



APPROVED

Two-Year Operating and Capital Budget

JULY 1, 2017 TO JUNE 30, 2019



Vision Statement

Our vision is to:

“Maintain our community’s high quality of life provision of valued water and sewer services”



through

Mission Statement

Our mission is to:

“Provide our customers with reliable, high quality water and sewer services featuring home service, fiscal discipline and direct accountability”

town

Values

EOCWD will embody the following core values in the setting and implementation of its policies and practices:

- Integrity and ethical behavior – EOCWD will consistently adhere to high moral and ethical principles
- Community – EOCWD will cooperatively work together and with stakeholders to further the mission and goals of the organization

Board of Directors

Doug Davert, President

Richard Bell, Vice President

John Dulebohn, Director

Sy Everett, Director

John Sears, Director

General Manager

Lisa Ohlund

General Counsel/District Secretary

Jeff Hoskinson., Bowie, Arneson, Wiles & Giannone

East Orange County Water District is a public agency proudly serving portions of Tustin, Orange, Orange Park Acres, North Tustin, Cowan Heights, Lemon Heights and Panorama Heights.

Adopted
Operating and Capital Budget
July 1, 2017 to June 30, 2019

COVER PHOTO



The Paul Andres (11.5 MG) Reservoir by Jerry Mendzer



Board of Directors
Doug Davert, President
Richard Bell, Vice President
John Dulebohn, Director
Sy Everett, Director
John Sears, Director

General Manager
Lisa Ohlund

June 15, 2017

Board of Directors
East Orange County Water District

Board of Directors,

I am pleased to present the General Manager’s Recommended Two-Year Budget for fiscal years 2017- 2018 and 2018-19. This is the first two-year budget document ever presented and reflects another significant milestone in the history of the District; the completion of the first year of sewer collection system operations (Improvement District 1).

As public stewards, this budget reflects the District’s continuing commitment to manage the District in accordance with the EOCWD Strategic Plan: the Board of Director’s comprehensive policy statement that was reviewed and updated to incorporate sewer system operations on May 18, 2017.

The Five Goals of the Strategic Plan are:

1. EOCWD will provide reliable water and sewer services, that consider the environment, to meet the needs of the community.
2. EOCWD will acquire, maintain and operate our infrastructure to ensure reliable water and sewer services.
3. EOCWD will provide responsive local government, value and outreach to the communities we serve.
4. EOCWD will manage our financial assets to provide and maintain reliable water service.
5. EOCWD will maintain workforce expertise to ensure service quality and continuity.

Current Issues and Challenges

After severe water curtailment (36% for EOCWD) was mandated by the emergency drought regulations adopted in on May 18 2016 by the State Water Resources Control Board (SWRCB), the District worked to successfully achieve this reduction. After an historically wet winter in 2016/17, the State rescinded the mandatory reductions, however the Board determined that because of ongoing water supply uncertainty, a 15% reduction would be kept in place until the State issues anticipated long-term conservation requirements.

The Emergency Drought Regulations imposed by the SWRCB had a substantial effect on the Retail Zone's revenues. In recognition of this, the District prepared a water rate study and completed the Proposition 218 rate increase process on September 15, 2016 with the adoption of a five-year rate plan. The rate plan is designed to provide financial stability by increasing the proportion of district costs funded by fixed fees, providing for pass-through of wholesale water and energy cost increases, and by establishing "drought rates" that can be instituted in the event of reductions in water sales caused by a natural or regulatory drought.

The drought and the actions of the SWRCB have reinforced the need for continued water use efficiency as well as development of local drought-resilient water supplies to be less reliant on imported water. To this end, the District continues to implement water conservation outreach and activities among its Wholesale and Retail water customers, and has begun examining the feasibility of obtaining access to local stormwater that could augment the raw water supply for the proposed reconstruction of the water treatment plant that the District had historically owned at operated at the Peters Canyon Reservoir site. The treatment plant reconstruction is predicated on the financial feasibility of treating and distributing water delivered by the Metropolitan Water District of Southern California (MET) at a cost less than that charged by MET; development of local stormwater supply would enhance its reliability, and potentially, financial feasibility.

In addition to pursuing alternative local water supply development, the District has also been proactive in maintenance of potable water, recycled water, and wastewater capital facilities in order to protect capital investments made to date by the District's rate payers. The District's ten-year capital spending plan includes critical preventative maintenance programs, such as repairs to the Peters Canyon Reservoir Roof, rehabilitation to the Vista Panorama Reservoir and replacement of water lines in Alexander and Stollar Lanes. These programs will extend the useful lives of the existing transmission and distribution system and are expected to continue as planned.

The District relies heavily on both local and imported water for its water supply. Purchased water wholesale cost increases, particularly for groundwater, and variations in

weather conditions are uncontrollable factors that significantly influence and affect the development of the District's budget. This year saw a 31% increase in the budget for groundwater purchases and at 15% increase in the budget for imported water purchases. Water purchases are the single largest expense in the budget, and even though the District's service area has robust income levels, the pace with which water rate increases has occurred over the past 10 years has stressed customer tolerance.

PRIORITIES FOR FISCAL YEAR 2016-2017

Water Supply Priorities

The District's long term operational program and Capital Improvement Plan target opportunities to improve water supply reliability and sustainability.

The budget provides resources to accomplish the following goals and objectives:

- Comply with State Water Resources Control Board regulations, including reporting data and calculations of local supply-based assessment standards.
- Continue evaluating the potential to increase long-term water supply reliability through reconstruction of the Peters Canyon Water Treatment Plant.
- Continue District conservation programs with a focus on water use efficiency education and conservation.
- Comply with the requirements of the Clean Water Act, California Water Code and the Urban Water Management Planning Act.
- Monitor water use per SB X7-7 to ensure compliance.
- Continue to invest in the rehabilitation and replacement of district facilities as they near the end of their useful life in a manner that limits impacts, both financial and quality-of-life, to our customers.

Potable Water and Wastewater Distribution and Collection Facility Priorities

The District's facility priorities are comprised of the expansion, replacement, and betterment of existing facