277	258,764	269,833	276,578	283,493	290,580	297,845	305,291	312,923	320,746
RECYCLE	3,143,720	2,718,370	2,795,529	2,865,417	2,937,052	3,010,479	3,085,741	3,162,884	3,241,956	3,323,005
PUBLIC INFORMATION	148,985	158,933	169,597	173,845	178,200	182,664	187,241	191,931	196,740	201,669
Security and Contamination Prevention	995,836	1,041,693	1,090,268	1,117,525	1,145,463	1,174,100	1,203,452	1,233,539	1,264,377	1,295,987
CIP Incremental O&M Costs	-	2,060,857	2,248,692	6,982,201	7,457,948	8,587,512	9,726,290	10,107,117	10,779,844	11,169,252
Additional O&M Programs	241,000	243,500	246,063	248,689	251,381	257,666	264,107	270,710	277,478	284,415
Additional Staff	-	5,216,624	7,129,387	7,307,621	7,490,312	7,677,570	7,869,509	8,066,247	8,267,903	8,474,600
<b>Subtotal: Operating Expenditures</b>	<b>\$ 36,167,860</b>	<b>\$ 41,871,998</b>	<b>\$ 45,580,215</b>	<b>\$ 51,101,062</b>	<b>\$ 50,637,425</b>	<b>\$ 50,650,403</b>	<b>\$ 50,794,033</b>	<b>\$ 52,817,747</b>	<b>\$ 55,210,464</b>	<b>\$ 57,413,989</b>
<i>Other Operating Expenses</i>										
Debt Service	\$ 14,868,435	\$ 14,875,436	\$ 14,888,522	\$ 17,170,053	\$ 21,579,698	\$ 24,961,132	\$ 28,315,108	\$ 30,879,184	\$ 31,638,625	\$ 32,637,315
Rate Funded Capital	-	1,000,000	1,025,000	1,050,625	1,076,891	1,103,813	1,131,408	1,159,693	1,188,686	1,218,403
<b>Subtotal: Other Operating Expenditures</b>	<b>\$ 14,868,435</b>	<b>\$ 15,875,436</b>	<b>\$ 15,913,522</b>	<b>\$ 18,220,678</b>	<b>\$ 22,656,589</b>	<b>\$ 26,064,944</b>	<b>\$ 29,446,516</b>	<b>\$ 32,038,878</b>	<b>\$ 32,827,310</b>	<b>\$ 33,855,718</b>
<b>Total Operating Expenditures</b>	<b>\$ 51,036,295</b>	<b>\$ 57,747,435</b>	<b>\$ 61,493,737</b>	<b>\$ 69,321,740</b>	<b>\$ 73,294,014</b>	<b>\$ 76,715,348</b>	<b>\$ 80,240,549</b>	<b>\$ 84,856,625</b>	<b>\$ 88,037,774</b>	<b>\$ 91,269,707</b>
<i>Policy Expenditures</i>										
Equipment Replacement Funding	\$ -	\$ 323,484	\$ 333,835	\$ 344,518	\$ 355,543	\$ 366,920	\$ 378,661	\$ 390,778	\$ 403,283	\$ 416,188
Minimum Operating Fund Balance	-	-	968,471	3,790,161	8,594,320	2,916,035	143,629	2,023,714	2,392,717	2,203,525
<b>Subtotal: Total Policy Expenditures</b>	<b>\$ -</b>	<b>\$ 323,484</b>	<b>\$ 1,302,306</b>	<b>\$ 4,134,679</b>	<b>\$ 8,949,863</b>	<b>\$ 3,282,955</b>	<b>\$ 522,291</b>	<b>\$ 2,414,493</b>	<b>\$ 2,796,000</b>	<b>\$ 2,619,713</b>
<b>Total Expenditures for Cash Flow Test</b>	<b>\$ 51,036,295</b>	<b>\$ 58,070,918</b>	<b>\$ 62,796,043</b>	<b>\$ 73,456,419</b>	<b>\$ 82,243,877</b>	<b>\$ 79,998,303</b>	<b>\$ 80,762,840</b>	<b>\$ 87,271,118</b>	<b>\$ 90,833,775</b>	<b>\$ 93,889,420</b>
<b>Cash Flow Surplus (Deficit)</b>	<b>\$ (1,058,501)</b>	<b>\$ 85,144</b>	<b>\$ 3,055,522</b>	<b>\$ (1,234,770)</b>	<b>\$ (5,496,812)</b>	<b>\$ 2,332,642</b>	<b>\$ 6,779,474</b>	<b>\$ 5,847,773</b>	<b>\$ 4,618,433</b>	<b>\$ 5,967,052</b>



City of Oxnard  
Water Financial Model  
Revenue Requirement

DEBT COVERAGE TEST																				
	FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		FY 2019/20		FY 2020/21		FY 2021/22		FY 2022/23		FY 2023/24		FY 2024/25	
<b>Revenues</b>																				
Water Revenues for Coverage	\$	49,977,794	\$	58,156,062	\$	65,851,566	\$	72,221,649	\$	76,747,065	\$	82,330,945	\$	87,542,313	\$	93,118,891	\$	95,452,208	\$	99,856,472
Less Recycled Water Revenues		(585,000)		(1,146,310)		(1,172,423)		(1,199,363)		(1,227,157)		(1,255,831)		(1,285,414)		(1,315,934)		(1,347,421)		(1,379,906)
Total Revenues	\$	49,392,794	\$	57,009,752	\$	64,679,143	\$	71,022,286	\$	75,519,908	\$	81,075,114	\$	86,256,899	\$	91,802,956	\$	94,104,786	\$	98,476,566
<b>Expenditures</b>																				
Ongoing Water Operating Expenses	\$	36,167,860	\$	41,871,998	\$	45,580,215	\$	51,101,062	\$	50,637,425	\$	50,650,403	\$	50,794,033	\$	52,817,747	\$	55,210,464	\$	57,413,989
Debt Service		14,868,435		14,875,436		14,888,522		17,170,053		21,579,698		24,961,132		28,315,108		30,879,184		31,638,625		32,637,315
Coverage		3,717,109		3,718,859		3,722,131		4,292,513		5,394,925		6,240,283		7,078,777		7,719,796		7,909,656		8,159,329
Total Expenditures	\$	54,753,404	\$	60,466,294	\$	64,190,868	\$	72,563,628	\$	77,612,048	\$	81,851,818	\$	86,187,918	\$	91,416,728	\$	94,758,745	\$	98,210,632
Bond Coverage Surplus (Deficit)	\$	(5,360,609)	\$	(3,456,542)	\$	488,275	\$	(1,541,342)	\$	(2,092,140)	\$	(776,704)	\$	68,982	\$	386,229	\$	(653,959)	\$	265,933
Coverage Factor		0.89 x		1.02 x		1.28 x		1.16 x		1.15 x		1.22 x		1.25 x		1.26 x		1.23 x		1.26 x

REVENUE REQUIREMENT																					
	FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		FY 2019/20		FY 2020/21		FY 2021/22		FY 2022/23		FY 2023/24		FY 2024/25		
Total Surplus (Deficit)	\$	(5,360,609)	\$	(3,456,542)	\$	488,275	\$	(1,541,342)	\$	(5,496,812)	\$	(776,704)	\$	68,982	\$	386,229	\$	(653,959)	\$	265,933	
Rate Increase Drive	Coverage		Coverage		Surplus		Coverage		Cash Flow		Coverage		Surplus		Surplus		Coverage		Surplus		
Month of Adoption	February		January		January		January		January		January		January		January		January		January		
Calculated Rate Increase (%)	31.99%		15.17%		0.00%		5.14%		16.95%		2.21%		0.00%		0.00%		1.55%		0.00%		
	Overriden		Overriden		Overriden		Overriden		Overriden		Overriden		Overriden		Overriden		Overriden		Overriden		
Rate Increases																					
Rate Increase (%)	15.00%		12.00%		8.00%		8.00%		8.00%		6.00%		6.00%		4.00%		4.00%		4.00%		
Cumulative Rate Increase (%)	15.00%		28.80%		39.10%		50.23%		62.25%		71.99%		82.31%		89.60%		97.18%		105.07%		
Typical Single Family Bill (11 units)	\$	76.00	\$	85.08	\$	91.86	\$	99.23	\$	107.17	\$	113.64	\$	120.42	\$	125.25	\$	130.31	\$	135.51	
Cash Flows																					
Revenues Before Rate Increase	\$	49,977,794	\$	58,156,062	\$	65,851,566	\$	72,221,649	\$	76,747,065	\$	82,330,945	\$	87,542,313	\$	93,118,891	\$	95,452,208	\$	99,856,472	
Revenues From Rate Increase																					
Revenues From Full Year of Rate Increase (Potable)	\$	6,031,951	\$	5,470,040	\$	4,258,032	\$	4,794,050	\$	5,187,510	\$	4,209,953	\$	4,501,025	\$	3,208,141	\$	3,365,218	\$	3,529,979	
Less: Rate Increase Delay (Potable)		(3,518,638)		(2,735,020)		(2,129,016)		(2,397,025)		(2,593,755)		(2,104,976)		(2,250,512)		(1,604,070)		(1,682,609)		(1,764,990)	
Resulting Revenues from Rate Increase	\$	2,513,313	\$	2,735,020	\$	2,129,016	\$	2,397,025	\$	2,593,755	\$	2,104,976	\$	2,250,512	\$	1,604,070	\$	1,682,609	\$	1,764,990	
Total Revenues (with Rate Increase)	\$	52,491,107	\$	60,891,082	\$	67,980,582	\$	74,618,674	\$	79,340,820	\$	84,435,921	\$	89,792,826	\$	94,722,961	\$	97,134,817	\$	101,621,461	
Less: Expenditures		(51,036,295)		(58,070,918)		(62,796,043)		(73,456,419)		(82,243,877)		(79,998,303)		(80,762,840)		(87,271,118)		(90,833,775)		(93,889,420)	
Cash Flow	\$	1,454,812	\$	2,820,164	\$	5,184,539	\$	1,162,255	\$	(2,903,057)	\$	4,437,618	\$	9,029,986	\$	7,451,843	\$	6,301,042	\$	7,732,041	
Coverage																					
Revenue Only Coverage Factor		1.06 x		1.20 x		1.43 x		1.30 x		1.27 x		1.30 x		1.33 x		1.31 x		1.28 x		1.31 x	
Coverage Factor with Operating Reserve		2.95 x		3.28 x		3.92 x		3.75 x		3.49 x		3.33 x		3.13 x		3.02 x		3.03 x		3.07 x	

## **APPENDIX C - RECYCLED WATER REVENUES**





## City of Oxnard Water Financial Model Recycled Water Usage and Revenues

Edit Log

2013

2015

2015

2017

2019

2021

2023

2024

[illegible]



2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
------	------	------	------	------	------	------	------	------	------	------	------	------

Recycled Water Usage and Revenue Projection											
	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
<b>Agricultural Usage - With Groundwater Credit Swap</b>											
Priority 1 RW Usage (AFY)		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Priority 2 RW Usage (AFY)		500	1,200	1,200	1,600	1,600	1,600	1,600	1,600	1,600	1,600
Priority 3 RW Usage (AFY)		0	1,200	1,200	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Priority 4 RW Usage (AFY)	Include:	Yes	0	1,370	960	5,650	4,040	2,430	820	820	820
Total Agricultural Usage With Groundwater Credit Swap			500	3,770	3,360	8,750	7,140	5,530	3,920	3,920	3,920
Total Recycled Water Usage			1,715	7,000	7,000	14,000	14,000	14,000	14,000	14,000	14,000
Calculated Usage Growth				308%	0%	100%	0%	0%	0%	0%	0%
Available AWPFCapacity (AFY)			1,785	0	0	0	0	0	0	0	0
<b>Recycled Water Revenues</b>											
<b>City Usage Revenues</b>											
Priority 1 RW Usage (AFY)		\$ 586,395	\$ 1,208,963	\$ 1,246,251	\$ 1,284,688	\$ 1,324,310	\$ 1,365,152	\$ 1,407,254	\$ 1,450,653	\$ 1,495,389	\$ 1,541,504
Golf Course - Priority 4 RW Usage (AFY) - With Swap		\$ 130,000	\$ 134,377	\$ 138,899	\$ 143,572	\$ 148,400	\$ 153,389	\$ 158,543	\$ 163,869	\$ 169,371	\$ 175,056
Golf Course - Priority 4 - RW Usage (AFY) - With Swap		\$ 130,000	\$ 134,377	\$ 138,899	\$ 143,572	\$ 148,400	\$ 153,389	\$ 158,543	\$ 163,869	\$ 169,371	\$ 175,056
In City Usage - Priority 4 - Without Swap		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total City Usage Revenues			846,395	1,477,716	1,524,049	1,571,832	1,621,110	1,671,929	1,724,340	1,778,390	1,834,131
<b>Agricultural Usage - Without Groundwater Credit Swap Revenues</b>											
Priority 1 RW Usage (AFY)		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Priority 2 RW Usage (AFY)		\$ -	\$ 552,557	\$ 569,625	\$ 587,219	\$ 605,357	\$ 624,054	\$ 643,328	\$ 663,197	\$ 683,680	\$ 704,794
Priority 3 RW Usage (AFY)		-	-	-	-	-	-	-	-	-	-
Priority 4 RW Usage (AFY)		-	-	-	-	-	-	-	-	-	-
Total Agricultural Usage Without Groundwater Credit Swap Revenues			\$ -	\$ 552,557	\$ 569,625	\$ 587,219	\$ 605,357	\$ 624,054	\$ 643,328	\$ 663,197	\$ 704,794
<b>Agricultural Usage - With Groundwater Credit Swap Revenues</b>											
Priority 1 RW Usage (AFY)		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Priority 2 RW Usage (AFY)		\$ 325,000	\$ 804,830	\$ 830,448	\$ 1,142,506	\$ 1,178,865	\$ 1,216,377	\$ 1,255,079	\$ 1,295,009	\$ 1,336,204	\$ 1,378,706
Priority 3 RW Usage (AFY)		-	619,430	639,486	825,235	851,946	879,517	907,975	937,349	967,668	998,963
Priority 4 RW Usage (AFY)		-	460,240	333,358	2,027,953	1,498,840	931,836	325,013	335,931	347,210	358,865
Total Agricultural Usage With Groundwater Credit Swap Revenues			\$ 325,000	\$ 1,884,501	\$ 1,803,293	\$ 3,995,694	\$ 3,529,651	\$ 3,027,730	\$ 2,488,067	\$ 2,568,288	\$ 2,651,083
Total Recycled Water Usage Revenues			\$ 1,171,395	\$ 3,914,774	\$ 3,896,966	\$ 6,154,745	\$ 5,756,117	\$ 5,323,713	\$ 4,855,735	\$ 5,009,875	\$ 5,168,893



## **APPENDIX D - WATER SOURCE OF SUPPLY**





City of Oxnard  
Water Financial Model  
Water Supply and Costs

201620172018201920202021202220232024202520262027202820292030

FY 2015/16FY 2016/17FY 2017/18FY 2018/19FY 2019/20FY 2020/21FY 2021/22FY 2022/23FY 2023/24FY 2024/25FY 2025/26FY 2026/27FY 2027/28FY 2028/29FY 2029/30

Usage Summary

In-City Recycled Water Sales	415	830	830	830	830	830	830	830	830	830	830	830	830	830	830
City Groundwater	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281
ASR (AWPF)	-	1,200	1,610	3,220	4,830	6,440	8,050	8,050	8,050	8,050	8,050	8,050	8,050	8,050	14,510
United	6,803	6,803	6,803	6,803	6,803	6,803	6,803	6,803	6,803	6,803	6,803	6,803	6,803	6,803	3,877
Callegus Tier 1	8,433	6,382	7,043	6,557	4,947	3,337	1,925	2,124	2,325	2,528	2,733	2,930	3,130	3,331	-
Callegus Tier 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total In-City Usage	25,932	25,496	26,567	27,691	27,691	27,691	27,889	28,088	28,289	28,492	28,697	28,894	29,094	29,295	29,498

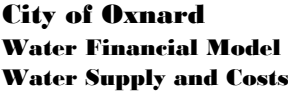
Total Without PHWA Transfer	20,997	20,561	21,632	22,756	22,756	22,756	22,954	23,153	23,354	23,557	23,762	23,959	24,159	24,360	24,563
-----------------------------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Supply Allocation

Winter Usage	FY 2013/14	Annualized Winter Usage													
	42.211%	17,727	17,358	18,262	19,212	19,212	19,212	19,379	19,547	19,717	19,888	20,060	20,227	20,396	20,565
Base Supply		17,727	17,358	18,262	19,212	19,212	19,212	19,379	19,547	19,717	19,888	20,060	20,227	20,396	20,565
Peak Supply		3,271	3,203	3,370	3,545	3,545	3,545	3,576	3,607	3,638	3,670	3,701	3,732	3,763	3,795
Base	Local Supplies	84.42%	84.42%	84.42%	84.42%	84.42%	84.42%	84.42%	84.42%	84.42%	84.42%	84.42%	84.42%	84.42%	84.42%
Peak	Imported Supplies	15.58%	15.58%	15.58%	15.58%	15.58%	15.58%	15.58%	15.58%	15.58%	15.58%	15.58%	15.58%	15.58%	15.58%

Cost Summary

In-City Recycled Water Sales	Costs included in O&M, No Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
City Groundwater		61,686	64,770	64,770	68,009	68,009	71,409	71,409	74,980	74,980	78,729	78,729	82,665	82,665	86,798
ASR (AWPF)	Costs included in O&M, No Supply Cost to Outside Entities														
United		3,986,724	4,186,060	3,540,281	3,717,180	3,900,788	4,095,828	4,298,233	4,513,120	4,736,269	4,973,055	5,219,073	5,480,027	5,751,293	6,038,858
Callegaus		11,803,621	9,726,255	11,135,689	11,003,623	9,121,762	7,024,206	5,023,345	5,623,125	6,273,390	6,977,866	7,740,543	8,548,076	9,420,559	10,362,675
Total Cost to Outside Entities		\$ 15,852,031	\$ 13,977,086	\$ 14,740,740	\$ 14,788,812	\$ 13,090,559	\$ 11,191,443	\$ 9,392,988	\$ 10,211,225	\$ 11,084,638	\$ 12,029,650	\$ 13,038,344	\$ 14,110,768	\$ 15,254,518	\$ 16,488,331



030

FY 2029/30

## City Groundwater

[illegible]



# City of Oxnard

## Water Financial Model

### Water Supply and Costs

FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------

Water Usage																
Projected Oxnard Water Usage	20,351	20,351	20,351	21,368	22,437	22,437	22,437	22,625	22,814	23,005	23,198	23,392	23,580	23,769	23,960	24,153
Less: In-City Recycled Water Sales		(415)	(830)	(830)	(830)	(830)	(830)	(830)	(830)	(830)	(830)	(830)	(830)	(830)	(830)	(830)
Oxnard Water Usage	<b>20,351</b>	<b>19,936</b>	<b>19,521</b>	<b>20,538</b>	<b>21,607</b>	<b>21,607</b>	<b>21,607</b>	<b>21,795</b>	<b>21,984</b>	<b>22,175</b>	<b>22,368</b>	<b>22,562</b>	<b>22,750</b>	<b>22,939</b>	<b>23,130</b>	<b>23,323</b>
Potable Water Change		-2.04%	-2.08%	5.21%	5.20%	0.00%	0.00%	0.87%	0.87%	0.87%	0.87%	0.87%	0.83%	0.83%	0.83%	0.83%
Port Hueneme Water Agency Transfer		4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700
Oxnard and PHWA Combined		24,636	24,221	25,238	26,307	26,307	26,307	26,495	26,684	26,875	27,068	27,262	27,450	27,639	27,830	28,023
System Loss Factor		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Total Supply Required		25,932	25,496	26,567	27,691	27,691	27,691	27,889	28,088	28,289	28,492	28,697	28,894	29,094	29,295	29,498
System Loss		1,297	1,275	1,328	1,385	1,385	1,385	1,394	1,404	1,414	1,425	1,435	1,445	1,455	1,465	1,475

[illegible]

## Supply Costs

Potable Source Priority 1																
City Groundwater		AF	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281
Annual Rate Increase			0%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
GMA Charge		per AF	\$6.00	\$6.30	\$6.30	\$6.62	\$6.62	\$6.95	\$6.95	\$7.29	\$7.29	\$7.66	\$7.66	\$8.04	\$8.04	\$8.44
Total GMA Charge for City Pumping			\$ 61,686	\$ 64,770	\$ 64,770	\$ 68,009	\$ 68,009	\$ 71,409	\$ 71,409	\$ 74,980	\$ 74,980	\$ 78,729	\$ 78,729	\$ 82,665	\$ 82,665	\$ 86,798

Potable Source Priority 2																
<b>ASR (AWPF)</b>	AF	-	1,200	1,610	3,220	4,830	6,440	8,050	8,050	8,050	8,050	8,050	8,050	8,050	8,050	14,510
Costs included in O&M of AWPF and ASR																



City of Oxnard  
Water Financial Model  
Water Supply and Costs

201620172018201920202021202220232024202520262027202820292030

FY 2015/16FY 2016/17FY 2017/18FY 2018/19FY 2019/20FY 2020/21FY 2021/22FY 2022/23FY 2023/24FY 2024/25FY 2025/26FY 2026/27FY 2027/28FY 2028/29FY 2029/30

Potable Source Priority 3																
United	Total AF	6,803	6,803	6,803	6,803	6,803	6,803	6,803	6,803	6,803	6,803	6,803	6,803	6,803	6,803	3,877
	Oceanview Us:	903	903	948	995	995	995	1,003	1,012	1,020	1,029	1,037	1,037	1,037	1,037	1,037
City Usage		0.87	0.87	0.86	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.73
Oceanview AG Usage		13%	13%	14%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	27%
City Usage																
Oceanview Usage																
Subject to Variable Rate	Below	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	3,876.5
Subject to Marginal Rate	Above	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	-
Subject to Unrecovered Variable Rate		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
City of Oxnard Usage																
Subject to Variable Rate		5,822.9	5,822.9	5,777.8	5,730.4	5,730.4	5,730.4	5,722.1	5,713.7	5,705.2	5,696.7	5,688.1	5,688.1	5,688.1	5,688.1	2,839.1
Subject to Marginal Rate		77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	-
Ocean View AG Usage																
Subject to Variable Rate		902.6	902.6	947.7	995.1	995.1	995.1	1,003.4	1,011.8	1,020.3	1,028.8	1,037.4	1,037.4	1,037.4	1,037.4	1,037.4
Annual Rate Increase																
M&I Rates																
Variable Rate	per AF	\$191.74	\$303.66	\$318.84	\$334.79	\$351.52	\$369.10	\$387.56	\$406.93	\$427.28	\$448.64	\$471.08	\$494.63	\$519.36	\$545.33	\$601.23
Marginal Rate	per AF	\$133.01	\$163.38	\$171.55	\$180.13	\$189.13	\$198.59	\$208.52	\$218.94	\$229.89	\$241.39	\$253.46	\$266.13	\$279.44	\$293.41	\$323.48
Unrecovered Variable Rate		\$191.74	\$311.78	\$327.37	\$343.74	\$360.92	\$378.97	\$397.92	\$417.82	\$438.71	\$460.64	\$483.67	\$507.86	\$533.25	\$559.91	\$617.30
Freeman In Lieu of Replenishment		\$54.00	\$68.70	\$72.14	\$75.74	\$79.53	\$83.51	\$87.68	\$92.06	\$96.67	\$101.50	\$106.58	\$111.91	\$117.50	\$123.38	\$136.02
District Wide In Lieu of Replenishment		\$119.25	\$131.10	\$137.66												
Ag Rates																
Freeman In Lieu of Replenishment	per AF	\$18.00	\$22.90	\$24.05	\$25.25	\$26.51	\$27.84	\$29.23	\$30.69	\$32.22	\$33.83	\$35.53	\$37.30	\$39.17	\$41.13	\$45.34
District Wide In Lieu of Replenishment	per AF	\$39.75	\$43.70	\$45.89	\$48.18	\$50.59	\$53.12	\$55.77	\$58.56	\$61.49	\$64.56	\$67.79	\$71.18	\$74.74	\$78.48	\$86.52
Fixed Charges																
Peak Capacity Units	CFS	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
75% Sub-Allocation	AF	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5	6,725.5
Fixed Charge Per Unit of Peak Capcacity		\$13,924.00	\$14,874.00	\$15,617.70	\$16,398.59	\$17,218.51	\$18,079.44	\$18,983.41	\$19,932.58	\$20,929.21	\$21,975.67	\$23,074.46	\$24,228.18	\$25,439.59	\$26,711.57	\$29,449.50
Fixed Well Replacement Charge per AF Allocated		\$14.08	\$38.15	\$40.06	\$42.06	\$44.16	\$46.37	\$48.69	\$51.12	\$53.68	\$56.36	\$59.18	\$62.14	\$65.25	\$68.51	\$75.53
Fiscal Year Charges																
Variable Rate Charges	Total Use	\$ 2,065,799	\$ 2,169,089	\$ 2,277,543	\$ 2,391,421	\$ 2,510,992	\$ 2,636,541	\$ 2,768,368	\$ 2,906,787	\$ 3,052,126	\$ 3,204,732	\$ 3,364,969	\$ 3,533,217	\$ 3,709,878	\$ 3,895,372	\$ 2,330,668
Marginal Rate Charges	Above Allocation	12,662	13,295	13,960	14,658	15,391	16,160	16,968	17,817	18,707	19,643	20,625	21,656	22,739	23,876	-
Unrecovered Variable Rate Charges	Below Allocation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GMA Charge	Total Use	40,818	42,859	42,859	45,002	45,002	47,252	47,252	49,615	49,615	52,095	52,095	54,700	54,700	57,435	32,728
Freeman Diversion Charge		426,028	447,330	467,418	488,276	512,690	538,324	564,729	592,425	621,473	651,940	683,894	718,089	753,993	791,693	433,215
District Wide In Lieu of Replenishment		812,989	853,638	45,659	50,339	52,856	55,499	58,762	62,217	65,874	69,747	73,847	77,540	81,417	85,488	89,762
Assigned Capacity Annual Cost		\$ 371,850	\$ 390,443	\$ 409,965	\$ 430,463	\$ 451,986	\$ 474,585	\$ 498,315	\$ 523,230	\$ 549,392	\$ 576,861	\$ 605,704	\$ 635,990	\$ 667,789	\$ 701,179	\$ 736,238
Well Replacement Annual Contribution		\$ 256,578	\$ 269,407	\$ 282,877	\$ 297,021	\$ 311,872	\$ 327,466	\$ 343,839	\$ 361,031	\$ 379,082	\$ 398,036	\$ 417,938	\$ 438,835	\$ 460,777	\$ 483,816	\$ 508,007
Oxnard UWCD Charges		\$ 3,986,724	\$ 4,186,060	\$ 3,540,281	\$ 3,717,180	\$ 3,900,788	\$ 4,095,828	\$ 4,298,233	\$ 4,513,120	\$ 4,736,269	\$ 4,973,055	\$ 5,219,073	\$ 5,480,027	\$ 5,751,293	\$ 6,038,858	\$ 4,130,617



City of Oxnard  
Water Financial Model  
Water Supply and Costs

201620172018201920202021202220232024202520262027202820292030

FY 2015/16FY 2016/17FY 2017/18FY 2018/19FY 2019/20FY 2020/21FY 2021/22FY 2022/23FY 2023/24FY 2024/25FY 2025/26FY 2026/27FY 2027/28FY 2028/29FY 2029/30

Oceanview Variable Rate

OH Agreement Variable Rate		\$303.66	\$318.84	\$334.79	\$351.52	\$369.10	\$387.56	\$406.93	\$427.28	\$448.64	\$471.08	\$494.63	\$519.36	\$545.33	\$572.60	\$601.23
Freeman Diversion Charge		\$22.90	\$24.05	\$25.25	\$26.51	\$27.84	\$29.23	\$30.69	\$32.22	\$33.83	\$35.53	\$37.30	\$39.17	\$41.13	\$43.18	\$45.34
District Wide In Lieu of Replenishment		\$43.70	\$45.89	\$48.18	\$50.59	\$53.12	\$55.77	\$58.56	\$61.49	\$64.56	\$67.79	\$71.18	\$74.74	\$78.48	\$82.40	\$86.52
Fixed Well Replacement Charge		\$38.15	\$40.06	\$42.06	\$44.16	\$46.37	\$48.69	\$51.12	\$53.68	\$56.36	\$59.18	\$62.14	\$65.25	\$68.51	\$71.94	\$75.53
GMA Charge		\$6.00	\$6.30	\$6.30	\$6.62	\$6.62	\$6.95	\$6.95	\$7.29	\$7.29	\$7.66	\$7.66	\$8.04	\$8.04	\$8.44	\$8.44
Pro-Rata portion of Peak Capacity Charge		\$59.16	\$62.12	\$65.22	\$68.48	\$71.91	\$75.50	\$79.28	\$83.24	\$87.41	\$91.78	\$96.37	\$101.18	\$106.24	\$111.55	\$203.22
Administrative/Overhead Charge	10%	\$47.36	\$49.72	\$52.18	\$54.79	\$57.49	\$60.37	\$63.35	\$66.52	\$69.81	\$73.30	\$76.93	\$80.77	\$84.77	\$89.01	\$102.03
Total Oceanview Volumetric Rate		\$520.93	\$546.97	\$573.98	\$602.67	\$632.44	\$664.07	\$696.89	\$731.73	\$767.92	\$806.31	\$846.21	\$888.52	\$932.50	\$979.13	\$1,122.31
Projected Oceanview Revenues		\$ 470,172	\$ 493,681	\$ 543,955	\$ 599,710	\$ 629,334	\$ 660,801	\$ 699,265	\$ 740,375	\$ 783,492	\$ 829,553	\$ 877,885	\$ 921,779	\$ 967,409	\$ 1,015,780	\$ 1,164,324

Potable Source Priority 4

Calleguas

Callegus Tier 1	AF	8,433	6,382	7,043	6,557	4,947	3,337	1,925	2,124	2,325	2,528	2,733	2,930	3,130	3,331	-
Callegus Tier 2	AF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CY	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024	CY 2025	CY 2026	CY 2027	CY 2028	CY 2029	CY 2030
Annual MWD Rate Increase	0.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Annual Calleguas Rate Increase	0.0%	4.4%	5.8%	5.7%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
		Proposed														

MWD RATES

MWD Tier 1	\$923	\$969	\$1,018	\$1,068	\$1,122	\$1,178	\$1,237	\$1,299	\$1,364	\$1,432	\$1,503	\$1,579	\$1,658	\$1,740	\$1,827	\$1,919
MWD Tier 2	\$1,055	\$1,108	\$1,163	\$1,221	\$1,282	\$1,346	\$1,414	\$1,484	\$1,559	\$1,637	\$1,718	\$1,804	\$1,895	\$1,989	\$2,089	\$2,193
RTS Charge	\$ 910,434	\$ 955,956	\$ 1,003,753	\$ 1,053,941	\$ 1,106,638	\$ 1,161,970	\$ 1,220,069	\$ 1,281,072	\$ 1,345,126	\$ 1,412,382	\$ 1,483,001	\$ 1,557,151	\$ 1,635,009	\$ 1,716,759	\$ 1,802,597	\$ 1,892,727

CALLEGUAS RATES

	CY	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024	CY 2025	CY 2026	CY 2027	CY 2028	CY 2029	CY 2030
O&M Surcharge (\$/af)	\$60	\$63	\$66	\$70	\$74	\$77	\$81	\$85	\$89	\$94	\$99	\$103	\$109	\$114	\$120	\$126
Capital Construction Surcharge (\$/af)	\$227	\$237	\$251	\$265	\$278	\$292	\$307	\$322	\$338	\$355	\$373	\$392	\$411	\$432	\$453	\$476
Capacity Reservation Charge per cfs	\$21,840	\$22,801	\$24,123	\$25,498	\$26,773	\$28,112	\$29,518	\$30,994	\$32,543	\$34,170	\$35,879	\$37,673	\$39,556	\$41,534	\$43,611	\$45,792
Oxnard cfs	18.73	18.73	18.73	18.73	18.73	18.73	18.73	18.73	18.73	18.73	18.73	18.73	18.73	18.73	18.73	18.73
Oxnard Capacity Reservation Charge	\$ 409,049	\$ 427,047	\$ 451,815	\$ 477,569	\$ 501,447	\$ 526,520	\$ 552,846	\$ 580,488	\$ 609,512	\$ 639,988	\$ 671,988	\$ 705,587	\$ 740,866	\$ 777,910	\$ 816,805	\$ 857,645

COMBINED RATES

Combined Tier 1	\$1,210	\$1,269	\$1,335	\$1,404	\$1,474	\$1,547	\$1,625	\$1,706	\$1,791	\$1,881	\$1,975	\$2,074	\$2,177	\$2,286	\$2,401	\$2,521
Combined Tier 2	\$1,342	\$1,407	\$1,480	\$1,556	\$1,634	\$1,716	\$1,802	\$1,892	\$1,986	\$2,086	\$2,190	\$2,299	\$2,414	\$2,535	\$2,662	\$2,795
RTS Charge	\$ 910,434	\$ 955,956	\$ 1,003,753	\$ 1,053,941	\$ 1,106,638	\$ 1,161,970	\$ 1,220,069	\$ 1,281,072	\$ 1,345,126	\$ 1,412,382	\$ 1,483,001	\$ 1,557,151	\$ 1,635,009	\$ 1,716,759	\$ 1,802,597	\$ 1,892,727
CMWD Capacity Reservation	\$ 409,049	\$ 427,047	\$ 451,815	\$ 477,569	\$ 501,447	\$ 526,520	\$ 552,846	\$ 580,488	\$ 609,512	\$ 639,988	\$ 671,988	\$ 705,587	\$ 740,866	\$ 777,910	\$ 816,805	\$ 857,645

Fiscal Year Charges

	0	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
Tier 1 Charges		\$ 10,452,379	\$ 8,306,969	\$ 9,642,149	\$ 9,433,825	\$ 7,473,474	\$ 5,293,503	\$ 3,206,108	\$ 3,715,026	\$ 4,269,885	\$ 4,874,187	\$ 5,531,679	\$ 6,228,770	\$ 6,985,287	\$ 7,805,640	\$ -
Tier 2 Charges		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RTS Charge		\$ 933,195	\$ 979,855	\$ 1,028,847	\$ 1,080,290	\$ 1,134,304	\$ 1,191,019	\$ 1,250,570	\$ 1,313,099	\$ 1,378,754	\$ 1,447,692	\$ 1,520,076	\$ 1,596,080	\$ 1,675,884	\$ 1,759,678	\$ 1,847,662
CMWD Capacity Reservation		\$ 418,048	\$ 439,431	\$ 464,692	\$ 489,508	\$ 513,984	\$ 539,683	\$ 566,667	\$ 595,000	\$ 624,750	\$ 655,988	\$ 688,787	\$ 723,227	\$ 759,388	\$ 797,357	\$ 837,225
Total Calleguas Charges		\$ 11,803,621	\$ 9,726,255	\$ 11,135,689	\$ 11,003,623	\$ 9,121,762	\$ 7,024,206	\$ 5,023,345	\$ 5,623,125	\$ 6,273,390	\$ 6,977,866	\$ 7,740,543	\$ 8,548,076	\$ 9,420,559	\$ 10,362,675	\$ 2,684,887

## **APPENDIX E - WATER FUNCTIONAL ALLOCATION**





City of Oxnard - Water Rate Model

Carollo Engineers

User Rate Calculations - Functional Allocation of Revenue Requirements

Rate Design Year 

FY 2015/16

The functional allocation of required revenues is used to calculate the unit costs that are subsequently used to develop user rates. These tables summarize the functional allocation.

Functional Allocation	Test Year	Five Year Sum	Base	Peak Day	Peak Hour	Capacity	Customer	Fire Protection	As All Other	Total
Allocations			Base	Peak Day	Peak Hour	Capacity	Customer	Fire Protection	As All Other	Total
Customer Only Capacity Only Customer/Capacity Base Only Peak Only Max Only Debt Service Conservation	50% to Capacity, Remaining as Max Hour						100%		0%	100.0%
						100%			0%	100.0%
						100%				
			100%						0%	100.0%
				100%					0%	100.0%
							100%		0%	100.0%
			27%	13%	10%	47%	0%	3%	0%	100.0%
			50%	50%					0%	100.0%
				50%		50%			0%	100.0%
			0%	0%	0%	0%	0%	0%	0%	100.0%
			90%	10%						
			79%	21%						
			67%	33%	0%					
			53%	27%	20%					
			84%	16%					0%	100.0%
			0%	0%	0%	0%	0%	0%	100%	100.0%
Oceanview										
Annualized Summer/Annual Average										
Annualized Summer/Annualized Winter										
Max Day										
Max Hour										
Water Supply										
As All Others										

O&M Allocation	Cost	Allocation	Base	Peak Day	Peak Hour	Capacity	Customer	Fire Protection	As All Other	Total
PRODUCTION										
601-6001-841.80- DIRECT LABOR-REGULAR	\$ 2,643,612	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-841.80- PARS	\$ 331,603	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-841.80- EMPLOYEE BENEFITS	\$ 451,681	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-841.80- WORKERS COMP INSURANCE	\$ 189,138	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-841.80- PERS	\$ 574,270	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-841.80- WORKERS COMP/SAFETY	\$ 17,501	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
VACANCY SAVINGS	\$ -	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-842.82- SVCS-OTHER PROF/CONTRACT	\$ 5,452,224	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-842.82- PERSONNEL/RECRUITMENT	\$ 101,560	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-843.81- SUPPLIES-SHOP AND FIELD	\$ 853,417	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-843.81- SUPPLIES-OTHER	\$ 3,071,010	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-843.81- REPAIR PARTS	\$ 901,319	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-843.81- WATER ACQUISTITION-UMCD	\$ 19,331,033	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-843.81- WATER ACQUISITION-MWD	\$ 52,790,951	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-843.81- WATER ACQUISITION-CITY	\$ 327,244	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-843.82- SVCS-OTHER PROF/CONTRACT	\$ -	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-843.82- FUEL EXPENSE-DIESEL	\$ 14,082	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-843.82- WASTEWATER-DESALTER	\$ 4,506,380	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-843.83- EQUIPMENT RENTAL	\$ -	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-844.82- UTILITY EXPENSE-ELECTRIC	\$ 4,112,072	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-846.84- PHOTOCOPY CHARGES	\$ 194	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-846.84- SERVICES FROM OTHER PROG	\$ 942,854	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-846.85- BOND ISSUANCE COSTS	\$ -	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-846.85- DATA PROCESSING CHGS-OPER	\$ 24,789	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6001-846.85- INDIRECT PRORATED CST CHG	\$ 295,760	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%



City of Oxnard - Water Rate Model

Carollo Engineers

User Rate Calculations - Functional Allocation of Revenue Requirements

Rate Design Year	FY 2015/16
------------------	------------

The functional allocation of required revenues is used to calculate the unit costs that are subsequently used to develop user rates. These tables summarize the functional allocation.

Functional Allocation		Test Year	Five Year Sum	Base	Peak Day	Peak Hour	Capacity	Customer	Fire Protection	As All Other	Total
601-6010-844.82- UTIL EXP REFUSE & DISPOSE	\$	45,064	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-844.84- TELEPHONE CHGS-BASIC SVC	\$	28,165	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-844.84- TELEPHONE CHGS-CELL/PAGER	\$	84,495	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-844.85- TELEPHONE CHGS/HIPC	\$	253,484	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.81- POSTAGE	\$	32,326	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.81- SUBSCRIPTIONS/PUBLICATION	\$	26,939	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.81- MINOR EQUIPMENT-OFFICE	\$	26,939	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.81- MINOR EQUIPMENT-OTHER	\$	-	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.82- SERVICES-ADV & PROMOTION	\$	10,775	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.83- RENTALS-VEHICLES/EQUIP	\$	425	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.83- TRAINING/WORKSHOP/MEETING	\$	80,816	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.83- PUBLIC INFORMATION	\$	-	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.83- MEMBERSHIPS-OTHER	\$	161,632	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.83- TAXES AND FILING FEES	\$	126,687	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.83- BAD DEBT EXPENSE	\$	538,774	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.84- PHOTOCOPY CHARGES	\$	53,877	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.84- SERVICES FROM OTHER PROG	\$	80,816	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.84- LEGAL ADVOCACY-FEDERAL	\$	96,979	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.85- CUSTOMER BILLING CHARGES	\$	2,693,868	Customer Only	0%	0%	0%	0%	100%	0%	0%	100.0%
601-6010-846.85- DATA PROCESSING CHGS-OPER	\$	869,495	Customer Only	0%	0%	0%	0%	100%	0%	0%	100.0%
601-6010-846.85- DATA PROCESSING CHGS-WPC	\$	4,574	Customer Only	0%	0%	0%	0%	100%	0%	0%	100.0%
601-6010-846.85- LIABILITY INSURANCE CHGS	\$	164,924	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.85- FIRE & PROPERTY INSURANCE	\$	80,277	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-846.85- INDIRECT PRORATED CST CHG	\$	9,771,932	Customer Only	0%	0%	0%	0%	100%	0%	0%	100.0%
601-6010-846.85- INDIRECT PRORATED CST CHG	\$	872,813	Customer Only	0%	0%	0%	0%	100%	0%	0%	100.0%
601-6010-846.87- INFRASTRUCTURE USE FEE	\$	14,628,977	Capacity Only	0%	0%	0%	100%	0%	0%	0%	100.0%
601-6010-847.84- EQUIP MAINTENANCE CHGS	\$	1,777,953	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-847.85- FACILITY CHG-MAINTENANCE	\$	450,280	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
601-6010-891.86- MACHINERY & EQUIPMENT NEW	\$	269,387	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
CONSERVATION											
601-6011-841.80- DIRECT LABOR-REGULAR	\$	304,620	Conservation	50%	50%	0%	0%	0%	0%	0%	100.0%
601-6011-841.80- PARS	\$	42,512	Conservation	50%	50%	0%	0%	0%	0%	0%	100.0%
601-6011-841.80- EMPLOYEE BENEFITS	\$	60,605	Conservation	50%	50%	0%	0%	0%	0%	0%	100.0%
601-6011-841.80- WORKERS COMP INSURANCE	\$	6,774	Conservation	50%	50%	0%	0%	0%	0%	0%	100.0%
601-6011-841.80- PERS	\$	65,242	Conservation	50%	50%	0%	0%	0%	0%	0%	100.0%
601-6011-841.80- WORKERS COMP/SAFETY	\$	2,013	Conservation	50%	50%	0%	0%	0%	0%	0%	100.0%
VACANCY SAVINGS	\$	-	Conservation	50%	50%	0%	0%	0%	0%	0%	100.0%
601-6011-843.81- SUPPLIES-SHOP AND FIELD	\$	43,102	Conservation	50%	50%	0%	0%	0%	0%	0%	100.0%
601-6011-842.82- SVCS-OTHER PROF/CONTRACT	\$	53,877	Conservation	50%	50%	0%	0%	0%	0%	0%	100.0%
601-6011-843.82- SERVICES-PRINTING/BINDING	\$	117,727	Conservation	50%	50%	0%	0%	0%	0%	0%	100.0%
601-6011-846.83- TRAINING/WORKSHOP/MEETING	\$	-	Conservation	50%	50%	0%	0%	0%	0%	0%	100.0%
601-6011-846.83- PUBLIC INFORMATION	\$	420,243	Conservation	50%	50%	0%	0%	0%	0%	0%	100.0%
601-6011-846.84- SERVICES FROM OTHER PROG	\$	215,509	Conservation	50%	50%	0%	0%	0%	0%	0%	100.0%
601-6011-846.85- DATA PROCESSING CHGS-WPC	\$	4,720	Conservation	50%	50%	0%	0%	0%	0%	0%	100.0%
RECYCLE											
601-6012-841.80- DIRECT LABOR-REGULAR	\$	598,218	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6012-841.80- PARS	\$	42,410	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6012-841.80- EMPLOYEE BENEFITS	\$	143,157	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6012-841.80- WORKERS COMP INSURANCE	\$	38,644	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6012-841.80- PERS	\$	137,034	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6012-841.80- WORKERS COMP/SAFETY	\$	3,960	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
VACANCY SAVINGS	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6012-842.82- SERVICES-LEGAL COUNSEL	\$	500,000	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6012-842.82- SVCS-OTHER PROF/CONTRACT	\$	1,616,321	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6012-842.82- OFFICE SUPPLIES	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6012-843.81- TEST/MONITOR COMPLIANCE	\$	404,080	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6012-843.81- SUPPLIES-SHOP AND FIELD	\$	2,639,991	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6012-843.81- SAFETY SUPPLIES	\$	16,163	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
601-6012-843.81- REPAIR PARTS	\$	538,774	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%



City of Oxnard - Water Rate Model

Carollo Engineers

User Rate Calculations - Functional Allocation of Revenue Requirements

Rate Design Year 

FY 2015/16

52%15%4%23%5%1%

The functional allocation of required revenues is used to calculate the unit costs that are subsequently used to develop user rates. These tables summarize the functional allocation.

Functional Allocation		Test Year	Five Year Sum	Base	Peak Day	Peak Hour	Capacity	Customer	Fire Protection	As All Other	Total
CIP Incremental											
AWPF Expansion	\$	14,958,083	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
UV/AOP Brine Treatment	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Ag RW Storage	\$	22,076	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Connect Initial ASR Well at Campus Park to RWBS I	\$	84,393	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Hueneme Phase 2 to Ag Users	\$	858,919	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
0	\$	601,187	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
RW Loop to BS-3	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
ASR	\$	1,515,331	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
ASR Booster Pumping	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Construct 1 duty + 1 standby ASR Wells @ Campus	\$	8,387	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Construct 1 duty + 1 standby ASR Wells @ Campus	\$	28,190	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Construct 1 duty + 1 standby ASR Wells @ BS 1/6 (;	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Rehab Well 18 to IPR	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Expand desalter at BS 1/6 to 3.75 mgd (11.25 mgd €	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Blend Station Tie-In (@ BS 1/6)	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Disinfection System Upgrade (@ BS 1/6)	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Construct 3 new potable wells (BS 1/6) & booster pu	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Construct booster pump station (BS 1/6)	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Construct 2 new potable wells (BS 1/6) and 1 new st	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Construct new concentrate line from OWTP to BS 1/	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Construct concentrate line extension from BS 1/6 to	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
MBR Process	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
ADAVANCED DISINFECTION	\$	-	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Cathodic Protection	\$	42,563	Capacity Only	0%	0%	0%	100%	0%	0%	0%	100.0%
CMMS	\$	630,568	Capacity Only	0%	0%	0%	100%	0%	0%	0%	100.0%
	\$	-	Max Hour	53%	27%	20%	0%	0%	0%	0%	100.0%
Vehicle Replacement	\$	525,633	As All Others	0%	0%	0%	0%	0%	0%	100%	100.0%
River Park Pits	\$	705,000	As All Others	0%	0%	0%	0%	0%	0%	100%	100.0%
Program 3	\$	-	As All Others	0%	0%	0%	0%	0%	0%	100%	100.0%
Program 4	\$	-	As All Others	0%	0%	0%	0%	0%	0%	100%	100.0%
Program 5	\$	-	As All Others	0%	0%	0%	0%	0%	0%	100%	100.0%
Filling of Vacant Positions & New Positions	\$	17,465,547	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
Additional CIP Staff	\$	9,678,397	Max Day	67%	33%	0%	0%	0%	0%	0%	100.0%
Subtotal O&M Allocation	\$	308,740,706		\$ 162,849,703	\$ 47,283,005	\$ 10,418,372	\$ 69,178,635	\$ 15,042,243	\$ 2,738,114	\$ 1,230,633	
Reallocation of As All Other		-		651,713	189,223	41,694	276,848	60,198	10,958	(1,230,633)	
Total O&M Allocation	\$	308,740,706		\$ 163,501,416	\$ 47,472,228	\$ 10,460,066	\$ 69,455,483	\$ 15,102,441	\$ 2,749,072	\$ -	
O&M Allocation Percentages											
				53%	15.4%	3.4%	22.5%	4.9%	1%	0%	

O&M Allocation Check	
Total Allocated O&M	\$ 308,740,706
Total Applicable O&M Costs	308,740,706
Difference	\$ -

City of Oxnard - Water Rate Model

Carollo Engineers

User Rate Calculations - Functional Allocation of Revenue Requirements

Rate Design Year 

FY 2015/16

The functional allocation of required revenues is used to calculate the unit costs that are subsequently used to develop user rates. These tables summarize the functional allocation.

Functional Allocation	Test Year	Five Year Sum	Base	Peak Day	Peak Hour	Capacity	Customer	Fire Protection	As All Other	Total
Revenue Requirement Allocation	Cost	Allocation	Base	Peak Day	Peak Hour	Capacity	Customer	Fire Protection	As All Other	Total
Allocated O&M	\$ 308,740,706	[Calculated]	53%	15%	3%	22%	5%	1%	0%	100.0%
Debt Service	Included above	Debt Service	27%	13%	10%	47%	0%	3%	0%	100.0%
Rate Funded Capital	4,152,516	Debt Service	27%	13%	10%	47%	0%	3%	0%	100.0%
Equipment Replacement Funding	1,357,379	As All Others	0%	0%	0%	0%	0%	0%	100%	100.0%
Minimum Operating Fund Balance	13,352,951	As All Others	0%	0%	0%	0%	0%	0%	100%	100.0%
		As All Others	0%	0%	0%	0%	0%	0%	100%	100.0%
Net Cash Flows (after rate increase)	7,718,713	As All Others	0%	0%	0%	0%	0%	0%	100%	100.0%
Less Offsetting Revenues										
Recycled Water Revenues (Potable Offetts)	(5,650,606)	As All Others	0%	0%	0%	0%	0%	0%	100%	100.0%
Recycled Water Revenues (New Usage)	(5,330,253)	As All Others	0%	0%	0%	0%	0%	0%	100%	100.0%
P&G Water Supply Agreement	(12,463,397)	As All Others	0%	0%	0%	0%	0%	0%	100%	100.0%
Oceanview Volumetric Revenues	(2,736,853)	Water Supply	84%	16%	0%	0%	0%	0%	0%	100.0%
Interest on Investments	(289,850)	As All Others	0%	0%	0%	0%	0%	0%	100%	100.0%
	-									
Other	(32,691,599)	As All Others	0%	0%	0%	0%	0%	0%	100%	100.0%
Subtotal Revenue Requirement Allocation	\$ (32,580,998)		\$ 162,297,531	\$ 47,600,266	\$ 10,875,317	\$ 71,395,380	\$ 15,102,441	\$ 2,885,433	\$ (33,996,661)	
Reallocation of Less Offsetting Revenues As Al	-		(17,789,653)	(5,217,530)	(1,192,058)	(7,825,745)	(1,655,399)	(316,276)	33,996,661	
Total Revenue Requirement Allocation	\$ 276,159,707		\$ 144,507,878	\$ 42,382,737	\$ 9,683,259	\$ 63,569,635	\$ 13,447,042	\$ 2,569,157	\$ -	
Revenue Requirement Allocation Percentages			52%	15%	4%	23.0%	4.9%	0.9%		

Revenue Requirement Allocation Check		
Total Allocated Revenue Requirement	\$ 276,159,707	
Total Revenue Requirement Less Offsetting Re	276,159,707	
Difference	\$ -	

2015/16 Functional Allocation Results			Base	Peak Day	Peak Hour	Capacity	Customer	Fire Protection
Allocation Percentages			CCF	CCF	CCF	EDUs	Accounts	Fire EDUs
			52%	15%	4%	23%	5%	1%
Allocated Costs for FY 2015/16	\$ 46,244,957	Allocated Costs	\$ 24,198,897.77	\$ 7,097,298.25	\$ 1,621,532.34	\$ 10,645,198.90	\$ 2,251,805.26	\$ 430,223.99
Unit Cost Factor		Unit Cost Factor	CCF	CCF	CCF	EDUs	Accounts	Fire EDUs
Units		Units	8,471,681	8,471,681	8,471,681	59,583	39,646	8,471,681
Unit Costs			\$2.86	\$0.84	\$0.19	\$178.66	\$56.80	\$0.05





City of Oxnard

Water Financial Model

Multi-Year Functional and Customer Cost Allocation

1

2

3

4

5

6

9

Multi-Year Functional Cost Allocation

Total		Base	Peak Day	Peak Hour	Capacity	Customer	Fire Protection
% Allocation	100%	52.3%	15.3%	3.5%	23.0%	4.9%	0.9%
Starting % Allocation	100%	58%	17%	4%	17%	4%	1%

Years to implement adjustment to Cost of Service based Allocation

3

1	FY 2015/16	100%	56.2%	16.5%	3.8%	18.9%	4.0%	0.8%
2	FY 2016/17	100%	54.2%	15.9%	3.6%	20.9%	4.4%	0.8%
3	FY 2017/18	100%	52.3%	15.3%	3.5%	23.0%	4.9%	0.9%
4	FY 2018/19	100%	52.3%	15.3%	3.5%	23.0%	4.9%	0.9%
5	FY 2019/20	100%	52.3%	15.3%	3.5%	23.0%	4.9%	0.9%

		\$ Allocation	Amount Allocable to Constituent					
1	2016	\$ 46,244,957	\$ 25,970,953	\$ 7,617,025	\$ 1,740,275	\$ 8,719,779	\$ 1,844,516	\$ 352,408
2	2017	\$ 48,318,687	26,209,792	7,687,074	1,756,279	10,116,674	2,140,005	408,864
3	2018	\$ 55,354,422	28,965,667	8,495,345	1,940,946	12,742,121	2,695,372	514,971
4	2019	\$ 62,322,644	32,611,973	9,564,770	2,185,280	14,346,147	3,034,676	579,797
5	2020	\$ 67,437,635	35,288,528	10,349,778	2,364,632	15,523,575	3,283,740	627,383
6	2021	\$ 72,270,855	37,817,638	11,091,541	2,534,104	16,636,141	3,519,084	672,347
7	2022	\$ 77,267,593	40,432,314	11,858,399	2,709,310	17,786,348	3,762,390	718,832
8	2023	\$ 81,807,588	42,807,986	12,555,161	2,868,500	18,831,417	3,983,456	761,069
9	2024	\$ 85,813,063	44,903,957	13,169,888	3,008,948	19,753,443	4,178,495	798,332
10	2025	\$ 90,014,465	47,102,452	13,814,685	3,156,266	20,720,570	4,383,074	837,419
11	2026	\$ 93,958,520	49,166,283	14,419,986	3,294,560	21,628,459	4,575,121	874,111

Projected Units

			Base	Peak Day	Peak Hour	Capacity	Customer	Fire Protection
FY	Units		CCF	CCF	CCF	EDUs	Accounts	Fire EDUs
1	2016	FY 2015/16	8,471,681	8,471,681	8,471,681	59,583	39,646	4,230
2	2017	FY 2016/17	8,471,681	8,471,681	8,471,681	60,103	39,992	4,272
3	2018	FY 2017/18	8,895,265	8,895,265	8,895,265	60,628	40,342	4,315
4	2019	FY 2018/19	9,340,028	9,340,028	9,340,028	61,158	40,694	4,358
5	2020	FY 2019/20	9,340,028	9,340,028	9,340,028	61,692	41,050	4,402
6	2021	FY 2020/21	9,340,028	9,340,028	9,340,028	62,232	41,409	4,446
7	2022	FY 2021/22	9,418,213	9,418,213	9,418,213	62,752	41,755	4,490
8	2023	FY 2022/23	9,497,051	9,497,051	9,497,051	63,278	42,105	4,528
9	2024	FY 2023/24	9,576,550	9,576,550	9,576,550	63,807	42,457	4,565
10	2025	FY 2024/25	9,656,715	9,656,715	9,656,715	64,342	42,813	4,604
11	2026	FY 2025/26	9,737,550	9,737,550	9,737,550	64,880	43,171	4,642

Calculated Unit Costs

		Base	Peak Day	Peak Hour	Capacity	Customer	Fire Protection
FY	Units	CCF	CCF	CCF	EDUs	Accounts	Fire EDUs
	2016	\$ 3.07	\$ 0.90	\$ 0.21	\$ 146.35	\$ 46.52	\$ 83.31
	2017	\$ 3.09	\$ 0.91	\$ 0.21	\$ 168.32	\$ 53.51	\$ 95.70
	2018	\$ 3.26	\$ 0.96	\$ 0.22	\$ 210.17	\$ 66.81	\$ 119.34
	2019	\$ 3.49	\$ 1.02	\$ 0.23	\$ 234.57	\$ 74.57	\$ 133.03
	2020	\$ 3.78	\$ 1.11	\$ 0.25	\$ 251.63	\$ 79.99	\$ 142.53
	2021	\$ 4.05	\$ 1.19	\$ 0.27	\$ 267.33	\$ 84.98	\$ 151.24
	2022	\$ 4.29	\$ 1.26	\$ 0.29	\$ 283.44	\$ 90.11	\$ 160.10
	2023	\$ 4.51	\$ 1.32	\$ 0.30	\$ 297.60	\$ 94.61	\$ 168.10
	2024	\$ 4.69	\$ 1.38	\$ 0.31	\$ 309.58	\$ 98.42	\$ 174.86
	2025	\$ 4.88	\$ 1.43	\$ 0.33	\$ 322.04	\$ 102.38	\$ 181.90
	2026	\$ 5.05	\$ 1.48	\$ 0.34	\$ 333.36	\$ 105.98	\$ 188.30



Customer Allocation

Base	Costs						
Allocation Factor	Total Allocation	OV: Irr Total	OX: C/I Total	OX: Irr Total	OX: MFR Total	OX: SFR Total	Fire EDUs
CCF	100.0%	0.0%	23.8%	16.6%	16.6%	43.0%	0.0%
2016	\$ 25,970,953	\$ -	\$ 6,190,183	\$ 4,313,113	\$ 4,302,949	\$ 11,164,708	\$ -
2017	\$ 26,209,792	\$ -	\$ 6,247,110	\$ 4,352,778	\$ 4,342,521	\$ 11,267,383	\$ -
2018	\$ 28,965,667	\$ -	\$ 6,903,974	\$ 4,810,458	\$ 4,799,123	\$ 12,452,112	\$ -
2019	\$ 32,611,973	\$ -	\$ 7,773,072	\$ 5,416,017	\$ 5,403,255	\$ 14,019,630	\$ -
2020	\$ 35,288,528	\$ -	\$ 8,411,029	\$ 5,860,524	\$ 5,846,715	\$ 15,170,260	\$ -
2021	\$ 37,817,638	\$ -	\$ 9,013,843	\$ 6,280,545	\$ 6,265,745	\$ 16,257,504	\$ -
2022	\$ 40,432,314	\$ -	\$ 9,637,052	\$ 6,714,776	\$ 6,698,953	\$ 17,381,533	\$ -
2023	\$ 42,807,986	\$ -	\$ 10,203,294	\$ 7,109,314	\$ 7,092,562	\$ 18,402,816	\$ -
2024	\$ 44,903,957	\$ -	\$ 10,702,869	\$ 7,457,402	\$ 7,439,829	\$ 19,303,857	\$ -
2025	\$ 47,102,452	\$ -	\$ 11,226,881	\$ 7,822,516	\$ 7,804,083	\$ 20,248,972	\$ -
2026	\$ 49,166,283	\$ -	\$ 11,718,796	\$ 8,165,265	\$ 8,146,025	\$ 21,136,197	\$ -

Peak Day	Costs						
Allocation Factor	Total Allocation	OV: Irr Total	OX: C/I Total	OX: Irr Total	OX: MFR Total	OX: SFR Total	Fire EDUs
Summer	100.0%	0.0%	23.5%	18.8%	15.6%	42.1%	0.0%
2016	\$ 7,617,025	\$ -	\$ 1,788,183	\$ 1,434,178	\$ 1,184,534	\$ 3,210,130	\$ -
2017	\$ 7,687,074	\$ -	\$ 1,804,628	\$ 1,447,367	\$ 1,195,427	\$ 3,239,652	\$ -
2018	\$ 8,495,345	\$ -	\$ 1,994,379	\$ 1,599,553	\$ 1,321,122	\$ 3,580,291	\$ -
2019	\$ 9,564,770	\$ -	\$ 2,245,438	\$ 1,800,911	\$ 1,487,430	\$ 4,030,991	\$ -
2020	\$ 10,349,778	\$ -	\$ 2,429,728	\$ 1,948,717	\$ 1,609,508	\$ 4,361,825	\$ -
2021	\$ 11,091,541	\$ -	\$ 2,603,865	\$ 2,088,380	\$ 1,724,860	\$ 4,674,435	\$ -
2022	\$ 11,858,399	\$ -	\$ 2,783,894	\$ 2,232,769	\$ 1,844,115	\$ 4,997,621	\$ -
2023	\$ 12,555,161	\$ -	\$ 2,947,467	\$ 2,363,959	\$ 1,952,470	\$ 5,291,265	\$ -
2024	\$ 13,169,888	\$ -	\$ 3,091,781	\$ 2,479,704	\$ 2,048,067	\$ 5,550,337	\$ -
2025	\$ 13,814,685	\$ -	\$ 3,243,154	\$ 2,601,110	\$ 2,148,340	\$ 5,822,081	\$ -
2026	\$ 14,419,986	\$ -	\$ 3,385,256	\$ 2,715,079	\$ 2,242,471	\$ 6,077,180	\$ -

Peak Hour	Costs						
Allocation Factor	Total Allocation	OV: Irr Total	OX: C/I Total	OX: Irr Total	OX: MFR Total	OX: SFR Total	Fire EDUs
MEU's Without C	100.0%	0.0%	15.7%	9.1%	8.8%	66.4%	0.0%
2016	\$ 1,740,275	\$ -	\$ 273,529	\$ 157,559	\$ 152,804	\$ 1,156,383	\$ -
2017	\$ 1,756,279	\$ -	\$ 276,044	\$ 159,008	\$ 154,209	\$ 1,167,018	\$ -
2018	\$ 1,940,946	\$ -	\$ 305,069	\$ 175,728	\$ 170,424	\$ 1,289,726	\$ -
2019	\$ 2,185,280	\$ -	\$ 343,472	\$ 197,849	\$ 191,877	\$ 1,452,081	\$ -
2020	\$ 2,364,632	\$ -	\$ 371,662	\$ 214,087	\$ 207,625	\$ 1,571,258	\$ -
2021	\$ 2,534,104	\$ -	\$ 398,299	\$ 229,430	\$ 222,506	\$ 1,683,869	\$ -
2022	\$ 2,709,310	\$ -	\$ 425,837	\$ 245,293	\$ 237,889	\$ 1,800,290	\$ -
2023	\$ 2,868,500	\$ -	\$ 450,858	\$ 259,706	\$ 251,867	\$ 1,906,069	\$ -
2024	\$ 3,008,948	\$ -	\$ 472,933	\$ 272,421	\$ 264,199	\$ 1,999,395	\$ -
2025	\$ 3,156,266	\$ -	\$ 496,088	\$ 285,759	\$ 277,134	\$ 2,097,285	\$ -
2026	\$ 3,294,560	\$ -	\$ 517,824	\$ 298,280	\$ 289,277	\$ 2,189,179	\$ -

Capacity	Costs						
Allocation Factor	Total Allocation	OV: Irr Total	OX: C/I Total	OX: Irr Total	OX: MFR Total	OX: SFR Total	Fire EDUs
EDUs	100.0%	1.5%	15.5%	8.9%	8.7%	65.5%	0.0%
2016	\$ 8,719,779	\$ 128,939	\$ 1,350,269	\$ 777,790	\$ 754,314	\$ 5,708,467	\$ -
2017	\$ 10,116,674	\$ 149,595	\$ 1,566,580	\$ 902,391	\$ 875,154	\$ 6,622,955	\$ -
2018	\$ 12,742,121	\$ 188,417	\$ 1,973,134	\$ 1,136,576	\$ 1,102,271	\$ 8,341,723	\$ -
2019	\$ 14,346,147	\$ 212,136	\$ 2,221,520	\$ 1,279,653	\$ 1,241,029	\$ 9,391,810	\$ -
2020	\$ 15,523,575	\$ 229,546	\$ 2,403,846	\$ 1,384,677	\$ 1,342,883	\$ 10,162,622	\$ -
2021	\$ 16,636,141	\$ 245,998	\$ 2,576,129	\$ 1,483,916	\$ 1,439,127	\$ 10,890,971	\$ -
2022	\$ 17,786,348	\$ 263,006	\$ 2,754,240	\$ 1,586,513	\$ 1,538,627	\$ 11,643,963	\$ -
2023	\$ 18,831,417	\$ 278,459	\$ 2,916,070	\$ 1,679,731	\$ 1,629,032	\$ 12,328,125	\$ -
2024	\$ 19,753,443	\$ 292,093	\$ 3,058,847	\$ 1,761,974	\$ 1,708,793	\$ 12,931,736	\$ -
2025	\$ 20,720,570	\$ 306,394	\$ 3,208,608	\$ 1,848,241	\$ 1,792,455	\$ 13,564,873	\$ -
2026	\$ 21,628,459	\$ 319,819	\$ 3,349,196	\$ 1,929,223	\$ 1,870,993	\$ 14,159,229	\$ -

Customer	Costs						
Allocation Factor	Total Allocation	OV: Irr Total	OX: C/I Total	OX: Irr Total	OX: MFR Total	OX: SFR Total	Fire EDUs
Accounts	100.0%	0.1%	6.9%	3.5%	5.2%	84.3%	0.0%
2016	\$ 1,844,516	\$ 2,094	\$ 127,713	\$ 64,113	\$ 95,518	\$ 1,555,079	\$ -
2017	\$ 2,140,005	\$ 2,429	\$ 148,173	\$ 74,383	\$ 110,819	\$ 1,804,201	\$ -
2018	\$ 2,695,372	\$ 3,059	\$ 186,626	\$ 93,687	\$ 139,579	\$ 2,272,421	\$ -
2019	\$ 3,034,676	\$ 3,445	\$ 210,119	\$ 105,481	\$ 157,149	\$ 2,558,482	\$ -
2020	\$ 3,283,740	\$ 3,727	\$ 227,365	\$ 114,138	\$ 170,047	\$ 2,768,463	\$ -
2021	\$ 3,519,084	\$ 3,994	\$ 243,660	\$ 122,318	\$ 182,234	\$ 2,966,878	\$ -
2022	\$ 3,762,390	\$ 4,271	\$ 260,506	\$ 130,775	\$ 194,834	\$ 3,172,005	\$ -
2023	\$ 3,983,456	\$ 4,522	\$ 275,813	\$ 138,459	\$ 206,282	\$ 3,358,382	\$ -
2024	\$ 4,178,495	\$ 4,743	\$ 289,317	\$ 145,238	\$ 216,382	\$ 3,522,815	\$ -
2025	\$ 4,383,074	\$ 4,975	\$ 303,482	\$ 152,349	\$ 226,976	\$ 3,695,292	\$ -
2026	\$ 4,575,121	\$ 5,193	\$ 316,779	\$ 159,024	\$ 236,921	\$ 3,857,204	\$ -

Fire Protection	Costs						
Allocation Factor	Total Allocation	OV: Irr Total	OX: C/I Total	OX: Irr Total	OX: MFR Total	OX: SFR Total	Fire EDUs
Fire EDUs	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2016	\$ 352,408	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 352,408
2017	\$ 408,864	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 408,864
2018	\$ 514,971	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 514,971
2019	\$ 579,797	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 579,797
2020	\$ 627,383	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 627,383
2021	\$ 672,347	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 672,347
2022	\$ 718,832	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 718,832
2023	\$ 761,069	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 761,069
2024	\$ 798,332	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 798,332
2025	\$ 837,419	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 837,419
2026	\$ 874,111	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 874,111

## APPENDIX F - WATER CIP



		9				10		11		12		14					
												Total Project Cost					
Driver		Unit Operation		Scenario 4		Project Title		Notes		Start Year		Duration (Years)		Unescalated		Unescalated Scenario	
Treatment Plant Improvements																	
Treatment Plant Improvements	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 1	New ASTs	0	2036	5	33300000	\$	33,300,000						
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 2	New SSTs	0	2036	5	31500000	\$	31,500,000						
	R&R	Wet Weather Storage	TRUE	Treatment Plant Improvements - New Plant 3	New EQ Basin	0	2036	5	8800000	\$	8,800,000						
	R&R	Disinfection	TRUE	Treatment Plant Improvements - New Plant 4	New CCTs	0	2036	5	3500000	\$	3,500,000						
	R&R	Final Effluent Pumping	TRUE	Treatment Plant Improvements - New Plant 5	New Effluent PS	0	2036	5	8800000	\$	8,800,000						
	R&R	Preliminary Treatment	TRUE	Treatment Plant Improvements - New Plant 6	Headworks rehab	0	2036	5	11600000	\$	11,600,000						
	R&R	Primary Sedimentation	TRUE	Treatment Plant Improvements - New Plant 7	New Primary Clarifiers	0	2024	5	24500000	\$	24,500,000						
	Performance	Primary Sedimentation	TRUE	Treatment Plant Improvements - New Plant 8	CEPT	0	2024	2	1500000	\$	1,500,000						
	R&R	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 9	New Digesters	0	2024	5	78800000	\$	78,800,000						
	Performance	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 10	New DAFTs	0	2024	3	15800000	\$	15,800,000						
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 11	new chemical handling facilities	0	2024	2	19300000	\$	19,300,000						
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 12	New Primary Sedimentation Bld	0	2024	5	3100000	\$	3,100,000						
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 13	New Chemical Handling Bld	0	2024	3	3400000	\$	3,400,000						
	Performance	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 14	New Non Haz Liquid Receiv Stn	0	2024	2	2800000	\$	2,800,000						
	Resource Sustainability	Cogen	TRUE	Treatment Plant Improvements - New Plant 15	New FOG Receiving	0	2024	2	3700000	\$	3,700,000						
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 16	New Digester Control Bld	0	2024	5	1700000	\$	1,700,000						
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 17	New Polymer Bld	0	2024	3	800000	\$	800,000						
	Performance	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 18	New Solids Processing Facility	0	2024	3	27800000	\$	27,800,000						
	Performance	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 19	New Sludge Silos	0	2024	3	6900000	\$	6,900,000						
	R&R	Cogen	TRUE	Treatment Plant Improvements - New Plant 20	New Cogen Facility	0	2024	3	16100000	\$	16,100,000						
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 21	New Operations Center and Lab Building	0	2024	4	18500000	\$	18,500,000						
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 22	New Collections System and Maintenance Building	0	2024	2	7100000	\$	7,100,000						
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 23	New Storage/Warehouse	0	2024	2	7100000	\$	7,100,000						
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 24	New Effluent Elect Bld	0	2024	3	1300000	\$	1,300,000						
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 25	New North Area Elect Bld	0	2024	3	2000000	\$	2,000,000						
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 26	New Main Elect Bld	0	2024	3	1000000	\$	1,000,000						
	Resource Sustainability	General	TRUE	Treatment Plant Improvements - New Plant 27	Solar Facilities	0	2024	10	1700000	\$	1,700,000						
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 28	SCADA	0	2024	5	11800000	\$	11,800,000						
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 29	AST blower and diffuser replacement	0	2017	3	6200000	\$	6,200,000						
	Small Equipment Replacement	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 30	Secondary small equipment replacement	0	2017	3	700000	\$	700,000						
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 31	SST replace skimmers, collectors, drives and RAS pumps	0	2017	3	12000000	\$	12,000,000						
	Small Equipment Replacement	Wet Weather Storage	TRUE	Treatment Plant Improvements - New Plant 32	EQ Basin small equipment replacement	0	2020	3	600000	\$	600,000						
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 33	AST concrete rehab	0	2017	11	8800000	\$	8,800,000						
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 34	SST concrete rehab	0	2017	11	6200000	\$	6,200,000						
	R&R	Wet Weather Storage	TRUE	Treatment Plant Improvements - New Plant 35	EQ concrete rehab	0	2017	3	2800000	\$	2,800,000						
	Small Equipment Replacement	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 36	CCT rehab	0	2024	3	400000	\$	400,000						
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 37	CCT coating	0	2026	2	1500000	\$	1,500,000						
	R&R	Final Effluent Pumping	TRUE	Treatment Plant Improvements - New Plant 38	Effluent PS rehab	0	2017	3	16800000	\$	16,800,000						
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 39	CMMS	0	2017	3	300000	\$	300,000						
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 40	Additional civil/sitework/inter-process piping needed with new plant	0	2017	24	38700000	\$	38,700,000						
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 41	Demolish and Reclaim old site	0	2036	5	10000000	\$	10,000,000						
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 42	Land Acquisition	0	2017	1	22000000	\$	22,000,000						
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 43	CEQA/Permitting	0	2017	10	5200000	\$	5,200,000						
	R&R	General	0	Treatment Plant Improvements - New Plant 44	0	0	0	0	0	\$	-						
	R&R	General	0	Treatment Plant Improvements - New Plant 45	0	0	0	0	0	\$	-						
	R&R	General	0	Treatment Plant Improvements - New Plant 46	0	0	0	0	0	\$	-						
	R&R	General	0	Treatment Plant Improvements - New Plant 47	0	0	0	0	0	\$	-						
	R&R	General	0	Treatment Plant Improvements - New Plant 48	0	0	0	0	0	\$	-						
	R&R	Preliminary Treatment	TRUE	Treatment Plant Improvements - New Plant 49	Headworks Odor Control with Screen Walls, Concrete Repair, and RPF Cover Repairs	0	2017	3	4174397.032	\$	4,174,397						
	R&R	Preliminary Treatment	TRUE	Treatment Plant Improvements - New Plant 50	Headworks Below Cover Coating Repairs	0	2017	3	695732.8386	\$	695,733						
	R&R	Primary Sedimentation	TRUE	Treatment Plant Improvements - New Plant 51	Replace Primary Clarifier Equipment	0	2017	3	4174397.032	\$	4,174,397						
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 52	Demolish Biotowers	0	2017	3	1113172.542	\$	1,113,173						
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 53	Add Baffle Walls in ASTs	0	2017	3	528756.9573	\$	528,757						
	R&R	Final Effluent Pumping	TRUE	Treatment Plant Improvements - New Plant 54	Replace/Modify Interstage and Effluent Pump Station Pumps	0	2017	3	2087198.516	\$	2,087,199						
	R&R	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 55	Clean Digesters #1 and #3, add Dystor Cover to #2	0	2017	3	4174397.032	\$	4,174,397						
	R&R	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 56	Rebuild/Rehab the Gravity Thickeners	0	2017	3	1043599.258	\$	1,043,599						
	R&R	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 57	Replace the Belt Filter Presses	0	2017	3	2782931.354	\$	2,782,931						
	R&R	Cogen	TRUE	Treatment Plant Improvements - New Plant 58	Rebuild Cogen Units	0	2017	3	1113172.542	\$	1,113,173						
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 59	Replace Standby Generators	0	2017	3	3478664.193	\$	3,478,664						
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 60	Replace Plant MCCs	0	2017	3	2087198.516	\$	2,087,199						
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 61	Plant-wide Cathodic Protection	0	2017	3	0	\$	-						
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 62	Site Electrical, Utilities, Paving	0	2017	3	1391465.677	\$	1,391,466						
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 63	SCADA System Replacement	0	2017	3	695732.8386	\$	695,733						
	Performance	Final Effluent Pumping	TRUE	Treatment Plant Improvements - New Plant 64	Water Quality Early Warning System	0	2017	4	459183.6735	\$	459,184						
Treatment Plant Improvements Total Project Cost												516,400,000					

Baseline

Scenario 1

Baseline + Resource Recovery

Scenario 2

Baseline + Resource Recovery + Energy Efficiency

Scenario 3

New Plant

Scenario 4

4	5	9				FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Driver	Unit Operation	Scenario 4	Project Title			Unescalated Detail										
Treatment Plant Improvements																
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 1	New ASTs		-	-	-	-	-	-	-	-	-	-	-
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 2	New SSTs		-	-	-	-	-	-	-	-	-	-	-
R&R	Wet Weather Storage	TRUE	Treatment Plant Improvements - New Plant 3	New EQ Basin		-	-	-	-	-	-	-	-	-	-	-
R&R	Disinfection	TRUE	Treatment Plant Improvements - New Plant 4	New CCTs		-	-	-	-	-	-	-	-	-	-	-
R&R	Final Effluent Pumping	TRUE	Treatment Plant Improvements - New Plant 5	New Effluent PS		-	-	-	-	-	-	-	-	-	-	-
R&R	Preliminary Treatment	TRUE	Treatment Plant Improvements - New Plant 6	Headworks rehab		-	-	-	-	-	-	-	-	-	-	-
R&R	Primary Sedimentation	TRUE	Treatment Plant Improvements - New Plant 7	New Primary Clarifiers		-	-	-	-	-	-	-	-	-	980,000	1,470,000
Performance	Primary Sedimentation	TRUE	Treatment Plant Improvements - New Plant 8	CEPT		-	-	-	-	-	-	-	-	-	450,000	1,050,000
R&R	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 9	New Digesters		-	-	-	-	-	-	-	-	-	3,152,000	4,728,000
Performance	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 10	New DAFTs		-	-	-	-	-	-	-	-	-	1,580,000	7,110,000
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 11	new chemical handling facilities		-	-	-	-	-	-	-	-	-	5,790,000	13,510,000
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 12	New Primary Sedimentation Bld		-	-	-	-	-	-	-	-	-	124,000	186,000
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 13	New Chemical Handling Bld		-	-	-	-	-	-	-	-	-	340,000	1,530,000
Performance	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 14	New Non Haz Liquid Receiv Stn		-	-	-	-	-	-	-	-	-	840,000	1,960,000
Resource Sustainability	Cogen	TRUE	Treatment Plant Improvements - New Plant 15	New FOG Receiving		-	-	-	-	-	-	-	-	-	1,110,000	2,590,000
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 16	New Digester Control Bld		-	-	-	-	-	-	-	-	-	68,000	102,000
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 17	New Polymer Bld		-	-	-	-	-	-	-	-	-	80,000	360,000
Performance	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 18	New Solids Processing Facility		-	-	-	-	-	-	-	-	-	2,780,000	12,510,000
Performance	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 19	New Sludge Silos		-	-	-	-	-	-	-	-	-	690,000	3,105,000
R&R	Cogen	TRUE	Treatment Plant Improvements - New Plant 20	New Cogen Facility		-	-	-	-	-	-	-	-	-	1,610,000	7,245,000
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 21	New Operations Center and Lab Building		-	-	-	-	-	-	-	-	-	740,000	1,110,000
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 22	New Collections System and Maintenance Building		-	-	-	-	-	-	-	-	-	2,130,000	4,970,000
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 23	New Storage/Warehouse		-	-	-	-	-	-	-	-	-	2,130,000	4,970,000
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 24	New Effluent Elect Bld		-	-	-	-	-	-	-	-	-	130,000	585,000
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 25	New North Area Elect Bld		-	-	-	-	-	-	-	-	-	200,000	900,000
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 26	New Main Elect Bld		-	-	-	-	-	-	-	-	-	100,000	450,000
Resource Sustainability	General	TRUE	Treatment Plant Improvements - New Plant 27	Solar Facilities		-	-	-	-	-	-	-	-	-	17,000	34,000
R&R	General	TRUE	Treatment Plant Improvements - New Plant 28	SCADA		-	-	-	-	-	-	-	-	-	472,000	708,000
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 29	AST blower and diffuser replacement		-	-	620,000	2,790,000	2,790,000	-	-	-	-	-	-
Small Equipment Repla	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 30	Secondary small equipment replacement		-	-	70,000	315,000	315,000	-	-	-	-	-	-
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 31	SST replace skimmers, collectors, drives and RAS pumps		-	-	1,200,000	5,400,000	5,400,000	-	-	-	-	-	-
Small Equipment Repla	Wet Weather Storage	TRUE	Treatment Plant Improvements - New Plant 32	EQ Basin small equipment replacement		-	-	-	-	-	60,000	270,000	270,000	-	-	-
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 33	AST concrete rehab		-	-	88,000	88,000	88,000	264,000	704,000	2,640,000	2,640,000	1,760,000	264,000
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 34	SST concrete rehab		-	-	62,000	62,000	62,000	186,000	496,000	1,860,000	1,860,000	1,240,000	186,000
R&R	Wet Weather Storage	TRUE	Treatment Plant Improvements - New Plant 35	EQ concrete rehab		-	-	280,000	1,260,000	1,260,000	-	-	-	-	-	-
Small Equipment Repla	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 36	CCT rehab		-	-	-	-	-	-	-	-	-	40,000	180,000
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 37	CCT coating		-	-	-	-	-	-	-	-	-	-	-
R&R	Final Effluent Pumping	TRUE	Treatment Plant Improvements - New Plant 38	Effluent PS rehab		-	-	1,680,000	7,560,000	7,560,000	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 39	CMMS		-	-	30,000	135,000	135,000	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 40	Additional civil/sitework/inter-process piping needed with new plant		-	-	1,612,500	1,612,500	1,612,500	1,612,500	1,612,500	1,612,500	1,612,500	1,612,500	1,612,500
R&R	General	TRUE	Treatment Plant Improvements - New Plant 41	Demolish and Reclaim old site		-	-	-	-	-	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 42	Land Acquisition		-	-	22,000,000	-	-	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 43	CEQA/Permitting		-	-	52,000	104,000	364,000	1,040,000	1,560,000	1,300,000	780,000	-	-
R&R	General	0	Treatment Plant Improvements - New Plant 44	0		-	-	-	-	-	-	-	-	-	-	-
R&R	General	0	Treatment Plant Improvements - New Plant 45	0		-	-	-	-	-	-	-	-	-	-	-
R&R	General	0	Treatment Plant Improvements - New Plant 46	0		-	-	-	-	-	-	-	-	-	-	-
R&R	General	0	Treatment Plant Improvements - New Plant 47	0		-	-	-	-	-	-	-	-	-	-	-
R&R	General	0	Treatment Plant Improvements - New Plant 48	0		-	-	-	-	-	-	-	-	-	-	-
R&R	Preliminary Treatment	TRUE	Treatment Plant Improvements - New Plant 49	Headworks Odor Control with Screen Walls, Concrete Repair, and RPF Cover Repla		-	-	417,440	1,878,479	1,878,479	-	-	-	-	-	-
R&R	Preliminary Treatment	TRUE	Treatment Plant Improvements - New Plant 50	Headworks Below Cover Coating Repairs		-	-	69,573	313,080	313,080	-	-	-	-	-	-
R&R	Primary Sedimentation	TRUE	Treatment Plant Improvements - New Plant 51	Replace Primary Clarifier Equipment		-	-	417,440	1,878,479	1,878,479	-	-	-	-	-	-
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 52	Demolish Biotowers		-	-	111,317	500,928	500,928	-	-	-	-	-	-
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 53	Add Baffle Walls in ASTs		-	-	52,876	237,941	237,941	-	-	-	-	-	-
R&R	Final Effluent Pumping	TRUE	Treatment Plant Improvements - New Plant 54	Replace/Modify interstage and Effluent Pump Station Pumps		-	-	208,720	939,239	939,239	-	-	-	-	-	-
R&R	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 55	Clean Digesters #1 and #3, add Dystor Cover to #2		-	-	417,440	1,878,479	1,878,479	-	-	-	-	-	-
R&R	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 56	Rebuild/Rehab the Gravity Thickeners		-	-	104,360	469,620	469,620	-	-	-	-	-	-
R&R	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 57	Replace the Belt Filter Presses		-	-	278,293	1,252,319	1,252,319	-	-	-	-	-	-
R&R	Cogen	TRUE	Treatment Plant Improvements - New Plant 58	Rebuild Cogen Units		-	-	111,317	500,928	500,928	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 59	Replace Standby Generators		-	-	347,866	1,565,399	1,565,399	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 60	Replace Plant MCCs		-	-	208,720	939,239	939,239	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 61	Plant-wide Cathodic Protection		-	-	-	-	-	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 62	Site Electrical, Utilities, Paving		-	-	139,147	626,160	626,160	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 63	SCADA System Replacement		-	-	69,573	313,080	313,080	-	-	-	-	-	-
Performance	Final Effluent Pumping	TRUE	Treatment Plant Improvements - New Plant 64	Water Quality Early Warning System		-	-	18,367	27,551	183,673	229,592	-	-	-	-	-
						-	-	30,666,949	32,647,418	33,063,541	3,392,092	4,642,500	7,682,500	6,892,500	30,165,500	73,425,500

Baseline

Scenario 1

Baseline + Resource Recovery

Scenario 2

Baseline + Resource Recovery + Energy Efficiency

Scenario 3

New Plant

Scenario 4

4	5	9				FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Driver	Unit Operation	Scenario 4	Project Title												
Treatment Plant Improvements															
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 1	New ASTs	-	-	-	-	-	-	-	-	-	-	-
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 2	New SSTs	-	-	-	-	-	-	-	-	-	-	-
R&R	Wet Weather Storage	TRUE	Treatment Plant Improvements - New Plant 3	New EQ Basin	-	-	-	-	-	-	-	-	-	-	-
R&R	Disinfection	TRUE	Treatment Plant Improvements - New Plant 4	New CCTs	-	-	-	-	-	-	-	-	-	-	-
R&R	Final Effluent Pumping	TRUE	Treatment Plant Improvements - New Plant 5	New Effluent PS	-	-	-	-	-	-	-	-	-	-	-
R&R	Preliminary Treatment	TRUE	Treatment Plant Improvements - New Plant 6	Headworks rehab	-	-	-	-	-	-	-	-	-	-	-
R&R	Primary Sedimentation	TRUE	Treatment Plant Improvements - New Plant 7	New Primary Clarifiers	8,575,000	8,575,000	4,900,000	-	-	-	-	-	-	-	-
Performance	Primary Sedimentation	TRUE	Treatment Plant Improvements - New Plant 8	CEPT	-	-	-	-	-	-	-	-	-	-	-
R&R	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 9	New Digesters	27,580,000	27,580,000	15,760,000	-	-	-	-	-	-	-	-
Performance	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 10	New DAFTs	7,110,000	-	-	-	-	-	-	-	-	-	-
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 11	new chemical handling facilities	-	-	-	-	-	-	-	-	-	-	-
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 12	New Primary Sedimentation Bld	1,085,000	1,085,000	620,000	-	-	-	-	-	-	-	-
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 13	New Chemical Handling Bld	1,530,000	-	-	-	-	-	-	-	-	-	-
Performance	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 14	New Non Haz Liquid Receiv Stn	-	-	-	-	-	-	-	-	-	-	-
Resource Sustainability	Cogen	TRUE	Treatment Plant Improvements - New Plant 15	New FOG Receiving	-	-	-	-	-	-	-	-	-	-	-
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 16	New Digester Control Bld	595,000	595,000	340,000	-	-	-	-	-	-	-	-
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 17	New Polymer Bld	360,000	-	-	-	-	-	-	-	-	-	-
Performance	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 18	New Solids Processing Facility	12,510,000	-	-	-	-	-	-	-	-	-	-
Performance	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 19	New Sludge Silos	3,105,000	-	-	-	-	-	-	-	-	-	-
R&R	Cogen	TRUE	Treatment Plant Improvements - New Plant 20	New Cogen Facility	7,245,000	-	-	-	-	-	-	-	-	-	-
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 21	New Operations Center and Lab Building	7,400,000	9,250,000	-	-	-	-	-	-	-	-	-
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 22	New Collections System and Maintenance Building	-	-	-	-	-	-	-	-	-	-	-
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 23	New Storage/Warehouse	-	-	-	-	-	-	-	-	-	-	-
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 24	New Effluent Elect Bld	585,000	-	-	-	-	-	-	-	-	-	-
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 25	New North Area Elect Bld	900,000	-	-	-	-	-	-	-	-	-	-
R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 26	New Main Elect Bld	450,000	-	-	-	-	-	-	-	-	-	-
Resource Sustainability	General	TRUE	Treatment Plant Improvements - New Plant 27	Solar Facilities	119,000	340,000	510,000	425,000	255,000	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 28	SCADA	4,130,000	4,130,000	2,360,000	-	-	-	-	-	-	-	-
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 29	AST blower and diffuser replacement	-	-	-	-	-	-	-	-	-	-	-
Small Equipment Replacement	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 30	Secondary small equipment replacement	-	-	-	-	-	-	-	-	-	-	-
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 31	SST replace skimmers, collectors, drives and RAS pumps	-	-	-	-	-	-	-	-	-	-	-
Small Equipment Replacement	Wet Weather Storage	TRUE	Treatment Plant Improvements - New Plant 32	EQ Basin small equipment replacement	-	-	-	-	-	-	-	-	-	-	-
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 33	AST concrete rehab	176,000	88,000	-	-	-	-	-	-	-	-	-
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 34	SST concrete rehab	124,000	62,000	-	-	-	-	-	-	-	-	-
R&R	Wet Weather Storage	TRUE	Treatment Plant Improvements - New Plant 35	EQ concrete rehab	-	-	-	-	-	-	-	-	-	-	-
Small Equipment Replacement	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 36	CCT rehab	180,000	-	-	-	-	-	-	-	-	-	-
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 37	CCT coating	450,000	1,050,000	-	-	-	-	-	-	-	-	-
R&R	Final Effluent Pumping	TRUE	Treatment Plant Improvements - New Plant 38	Effluent PS rehab	-	-	-	-	-	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 39	CMMS	-	-	-	-	-	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 40	Additional civil/sitework/inter-process piping needed with new plant	1,612,500	1,612,500	1,612,500	1,612,500	1,612,500	1,612,500	1,612,500	1,612,500	1,612,500	1,612,500	1,612,500
R&R	General	TRUE	Treatment Plant Improvements - New Plant 41	Demolish and Reclaim old site	-	-	-	-	-	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 42	Land Acquisition	-	-	-	-	-	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 43	CEQA/Permitting	-	-	-	-	-	-	-	-	-	-	-
R&R	General	0	Treatment Plant Improvements - New Plant 44	0	-	-	-	-	-	-	-	-	-	-	-
R&R	General	0	Treatment Plant Improvements - New Plant 45	0	-	-	-	-	-	-	-	-	-	-	-
R&R	General	0	Treatment Plant Improvements - New Plant 46	0	-	-	-	-	-	-	-	-	-	-	-
R&R	General	0	Treatment Plant Improvements - New Plant 47	0	-	-	-	-	-	-	-	-	-	-	-
R&R	General	0	Treatment Plant Improvements - New Plant 48	0	-	-	-	-	-	-	-	-	-	-	-
R&R	Preliminary Treatment	TRUE	Treatment Plant Improvements - New Plant 49	Headworks Odor Control with Screen Walls, Concrete Repair, and RPF Cover Replacement	-	-	-	-	-	-	-	-	-	-	-
R&R	Preliminary Treatment	TRUE	Treatment Plant Improvements - New Plant 50	Headworks Below Cover Coating Repairs	-	-	-	-	-	-	-	-	-	-	-
R&R	Primary Sedimentation	TRUE	Treatment Plant Improvements - New Plant 51	Replace Primary Clarifier Equipment	-	-	-	-	-	-	-	-	-	-	-
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 52	Demolish Biotowers	-	-	-	-	-	-	-	-	-	-	-
R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 53	Add Baffle Walls in ASTs	-	-	-	-	-	-	-	-	-	-	-
R&R	Final Effluent Pumping	TRUE	Treatment Plant Improvements - New Plant 54	Replace/Modify interstage and Effluent Pump Station Pumps	-	-	-	-	-	-	-	-	-	-	-
R&R	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 55	Clean Digesters #1 and #3, add Dystor Cover to #2	-	-	-	-	-	-	-	-	-	-	-
R&R	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 56	Rebuild/Rehab the Gravity Thickeners	-	-	-	-	-	-	-	-	-	-	-
R&R	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 57	Replace the Belt Filter Presses	-	-	-	-	-	-	-	-	-	-	-
R&R	Cogen	TRUE	Treatment Plant Improvements - New Plant 58	Rebuild Cogen Units	-	-	-	-	-	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 59	Replace Standby Generators	-	-	-	-	-	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 60	Replace Plant MCCs	-	-	-	-	-	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 61	Plant-wide Cathodic Protection	-	-	-	-	-	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 62	Site Electrical, Utilities, Paving	-	-	-	-	-	-	-	-	-	-	-
R&R	General	TRUE	Treatment Plant Improvements - New Plant 63	SCADA System Replacement	-	-	-	-	-	-	-	-	-	-	-
Performance	Final Effluent Pumping	TRUE	Treatment Plant Improvements - New Plant 64	Water Quality Early Warning System	-	-	-	-	-	-	-	-	-	-	-
						85,821,500	54,367,500	26,102,500	2,037,500	1,867,500	1,612,500	1,612,500	1,612,500	1,612,500	1,612,500

Baseline

Scenario 1

Baseline + Resource Recovery

Scenario 2

Baseline + Resource Recovery + Energy Efficiency

Scenario 3

New Plant

Scenario 4

		5		9						
Driver		Unit Operation		Scenario 4		Project Title				
Treatment Plant Improvements										
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 1	New ASTs	1,332,000	1,998,000	11,655,000	11,655,000	6,660,000
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 2	New SSTs	1,260,000	1,890,000	11,025,000	11,025,000	6,300,000
	R&R	Wet Weather Storage	TRUE	Treatment Plant Improvements - New Plant 3	New EQ Basin	352,000	528,000	3,080,000	3,080,000	1,760,000
	R&R	Disinfection	TRUE	Treatment Plant Improvements - New Plant 4	New CCTs	140,000	210,000	1,225,000	1,225,000	700,000
	R&R	Final Effluent Pumping	TRUE	Treatment Plant Improvements - New Plant 5	New Effluent PS	352,000	528,000	3,080,000	3,080,000	1,760,000
	R&R	Preliminary Treatment	TRUE	Treatment Plant Improvements - New Plant 6	Headworks rehab	464,000	696,000	4,060,000	4,060,000	2,320,000
	R&R	Primary Sedimentation	TRUE	Treatment Plant Improvements - New Plant 7	New Primary Clarifiers	-	-	-	-	-
	Performance	Primary Sedimentation	TRUE	Treatment Plant Improvements - New Plant 8	CEPT	-	-	-	-	-
	R&R	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 9	New Digesters	-	-	-	-	-
	Performance	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 10	New DAFTs	-	-	-	-	-
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 11	new chemical handling facilities	-	-	-	-	-
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 12	New Primary Sedimentation Bld	-	-	-	-	-
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 13	New Chemical Handling Bld	-	-	-	-	-
	Performance	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 14	New Non Haz Liquid Receiv Stn	-	-	-	-	-
	Resource Sustainability	Cogen	TRUE	Treatment Plant Improvements - New Plant 15	New FOG Receiving	-	-	-	-	-
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 16	New Digester Control Bld	-	-	-	-	-
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 17	New Polymer Bld	-	-	-	-	-
	Performance	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 18	New Solids Processing Facility	-	-	-	-	-
	Performance	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 19	New Sludge Silos	-	-	-	-	-
	R&R	Cogen	TRUE	Treatment Plant Improvements - New Plant 20	New Cogen Facility	-	-	-	-	-
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 21	New Operations Center and Lab Building	-	-	-	-	-
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 22	New Collections System and Maintenance Building	-	-	-	-	-
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 23	New Storage/Warehouse	-	-	-	-	-
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 24	New Effluent Elect Bld	-	-	-	-	-
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 25	New North Area Elect Bld	-	-	-	-	-
	R&R	Buildings/District Property	TRUE	Treatment Plant Improvements - New Plant 26	New Main Elect Bld	-	-	-	-	-
	Resource Sustainability	General	TRUE	Treatment Plant Improvements - New Plant 27	Solar Facilities	-	-	-	-	-
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 28	SCADA	-	-	-	-	-
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 29	AST blower and diffuser replacement	-	-	-	-	-
	Small Equipment Replacement	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 30	Secondary small equipment replacement	-	-	-	-	-
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 31	SST replace skimmers, collectors, drives and RAS pumps	-	-	-	-	-
	Small Equipment Replacement	Wet Weather Storage	TRUE	Treatment Plant Improvements - New Plant 32	EQ Basin small equipment replacement	-	-	-	-	-
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 33	AST concrete rehab	-	-	-	-	-
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 34	SST concrete rehab	-	-	-	-	-
	R&R	Wet Weather Storage	TRUE	Treatment Plant Improvements - New Plant 35	EQ concrete rehab	-	-	-	-	-
	Small Equipment Replacement	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 36	CCT rehab	-	-	-	-	-
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 37	CCT coating	-	-	-	-	-
	R&R	Final Effluent Pumping	TRUE	Treatment Plant Improvements - New Plant 38	Effluent PS rehab	-	-	-	-	-
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 39	CMMS	-	-	-	-	-
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 40	Additional civil/site/work/inter-process piping needed with new plant	1,612,500	1,612,500	1,612,500	1,612,500	1,612,500
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 41	Demolish and Reclaim old site	400,000	600,000	3,500,000	3,500,000	2,000,000
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 42	Land Acquisition	-	-	-	-	-
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 43	CEQA/Permitting	-	-	-	-	-
	R&R	General	0	Treatment Plant Improvements - New Plant 44	0	-	-	-	-	-
	R&R	General	0	Treatment Plant Improvements - New Plant 45	0	-	-	-	-	-
	R&R	General	0	Treatment Plant Improvements - New Plant 46	0	-	-	-	-	-
	R&R	General	0	Treatment Plant Improvements - New Plant 47	0	-	-	-	-	-
	R&R	General	0	Treatment Plant Improvements - New Plant 48	0	-	-	-	-	-
	R&R	Preliminary Treatment	TRUE	Treatment Plant Improvements - New Plant 49	Headworks Odor Control with Screen Walls, Concrete Repair, and RPF Cover Replacement	-	-	-	-	-
	R&R	Preliminary Treatment	TRUE	Treatment Plant Improvements - New Plant 50	Headworks Below Cover Coating Repairs	-	-	-	-	-
	R&R	Primary Sedimentation	TRUE	Treatment Plant Improvements - New Plant 51	Replace Primary Clarifier Equipment	-	-	-	-	-
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 52	Demolish Biotowers	-	-	-	-	-
	R&R	Secondary Treatment	TRUE	Treatment Plant Improvements - New Plant 53	Add Baffle Walls in ASTs	-	-	-	-	-
	R&R	Final Effluent Pumping	TRUE	Treatment Plant Improvements - New Plant 54	Replace/Modify Interstage and Effluent Pump Station Pumps	-	-	-	-	-
	R&R	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 55	Clean Digesters #1 and #3, add Dystor Cover to #2	-	-	-	-	-
	R&R	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 56	Rebuild/Rehab the Gravity Thickeners	-	-	-	-	-
	R&R	Sludge Handling	TRUE	Treatment Plant Improvements - New Plant 57	Replace the Belt Filter Presses	-	-	-	-	-
	R&R	Cogen	TRUE	Treatment Plant Improvements - New Plant 58	Rebuild Cogen Units	-	-	-	-	-
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 59	Replace Standby Generators	-	-	-	-	-
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 60	Replace Plant MCCs	-	-	-	-	-
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 61	Plant-wide Cathodic Protection	-	-	-	-	-
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 62	Site Electrical, Utilities, Paving	-	-	-	-	-
	R&R	General	TRUE	Treatment Plant Improvements - New Plant 63	SCADA System Replacement	-	-	-	-	-
	Performance	Final Effluent Pumping	TRUE	Treatment Plant Improvements - New Plant 64	Water Quality Early Warning System	-	-	-	-	-
						5,912,500	8,062,500	39,237,500	39,237,500	23,112,500



User Input

S-Curve

Evenly Distributed

CAPITAL IMPROVEMENT PLAN									
Include	Proj. #	Project Title	Total Budget	Start Year	Duration	End Year	Expansion	Replacement	Cost Distribution
Existing Projects			2015 Dollars						
✓		CENTRAL TRUNK SEWER REHAB & REPLACEMENT (1)	\$ -					100%	User Input
✓		Central Trunk condition assessment	200,000				17%	83%	User Input
✓		Phase 1 Central Trunk manholes reconstruction	1,500,000				17%	83%	User Input
✓		Phase 2 Central Trunk manholes reconstruction	550,000				17%	83%	User Input
✓		Phase 1 Central Trunk replacement	36,500,000	2029	3 years	2031	17%	83%	S-Curve
✓		Phase 2 Central Trunk replacement	30,000,000	2030	3 years	2032	17%	83%	S-Curve
✓			-					100%	User Input
✓		RICE AVE SEWER REPLACEMENT (1)						100%	User Input
✓		Rice Ave (Rice & 5th) sewer replacement	1,300,000				17%	83%	User Input
✓			-					100%	User Input
✓		POTENTIAL SEWER REPLACEMENTS (2)						100%	User Input
✓		Ventura/Doris Sewer Replacement (10" upsized to 15" - 2,200 ft)	NOT NEEDED				17%	83%	User Input
✓		Channel Is/PS 29 Sewer Replacement (10" to 12" - 1,000 ft)	NOT NEEDED				17%	83%	User Input
✓			-					100%	User Input
✓		MISC SEWER PROJECTS (1)						100%	User Input
✓		0 Existing sewer deficient capacity replacement	3,200,000				17%	83%	User Input
✓		0 Existing asbestos concrete pipe (ACP) replacement	5,000,000				17%	83%	User Input
✓		0 Harbor Blvd manhole rehabilitation	100,000					100%	User Input
✓		0 Redwood tributary manholes rehabilitation	200,000					100%	User Input
✓		Annual Pipe Repair	4,000,000					100%	User Input
✓		Magnesium Hydroxide Addition	4,400,000	2018	2 years	2019			S-Curve
✓			-						User Input
✓		LIFT STATIONS (1), (2)						100%	User Input
✓		0 Casden Village Lift Station	1,000,000					100%	User Input
✓		0 Lift Station 23 - Wagon Wheel Replacement	1,000,000					100%	User Input
✓		0 Lift Station 6 - Canal Rehabilitation	500,000					100%	User Input
✓		0 Lift Station 4 - Madaley & Wooley Rehabilitation	500,000					100%	User Input
✓			-					100%	User Input
✓		HEADWORKS (1)						100%	User Input
✓		0 Headworks meter vaults/vortex structures coating	1,000,000					100%	User Input
✓			-					100%	User Input
✓		2008 MASTER PLAN						100%	User Input
✓		ULTIMATE IMPROVEMENTS FROM 2008 MP (Kennedy/Jenks)	66,600,000	2027	10 years	2036	17%	83%	Evenly Distributed
✓								100%	
✓					20 years		17%	83%	Evenly Distributed
Total Projects			\$ 157,550,000				\$ 24,943,568	\$ 128,206,432	
							15.83%	81.38%	
Summary of Capital Improvement Plan									
			Unescalated			Escalated			
5-year CIP (2015-2020)									
	R&R		\$ 9,135,011			\$ 9,640,077			
	Expansion		880,989			942,402			
	Total		\$ 10,016,000			\$ 10,582,478			
	R&R		\$ 14,798,820			\$ 16,326,531			
	Expansion		1,851,180			2,081,803			
	Total		\$ 16,650,000			\$ 18,408,334			
Total CIP (2015-2047)									
	R&R		\$ 128,206,432			\$ 199,229,618			
	Expansion		24,943,568			39,337,314			
	Total		\$ 153,150,000			\$ 238,566,932			



## Starting Year FY 2015/16

[illegible][illegible]

<b>scalated</b>																					
\$	-	\$ 4,493,357	\$ 2,896,984	\$ 1,744,670	\$ 2,324,956	\$ 1,497,158	\$ 613,899	\$ 613,899	\$ 613,899	\$ 613,899	\$ 613,899	\$ 5,713,130	\$ 5,713,130	\$ 8,734,590	\$ 21,793,091	\$ 30,484,963	\$ 16,888,393	\$ 5,713,130	\$ 5,713,130	\$ 5,713,130	\$ 5,713,130
\$	-	206,643	353,016	321,330	442,044	269,842	86,101	86,101	86,101	86,101	86,101	1,146,870	1,146,870	1,775,410	4,491,909	6,300,037	3,471,607	1,146,870	1,146,870	1,146,870	1,146,870
\$	-	\$ 4,700,000	\$ 3,250,000	\$ 2,066,000	\$ 2,767,000	\$ 1,767,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 6,860,000	\$ 6,860,000	\$ 10,510,000	\$ 26,285,000	\$ 36,785,000	\$ 20,360,000	\$ 6,860,000	\$ 6,860,000	\$ 6,860,000	\$ 6,860,000
<b>alated</b>																					
\$	-	\$ 4,637,144	\$ 3,085,358	\$ 1,917,575	\$ 2,637,142	\$ 1,752,533	\$ 741,609	\$ 765,340	\$ 789,831	\$ 815,106	\$ 841,189	\$ 8,078,872	\$ 8,337,396	\$ 13,154,628	\$ 33,871,513	\$ 48,896,877	\$ 27,955,256	\$ 9,759,531	\$ 10,071,836	\$ 10,394,135	#####
\$	-	\$ 213,256	\$ 375,970	\$ 353,176	\$ 501,400	\$ 315,869	\$ 104,013	\$ 107,342	\$ 110,777	\$ 114,321	\$ 117,980	\$ 1,621,776	\$ 1,673,673	\$ 2,673,836	\$ 6,981,467	\$ 10,105,053	\$ 5,746,531	\$ 1,959,157	\$ 2,021,850	\$ 2,086,549	\$ 2,153,318
\$	-	\$ 4,850,400	\$ 3,461,328	\$ 2,270,750	\$ 3,138,542	\$ 2,068,402	\$ 845,622	\$ 872,682	\$ 900,608	\$ 929,427	\$ 959,169	\$ 9,700,649	\$ 10,011,070	\$ 15,828,464	\$ 40,852,980	\$ 59,001,930	\$ 33,701,787	\$ 11,718,687	\$ 12,093,685	\$ 12,480,683	#####

---

## APPENDIX G - WASTEWATER REVENUE REQUIREMENT





**City of Oxnard**  
**Wastewater Financial Model**  
**Revenue Requirement**

	FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		FY 2019/20		FY 2020/21		FY 2021/22		FY 2022/23		FY 2023/24		FY 2024/25	
CASH FLOW TEST																						
Revenues	FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		FY 2019/20		FY 2020/21		FY 2021/22		FY 2022/23		FY 2023/24		FY 2024/25	
Revenues from Wastewater Operations																						
WW Service Fees	\$	29,324,100	\$	29,324,100	\$	39,587,535	\$	43,949,369	\$	47,900,646	\$	52,202,852	\$	56,886,846	\$	60,824,068	\$	65,028,964	\$	69,519,480	\$	74,314,755
Interest on Investments		77,800		45,460		28,900		1,462		3,017		5,136		80,805		88,145		111,246		159,964		211,181
Other Revenues		1,150,000		1,150,000		2,545,023		2,421,021		1,801,398		1,150,000		1,150,000		1,150,000		1,150,000		1,150,000		1,150,000
Total Revenues	\$	30,551,900	\$	30,519,560	\$	42,161,458	\$	46,371,852	\$	49,705,061	\$	53,357,988	\$	58,117,651	\$	62,062,213	\$	66,290,210	\$	70,829,444	\$	75,675,936
Expenditures																						
Ongoing Wastewater Operating Expenses																						
Div 01 WWC Source Control / Services	\$	976,400	\$	1,033,290	\$	1,094,038	\$	1,158,924	\$	1,187,897	\$	1,217,594	\$	1,248,034	\$	1,279,235	\$	1,311,216	\$	1,343,996	\$	1,377,596
Div 02 Storm Water Quality Management		652,300		687,363		724,708		764,500		783,612		803,202		823,282		843,865		864,961		886,585		908,750
Div 03 Collection System Main & Upgrade		3,951,596		4,126,355		4,310,501		4,504,618		4,639,085		4,777,787		4,920,866		5,068,468		5,220,742		5,377,846		5,539,941
Div 07 Storm Water Flood Control		402,160		415,988		430,323		445,184		460,238		475,826		491,966		508,680		525,988		543,913		562,477
Div 45 Public Information		81,500		86,418		91,674		97,294		99,726		102,219		104,775		107,394		110,079		112,831		115,652
Additional Collections Expenditures		1,576,000		1,615,400		1,655,785		1,697,180		1,739,609		1,783,099		1,827,677		1,873,369		1,920,203		1,968,208		2,017,413
Div 01 WWT Laboratory Services		1,490,061		1,551,351		1,615,976		1,684,155		1,726,259		1,769,416		1,813,651		1,858,992		1,905,467		1,953,104		2,001,932
Div 02 Treatment Services		7,038,749		7,351,987		7,682,402		8,031,086		8,262,387		8,500,690		8,746,221		8,999,211		9,259,899		9,528,533		9,805,368
Div 05 Treatment System Maintenance-Upgrades		5,859,012		6,113,669		6,382,805		6,667,393		6,834,077		7,004,929		7,180,053		7,359,554		7,543,543		7,732,131		7,925,435
Div 45 Public Information		75,800		80,575		85,685		91,156		93,435		95,770		98,165		100,619		103,134		105,713		108,355
Additional Treatment Expenditures		1,292,000		1,324,300		1,357,408		1,391,343		1,426,126		1,461,779		1,498,324		1,535,782		1,574,177		1,613,531		1,653,869
Other		-		-		-		-		-		-		-		-		-		-		-
CIP Incremental O&M Costs		-		-		1,439,827		1,309,191		1,237,353		1,464,425		1,565,128		1,919,575		1,774,814		1,883,877		1,997,283
Additional O&M Programs		-		100,000		102,500		105,063		107,689		110,381		113,141		115,969		118,869		121,840		124,886
Additional Staff		-		-		4,956,148		6,979,810		6,548,664		6,712,381		6,880,191		7,052,195		7,228,500		7,409,213		7,594,443
Subtotal: Operating Expenditures	\$	23,395,578	\$	24,486,696	\$	31,929,781	\$	34,926,895	\$	35,146,158	\$	36,279,501	\$	37,311,474	\$	38,622,909	\$	39,461,593	\$	40,581,322	\$	41,733,401
Other Operating Expenses																						
Existing Debt Service	\$	8,039,703	\$	9,755,012	\$	9,723,173	\$	9,696,461	\$	9,669,792	\$	9,637,591	\$	9,507,157	\$	9,485,434	\$	9,467,445	\$	9,447,682	\$	9,420,616
Projected Debt Service	\$	-	\$	-	\$	-	\$	-	\$	1,945,100	\$	4,153,372	\$	7,289,518	\$	8,535,869	\$	9,643,129	\$	10,082,846	\$	10,284,072
Rate Funded Capital		-		-		-		-		-		-		-		-		-		-		0
Subtotal: Other Operating Expenditures	\$	8,039,703	\$	9,755,012	\$	9,723,173	\$	9,696,461	\$	11,614,892	\$	13,790,963	\$	16,796,675	\$	18,021,303	\$	19,110,574	\$	19,530,528	\$	19,704,688
Total Operating Expenditures	\$	31,435,281	\$	34,241,708	\$	41,652,954	\$	44,623,356	\$	46,761,051	\$	50,070,464	\$	54,108,149	\$	56,644,211	\$	58,572,167	\$	60,111,850	\$	61,438,088
Policy Expenditures																						
Equipment Replacement Funding	\$	-	\$	-	\$	41,761	\$	86,194	\$	88,952	\$	91,799	\$	94,736	\$	97,768	\$	100,897	\$	104,125	\$	107,457
Minimum Operating Fund Balance		-		-		8,109,604		7,911,320		4,655,491		850,007		773,980		983,576		629,013		839,796		864,059
Subtotal: Total Policy Expenditures	\$	-	\$	-	\$	8,151,365	\$	7,997,514	\$	4,744,443	\$	941,806	\$	868,716	\$	1,081,344	\$	729,910	\$	943,922	\$	971,516
Total Expenditures for Cash Flow Test	\$	31,435,281	\$	34,241,708	\$	49,804,318	\$	52,620,870	\$	51,505,494	\$	51,012,270	\$	54,976,865	\$	57,725,555	\$	59,302,077	\$	61,055,772	\$	62,409,605
Cash Flow Surplus (Deficit)																						
	\$	(883,381)	\$	(3,722,148)	\$	(7,642,861)	\$	(6,249,018)	\$	(1,800,432)	\$	2,345,718	\$	3,140,785	\$	4,336,658	\$	6,988,133	\$	9,773,673	\$	13,266,331



City of Oxnard  
Wastewater Financial Model  
Revenue Requirement

DEBT COVERAGE TEST												
	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
<b>Revenues</b>												
Wastewater Revenues for Coverage	\$ 30,551,900	\$ 30,519,560	\$ 42,161,458	\$ 46,371,852	\$ 49,705,061	\$ 53,357,988	\$ 58,117,651	\$ 62,062,213	\$ 66,290,210	\$ 70,829,444	\$ 75,675,936	
Total Revenues	\$ 30,551,900	\$ 30,519,560	\$ 42,161,458	\$ 46,371,852	\$ 49,705,061	\$ 53,357,988	\$ 58,117,651	\$ 62,062,213	\$ 66,290,210	\$ 70,829,444	\$ 75,675,936	
<b>Expenditures</b>												
Ongoing Wastewater Operating Expenses	\$ 23,395,578	\$ 24,486,696	\$ 31,929,781	\$ 34,926,895	\$ 35,146,158	\$ 36,279,501	\$ 37,311,474	\$ 38,622,909	\$ 39,461,593	\$ 40,581,322	\$ 41,733,401	
Total Debt Service	8,039,703	9,755,012	9,723,173	9,696,461	11,614,892	13,790,963	16,796,675	18,021,303	19,110,574	19,530,528	19,704,688	
Coverage	3,215,881	2,438,753	2,430,793	2,424,115	2,903,723	3,447,741	4,199,169	4,505,326	4,777,643	4,882,632	4,926,172	
Total Expenditures	\$ 34,651,162	\$ 36,680,461	\$ 44,083,747	\$ 47,047,472	\$ 49,664,774	\$ 53,518,205	\$ 58,307,318	\$ 61,149,537	\$ 63,349,810	\$ 64,994,482	\$ 66,364,260	
Bond Coverage Surplus (Deficit)	\$ (4,099,262)	\$ (6,160,901)	\$ (1,922,289)	\$ (675,620)	\$ 40,288	\$ (160,217)	\$ (189,667)	\$ 912,676	\$ 2,940,400	\$ 5,834,962	\$ 9,311,676	
Coverage Factor	0.89 x	0.62 x	1.05 x	1.18 x	1.25 x	1.24 x	1.24 x	1.30 x	1.40 x	1.55 x	1.72 x	

REVENUE REQUIREMENT												
	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Total Surplus (Deficit)	\$ (4,099,262)	\$ (6,160,901)	\$ (7,642,861)	\$ (6,249,018)	\$ (1,800,432)	\$ (160,217)	\$ (189,667)	\$ 912,676	\$ 2,940,400	\$ 5,834,962	\$ 9,311,676	
Rate Increase Driver	Coverage	Coverage	Cash Flow	Cash Flow	Cash Flow	Coverage	Coverage	Surplus	Surplus	Surplus	Surplus	
Month of Adoption	July	February	January	January	January	January	January	January	January	January	January	
Calculated Rate Increase (%)	13.98% Overriden	50.42% Overriden	38.61% Overriden	28.44% Overriden	7.52% Overriden	0.61% Overriden	0.67% Overriden	0.00% Overriden	0.00% Overriden	0.00% Overriden	0.00% Overriden	
<b>Rate Increases</b>												
Rate Increase (%)	0.00%	35.00%	10.00%	8.00%	8.00%	8.00%	6.00%	6.00%	6.00%	6.00%	6.00%	
Cumulative Rate Increase (%)	0.00%	35.00%	48.50%	60.38%	73.21%	87.07%	98.29%	110.19%	122.80%	136.17%	150.34%	
Typical Single Family Bill (11 units)	\$ 36.44	\$ 49.19	\$ 54.16	\$ 58.46	\$ 63.18	\$ 68.23	\$ 72.28	\$ 76.59	\$ 81.16	\$ 86.00	\$ 91.14	
<b>Cash Flows</b>												
Revenues Before Rate Increase	\$ 30,551,900	\$ 30,519,560	\$ 42,161,458	\$ 46,371,852	\$ 49,705,061	\$ 53,357,988	\$ 58,117,651	\$ 62,062,213	\$ 66,290,210	\$ 70,829,444	\$ 75,675,936	
<b>Revenues From Rate Increase</b>												
Revenues From Full Year of Rate Increase	\$ -	\$ 10,263,435	\$ 3,958,754	\$ 3,515,950	\$ 3,832,052	\$ 4,176,228	\$ 3,413,211	\$ 3,649,444	\$ 3,901,738	\$ 4,171,169	\$ 4,458,885	
Less: Rate Increase Delay	-	(5,987,004)	(1,979,377)	(1,757,975)	(1,916,026)	(2,088,114)	(1,706,605)	(1,824,722)	(1,950,869)	(2,085,584)	(2,229,443)	
Resulting Revenues from Rate Increase	\$ -	\$ 4,276,431	\$ 1,979,377	\$ 1,757,975	\$ 1,916,026	\$ 2,088,114	\$ 1,706,605	\$ 1,824,722	\$ 1,950,869	\$ 2,085,584	\$ 2,229,443	
Total Revenues (with Rate Increase)	\$ 30,551,900	\$ 34,795,991	\$ 44,140,835	\$ 48,129,827	\$ 51,621,087	\$ 55,446,102	\$ 59,824,256	\$ 63,886,935	\$ 68,241,079	\$ 72,915,029	\$ 77,905,379	
Less: Expenditures	(31,435,281)	(34,241,708)	(49,804,318)	(52,620,870)	(51,505,494)	(51,012,270)	(54,976,865)	(57,725,555)	(59,302,077)	(61,055,772)	(62,409,605)	
Cash Flow	\$ (883,381)	\$ 554,284	\$ (5,663,484)	\$ (4,491,044)	\$ 115,593	\$ 4,433,832	\$ 4,847,391	\$ 6,161,380	\$ 8,939,002	\$ 11,859,257	\$ 15,495,774	
<b>Coverage</b>												
Revenue Only Coverage Factor	0.89 x	1.06 x	1.26 x	1.36 x	1.42 x	1.39 x	1.34 x	1.40 x	1.51 x	1.66 x	1.84 x	
Coverage Factor With Operating Reserve Ending Balance	2.79 x	2.68 x	3.14 x	3.60 x	3.69 x	3.36 x	3.01 x	3.01 x	3.05 x	3.21 x	3.42 x	

---

## APPENDIX H - WASTEWATER FUNCTIONAL ALLOCATION



## City of Oxnard - Wastewater Financial Model

**Carollo Engineers**  
**User Rate Calculations - Functional Allocation of Revenue Requirements**

[illegible]



City of Oxnard - Wastewater Financial Model

Carollo Engineers  
User Rate Calculations - Functional Allocation of Revenue Requirements

O&M Allocation		Cost	Allocation	Collection Flow	Treatment Flow	BOD	TSS	NH3	Stormwater	Customer	Admin	Outside City	-Blank-	As All Other	Total
No.															
Div 01 WWC Source Control / Services															
1	Salaries and Wages	\$	3,931,031	Div 01 Source Control / Services	85%	0%	0%	0%	0%	5%	5%	5%	0%	0%	100.0%
2	Contractual Services	\$	150,857	Div 01 Source Control / Services	85%	0%	0%	0%	0%	5%	5%	5%	0%	0%	100.0%
3	Operating Supplies	\$	118,530	Div 01 Source Control / Services	85%	0%	0%	0%	0%	5%	5%	5%	0%	0%	100.0%
4	Utilities	\$	10,775	Div 01 Source Control / Services	85%	0%	0%	0%	0%	5%	5%	5%	0%	0%	100.0%
5	General and Administrative	\$	1,405,122	Div 01 Source Control / Services	85%	0%	0%	0%	0%	5%	5%	5%	0%	0%	100.0%
6	Maintenace Services	\$	75,428	Div 01 Source Control / Services	85%	0%	0%	0%	0%	5%	5%	5%	0%	0%	100.0%
7															
Div 02 Storm Water Quality Management															
8	Salaries and Wages	\$	2,269,904	Div 02 Storm Water Quality Management	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100.0%
9	Contractual Services	\$	274,775	Div 02 Storm Water Quality Management	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100.0%
10	Operating Supplies	\$	153,550	Div 02 Storm Water Quality Management	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100.0%
11	General and Administrative	\$	1,065,156	Div 02 Storm Water Quality Management	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100.0%
12	Maintenace Services	\$	-	Div 02 Storm Water Quality Management	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100.0%
13															
Div 03 Collection System Main & Upgrade															
14	Salaries and Wages	\$	6,843,444	Div 03 Collection System Main & Upgrade	82%	0%	0%	0%	0%	5%	5%	8%	0%	0%	100.0%
15	Contractual Services	\$	3,368,828	Div 03 Collection System Main & Upgrade	82%	0%	0%	0%	0%	5%	5%	8%	0%	0%	100.0%
16	Operating Supplies	\$	654,610	Div 03 Collection System Main & Upgrade	82%	0%	0%	0%	0%	5%	5%	8%	0%	0%	100.0%
17	Electricity	\$	7,294,974	Div 03 Collection System Main & Upgrade	82%	0%	0%	0%	0%	5%	5%	8%	0%	0%	100.0%
18	Other Utilities	\$	-	Div 03 Collection System Main & Upgrade	82%	0%	0%	0%	0%	5%	5%	8%	0%	0%	100.0%
19	Telephone-Basic Service	\$	-	Div 03 Collection System Main & Upgrade	82%	0%	0%	0%	0%	5%	5%	8%	0%	0%	100.0%
20	Telephone-Cell and Pager	\$	-	Div 03 Collection System Main & Upgrade	82%	0%	0%	0%	0%	5%	5%	8%	0%	0%	100.0%
21	Telephone Chgs/HIPC	\$	-	Div 03 Collection System Main & Upgrade	82%	0%	0%	0%	0%	5%	5%	8%	0%	0%	100.0%
22	General and Administrative	\$	2,714,864	Div 03 Collection System Main & Upgrade	82%	0%	0%	0%	0%	5%	5%	8%	0%	0%	100.0%
23	Maintenance Services	\$	1,481,628	Div 03 Collection System Main & Upgrade	82%	0%	0%	0%	0%	5%	5%	8%	0%	0%	100.0%
24															
Div 07 Storm Water Flood Control															
25	Salaries and Wages	\$	34,493	Div 07 Storm Water Flood Control	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100.0%
26	Contractual Services	\$	107,755	Div 07 Storm Water Flood Control	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100.0%
27	Operating Supplies	\$	207,428	Div 07 Storm Water Flood Control	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100.0%
28	Electricity	\$	1,310,230	Div 07 Storm Water Flood Control	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100.0%
29	Water	\$	-	Div 07 Storm Water Flood Control	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100.0%
30	Refuse & Disposal	\$	-	Div 07 Storm Water Flood Control	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100.0%
31	Telephone-Cell & Pager	\$	-	Div 07 Storm Water Flood Control	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100.0%
32	General and Administrative	\$	538,019	Div 07 Storm Water Flood Control	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100.0%
33	Maintenance Services	\$	29,633	Div 07 Storm Water Flood Control	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100.0%
34															
Div 45 Public Information															
35	Salaries and Wages	\$	348,564	Div 45 Public Information	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100.0%
36	Contractual Services	\$	41,486	Div 45 Public Information	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100.0%
37	Operating Supplies	\$	40,947	Div 45 Public Information	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100.0%
38	General and Administrative	\$	37,714	Div 45 Public Information	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100.0%
39	Maintenance Services	\$	8,620	Div 45 Public Information	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100.0%
40															
Additional Collections Expenditures															
41	Routine Capital	\$	-	Div 03 Collection System Main & Upgrade	82%	0%	0%	0%	0%	5%	5%	8%	0%	0%	100.0%
42	Reserves and Transfers	\$	8,491,073	Div 03 Collection System Main & Upgrade	82%	0%	0%	0%	0%	5%	5%	8%	0%	0%	100.0%

City of Oxnard - Wastewater Financial Model

Carollo Engineers  
User Rate Calculations - Functional Allocation of Revenue Requirements

Line No.	Dept.														
Div 01 WWT Laboratory Services															
43	Salaries and Wages	\$	2,909,375	Div 01 Laboratory Services	0%	0%	50%	50%	0%	0%	1%	5%	0%	0%	-5%
44	Contractual Services	\$	3,073,601	Div 01 Laboratory Services	0%	0%	50%	50%	0%	0%	1%	5%	0%	0%	-5%
45	Operating Supplies	\$	288,244	Div 01 Laboratory Services	0%	0%	50%	50%	0%	0%	1%	5%	0%	0%	-5%
46	Utilities	\$	23,571	Div 01 Laboratory Services	0%	0%	50%	50%	0%	0%	1%	5%	0%	0%	-5%
47	General and Administrative	\$	2,052,367	Div 01 Laboratory Services	0%	0%	50%	50%	0%	0%	1%	5%	0%	0%	-5%
48	Maintenance Services	\$	-	Div 01 Laboratory Services	0%	0%	50%	50%	0%	0%	1%	5%	0%	0%	-5%
49															
Div 02 Treatment Services															
50	Salaries and Wages	\$	13,329,530	Div 02 Treatment Services	0%	40%	35%	25%	0%	0%	0%	0%	0%	0%	0%
51	Contractual Services	\$	2,775,239	Div 02 Treatment Services	0%	40%	35%	25%	0%	0%	0%	0%	0%	0%	0%
52	Operating Supplies	\$	5,465,859	Div 02 Treatment Services	0%	40%	35%	25%	0%	0%	0%	0%	0%	0%	0%
53	Electricity	\$	4,602,307	Div 02 Treatment Services	0%	40%	35%	25%	0%	0%	0%	0%	0%	0%	0%
54	Natural Gas	\$	844,946	Div 02 Treatment Services	0%	40%	35%	25%	0%	0%	0%	0%	0%	0%	0%
55	Wastewater	\$	45,064	Div 02 Treatment Services	0%	40%	35%	25%	0%	0%	0%	0%	0%	0%	0%
56	Water	\$	281,649	Div 02 Treatment Services	0%	40%	35%	25%	0%	0%	0%	0%	0%	0%	0%
57	Refuse and Disposal	\$	9,012,761	Div 02 Treatment Services	0%	40%	35%	25%	0%	0%	0%	0%	0%	0%	0%
58	Other Utilities	\$	-	Div 02 Treatment Services	0%	40%	35%	25%	0%	0%	0%	0%	0%	0%	0%
59	Telephone-Cell and Pager	\$	5,633	Div 02 Treatment Services	0%	40%	35%	25%	0%	0%	0%	0%	0%	0%	0%
60	General and Administrative	\$	3,433,238	Div 02 Treatment Services	0%	40%	35%	25%	0%	0%	0%	0%	0%	0%	0%
61	Maintenance Services	\$	32,326	Div 02 Treatment Services	0%	40%	35%	25%	0%	0%	0%	0%	0%	0%	0%
62															
Div 05 Treatment System Maintenance-Upgrades															
63	Salaries and Wages	\$	13,093,112	05 Treatment System Maintenance	0%	40%	35%	25%	0%	0%	0%	1%	0%	0%	-1%
64	Contractual Services	\$	9,734,827	05 Treatment System Maintenance	0%	40%	35%	25%	0%	0%	0%	1%	0%	0%	-1%
65	Operating Supplies	\$	2,683,093	05 Treatment System Maintenance	0%	40%	35%	25%	0%	0%	0%	1%	0%	0%	-1%
66	Utilities	\$	3,833,913	05 Treatment System Maintenance	0%	40%	35%	25%	0%	0%	0%	1%	0%	0%	-1%
67	General and Administrative	\$	3,323,889	05 Treatment System Maintenance	0%	40%	35%	25%	0%	0%	0%	1%	0%	0%	-1%
68	Maintenance Services	\$	334,040	05 Treatment System Maintenance	0%	40%	35%	25%	0%	0%	0%	1%	0%	0%	-1%
69															
Div 45 Public Information															
70	Salaries and Wages	\$	348,564	Div 45 Public Information	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%
71	Contractual Services	\$	10,775	Div 45 Public Information	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%
72	Operating Supplies	\$	40,947	Div 45 Public Information	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%
73	General and Administrative	\$	37,714	Div 45 Public Information	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%
74	Maintenance Services	\$	8,620	Div 45 Public Information	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%
75															
Additional Treatment Expenditures															
76	Routine Capital	\$	53,877	Div 02 Treatment Services	0%	40%	35%	25%	0%	0%	0%	0%	0%	0%	0%
77	Reserves and Transfers	\$	6,907,078	Div 02 Treatment Services	0%	40%	35%	25%	0%	0%	0%	0%	0%	0%	0%

City of Oxnard - Wastewater Financial Model

Carollo Engineers  
User Rate Calculations - Functional Allocation of Revenue Requirements

<b>Other</b>																										
78	Salaries and Benefits	\$	-	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%										
79	Other Expenses	\$	-	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%										
<b>Wastewater Debt Service</b>				<b>Included Below</b>																						
				As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%										
				As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%										
<b>Other Expenditures</b>																										
82	Salaries and Benefits	\$	-	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%										
83	Other Expenses	\$	-	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%										
<b>CIP Incremental O&amp;M Costs</b>																										
84	Incremental O&M	\$	5,450,796	Div 02 Treatment Services	0%	40%	35%	25%	0%	0%	0%	0%	0%	0%	0%	100.0%										
<b>Additional O&amp;M Programs</b>																										
85	Vehicle Replacement	\$	525,633	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%										
86	Additional Storm Drain Maintenance	\$	-	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%										
87	Additional O&M for R&R Scenario	\$	-	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%										
88	Program 4	\$	-	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%										
89	Program 5	\$	-	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%										
<b>Additional Staff</b>																										
90	Filling of Vacant Positions & New Positions	\$	15,518,606	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%										
	Engineering Personell for CIP	\$	9,678,397	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%										
<b>Equipment Replacement Funding</b>				<b>Included Below</b>																						
91				As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%										
92				As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%										
Subtotal O&M Allocation		\$	162,769,031		\$	30,134,507	\$	34,097,271	\$	34,008,691	\$	25,484,373	\$	-	\$	5,990,943	\$	1,868,794	\$	3,630,409	\$	2,752,541	\$	-	\$	24,801,502
Reallocation of As All Other			-			5,417,079		6,129,439		6,113,515		4,581,156		-		1,076,952		335,941		652,614		494,806		-		(24,801,502)
<b>Total O&amp;M Allocation</b>		<b>\$</b>	<b>162,769,031</b>		<b>\$</b>	<b>35,551,586</b>	<b>\$</b>	<b>40,226,710</b>	<b>\$</b>	<b>40,122,207</b>	<b>\$</b>	<b>30,065,529</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>7,067,895</b>	<b>\$</b>	<b>2,204,735</b>	<b>\$</b>	<b>4,283,023</b>	<b>\$</b>	<b>3,247,347</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>-</b>
<b>O&amp;M Allocation Percentages</b>					<b>22%</b>	<b>24.7%</b>	<b>24.6%</b>	<b>18.5%</b>	<b>0.0%</b>	<b>4%</b>	<b>1%</b>	<b>3%</b>	<b>2%</b>	<b>0%</b>	<b>0%</b>											

O&M Allocation Check	
Total Allocated O&M	\$ 162,769,031
Total Applicable O&M Costs	162,769,031
Difference	\$ -

City of Oxnard - Wastewater Financial Model

Carollo Engineers  
User Rate Calculations - Functional Allocation of Revenue Requirements

All-In Revenue Requirement Allocation		Cost	Allocation	Collection Flow	Treatment Flow	BOD	TSS	NH3	Stormwater	Customer	Admin	Outside City	-Blank-	As All Other	Total
Notes:	Allocated O&M	\$ 162,769,031	[Calculated]	22%	25%	25%	18%	0%	4%	1%	3%	2%	0%	0%	100.0%
	Existing Debt	48,482,029	As Existing Debt	32%	13%	28%	27%	0%	0%	0%	0%	0%	0%	0%	100.0%
	Future debt	6,098,473	As Capital	22%	36%	22%	19%	0%	0%	0%	0%	0%	0%		
	Rate Funded Capital	-	As Capital	22%	36%	22%	19%	0%	0%	0%	0%	0%	0%	0%	100.0%
	Equipment Replacement Funding	308,706	05 Treatment System Maintenance	0%	40%	35%	25%	0%	0%	0%	1%	0%	0%	-1%	100.0%
	Minimum Operating Fund Balance	21,526,421	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%
			As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%
	Revenue from Full Year Rate Increase	(5,050,818)	As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%
	Less Offsetting Revenues														
	Interest on Investments	(83,975)	[Calculated]	22%	25%	25%	18%	0%	4%	1%	3%	2%	0%	0%	100.0%
	Other Revenues	(9,067,442)	[Calculated]	22%	25%	25%	18%	0%	4%	1%	3%	2%	0%	0%	100.0%
			As All Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100.0%
Subtotal Revenue Requirement Allocation		\$ 62,213,394		\$ 50,421,371	\$ 46,737,818	\$ 52,839,315	\$ 42,650,040	\$ -	\$ 6,670,514	\$ 2,080,777	\$ 4,046,539	\$ 3,064,770	\$ -	\$ 16,471,281	
Reallocation of As All Other				4,178,096	3,872,863	4,378,455	3,534,135	-	No Reallocation App	172,421	335,311	No Reallocation App	-	(16,471,281)	
Total Revenue Requirement Allocation		\$ 224,982,425		\$ 54,599,466	\$ 50,610,681	\$ 57,217,770	\$ 46,184,176	\$ -	\$ 6,670,514	\$ 2,253,198	\$ 4,381,850	\$ 3,064,770	\$ -	\$ -	
Revenue Requirement Allocation Percentages				24%	22%	25%	21%	0%	3%	1%	2%	1%			

Revenue Requirement Allocation Check		
Total Allocated Revenue Requirement	\$ 224,982,425	
Total Revenue Requirement Less Offsetting Rev	224,982,425	
Difference	\$ -	

2015/16 Functional Allocation Results			Collection Flow	Treatment Flow	BOD	TSS	NH3	Stormwater	Customer	Admin	Outside City	-Blank-
Allocation Percentages		Allocation Percentage	24%	22%	25%	21%	0%	3%	1%	2%	1%	0%
FY 2015/16	\$ 39,587,535	Allocated Costs	\$ 9,607,232	\$ 8,905,372	\$ 10,067,944	\$ 8,126,491	\$ -	\$ 1,173,733	\$ 396,469	\$ 771,023	\$ 539,272	\$ -
Unit Cost Factor		Unit Cost Factor	Flow (HCF)	Flow (HCF)	BOD (lbs)	TSS (lbs)		Inside City Accounts	Accounts	Accounts	Outside City Accounts	
Units		Units	8,168,180	9,603,476	18,472,299	16,732,720	0	38,793	39,104	39,104	311	
Unit Costs		Unit Cost	\$1.18	\$0.93	\$0.55	\$0.49	#DIV/0!	\$2.52	\$0.84	\$1.64	\$144.50	
			Per HCF	Per HCF	Per Lb	Per Lb	Per Lb	Per Acct Per Month	Per Acct Per Month	Per Acct Per Month	Per Acct Per Month	Per Acct Per Month
Unit Costs		Unit Cost	\$1,572.43	\$1,239.72	\$545.03	\$485.66	#DIV/0!					
			Per MG	Per MG	Per kLb	Per kLb						
Allocation For EDU Calc			26.17%	24.26%	27.43%	22.14%	0.00%					

City of Oxnard - Wastewater Financial Model

Carollo Engineers  
User Rate Calculations - Functional Allocation of Revenue Requirements

Regional Allocation				Collection Flow	Treatment Flow	BOD	TSS	NH3	Stormwater	Customer	Admin	Outside City	-Blank-
Ongoing O&M													
	Expenditures	Reallocation of General	Resulting Allocation	Percentage									
Colletions O&M	\$ 37,018,495	\$ 6,948,109	\$ 43,966,604	27%									
OWTP O&M	94,036,957	17,650,070	111,687,027	69%									
Stormwater General	5,990,943	1,124,457	7,115,400	4%									
	25,722,636												
Total	\$ 162,769,031	\$ 25,722,636	\$ 162,769,031	100%									
OWTP O&M Allocation													
Allocated OWTP O&M Costs			\$94,958,091		\$0	\$34,097,271	\$34,008,691	\$25,484,373	\$0	\$0	\$41,736	\$1,326,019	\$0
Reallocation of As All Others			\$24,801,502		\$0	\$8,905,650	\$8,882,515	\$6,656,102	\$0	\$0	\$10,901	\$346,335	\$0
Resulting OWTP O&M Allocation			\$119,759,593		\$0	\$43,002,921	\$42,891,206	\$32,140,475	\$0	\$0	\$52,636	\$1,672,354	\$0
Less Offsetting Revenues													
Interest on Investments			(\$41,384)			(14,240)	(14,203)	(10,643)			(780)	(1,516)	
Other Revenues			(\$4,468,550)			(1,537,653)	(1,533,659)	(1,149,245)			(84,275)	(163,717)	
Resulting OWTP Allocation			\$115,249,659			\$41,451,027	\$41,343,344	\$30,980,587			-\$32,419	\$1,507,120	
ADJUSTMENTS													
Regional Customer O&M Allocation				14.25%	85.75% Regional customers don't get full burden of WWT O&M (capacity rights basis)								
	Share of O&M	Total											
City Of Oxnard	85.75%	\$98,826,583			\$35,544,256	\$35,451,917	\$26,565,853			-\$27,800	\$1,292,356		
Regional Customers	14.25%	\$16,423,076			\$5,906,771	\$5,891,426	\$4,414,734			-\$4,620	\$214,765		
Total	100.00%	\$115,249,659			\$41,451,027	\$41,343,344	\$30,980,587			-\$32,419	\$1,507,120		
OWTP O&M Unit Costs	FY 2015/16												
City of Oxnard	Allocated Costs	\$98,826,583			\$35,544,256	\$35,451,917	\$26,565,853			-\$27,800	\$1,292,356		
Regional Customers	Allocated Costs	\$16,423,076			\$5,906,771	\$5,891,426	\$4,414,734			-\$4,620	\$214,765		
	Reallocation of Customer and Admin Costs				\$76,561	\$76,362	\$57,222						
Resulting Regional OWTP O&M Allocati		\$16,423,076			\$5,983,332	\$5,967,789	\$4,471,955						
Allocation Based on Current Data					58.1%	17.2%	24.7%						
Allocation Based on Current Data					\$9,544,913	\$2,825,305	\$4,052,858						

City of Oxnard - Wastewater Financial Model

Carollo Engineers  
User Rate Calculations - Functional Allocation of Revenue Requirements

OWTP Capital												
ALLOCATION BASED ON CAPACITY RIGHTS												
Oxnard		82.0200%	0.0%	91.5%	97.5%	97.5%	0.0%				13.7%	
PH		11.67%		7.2%	1.0%	1.0%					2.5%	
Pt. Mugu		1.58%		0.1%	0.5%	0.5%					0.5%	
CBC/NBVC		4.73%		1.2%	1.0%	1.0%					1.5%	
Existing Debt												
Existing Debt Service		32,967,780		6,428,717	13,516,790	13,022,273	-					
Applicability to Regional Customers												
Regional Allocation		0.00%	\$	-	\$	-	\$	-				
Future Debt												
Future Debt Service		4,744,109		2,220,588	1,348,075	1,175,446	-					
Applicability to Regional Customers												
Regional Allocation		100.00%	\$	188,306	\$	33,702	\$	29,386	\$	-		
Other Capital Expenditures												
Rate Funded Capital		-		-	-	-	-					
Equipment Replacement Funding		308,706		123,482	108,047	77,176	-					
Applicability to Regional Customers												
Rate Funded Capital		100.00%		-	-	-	-					
Equipment Replacement Funding		100.00%		10,471	2,701	1,929	-					
Total Other Capital Expenditures			\$	10,471	\$	2,701	\$	1,929	\$	-		
Total OWTP Capital Allocated to Regional Customers			\$	198,777	\$	36,403	\$	31,316	\$	-		
Total Regional Allocation												
OWTP O&M		\$	-	\$	5,983,332	\$	5,967,789	\$	4,471,955	\$	-	\$
OWTP Capital		\$	-	\$	198,777	\$	36,403	\$	31,316	\$	-	\$
Total Regional Allocation		\$	-	\$	6,182,110	\$	6,004,192	\$	4,503,271	\$	-	\$
Total Allocated (In-City and Regional)		\$	54,599,466	\$	50,610,681	\$	57,217,770	\$	46,184,176	\$	-	\$
Regional Percentages												
OWTP O&M		0.0%		11.8%	10.4%	9.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
OWTP Capital		0.0%		0.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Regional		0.0%		12.2%	10.5%	9.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Inside City		100.0%		87.8%	89.5%	90.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

## **APPENDIX I – ENVIRONMENTAL RESOURCES REVENUE REQUIREMENTS**







City of Oxnard

Environmental Resources Financial Model

Revenue Requirement

Edit Log

	FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		FY 2019/20		FY 2020/21		FY 2021/22		FY 2022/23		FY 2023/24		FY 2024/25	
CASH FLOW TEST																				
Revenues	FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		FY 2019/20		FY 2020/21		FY 2021/22		FY 2022/23		FY 2023/24		FY 2024/25	
Revenues from Wastewater Operations																				
Residential Rate Revenues	\$	12,980,000	\$	13,758,800	\$	14,309,152	\$	14,881,518	\$	15,476,779	\$	15,941,082	\$	16,419,315	\$	16,911,894	\$	17,419,251	\$	17,941,828
Commercial Rate Revenues		13,970,000		14,808,200		15,400,528		16,016,549		16,657,211		17,156,927		17,671,635		18,201,784		18,747,838		19,310,273
Industrial Rate Revenues		1,980,000		2,098,800		2,182,752		2,270,062		2,360,865		2,431,691		2,504,641		2,579,780		2,657,174		2,736,889
Usage Fees		5,607,500		5,727,938		5,851,386		5,977,921		6,107,619		6,240,559		6,376,823		6,516,494		6,659,656		6,806,397
MRF Recycled Material Sales		7,175,000		7,354,375		7,538,234		7,726,690		7,919,857		8,117,854		8,320,800		8,528,820		8,742,041		8,960,592
Pass-Throughs		1,998,750		2,048,719		2,099,937		2,152,435		2,206,246		2,261,402		2,317,937		2,375,886		2,435,283		2,496,165
Other Revenues		350,000		350,000		350,000		350,000		350,000		350,000		350,000		350,000		350,000		350,000
Total Revenues	\$	44,061,250	\$	46,146,831	\$	47,731,989	\$	49,375,175	\$	51,078,577	\$	52,499,515	\$	53,961,152	\$	55,464,658	\$	57,011,242	\$	58,602,144
Expenditures																				
Ongoing Water Operating Expenses																				
Division 1 - ADMINISTRATIVE & PLANNING	\$	2,232,108	\$	2,287,694	\$	2,410,752	\$	2,471,426	\$	2,533,632	\$	2,597,411	\$	2,662,802	\$	2,729,846	\$	2,798,585	\$	2,869,062
Division 2 - WASTE REDUCTION & EDUCAT.		237,764		247,754		258,297		264,764		271,393		278,189		285,155		292,295		299,614		307,117
Division 4 - PROCESSING AND DISPOSAL		-		-		-		-		-		-		-		-		-		-
Division 5 - DEBT SERVICE		119,992		122,992		126,067		129,218		132,449		135,760		139,154		142,633		146,199		149,854
Division 7 - RESIDENTIAL COLLECTION		4,255,862		4,473,033		4,703,104		4,842,500		4,986,121		5,134,099		5,285,556		5,441,575		5,602,297		5,767,866
Division 8 - COMMERCIAL COLLECTION		5,080,226		4,441,159		4,697,749		4,829,783		4,965,613		5,105,352		5,248,438		5,395,620		5,547,019		5,702,757
Division 9 - INDUSTRIAL COLLECTION		1,404,859		1,464,722		1,545,368		1,589,175		1,634,252		1,680,637		1,728,131		1,776,996		1,827,272		1,879,003
Division 10 - INSPECTION SERVICES		629,551		673,151		719,901		738,645		757,883		777,628		797,860		818,625		839,936		861,809
Division 11 - CONTAINER MAINTENANCE		400,899		423,277		447,116		458,967		471,136		483,633		496,436		509,583		523,083		536,946
Division 12 - Tipping Floor Processing/Disposal		3,725,471		2,796,979		2,906,202		2,991,273		3,078,900		3,169,161		3,261,616		3,356,834		3,454,901		3,555,904
Division 13 - MRF		6,610,936		5,697,450		5,873,789		6,021,768		6,173,492		6,329,057		6,488,560		6,652,101		6,819,784		6,991,715
Division 14 - Waste Transfer Hauling		10,695,667		11,153,201		11,632,209		12,051,076		12,485,457		12,935,937		13,402,508		13,886,379		14,388,205		14,908,666
Division 16 - Greenwaste Conversion		1,595,413		1,665,735		1,739,695		1,793,697		1,849,407		1,906,878		1,965,684		2,026,334		2,088,887		2,153,404
Division 45 - PUBLIC INFO-SPECIAL PROJ		187,788		200,478		214,084		219,465		224,982		230,638		236,437		242,382		248,477		254,726
Division 28 - Other		(491)		-		-		-		-		-		-		-		-		-
Fund 633 - Division 7		40,000		41,000		42,025		43,076		44,153		45,256		46,388		47,547		48,736		49,955
Fund 633 - Division 7		15,000		15,375		15,759		16,153		16,557		16,971		17,395		17,830		18,276		18,733
Fund 638 - Division 15		80,000		82,000		84,050		86,151		88,305		90,513		92,775		95,095		97,472		99,909
Additional ER Expenditures		1,987,743		2,037,437		2,088,372		2,140,582		2,194,096		2,248,949		2,305,172		2,362,802		2,421,872		2,482,419
Other Expenditures		-		-		-		-		-		-		-		-		-		-
CIP Incremental O&M Costs		-		-		-		-		-		-		-		-		-		-
Additional O&M Programs		-		-		-		-		-		-		-		-		-		-
Additional Staff		-		-		-		-		-		-		-		-		-		-
Equipment Replacement Funding		-		-		-		-		-		-		-		-		-		-
Subtotal: Operating Expenditures	\$	39,298,788	\$	37,823,436	\$	39,504,540	\$	40,687,719	\$	41,907,828	\$	43,166,069	\$	44,460,066	\$	45,794,477	\$	47,170,616	\$	48,589,843
Other Operating Expenses																				
Debt Service	\$	3,242,300	\$	1,667,300	\$	3,174,569	\$	4,028,029	\$	5,889,819	\$	5,812,676	\$	6,286,967	\$	6,337,515	\$	6,337,515	\$	6,337,515
Rate Funded Capital		-		4,626,800		4,774,858		4,927,653		-		-		-		-		-		-
Subtotal: Other Operating Expenditures	\$	3,242,300	\$	6,294,100	\$	7,949,427	\$	8,955,682	\$	5,889,819	\$	5,812,676	\$	6,286,967	\$	6,337,515	\$	6,337,515	\$	6,337,515
Total Operating Expenditures	\$	42,541,088	\$	44,117,536	\$	47,453,967	\$	49,643,401	\$	47,797,647	\$	48,978,745	\$	50,747,033	\$	52,131,992	\$	53,508,131	\$	54,927,358
Policy Expenditures																				
Equipment Replacement Funding	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Minimum Operating Fund Balance		1,690,112		2,363,139		560,312		394,353		406,662		419,372		431,289		444,759		458,667		473,028
Subtotal: Total Policy Expenditures	\$	1,690,112	\$	2,363,139	\$	560,312	\$	394,353	\$	406,662	\$	419,372	\$	431,289	\$	444,759	\$	458,667	\$	473,028
Total Expenditures for Cash Flow Test	\$	44,231,200	\$	46,480,675	\$	48,014,279	\$	50,037,754	\$	48,204,309	\$	49,398,117	\$	51,178,322	\$	52,576,751	\$	53,966,798	\$	55,400,387
Cash Flow Surplus (Deficit)																				
	\$	(169,950)	\$	(333,844)	\$	(282,290)	\$	(662,579)	\$	2,874,267	\$	3,101,398	\$	2,782,829	\$	2,887,907	\$	3,044,444	\$	3,201,758



City of Oxnard  
Environmental Resources Financial Model  
Revenue Requirement

Edit Log

DEBT COVERAGE TEST

	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
<b>Revenues</b>										
Water Revenues for Coverage	\$ 44,061,250	\$ 46,146,831	\$ 47,731,989	\$ 49,375,175	\$ 51,078,577	\$ 52,499,515	\$ 53,961,152	\$ 55,464,658	\$ 57,011,242	\$ 58,602,144
Interest on Unrestricted Funds										
Total Revenues	\$ 44,061,250	\$ 46,146,831	\$ 47,731,989	\$ 49,375,175	\$ 51,078,577	\$ 52,499,515	\$ 53,961,152	\$ 55,464,658	\$ 57,011,242	\$ 58,602,144
<b>Expenditures</b>										
Ongoing Water Operating Expenses	\$ 39,298,788	\$ 37,823,436	\$ 39,504,540	\$ 40,687,719	\$ 41,907,828	\$ 43,166,069	\$ 44,460,066	\$ 45,794,477	\$ 47,170,616	\$ 48,589,843
Debt Service	3,242,300	1,667,300	3,174,569	4,028,029	5,889,819	5,812,676	6,286,967	6,337,515	6,337,515	6,337,515
Coverage	810,575	416,825	793,642	1,007,007	1,472,455	1,453,169	1,571,742	1,584,379	1,584,379	1,584,379
Total Expenditures	\$ 43,351,663	\$ 39,907,561	\$ 43,472,752	\$ 45,722,755	\$ 49,270,102	\$ 50,431,914	\$ 52,318,775	\$ 53,716,371	\$ 55,092,510	\$ 56,511,737
Bond Coverage Surplus (Deficit)	\$ 709,587	\$ 6,239,270	\$ 4,259,237	\$ 3,652,420	\$ 1,808,475	\$ 2,067,601	\$ 1,642,377	\$ 1,748,288	\$ 1,918,732	\$ 2,090,407
Coverage Factor	1.47 x	4.99 x	2.59 x	2.16 x	1.56 x	1.61 x	1.51 x	1.53 x	1.55 x	1.58 x

REVENUE REQUIREMENT

	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Total Surplus (Deficit)	\$ (169,950)	\$ (333,844)	\$ (282,290)	\$ (662,579)	\$ 1,808,475	\$ 2,067,601	\$ 1,642,377	\$ 1,748,288	\$ 1,918,732	\$ 2,090,407
Rate Increase Driver	Cash Flow	Cash Flow	Cash Flow	Cash Flow	Surplus	Surplus	Surplus	Surplus	Surplus	Surplus
Month of Adoption	February	January	January	January	January	January	January	January	January	January
Calculated Rate Increase (%)	1.41%	2.18%	1.77%	4.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	Overriden	Overriden	Overriden	Overriden	Overriden	Overriden	Overriden	Overriden	Overriden	Overriden
Rate Increases										
Rate Increase (%)	6.00%	4.00%	4.00%	4.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Cumulative Rate Increase (%)	6.00%	10.24%	14.65%	19.24%	22.81%	26.50%	30.29%	34.20%	38.23%	42.37%
Typical Single Family Bill (11 units)	\$ 31.96	\$ 33.24	\$ 34.57	\$ 35.95	\$ 37.03	\$ 38.14	\$ 39.28	\$ 40.46	\$ 41.67	\$ 42.92
<b>Cash Flows</b>										
Revenues Before Rate Increase	\$ 44,061,250	\$ 46,146,831	\$ 47,731,989	\$ 49,375,175	\$ 51,078,577	\$ 52,499,515	\$ 53,961,152	\$ 55,464,658	\$ 57,011,242	\$ 58,602,144
<b>Revenues From Rate Increase</b>										
Revenues From Full Year of Rate Increase	\$ 1,735,800	\$ 1,226,632	\$ 1,275,697	\$ 1,326,725	\$ 1,034,846	\$ 1,065,891	\$ 1,097,868	\$ 1,130,804	\$ 1,164,728	\$ 1,199,670
Less: Rate Increase Delay	(1,012,550)	(613,316)	(637,849)	(663,363)	(517,423)	(532,946)	(548,934)	(565,402)	(582,364)	(599,835)
Resulting Revenues from Rate Increase	\$ 723,250	\$ 613,316	\$ 637,849	\$ 663,363	\$ 517,423	\$ 532,946	\$ 548,934	\$ 565,402	\$ 582,364	\$ 599,835
Total Revenues (with Rate Increase)	\$ 44,784,500	\$ 46,760,147	\$ 48,369,838	\$ 50,038,538	\$ 51,595,999	\$ 53,032,461	\$ 54,510,085	\$ 56,030,060	\$ 57,593,606	\$ 59,201,979
Less: Expenditures	(44,231,200)	(46,480,675)	(48,014,279)	(50,037,754)	(48,204,309)	(49,398,117)	(51,178,322)	(52,576,751)	(53,966,798)	(55,400,387)
Cash Flow	\$ 553,300	\$ 279,472	\$ 355,559	\$ 783	\$ 3,391,690	\$ 3,634,344	\$ 3,331,763	\$ 3,453,309	\$ 3,626,808	\$ 3,801,592
<b>Coverage</b>										
Revenue Only Coverage Factor	1.69 x	5.36 x	2.79 x	2.32 x	1.64 x	1.70 x	1.60 x	1.62 x	1.64 x	1.67 x
Coverage Factor with Operating Reserve	4.85 x	12.92 x	6.94 x	5.69 x	4.02 x	4.17 x	3.96 x	4.02 x	4.13 x	4.23 x

## APPENDIX J - CUSTOMER IMPACTS





Oxnard Multi-Family Bill Impacts										WATER														
Existing Rates										FY 2015/16					Proposed Rates									
Tier 1		0		to		17		\$2.27		Tier 1		0		8		\$3.90								
Tier 2		18		to		32		\$2.53		Tier 2		9		12		\$4.32								
Tier 3		33		to		+		\$3.76		Tier 3		13		+		\$4.97								
Meter Size										Monthly Charge					Meter Size									
3/4"										\$15.61					3/4"									
1"										\$24.60					1"									
1.5"										\$45.50					1.5"									
2"										\$75.92					2"									
3"										\$155.03					3"									
4"										\$263.13					4"									
6"										\$545.90					6"									
8"										\$784.16					8"									
10"										\$1,262.25					10"									
Meter Size										1"														
										Dwelling Units					4									
TOTAL		Existing		Tier 1		Tier 2		Tier 3		Total		Proposed		FY 2015/16		Tier 2		Tier 3		Total				
HCF/DU	HCF	Fixed										Fixed	Tier 1	Tier 2	Tier 3	Total								
3	12	\$20.98	\$27.24	\$0.00	\$0.00	\$48.22	\$24.25	\$46.80	\$0.00	\$0.00	\$71.05	47%												
6	24	\$20.98	\$38.59	\$17.71	\$0.00	\$77.28	\$24.25	\$93.60	\$0.00	\$0.00	\$117.85	52%												
9	36	\$20.98	\$38.59	\$37.95	\$15.04	\$112.56	\$24.25	\$124.80	\$17.26	\$0.00	\$166.31	48%												
12	48	\$20.98	\$38.59	\$37.95	\$60.16	\$157.68	\$24.25	\$124.80	\$69.04	\$0.00	\$218.09	38%												
15	60	\$20.98	\$38.59	\$37.95	\$105.28	\$202.80	\$24.25	\$124.80	\$69.04	\$51.78	\$269.88	33%												
Meter Size										1.5"														
										Dwelling Units					10									
TOTAL		Existing		Tier 1		Tier 2		Tier 3		Total		Proposed		FY 2015/16		Tier 2		Tier 3		Total				
HCF/DU	HCF	Fixed										Fixed	Tier 1	Tier 2	Tier 3	Total								
3	30	\$38.24	\$38.59	\$32.89	\$0.00	\$109.72	\$44.49	\$117.00	\$0.00	\$0.00	\$161.49	47%												
6	60	\$38.24	\$38.59	\$37.95	\$105.28	\$220.06	\$44.49	\$234.00	\$0.00	\$0.00	\$278.49	27%												
9	90	\$38.24	\$38.59	\$37.95	\$218.08	\$332.86	\$44.49	\$312.00	\$43.15	\$0.00	\$399.64	20%												
12	120	\$38.24	\$38.59	\$37.95	\$330.88	\$445.66	\$44.49	\$312.00	\$172.61	\$0.00	\$529.10	19%												
15	150	\$38.24	\$38.59	\$37.95	\$443.68	\$558.46	\$44.49	\$312.00	\$172.61	\$129.46	\$658.56	18%												
Meter Size										2"														
										Dwelling Units					20									
TOTAL		Existing		Tier 1		Tier 2		Tier 3		Total		Proposed		FY 2015/16		Tier 2		Tier 3		Total				
HCF/DU	HCF	Fixed										Fixed	Tier 1	Tier 2	Tier 3	Total								
3	60	\$59.25	\$38.59	\$37.95	\$105.28	\$241.07	\$68.89	\$234.00	\$0.00	\$0.00	\$302.89	26%												
6	120	\$59.25	\$38.59	\$37.95	\$330.88	\$466.67	\$68.89	\$468.00	\$0.00	\$0.00	\$536.89	15%												
9	180	\$59.25	\$38.59	\$37.95	\$556.48	\$692.27	\$68.89	\$624.00	\$86.30	\$0.00	\$779.20	13%												
12	240	\$59.25	\$38.59	\$37.95	\$782.08	\$917.87	\$68.89	\$624.00	\$345.21	\$0.00	\$1,038.11	13%												
15	300	\$59.25	\$38.59	\$37.95	\$1,007.68	\$1,143.47	\$68.89	\$624.00	\$345.21	\$258.91	\$1,297.02	13%												
Meter Size										3"														
										Dwelling Units					40									
TOTAL		Existing		Tier 1		Tier 2		Tier 3		Total		Proposed		FY 2015/16		Tier 2		Tier 3		Total				
HCF/DU	HCF	Fixed										Fixed	Tier 1	Tier 2	Tier 3	Total								
3	120	\$166.10	\$38.59	\$37.95	\$330.88	\$573.52	\$125.84	\$468.00	\$0.00	\$0.00	\$593.84	4%												
6	240	\$166.10	\$38.59	\$37.95	\$782.08	\$1,024.72	\$125.84	\$936.01	\$0.00	\$0.00	\$1,061.85	4%												
9	360	\$166.10	\$38.59	\$37.95	\$1,233.28	\$1,475.92	\$125.84	\$1,248.01	\$172.61	\$0.00	\$1,546.46	5%												
12	480	\$166.10	\$38.59	\$37.95	\$1,684.48	\$1,927.12	\$125.84	\$1,248.01	\$690.43	\$0.00	\$2,064.28	7%												
15	600	\$166.10	\$38.59	\$37.95	\$2,135.68	\$2,378.32	\$125.84	\$1,248.01	\$690.43	\$517.82	\$2,582.10	9%												
Meter Size										4"														
										Dwelling Units					80									
TOTAL		Existing		Tier 1		Tier 2		Tier 3		Total		Proposed		FY 2015/16		Tier 2		Tier 3		Total				
HCF/DU	HCF	Fixed										Fixed	Tier 1	Tier 2	Tier 3	Total								
3	240	\$216.34	\$38.59	\$37.95	\$782.08	\$1,074.96	\$207.19	\$936.01	\$0.00	\$0.00	\$1,143.20	6%												
6	480	\$216.34	\$38.59	\$37.95	\$1,684.48	\$1,977.36	\$207.19	\$1,872.01	\$0.00	\$0.00	\$2,079.20	5%												
9	720	\$216.34	\$38.59	\$37.95	\$2,586.88	\$2,879.76	\$207.19	\$2,496.02	\$345.21	\$0.00	\$3,048.42	6%												
12	960	\$216.34	\$38.59	\$37.95	\$3,489.28	\$3,782.16	\$207.19	\$2,496.02	\$1,380.86	\$0.00	\$4,084.07	8%												
15	1200	\$216.34	\$38.59	\$37.95	\$4,391.68	\$4,684.56	\$207.19	\$2,496.02	\$1,380.86	\$1,035.64	\$5,119.71	9%												
Meter Size										6"														
										Dwelling Units					120									
TOTAL		Existing		Tier 1		Tier 2		Tier 3		Total		Proposed		FY 2015/16		Tier 2		Tier 3		Total				
HCF/DU	HCF	Fixed										Fixed	Tier 1	Tier 2	Tier 3	Total								
3	360	\$452.61	\$38.59	\$37.95	\$1,233.28	\$1,762.43	\$451.10	\$1,404.01	\$0.00	\$0.00	\$1,855.11	5%												
6	720	\$452.61	\$38.59	\$37.95	\$2,586.88	\$3,116.03	\$451.10	\$2,808.02	\$0.00	\$0.00	\$3,259.12	5%												
9	1080	\$452.61	\$38.59	\$37.95	\$3,940.48	\$4,469.63	\$451.10	\$3,744.03	\$517.82	\$0.00	\$4,712.95	5%												
12	1440	\$452.61	\$38.59	\$37.95	\$5,294.08	\$5,823.23	\$451.10	\$3,744.03	\$2,071.29	\$0.00	\$6,266.42	8%												
15	1800	\$452.61	\$38.59	\$37.95	\$6,647.68	\$7,176.83	\$451.10	\$3,744.03	\$2,071.29	\$1,553.47	\$7,819.88	9%												

Oxnard Commerical, Industrial, and Institutional Bill Impacts											WATER		
Existing Rates					FY 2015/16		Proposed Rates						
Tier 1	0	to	15	\$2.27	Tier 1	0	to	100	\$3.72				
Tier 2	16	to	32	\$2.53	Tier 2	101	to	99999	\$4.33				
Tier 3	33	to	+	\$3.76									
Meter Size					Meter Size		Monthly Charge						
3/4"					3/4"		\$10.76						
1"					1"		\$16.55						
1.5"					1.5"		\$29.85						
2"					2"		\$46.39						
3"					3"		\$99.23						
4"					4"		\$169.71						
6"					6"		\$347.35						
8"					8"		\$506.71						
10"					10"		\$803.43						
Meter Size		1"											
HCF	5	Existing				Proposed		FY 2015/16				43%	
		Fixed	Tier 1	Tier 2	Tier 3	Total	Fixed	Tier 1	Tier 2	Tier 3	Total		
		\$16.55	\$11.35	\$0.00	\$0.00	\$27.90	\$21.36	\$18.59	\$0.00	\$0.00	\$39.95		
		Tier 1	0	to	15	\$2.27	Tier 1	0	to	100	\$3.72		
		Tier 2	16	to	32	\$2.53	Tier 2	101	to	99999	\$4.33		
		Tier 3	33	to	+	\$3.76							
		Meter Size				Meter Size		Monthly Charge					
		3/4"				3/4"		\$14.16					
		1"				1"		\$21.36					
		1.5"				1.5"		\$39.19					
		2"				2"		\$60.68					
		3"				3"		\$110.85					
		4"				4"		\$182.51					
		6"				6"		\$397.37					
		8"				8"		\$648.00					
		10"				10"		\$1,006.07					
Meter Size		1"											
HCF	5	Existing				Proposed		FY 2015/16				43%	
		Fixed	Tier 1	Tier 2	Tier 3	Total	Fixed	Tier 1	Tier 2	Tier 3	Total		
		\$16.55	\$11.35	\$0.00	\$0.00	\$27.90	\$21.36	\$18.59	\$0.00	\$0.00	\$39.95		
		10	\$16.55	\$22.70	\$0.00	\$0.00	\$39.25	\$21.36	\$37.17	\$0.00	\$0.00		\$58.53
		15	\$16.55	\$34.05	\$0.00	\$0.00	\$50.60	\$21.36	\$55.76	\$0.00			\$77.12
		20	\$16.55	\$38.59	\$7.59	\$0.00	\$62.73	\$21.36	\$74.35	\$0.00			\$95.71
		25	\$16.55	\$38.59	\$20.24	\$0.00	\$75.38	\$21.36	\$92.94	\$0.00			\$114.30
		30	\$16.55	\$38.59	\$32.89	\$0.00	\$88.03	\$21.36	\$111.52	\$0.00			\$132.88
Meter Size		1.5"											
HCF	10	Existing				Proposed		FY 2015/16				45%	
		Fixed	Tier 1	Tier 2	Tier 3	Total	Fixed	Tier 1	Tier 2	Tier 3	Total		
		\$29.85	\$22.70	\$0.00	\$0.00	\$52.55	\$39.19	\$37.17	\$0.00	\$0.00	\$76.36		
		20	\$29.85	\$38.59	\$7.59	\$0.00	\$76.03	\$39.19	\$74.35	\$0.00			\$113.54
		30	\$29.85	\$38.59	\$32.89	\$0.00	\$101.33	\$39.19	\$111.52	\$0.00			\$150.71
		40	\$29.85	\$38.59	\$37.95	\$30.08	\$136.47	\$39.19	\$148.70	\$0.00			\$187.89
		50	\$29.85	\$38.59	\$37.95	\$67.68	\$174.07	\$39.19	\$185.87	\$0.00			\$225.06
		60	\$29.85	\$38.59	\$37.95	\$105.28	\$211.67	\$39.19	\$223.05	\$0.00			\$262.24
Meter Size		2"											
HCF	50	Existing				Proposed		FY 2015/16				29%	
		Fixed	Tier 1	Tier 2	Tier 3	Total	Fixed	Tier 1	Tier 2	Tier 3	Total		
		\$46.39	\$38.59	\$37.95	\$67.68	\$190.61	\$60.68	\$185.87	\$0.00	\$0.00	\$246.55		
		100	\$46.39	\$38.59	\$37.95	\$255.68	\$378.61	\$60.68	\$371.75	\$0.00			\$432.43
		150	\$46.39	\$38.59	\$37.95	\$443.68	\$566.61	\$60.68	\$371.75	\$216.64			\$649.07
		200	\$46.39	\$38.59	\$37.95	\$631.68	\$754.61	\$60.68	\$371.75	\$433.28			\$865.71
		250	\$46.39	\$38.59	\$37.95	\$819.68	\$942.61	\$60.68	\$371.75	\$649.92			\$1,082.35
		300	\$46.39	\$38.59	\$37.95	\$1,007.68	\$1,130.61	\$60.68	\$371.75	\$866.56			\$1,298.98
Meter Size		3"											
HCF	100	Existing				Proposed		FY 2015/16				12%	
		Fixed	Tier 1	Tier 2	Tier 3	Total	Fixed	Tier 1	Tier 2	Tier 3	Total		
		\$99.23	\$38.59	\$37.95	\$255.68	\$431.45	\$110.85	\$371.75	\$0.00	\$0.00	\$482.60		
		200	\$99.23	\$38.59	\$37.95	\$631.68	\$807.45	\$110.85	\$371.75	\$433.28			\$915.88
		300	\$99.23	\$38.59	\$37.95	\$1,007.68	\$1,183.45	\$110.85	\$371.75	\$866.56			\$1,349.15
		400	\$99.23	\$38.59	\$37.95	\$1,383.68	\$1,559.45	\$110.85	\$371.75	\$1,299.84			\$1,782.43
		500	\$99.23	\$38.59	\$37.95	\$1,759.68	\$1,935.45	\$110.85	\$371.75	\$1,733.12			\$2,215.71
		600	\$99.23	\$38.59	\$37.95	\$2,135.68	\$2,311.45	\$110.85	\$371.75	\$2,166.40			\$2,648.99
Meter Size		4"											
HCF	200	Existing				Proposed		FY 2015/16				12%	
		Fixed	Tier 1	Tier 2	Tier 3	Total	Fixed	Tier 1	Tier 2	Tier 3	Total		
		\$169.71	\$38.59	\$37.95	\$631.68	\$877.93	\$182.51	\$371.75	\$433.28	\$0.00	\$987.54		
		400	\$169.71	\$38.59	\$37.95	\$1,383.68	\$1,629.93	\$182.51	\$371.75	\$1,299.84			\$1,854.09
		600	\$169.71	\$38.59	\$37.95	\$2,135.68	\$2,381.93	\$182.51	\$371.75	\$2,166.40			\$2,720.65
		800	\$169.71	\$38.59	\$37.95	\$2,887.68	\$3,133.93	\$182.51	\$371.75	\$3,032.96			\$3,587.21
		1000	\$169.71	\$38.59	\$37.95	\$3,639.68	\$3,885.93	\$182.51	\$371.75	\$3,899.52			\$4,453.77
		1200	\$169.71	\$38.59	\$37.95	\$4,391.68	\$4,637.93	\$182.51	\$371.75	\$4,766.07			\$5,320.33
Meter Size		6"											
Existing					Proposed		FY 2015/16						

Oxnard Irrigation Bill Impacts

WATER

Existing Rates					FY 2015/16		Proposed Rates		
Tier 1	0	to	15	\$34.84	Tier 1	0	50	4.06	
Tier 2	16	to	32	\$27.42	Tier 2	51	99999	4.29	
Tier 3	33	to	+	\$0.00					
Meter Size					Meter Size				
3/4"					3/4"				
\$10.76					\$14.16				
\$16.55					\$21.36				
\$29.85					\$39.19				
\$46.39					\$60.68				
\$99.23					\$110.85				
\$169.71					\$182.51				
\$347.35					\$397.37				
\$506.71					\$648.00				
\$803.43					\$1,006.07				

Meter Size3/4"

HCF		Existing					Proposed		FY 2015/16			
		Fixed	Tier 1	Tier 2	Tier 3	Total	Fixed	Tier 1	Tier 2	Tier 3	Total	
	5	\$10.76	\$11.35	\$0.00	\$0.00	\$22.11	\$14.16	\$20.30	\$0.00		\$34.46	56%
	10	\$10.76	\$22.70	\$0.00	\$0.00	\$33.46	\$14.16	\$40.60	\$0.00		\$54.76	64%
	15	\$10.76	\$34.05	\$0.00	\$0.00	\$44.81	\$14.16	\$60.90	\$0.00		\$75.06	68%
	20	\$10.76	\$38.59	\$7.59	\$0.00	\$56.94	\$14.16	\$81.21	\$0.00		\$95.37	67%
	25	\$10.76	\$38.59	\$20.24	\$0.00	\$69.59	\$14.16	\$101.51	\$0.00		\$115.67	66%
	30	\$10.76	\$38.59	\$32.89	\$0.00	\$82.24	\$14.16	\$121.81	\$0.00		\$135.97	65%

Meter Size1"

HCF		Existing					Proposed		FY 2015/16			
		Fixed	Tier 1	Tier 2	Tier 3	Total	Fixed	Tier 1	Tier 2	Tier 3	Total	
	10	\$16.55	\$22.70	\$0.00	\$0.00	\$39.25	\$21.36	\$40.60	\$0.00		\$61.96	58%
	20	\$16.55	\$38.59	\$7.59	\$0.00	\$62.73	\$21.36	\$81.21	\$0.00		\$102.57	64%
	30	\$16.55	\$38.59	\$32.89	\$0.00	\$88.03	\$21.36	\$121.81	\$0.00		\$143.17	63%
	40	\$16.55	\$38.59	\$37.95	\$30.08	\$123.17	\$21.36	\$162.41	\$0.00		\$183.77	49%
	50	\$16.55	\$38.59	\$37.95	\$67.68	\$160.77	\$21.36	\$203.02	\$0.00		\$224.38	40%
	60	\$16.55	\$38.59	\$37.95	\$105.28	\$198.37	\$21.36	\$243.62	\$42.88		\$307.86	55%

Meter Size1.5"

HCF		Existing					Proposed		FY 2015/16			
		Fixed	Tier 1	Tier 2	Tier 3	Total	Fixed	Tier 1	Tier 2	Tier 3	Total	
	20	\$29.85	\$38.59	\$7.59	\$0.00	\$76.03	\$39.19	\$81.21	\$0.00		\$120.40	58%
	40	\$29.85	\$38.59	\$37.95	\$30.08	\$136.47	\$39.19	\$162.41	\$0.00		\$201.60	48%
	60	\$29.85	\$38.59	\$37.95	\$105.28	\$211.67	\$39.19	\$243.62	\$42.88		\$325.69	54%
	80	\$29.85	\$38.59	\$37.95	\$180.48	\$286.87	\$39.19	\$324.82	\$128.64		\$492.66	72%
	100	\$29.85	\$38.59	\$37.95	\$255.68	\$362.07	\$39.19	\$406.03	\$214.40		\$659.62	82%
	120	\$29.85	\$38.59	\$37.95	\$330.88	\$437.27	\$39.19	\$487.24	\$300.17		\$826.59	89%

Meter Size2"

HCF		Existing					Proposed		FY 2015/16			
		Fixed	Tier 1	Tier 2	Tier 3	Total	Fixed	Tier 1	Tier 2	Tier 3	Total	
	50	\$46.39	\$38.59	\$37.95	\$67.68	\$190.61	\$60.68	\$203.02	\$0.00		\$263.70	38%
	100	\$46.39	\$38.59	\$37.95	\$255.68	\$378.61	\$60.68	\$406.03	\$214.40		\$681.11	80%
	150	\$46.39	\$38.59	\$37.95	\$443.68	\$566.61	\$60.68	\$609.05	\$428.81		\$1,098.53	94%
	200	\$46.39	\$38.59	\$37.95	\$631.68	\$754.61	\$60.68	\$812.06	\$643.21		\$1,515.95	101%
	250	\$46.39	\$38.59	\$37.95	\$819.68	\$942.61	\$60.68	\$1,015.08	\$857.62		\$1,933.37	105%
	300	\$46.39	\$38.59	\$37.95	\$1,007.68	\$1,130.61	\$60.68	\$1,218.09	\$1,072.02		\$2,350.79	108%

Meter Size3"

HCF		Existing					Proposed		FY 2015/16			
		Fixed	Tier 1	Tier 2	Tier 3	Total	Fixed	Tier 1	Tier 2	Tier 3	Total	
	100	\$99.23	\$38.59	\$37.95	\$255.68	\$431.45	\$110.85	\$406.03	\$214.40		\$731.28	69%
	200	\$99.23	\$38.59	\$37.95	\$631.68	\$807.45	\$110.85	\$812.06	\$643.21		\$1,566.12	94%
	300	\$99.23	\$38.59	\$37.95	\$1,007.68	\$1,183.45	\$110.85	\$1,218.09	\$1,072.02		\$2,400.96	103%
	400	\$99.23	\$38.59	\$37.95	\$1,383.68	\$1,559.45	\$110.85	\$1,624.12	\$1,500.83		\$3,235.80	107%
	500	\$99.23	\$38.59	\$37.95	\$1,759.68	\$1,935.45	\$110.85	\$2,030.15	\$1,929.64		\$4,070.64	110%
	600	\$99.23	\$38.59	\$37.95	\$2,135.68	\$2,311.45	\$110.85	\$2,436.18	\$2,358.45		\$4,905.48	112%

Meter Size4"

HCF		Existing					Proposed		FY 2015/16			
		Fixed	Tier 1	Tier 2	Tier 3	Total	Fixed	Tier 1	Tier 2	Tier 3	Total	
	200	\$169.71	\$38.59	\$37.95	\$631.68	\$877.93	\$182.51	\$812.06	\$643.21		\$1,637.78	87%
	400	\$169.71	\$38.59	\$37.95	\$1,383.68	\$1,629.93	\$182.51	\$1,624.12	\$1,500.83		\$3,307.46	103%
	600	\$169.71	\$38.59	\$37.95	\$2,135.68	\$2,381.93	\$182.51	\$2,436.18	\$2,358.45		\$4,977.14	109%
	800	\$169.71	\$38.59	\$37.95	\$2,887.68	\$3,133.93	\$182.51	\$3,248.24	\$3,216.07		\$6,646.82	112%
	1000	\$169.71	\$38.59	\$37.95	\$3,639.68	\$3,885.93	\$182.51	\$4,060.30	\$4,073.69		\$8,316.50	114%
	1200	\$169.71	\$38.59	\$37.95	\$4,391.68	\$4,637.93	\$182.51	\$4,872.36	\$4,931.31		\$9,986.18	115%

Meter Size6"

HCF		Existing					Proposed		FY 2015/16			
		Fixed	Tier 1	Tier 2	Tier 3	Total	Fixed	Tier 1	Tier 2	Tier 3	Total	
	400	\$347.35	\$38.59	\$37.95	\$1,383.68	\$1,807.57	\$397.37	\$1,624.12	\$1,500.83		\$3,522.32	95%
	800	\$347.35	\$38.59	\$37.95	\$2,887.68	\$3,311.57	\$397.37	\$3,248.24	\$3,216.07		\$6,861.68	107%
	1200	\$347.35	\$38.59	\$37.95	\$4,391.68	\$4,815.57	\$397.37	\$4,872.36	\$4,931.31		#####	112%
	1600	\$347.35	\$38.59	\$37.95	\$5,895.68	\$6,319.57	\$397.37	\$6,496.48	\$6,646.54		#####	114%
	2000	\$347.35	\$38.59	\$37.95	\$7,399.68	\$7,823.57	\$397.37	\$8,120.60	\$8,361.78		#####	116%
	2400	\$347.35	\$38.59	\$37.95	\$8,903.68	\$9,327.57	\$397.37	\$9,744.72	#####		#####	117%



Oceanview Irrigation Bill Impacts

WATER

Existing Rates						FY 2015/16		Proposed Rates				
Tier 1		0	to		999999	\$34.84	Tier 1		0	999999	\$1.20	
Meter Size 3/4"												
Meter Size		Monthly Charge				Meter Size		Monthly Charge				
3/4"		\$10.86				3/4"		\$14.16				
1"		\$16.55				1"		\$14.16				
1.5"		\$29.85				1.5"		\$21.36				
2"		\$46.39				2"		\$39.19				
3"		\$99.23				3"		\$60.68				
4"		\$169.71				4"		\$110.85				
6"		\$347.35				6"		\$182.51				
8"		\$506.71				8"		\$397.37				
10"		\$803.43				10"		\$648.00				
Meter Size 1"												
HCF		Existing Fixed	Tier 1	Tier 2	Tier 3	Total	Proposed Fixed	Tier 1	Tier 2	Tier 3	Total	
5		\$10.76	\$4.95			\$15.71	\$14.16	\$5.98			\$20.14	28%
10		\$10.76	\$9.90			\$20.66	\$14.16	\$11.96			\$26.12	26%
15		\$10.76	\$14.85			\$25.61	\$14.16	\$17.94			\$32.10	25%
20		\$10.76	\$19.80			\$30.56	\$14.16	\$23.92			\$38.08	25%
25		\$10.76	\$24.75			\$35.51	\$14.16	\$29.90			\$44.06	24%
30		\$10.76	\$29.70			\$40.46	\$14.16	\$35.88			\$50.04	24%
Meter Size 1.5"												
HCF		Existing Fixed	Tier 1	Tier 2	Tier 3	Total	Proposed Fixed	Tier 1	Tier 2	Tier 3	Total	
10		\$16.55	\$9.90			\$26.45	\$21.36	\$11.96			\$33.32	26%
20		\$16.55	\$19.80			\$36.35	\$21.36	\$23.92			\$45.28	25%
30		\$16.55	\$29.70			\$46.25	\$21.36	\$35.88			\$57.24	24%
40		\$16.55	\$39.60			\$56.15	\$21.36	\$47.84			\$69.20	23%
50		\$16.55	\$49.50			\$66.05	\$21.36	\$59.79			\$81.15	23%
60		\$16.55	\$59.40			\$75.95	\$21.36	\$71.75			\$93.11	23%
Meter Size 2"												
HCF		Existing Fixed	Tier 1	Tier 2	Tier 3	Total	Proposed Fixed	Tier 1	Tier 2	Tier 3	Total	
20		\$29.85	\$19.80			\$49.65	\$39.19	\$23.92			\$63.11	27%
40		\$29.85	\$39.60			\$69.45	\$39.19	\$47.84			\$87.03	25%
60		\$29.85	\$59.40			\$89.25	\$39.19	\$71.75			\$110.94	24%
80		\$29.85	\$79.20			\$109.05	\$39.19	\$95.67			\$134.86	24%
100		\$29.85	\$99.00			\$128.85	\$39.19	\$119.59			\$158.78	23%
120		\$29.85	\$118.80			\$148.65	\$39.19	\$143.51			\$182.70	23%
Meter Size 3"												
HCF		Existing Fixed	Tier 1	Tier 2	Tier 3	Total	Proposed Fixed	Tier 1	Tier 2	Tier 3	Total	
50		\$46.39	\$49.50			\$95.89	\$60.68	\$59.79			\$120.47	26%
100		\$46.39	\$99.00			\$145.39	\$60.68	\$119.59			\$180.27	24%
150		\$46.39	\$148.50			\$194.89	\$60.68	\$179.38			\$240.06	23%
200		\$46.39	\$198.00			\$244.39	\$60.68	\$239.18			\$299.86	23%
250		\$46.39	\$247.50			\$293.89	\$60.68	\$298.97			\$359.65	22%
300		\$46.39	\$297.00			\$343.39	\$60.68	\$358.77			\$419.45	22%
Meter Size 4"												
HCF		Existing Fixed	Tier 1	Tier 2	Tier 3	Total	Proposed Fixed	Tier 1	Tier 2	Tier 3	Total	
100		\$99.23	\$99.00			\$198.23	\$110.85	\$119.59			\$230.44	16%
200		\$99.23	\$198.00			\$297.23	\$110.85	\$239.18			\$350.03	18%
300		\$99.23	\$297.00			\$396.23	\$110.85	\$358.77			\$469.62	19%
400		\$99.23	\$396.00			\$495.23	\$110.85	\$478.35			\$589.20	19%
500		\$99.23	\$495.00			\$594.23	\$110.85	\$597.94			\$708.79	19%
600		\$99.23	\$594.00			\$693.23	\$110.85	\$717.53			\$828.38	19%
Meter Size 6"												
HCF		Existing Fixed	Tier 1	Tier 2	Tier 3	Total	Proposed Fixed	Tier 1	Tier 2	Tier 3	Total	
400		\$347.35	\$396.00			\$743.35	\$397.37	\$478.35			\$875.72	18%
800		\$347.35	\$792.00			\$1,139.35	\$397.37	\$956.71			\$1,354.08	19%
1200		\$347.35	\$1,188.00			\$1,535.35	\$397.37	\$1,435.06			\$1,832.43	19%
1600		\$347.35	\$1,584.00			\$1,931.35	\$397.37	\$1,913.41			\$2,310.78	20%
2000		\$347.35	\$1,980.00			\$2,327.35	\$397.37	\$2,391.77			\$2,789.14	20%
2400		\$347.35	\$2,376.00			\$2,723.35	\$397.37	\$2,870.12			\$3,267.49	20%



Large Lot - Single Family Residential - Wastewater Rate Impacts

Percentage Wastewater Return = 60%

Percentage Wastewater Return = 60%				Current	Proposed
Rate Per Hundred Cubic Feet (HCF)				Rates	2/1/2016
Tier 1	0	to	16	\$1.37	\$1.85
Tier 2	17	to	25	\$1.52	\$2.06
Tier 3	Over 25 HCF per Month			\$2.12	\$2.87
Monthly Base Rate				\$21.07	\$28.45

Charged Sewer Usage (HCF)	Tier 1	Tier 2	Tier 3	Total	Tier 1	Tier 2	Tier 3	Total	Increase	
1	\$1.37	\$0.00	\$0.00	\$22.44	\$1.85	\$0.00	\$0.00	\$30.30	\$7.86	35%
2	\$2.74	\$0.00	\$0.00	\$23.81	\$3.70	\$0.00	\$0.00	\$32.15	\$8.34	35%
3	\$4.11	\$0.00	\$0.00	\$25.18	\$5.55	\$0.00	\$0.00	\$34.00	\$8.82	35%
4	\$5.48	\$0.00	\$0.00	\$26.55	\$7.40	\$0.00	\$0.00	\$35.85	\$9.30	35%
5	\$6.85	\$0.00	\$0.00	\$27.92	\$9.25	\$0.00	\$0.00	\$37.70	\$9.78	35%
6	\$8.22	\$0.00	\$0.00	\$29.29	\$11.10	\$0.00	\$0.00	\$39.55	\$10.26	35%
7	\$9.59	\$0.00	\$0.00	\$30.66	\$12.95	\$0.00	\$0.00	\$41.40	\$10.74	35%
8	\$10.96	\$0.00	\$0.00	\$32.03	\$14.80	\$0.00	\$0.00	\$43.25	\$11.22	35%
9	\$12.33	\$0.00	\$0.00	\$33.40	\$16.65	\$0.00	\$0.00	\$45.10	\$11.70	35%
10	\$13.70	\$0.00	\$0.00	\$34.77	\$18.50	\$0.00	\$0.00	\$46.95	\$12.18	35%
11	\$15.07	\$0.00	\$0.00	\$36.14	\$20.35	\$0.00	\$0.00	\$48.80	\$12.66	35%
12	\$16.44	\$0.00	\$0.00	\$37.51	\$22.20	\$0.00	\$0.00	\$50.65	\$13.14	35%
13	\$17.81	\$0.00	\$0.00	\$38.88	\$24.05	\$0.00	\$0.00	\$52.50	\$13.62	35%
14	\$19.18	\$0.00	\$0.00	\$40.25	\$25.90	\$0.00	\$0.00	\$54.35	\$14.10	35%
15	\$20.55	\$0.00	\$0.00	\$41.62	\$27.75	\$0.00	\$0.00	\$56.20	\$14.58	35%
16	\$21.92	\$0.00	\$0.00	\$42.99	\$29.60	\$0.00	\$0.00	\$58.05	\$15.06	35%
17	\$21.92	\$1.52	\$0.00	\$44.51	\$29.60	\$2.06	\$0.00	\$60.11	\$15.60	35%
18	\$21.92	\$3.04	\$0.00	\$46.03	\$29.60	\$4.12	\$0.00	\$62.17	\$16.14	35%
19	\$21.92	\$4.56	\$0.00	\$47.55	\$29.60	\$6.18	\$0.00	\$64.23	\$16.68	35%
20	\$21.92	\$6.08	\$0.00	\$49.07	\$29.60	\$8.24	\$0.00	\$66.29	\$17.22	35%
21	\$21.92	\$7.60	\$0.00	\$50.59	\$29.60	\$10.30	\$0.00	\$68.35	\$17.76	35%
22	\$21.92	\$9.12	\$0.00	\$52.11	\$29.60	\$12.36	\$0.00	\$70.41	\$18.30	35%
23	\$21.92	\$10.64	\$0.00	\$53.63	\$29.60	\$14.42	\$0.00	\$72.47	\$18.84	35%
24	\$21.92	\$12.16	\$0.00	\$55.15	\$29.60	\$16.48	\$0.00	\$74.53	\$19.38	35%
25	\$21.92	\$13.68	\$0.00	\$56.67	\$29.60	\$18.54	\$0.00	\$76.59	\$19.92	35%
26	\$21.92	\$13.68	\$2.12	\$58.79	\$29.60	\$18.54	\$2.87	\$79.46	\$20.67	35%
27	\$21.92	\$13.68	\$4.24	\$60.91	\$29.60	\$18.54	\$5.74	\$82.33	\$21.42	35%
28	\$21.92	\$13.68	\$6.36	\$63.03	\$29.60	\$18.54	\$8.61	\$85.20	\$22.17	35%
29	\$21.92	\$13.68	\$8.48	\$65.15	\$29.60	\$18.54	\$11.48	\$88.07	\$22.92	35%
30	\$21.92	\$13.68	\$10.60	\$67.27	\$29.60	\$18.54	\$14.35	\$90.94	\$23.67	35%
35	\$21.92	\$13.68	\$21.20	\$77.87	\$29.60	\$18.54	\$28.70	\$105.29	\$27.42	35%
40	\$21.92	\$13.68	\$31.80	\$88.47	\$29.60	\$18.54	\$43.05	\$119.64	\$31.17	35%
45	\$21.92	\$13.68	\$42.40	\$99.07	\$29.60	\$18.54	\$57.40	\$133.99	\$34.92	35%
50	\$21.92	\$13.68	\$53.00	\$109.67	\$29.60	\$18.54	\$71.75	\$148.34	\$38.67	35%
55	\$21.92	\$13.68	\$63.60	\$120.27	\$29.60	\$18.54	\$86.10	\$162.69	\$42.42	35%
60	\$21.92	\$13.68	\$74.20	\$130.87	\$29.60	\$18.54	\$100.45	\$177.04	\$46.17	35%
65	\$21.92	\$13.68	\$84.80	\$141.47	\$29.60	\$18.54	\$114.80	\$191.39	\$49.92	35%
70	\$21.92	\$13.68	\$95.40	\$152.07	\$29.60	\$18.54	\$129.15	\$205.74	\$53.67	35%
75	\$21.92	\$13.68	\$106.00	\$162.67	\$29.60	\$18.54	\$143.50	\$220.09	\$57.42	35%
80	\$21.92	\$13.68	\$116.60	\$173.27	\$29.60	\$18.54	\$157.85	\$234.44	\$61.17	35%
85	\$21.92	\$13.68	\$127.20	\$183.87	\$29.60	\$18.54	\$172.20	\$248.79	\$64.92	35%
90	\$21.92	\$13.68	\$137.80	\$194.47	\$29.60	\$18.54	\$186.55	\$263.14	\$68.67	35%
95	\$21.92	\$13.68	\$148.40	\$205.07	\$29.60	\$18.54	\$200.90	\$277.49	\$72.42	35%
100	\$21.92	\$13.68	\$159.00	\$215.67	\$29.60	\$18.54	\$215.25	\$291.84	\$76.17	35%

Multi Family Residential - Wastewater Rate Impacts

Percentage Wastewater Return = 60%

Rate Per Hundred Cubic Feet (HCF)					Current Rates	Proposed 2/1/2016
Tier 1	0	to	6	Per DU	\$1.11	\$1.50
Tier 2	7	to	12	Per DU	\$1.24	\$1.68
Tier 3	Over 12 HCF per Month			Per DU	\$1.73	\$2.34
Monthly Base Rate		Dwelling Units 1 through 6			\$15.41	\$20.81
Monthly Base Rate		Dwelling Units 7+			\$7.68	\$10.37

Charged Sewer Usage (HCF)	Tier 1	Tier 2	Tier 3	Total	Tier 1	Tier 2	Tier 3	Total	Increase	
Dwelling Units										
1	\$1.11	\$0.00	\$0.00	\$16.52	\$1.50	\$0.00	\$0.00	\$22.31	\$5.79	35%
2	\$2.22	\$0.00	\$0.00	\$17.63	\$3.00	\$0.00	\$0.00	\$23.81	\$6.18	35%
3	\$3.33	\$0.00	\$0.00	\$18.74	\$4.50	\$0.00	\$0.00	\$25.31	\$6.57	35%
4	\$4.44	\$0.00	\$0.00	\$19.85	\$6.00	\$0.00	\$0.00	\$26.81	\$6.96	35%
5	\$5.55	\$0.00	\$0.00	\$20.96	\$7.50	\$0.00	\$0.00	\$28.31	\$7.35	35%
6	\$6.66	\$0.00	\$0.00	\$22.07	\$9.00	\$0.00	\$0.00	\$29.81	\$7.74	35%
7	\$6.66	\$1.24	\$0.00	\$23.31	\$9.00	\$1.68	\$0.00	\$31.49	\$8.18	35%
8	\$6.66	\$2.48	\$0.00	\$24.55	\$9.00	\$3.36	\$0.00	\$33.17	\$8.62	35%
9	\$6.66	\$3.72	\$0.00	\$25.79	\$9.00	\$5.04	\$0.00	\$34.85	\$9.06	35%
10	\$6.66	\$4.96	\$0.00	\$27.03	\$9.00	\$6.72	\$0.00	\$36.53	\$9.50	35%
11	\$6.66	\$6.20	\$0.00	\$28.27	\$9.00	\$8.40	\$0.00	\$38.21	\$9.94	35%
12	\$6.66	\$7.44	\$0.00	\$29.51	\$9.00	\$10.08	\$0.00	\$39.89	\$10.38	35%
13	\$6.66	\$7.44	\$1.73	\$31.24	\$9.00	\$10.08	\$2.34	\$42.23	\$10.99	35%
14	\$6.66	\$7.44	\$3.46	\$32.97	\$9.00	\$10.08	\$4.68	\$44.57	\$11.60	35%
15	\$6.66	\$7.44	\$5.19	\$34.70	\$9.00	\$10.08	\$7.02	\$46.91	\$12.21	35%
16	\$6.66	\$7.44	\$6.92	\$36.43	\$9.00	\$10.08	\$9.36	\$49.25	\$12.82	35%
17	\$6.66	\$7.44	\$8.65	\$38.16	\$9.00	\$10.08	\$11.70	\$51.59	\$13.43	35%
18	\$6.66	\$7.44	\$10.38	\$39.89	\$9.00	\$10.08	\$14.04	\$53.93	\$14.04	35%
19	\$6.66	\$7.44	\$12.11	\$41.62	\$9.00	\$10.08	\$16.38	\$56.27	\$14.65	35%
20	\$6.66	\$7.44	\$13.84	\$43.35	\$9.00	\$10.08	\$18.72	\$58.61	\$15.26	35%
21	\$6.66	\$7.44	\$15.57	\$45.08	\$9.00	\$10.08	\$21.06	\$60.95	\$15.87	35%
22	\$6.66	\$7.44	\$17.30	\$46.81	\$9.00	\$10.08	\$23.40	\$63.29	\$16.48	35%
23	\$6.66	\$7.44	\$19.03	\$48.54	\$9.00	\$10.08	\$25.74	\$65.63	\$17.09	35%
24	\$6.66	\$7.44	\$20.76	\$50.27	\$9.00	\$10.08	\$28.08	\$67.97	\$17.70	35%
25	\$6.66	\$7.44	\$22.49	\$52.00	\$9.00	\$10.08	\$30.42	\$70.31	\$18.31	35%
26	\$6.66	\$7.44	\$24.22	\$53.73	\$9.00	\$10.08	\$32.76	\$72.65	\$18.92	35%
27	\$6.66	\$7.44	\$25.95	\$55.46	\$9.00	\$10.08	\$35.10	\$74.99	\$19.53	35%
28	\$6.66	\$7.44	\$27.68	\$57.19	\$9.00	\$10.08	\$37.44	\$77.33	\$20.14	35%
35	\$6.66	\$7.44	\$39.79	\$69.30	\$9.00	\$10.08	\$53.82	\$93.71	\$24.41	35%
40	\$6.66	\$7.44	\$48.44	\$77.95	\$9.00	\$10.08	\$65.52	\$105.41	\$27.46	35%
45	\$6.66	\$7.44	\$57.09	\$86.60	\$9.00	\$10.08	\$77.22	\$117.11	\$30.51	35%
50	\$6.66	\$7.44	\$65.74	\$95.25	\$9.00	\$10.08	\$88.92	\$128.81	\$33.56	35%
55	\$6.66	\$7.44	\$74.39	\$103.90	\$9.00	\$10.08	\$100.62	\$140.51	\$36.61	35%
60	\$6.66	\$7.44	\$83.04	\$112.55	\$9.00	\$10.08	\$112.32	\$152.21	\$39.66	35%
65	\$6.66	\$7.44	\$91.69	\$121.20	\$9.00	\$10.08	\$124.02	\$163.91	\$42.71	35%
70	\$6.66	\$7.44	\$100.34	\$129.85	\$9.00	\$10.08	\$135.72	\$175.61	\$45.76	35%
75	\$6.66	\$7.44	\$108.99	\$138.50	\$9.00	\$10.08	\$147.42	\$187.31	\$48.81	35%
80	\$6.66	\$7.44	\$117.64	\$147.15	\$9.00	\$10.08	\$159.12	\$199.01	\$51.86	35%
85	\$6.66	\$7.44	\$126.29	\$155.80	\$9.00	\$10.08	\$170.82	\$210.71	\$54.91	35%
90	\$6.66	\$7.44	\$134.94	\$164.45	\$9.00	\$10.08	\$182.52	\$222.41	\$57.96	35%
95	\$6.66	\$7.44	\$143.59	\$173.10	\$9.00	\$10.08	\$194.22	\$234.11	\$61.01	35%
100	\$6.66	\$7.44	\$152.24	\$181.75	\$9.00	\$10.08	\$205.92	\$245.81	\$64.06	35%

Commercial - Wastewater Rate Impacts

Percentage Wastewater Return = 85%

Percentage Wastewater Return = 85%				Current	Proposed
Rate Per Hundred Cubic Feet (HCF)				Rates	2/1/2016
Tier 1	0	to	50	\$2.45	\$3.31
Tier 2	51	to	930	\$3.06	\$4.14
Tier 3	Over 930 HCF per Month			\$6.13	\$8.28
Minimum Monthly Fees (Non-Residential)				\$14.00	\$18.90

Charged Sewer Usage (HCF)	Tier 1	Tier 2	Tier 3	Total	Tier 1	Tier 2	Tier 3	Total	Increase	
1	\$2.45	\$0.00	\$0.00	\$14.00	\$3.31	\$0.00	\$0.00	\$18.90	\$4.90	35%
2	\$4.90	\$0.00	\$0.00	\$14.00	\$6.62	\$0.00	\$0.00	\$18.90	\$4.90	35%
3	\$7.35	\$0.00	\$0.00	\$14.00	\$9.93	\$0.00	\$0.00	\$18.90	\$4.90	35%
4	\$9.80	\$0.00	\$0.00	\$14.00	\$13.24	\$0.00	\$0.00	\$18.90	\$4.90	35%
5	\$12.25	\$0.00	\$0.00	\$14.00	\$16.55	\$0.00	\$0.00	\$18.90	\$4.90	35%
6	\$14.70	\$0.00	\$0.00	\$14.70	\$19.86	\$0.00	\$0.00	\$19.86	\$5.16	35%
7	\$17.15	\$0.00	\$0.00	\$17.15	\$23.17	\$0.00	\$0.00	\$23.17	\$6.02	35%
8	\$19.60	\$0.00	\$0.00	\$19.60	\$26.48	\$0.00	\$0.00	\$26.48	\$6.88	35%
9	\$22.05	\$0.00	\$0.00	\$22.05	\$29.79	\$0.00	\$0.00	\$29.79	\$7.74	35%
10	\$24.50	\$0.00	\$0.00	\$24.50	\$33.10	\$0.00	\$0.00	\$33.10	\$8.60	35%
15	\$36.75	\$0.00	\$0.00	\$36.75	\$49.65	\$0.00	\$0.00	\$49.65	\$12.90	35%
20	\$49.00	\$0.00	\$0.00	\$49.00	\$66.20	\$0.00	\$0.00	\$66.20	\$17.20	35%
25	\$61.25	\$0.00	\$0.00	\$61.25	\$82.75	\$0.00	\$0.00	\$82.75	\$21.50	35%
30	\$73.50	\$0.00	\$0.00	\$73.50	\$99.30	\$0.00	\$0.00	\$99.30	\$25.80	35%
35	\$85.75	\$0.00	\$0.00	\$85.75	\$115.85	\$0.00	\$0.00	\$115.85	\$30.10	35%
40	\$98.00	\$0.00	\$0.00	\$98.00	\$132.40	\$0.00	\$0.00	\$132.40	\$34.40	35%
45	\$110.25	\$0.00	\$0.00	\$110.25	\$148.95	\$0.00	\$0.00	\$148.95	\$38.70	35%
50	\$122.50	\$0.00	\$0.00	\$122.50	\$165.50	\$0.00	\$0.00	\$165.50	\$43.00	35%
60	\$122.50	\$30.60	\$0.00	\$153.10	\$165.50	\$41.40	\$0.00	\$206.90	\$53.80	35%
70	\$122.50	\$61.20	\$0.00	\$183.70	\$165.50	\$82.80	\$0.00	\$248.30	\$64.60	35%
80	\$122.50	\$91.80	\$0.00	\$214.30	\$165.50	\$124.20	\$0.00	\$289.70	\$75.40	35%
90	\$122.50	\$122.40	\$0.00	\$244.90	\$165.50	\$165.60	\$0.00	\$331.10	\$86.20	35%
100	\$122.50	\$153.00	\$0.00	\$275.50	\$165.50	\$207.00	\$0.00	\$372.50	\$97.00	35%
110	\$122.50	\$183.60	\$0.00	\$306.10	\$165.50	\$248.40	\$0.00	\$413.90	\$107.80	35%
120	\$122.50	\$214.20	\$0.00	\$336.70	\$165.50	\$289.80	\$0.00	\$455.30	\$118.60	35%
130	\$122.50	\$244.80	\$0.00	\$367.30	\$165.50	\$331.20	\$0.00	\$496.70	\$129.40	35%
140	\$122.50	\$275.40	\$0.00	\$397.90	\$165.50	\$372.60	\$0.00	\$538.10	\$140.20	35%
150	\$122.50	\$306.00	\$0.00	\$428.50	\$165.50	\$414.00	\$0.00	\$579.50	\$151.00	35%
200	\$122.50	\$459	\$0	\$582	\$166	\$621	\$0	\$787	\$205	35%
300	\$122.50	\$765	\$0	\$888	\$166	\$1,035	\$0	\$1,201	\$313	35%
400	\$122.50	\$1,071	\$0	\$1,194	\$166	\$1,449	\$0	\$1,615	\$421	35%
500	\$122.50	\$1,377	\$0	\$1,500	\$166	\$1,863	\$0	\$2,029	\$529	35%
600	\$122.50	\$1,683	\$0	\$1,806	\$166	\$2,277	\$0	\$2,443	\$637	35%
700	\$122.50	\$1,989	\$0	\$2,112	\$166	\$2,691	\$0	\$2,857	\$745	35%
800	\$122.50	\$2,295	\$0	\$2,418	\$166	\$3,105	\$0	\$3,271	\$853	35%
900	\$122.50	\$2,601	\$0	\$2,724	\$166	\$3,519	\$0	\$3,685	\$961	35%
1,000	\$122.50	\$2,693	\$429	\$3,244	\$166	\$3,643	\$580	\$4,388	\$1,144	35%
1,100	\$122.50	\$2,693	\$1,042	\$3,857	\$166	\$3,643	\$1,408	\$5,216	\$1,359	35%
1,200	\$122.50	\$2,693	\$1,655	\$4,470	\$166	\$3,643	\$2,236	\$6,044	\$1,574	35%
1,300	\$122.50	\$2,693	\$2,268	\$5,083	\$166	\$3,643	\$3,064	\$6,872	\$1,789	35%
1,400	\$122.50	\$2,693	\$2,881	\$5,696	\$166	\$3,643	\$3,892	\$7,700	\$2,004	35%
1,500	\$122.50	\$2,693	\$3,494	\$6,309	\$166	\$3,643	\$4,720	\$8,528	\$2,219	35%

Restaurants - Wastewater Rate Impacts

Percentage Wastewater Return = 80%

Percentage Wastewater Return = 80%				Current	Proposed
Rate Per Hundred Cubic Feet (HCF)				Rates	2/1/2016
Tier 1	0	to	20	\$2.45	\$3.31
Tier 2	21	to	160	\$3.06	\$4.14
Tier 3	Over 160 HCF per Month			\$6.13	\$8.28
Minimum Monthly Fees (Non-Residential)				\$12.98	\$17.53

Charged Sewer Usage (HCF)	Tier 1	Tier 2	Tier 3	Total	Tier 1	Tier 2	Tier 3	Total	Increase	
1	\$2.45	\$0.00	\$0.00	\$12.98	\$3.31	\$0.00	\$0.00	\$17.53	\$4.55	35%
2	\$4.90	\$0.00	\$0.00	\$12.98	\$6.62	\$0.00	\$0.00	\$17.53	\$4.55	35%
3	\$7.35	\$0.00	\$0.00	\$12.98	\$9.93	\$0.00	\$0.00	\$17.53	\$4.55	35%
4	\$9.80	\$0.00	\$0.00	\$12.98	\$13.24	\$0.00	\$0.00	\$17.53	\$4.55	35%
5	\$12.25	\$0.00	\$0.00	\$12.98	\$16.55	\$0.00	\$0.00	\$17.53	\$4.55	35%
6	\$14.70	\$0.00	\$0.00	\$14.70	\$19.86	\$0.00	\$0.00	\$19.86	\$5.16	35%
7	\$17.15	\$0.00	\$0.00	\$17.15	\$23.17	\$0.00	\$0.00	\$23.17	\$6.02	35%
8	\$19.60	\$0.00	\$0.00	\$19.60	\$26.48	\$0.00	\$0.00	\$26.48	\$6.88	35%
9	\$22.05	\$0.00	\$0.00	\$22.05	\$29.79	\$0.00	\$0.00	\$29.79	\$7.74	35%
10	\$24.50	\$0.00	\$0.00	\$24.50	\$33.10	\$0.00	\$0.00	\$33.10	\$8.60	35%
11	\$26.95	\$0.00	\$0.00	\$26.95	\$36.41	\$0.00	\$0.00	\$36.41	\$9.46	35%
12	\$29.40	\$0.00	\$0.00	\$29.40	\$39.72	\$0.00	\$0.00	\$39.72	\$10.32	35%
13	\$31.85	\$0.00	\$0.00	\$31.85	\$43.03	\$0.00	\$0.00	\$43.03	\$11.18	35%
14	\$34.30	\$0.00	\$0.00	\$34.30	\$46.34	\$0.00	\$0.00	\$46.34	\$12.04	35%
15	\$36.75	\$0.00	\$0.00	\$36.75	\$49.65	\$0.00	\$0.00	\$49.65	\$12.90	35%
16	\$39.20	\$0.00	\$0.00	\$39.20	\$52.96	\$0.00	\$0.00	\$52.96	\$13.76	35%
17	\$41.65	\$0.00	\$0.00	\$41.65	\$56.27	\$0.00	\$0.00	\$56.27	\$14.62	35%
18	\$44.10	\$0.00	\$0.00	\$44.10	\$59.58	\$0.00	\$0.00	\$59.58	\$15.48	35%
19	\$46.55	\$0.00	\$0.00	\$46.55	\$62.89	\$0.00	\$0.00	\$62.89	\$16.34	35%
20	\$49.00	\$0.00	\$0.00	\$49.00	\$66.20	\$0.00	\$0.00	\$66.20	\$17.20	35%
25	\$49.00	\$15.30	\$0.00	\$64.30	\$66.20	\$20.70	\$0.00	\$86.90	\$22.60	35%
30	\$49.00	\$30.60	\$0.00	\$79.60	\$66.20	\$41.40	\$0.00	\$107.60	\$28.00	35%
35	\$49.00	\$45.90	\$0.00	\$94.90	\$66.20	\$62.10	\$0.00	\$128.30	\$33.40	35%
40	\$49.00	\$61.20	\$0.00	\$110.20	\$66.20	\$82.80	\$0.00	\$149.00	\$38.80	35%
45	\$49.00	\$76.50	\$0.00	\$125.50	\$66.20	\$103.50	\$0.00	\$169.70	\$44.20	35%
50	\$49.00	\$91.80	\$0.00	\$140.80	\$66.20	\$124.20	\$0.00	\$190.40	\$49.60	35%
60	\$49.00	\$122.40	\$0.00	\$171.40	\$66.20	\$165.60	\$0.00	\$231.80	\$60.40	35%
70	\$49.00	\$153.00	\$0.00	\$202.00	\$66.20	\$207.00	\$0.00	\$273.20	\$71.20	35%
80	\$49.00	\$183.60	\$0.00	\$232.60	\$66.20	\$248.40	\$0.00	\$314.60	\$82.00	35%
90	\$49.00	\$214	\$0	\$263	\$66	\$290	\$0	\$356	\$93	35%
100	\$49.00	\$245	\$0	\$294	\$66	\$331	\$0	\$397	\$104	35%
120	\$49.00	\$306	\$0	\$355	\$66	\$414	\$0	\$480	\$125	35%
140	\$49.00	\$367	\$0	\$416	\$66	\$497	\$0	\$563	\$147	35%
160	\$49.00	\$428	\$0	\$477	\$66	\$580	\$0	\$646	\$168	35%
180	\$49.00	\$428	\$123	\$600	\$66	\$580	\$166	\$811	\$211	35%
200	\$49.00	\$428	\$245	\$723	\$66	\$580	\$331	\$977	\$254	35%
220	\$49.00	\$428	\$368	\$845	\$66	\$580	\$497	\$1,143	\$297	35%
240	\$49.00	\$428	\$490	\$968	\$66	\$580	\$662	\$1,308	\$340	35%
260	\$49.00	\$428	\$613	\$1,090	\$66	\$580	\$828	\$1,474	\$383	35%
280	\$49.00	\$428	\$736	\$1,213	\$66	\$580	\$994	\$1,639	\$426	35%
300	\$49.00	\$428	\$858	\$1,336	\$66	\$580	\$1,159	\$1,805	\$469	35%

Laundry/Laundromat - Wastewater Rate Impacts

Percentage Wastewater Return = 90%

Percentage Wastewater Return = 90%				Current	Proposed
Rate Per Hundred Cubic Feet (HCF)				Rates	2/1/2016
Tier 1	0	to	105	\$2.45	\$3.31
Tier 2	106	to	525	\$2.71	\$3.66
Tier 3	Over 525 HCF per Month			\$3.38	\$4.57
Minimum Monthly Fees (Non-Residential)				\$64.44	\$87.00

Charged Sewer Usage (HCF)	Tier 1	Tier 2	Tier 3	Total	Tier 1	Tier 2	Tier 3	Total	Increase	
5	\$12.25	\$0.00	\$0.00	\$64.44	\$16.55	\$0.00	\$0.00	\$87.00	\$22.56	35%
10	\$24.50	\$0.00	\$0.00	\$64.44	\$33.10	\$0.00	\$0.00	\$87.00	\$22.56	35%
15	\$36.75	\$0.00	\$0.00	\$64.44	\$49.65	\$0.00	\$0.00	\$87.00	\$22.56	35%
20	\$49.00	\$0.00	\$0.00	\$64.44	\$66.20	\$0.00	\$0.00	\$87.00	\$22.56	35%
25	\$61.25	\$0.00	\$0.00	\$64.44	\$82.75	\$0.00	\$0.00	\$87.00	\$22.56	35%
30	\$73.50	\$0.00	\$0.00	\$73.50	\$99.30	\$0.00	\$0.00	\$99.30	\$25.80	35%
35	\$85.75	\$0.00	\$0.00	\$85.75	\$115.85	\$0.00	\$0.00	\$115.85	\$30.10	35%
40	\$98.00	\$0.00	\$0.00	\$98.00	\$132.40	\$0.00	\$0.00	\$132.40	\$34.40	35%
45	\$110.25	\$0.00	\$0.00	\$110.25	\$148.95	\$0.00	\$0.00	\$148.95	\$38.70	35%
50	\$122.50	\$0.00	\$0.00	\$122.50	\$165.50	\$0.00	\$0.00	\$165.50	\$43.00	35%
75	\$183.75	\$0.00	\$0.00	\$183.75	\$248.25	\$0.00	\$0.00	\$248.25	\$64.50	35%
100	\$245.00	\$0.00	\$0.00	\$245.00	\$331.00	\$0.00	\$0.00	\$331.00	\$86.00	35%
125	\$257.25	\$54.20	\$0.00	\$311.45	\$347.55	\$73.20	\$0.00	\$420.75	\$109.30	35%
150	\$257.25	\$121.95	\$0.00	\$379.20	\$347.55	\$164.70	\$0.00	\$512.25	\$133.05	35%
175	\$257.25	\$189.70	\$0.00	\$446.95	\$347.55	\$256.20	\$0.00	\$603.75	\$156.80	35%
200	\$257.25	\$257.45	\$0.00	\$514.70	\$347.55	\$347.70	\$0.00	\$695.25	\$180.55	35%
225	\$257.25	\$325.20	\$0.00	\$582.45	\$347.55	\$439.20	\$0.00	\$786.75	\$204.30	35%
250	\$257.25	\$392.95	\$0.00	\$650.20	\$347.55	\$530.70	\$0.00	\$878.25	\$228.05	35%
275	\$257.25	\$460.70	\$0.00	\$717.95	\$347.55	\$622.20	\$0.00	\$969.75	\$251.80	35%
300	\$257.25	\$528.45	\$0.00	\$785.70	\$347.55	\$713.70	\$0.00	\$1,061.25	\$275.55	35%
325	\$257.25	\$596.20	\$0.00	\$853.45	\$347.55	\$805.20	\$0.00	\$1,152.75	\$299.30	35%
350	\$257.25	\$663.95	\$0.00	\$921.20	\$347.55	\$896.70	\$0.00	\$1,244.25	\$323.05	35%
375	\$257.25	\$731.70	\$0.00	\$988.95	\$347.55	\$988.20	\$0.00	\$1,335.75	\$346.80	35%
400	\$257.25	\$799.45	\$0.00	\$1,056.70	\$347.55	\$1,079.70	\$0.00	\$1,427.25	\$370.55	35%
425	\$257.25	\$867.20	\$0.00	\$1,124.45	\$347.55	\$1,171.20	\$0.00	\$1,518.75	\$394.30	35%
450	\$257.25	\$934.95	\$0.00	\$1,192.20	\$347.55	\$1,262.70	\$0.00	\$1,610.25	\$418.05	35%
475	\$257.25	\$1,002.70	\$0.00	\$1,259.95	\$347.55	\$1,354.20	\$0.00	\$1,701.75	\$441.80	35%
500	\$257.25	\$1,070.45	\$0.00	\$1,327.70	\$347.55	\$1,445.70	\$0.00	\$1,793.25	\$465.55	35%
525	\$257.25	\$1,138.20	\$0.00	\$1,395.45	\$347.55	\$1,537.20	\$0.00	\$1,884.75	\$489.30	35%
550	\$257.25	\$1,138.20	\$84.50	\$1,479.95	\$347.55	\$1,537.20	\$114.25	\$1,999.00	\$519.05	35%
575	\$257.25	\$1,138.20	\$169.00	\$1,564.45	\$347.55	\$1,537.20	\$228.50	\$2,113.25	\$548.80	35%
600	\$257.25	\$1,138.20	\$253.50	\$1,648.95	\$347.55	\$1,537.20	\$342.75	\$2,227.50	\$578.55	35%
650	\$257.25	\$1,138.20	\$422.50	\$1,817.95	\$347.55	\$1,537.20	\$571.25	\$2,456.00	\$638.05	35%
700	\$257.25	\$1,138.20	\$591.50	\$1,986.95	\$347.55	\$1,537.20	\$799.75	\$2,684.50	\$697.55	35%
750	\$257.25	\$1,138.20	\$760.50	\$2,155.95	\$347.55	\$1,537.20	\$1,028.25	\$2,913.00	\$757.05	35%
800	\$257.25	\$1,138.20	\$929.50	\$2,324.95	\$347.55	\$1,537.20	\$1,256.75	\$3,141.50	\$816.55	35%
850	\$257.25	\$1,138.20	\$1,098.50	\$2,493.95	\$347.55	\$1,537.20	\$1,485.25	\$3,370.00	\$876.05	35%
900	\$257.25	\$1,138.20	\$1,267.50	\$2,662.95	\$347.55	\$1,537.20	\$1,713.75	\$3,598.50	\$935.55	35%
950	\$257.25	\$1,138.20	\$1,436.50	\$2,831.95	\$347.55	\$1,537.20	\$1,942.25	\$3,827.00	\$995.05	35%
1,000	\$257.25	\$1,138.20	\$1,605.50	\$3,000.95	\$347.55	\$1,537.20	\$2,170.75	\$4,055.50	\$1,054.55	35%
1,050	\$257.25	\$1,138.20	\$1,774.50	\$3,169.95	\$347.55	\$1,537.20	\$2,399.25	\$4,284.00	\$1,114.05	35%
1,100	\$257.25	\$1,138.20	\$1,943.50	\$3,338.95	\$347.55	\$1,537.20	\$2,627.75	\$4,512.50	\$1,173.55	35%
1,150	\$257.25	\$1,138.20	\$2,112.50	\$3,507.95	\$347.55	\$1,537.20	\$2,856.25	\$4,741.00	\$1,233.05	35%

Schools - Wastewater Rate Impacts

Percentage Wastewater Return = 85%

Percentage Wastewater Return = 85%				Current	Proposed
Rate Per Hundred Cubic Feet (HCF)				Rates	2/1/2016
Tier 1	0	to	50	\$2.45	\$3.31
Tier 2	51	to	930	\$3.06	\$4.14
Tier 3	Over 930 HCF per Month			\$6.13	\$8.28
Minimum Monthly Fees (Non-Residential)				\$49.15	\$66.36

Charged Sewer Usage (HCF)	Tier 1	Tier 2	Tier 3	Total	Tier 1	Tier 2	Tier 3	Total	Increase	
5	\$12.25	\$0.00	\$0.00	\$49.15	\$16.55	\$0.00	\$0.00	\$66.36	\$17.21	35%
10	\$24.50	\$0.00	\$0.00	\$49.15	\$33.10	\$0.00	\$0.00	\$66.36	\$17.21	35%
15	\$36.75	\$0.00	\$0.00	\$49.15	\$49.65	\$0.00	\$0.00	\$66.36	\$17.21	35%
20	\$49.00	\$0.00	\$0.00	\$49.15	\$66.20	\$0.00	\$0.00	\$66.36	\$17.21	35%
25	\$61.25	\$0.00	\$0.00	\$61.25	\$82.75	\$0.00	\$0.00	\$82.75	\$21.50	35%
30	\$73.50	\$0.00	\$0.00	\$73.50	\$99.30	\$0.00	\$0.00	\$99.30	\$25.80	35%
35	\$85.75	\$0.00	\$0.00	\$85.75	\$115.85	\$0.00	\$0.00	\$115.85	\$30.10	35%
40	\$98.00	\$0.00	\$0.00	\$98.00	\$132.40	\$0.00	\$0.00	\$132.40	\$34.40	35%
45	\$110.25	\$0.00	\$0.00	\$110.25	\$148.95	\$0.00	\$0.00	\$148.95	\$38.70	35%
50	\$122.50	\$0.00	\$0.00	\$122.50	\$165.50	\$0.00	\$0.00	\$165.50	\$43.00	35%
75	\$122.50	\$76.50	\$0.00	\$199.00	\$165.50	\$103.50	\$0.00	\$269.00	\$70.00	35%
100	\$122.50	\$153.00	\$0.00	\$275.50	\$165.50	\$207.00	\$0.00	\$372.50	\$97.00	35%
125	\$122.50	\$229.50	\$0.00	\$352.00	\$165.50	\$310.50	\$0.00	\$476.00	\$124.00	35%
150	\$122.50	\$306.00	\$0.00	\$428.50	\$165.50	\$414.00	\$0.00	\$579.50	\$151.00	35%
175	\$122.50	\$382.50	\$0.00	\$505.00	\$165.50	\$517.50	\$0.00	\$683.00	\$178.00	35%
200	\$122.50	\$459.00	\$0.00	\$581.50	\$165.50	\$621.00	\$0.00	\$786.50	\$205.00	35%
225	\$122.50	\$535.50	\$0.00	\$658.00	\$165.50	\$724.50	\$0.00	\$890.00	\$232.00	35%
250	\$122.50	\$612.00	\$0.00	\$734.50	\$165.50	\$828.00	\$0.00	\$993.50	\$259.00	35%
275	\$122.50	\$688.50	\$0.00	\$811.00	\$165.50	\$931.50	\$0.00	\$1,097.00	\$286.00	35%
300	\$122.50	\$765.00	\$0.00	\$887.50	\$165.50	\$1,035.00	\$0.00	\$1,200.50	\$313.00	35%
325	\$122.50	\$841.50	\$0.00	\$964.00	\$165.50	\$1,138.50	\$0.00	\$1,304.00	\$340.00	35%
350	\$122.50	\$918.00	\$0.00	\$1,040.50	\$165.50	\$1,242.00	\$0.00	\$1,407.50	\$367.00	35%
375	\$122.50	\$994.50	\$0.00	\$1,117.00	\$165.50	\$1,345.50	\$0.00	\$1,511.00	\$394.00	35%
400	\$122.50	\$1,071.00	\$0.00	\$1,193.50	\$165.50	\$1,449.00	\$0.00	\$1,614.50	\$421.00	35%
425	\$122.50	\$1,147.50	\$0.00	\$1,270.00	\$165.50	\$1,552.50	\$0.00	\$1,718.00	\$448.00	35%
450	\$122.50	\$1,224.00	\$0.00	\$1,346.50	\$165.50	\$1,656.00	\$0.00	\$1,821.50	\$475.00	35%
475	\$122.50	\$1,300.50	\$0.00	\$1,423.00	\$165.50	\$1,759.50	\$0.00	\$1,925.00	\$502.00	35%
500	\$122.50	\$1,377.00	\$0.00	\$1,499.50	\$165.50	\$1,863.00	\$0.00	\$2,028.50	\$529.00	35%
525	\$122.50	\$1,453.50	\$0.00	\$1,576.00	\$165.50	\$1,966.50	\$0.00	\$2,132.00	\$556.00	35%
550	\$122.50	\$1,530.00	\$0.00	\$1,652.50	\$165.50	\$2,070.00	\$0.00	\$2,235.50	\$583.00	35%
575	\$122.50	\$1,606.50	\$0.00	\$1,729.00	\$165.50	\$2,173.50	\$0.00	\$2,339.00	\$610.00	35%
600	\$122.50	\$1,683.00	\$0.00	\$1,805.50	\$165.50	\$2,277.00	\$0.00	\$2,442.50	\$637.00	35%
650	\$122.50	\$1,836.00	\$0.00	\$1,958.50	\$165.50	\$2,484.00	\$0.00	\$2,649.50	\$691.00	35%
700	\$122.50	\$1,989.00	\$0.00	\$2,111.50	\$165.50	\$2,691.00	\$0.00	\$2,856.50	\$745.00	35%
750	\$122.50	\$2,142.00	\$0.00	\$2,264.50	\$165.50	\$2,898.00	\$0.00	\$3,063.50	\$799.00	35%
800	\$122.50	\$2,295.00	\$0.00	\$2,417.50	\$165.50	\$3,105.00	\$0.00	\$3,270.50	\$853.00	35%
850	\$122.50	\$2,448.00	\$0.00	\$2,570.50	\$165.50	\$3,312.00	\$0.00	\$3,477.50	\$907.00	35%
900	\$122.50	\$2,601.00	\$0.00	\$2,723.50	\$165.50	\$3,519.00	\$0.00	\$3,684.50	\$961.00	35%
950	\$122.50	\$2,692.80	\$122.60	\$2,937.90	\$165.50	\$3,643.20	\$165.60	\$3,974.30	\$1,036.40	35%
1,000	\$122.50	\$2,692.80	\$429.10	\$3,244.40	\$165.50	\$3,643.20	\$579.60	\$4,388.30	\$1,143.90	35%
1,050	\$122.50	\$2,692.80	\$735.60	\$3,550.90	\$165.50	\$3,643.20	\$993.60	\$4,802.30	\$1,251.40	35%
1,100	\$122.50	\$2,692.80	\$1,042.10	\$3,857.40	\$165.50	\$3,643.20	\$1,407.60	\$5,216.30	\$1,358.90	35%
1,150	\$122.50	\$2,692.80	\$1,348.60	\$4,163.90	\$165.50	\$3,643.20	\$1,821.60	\$5,630.30	\$1,466.40	35%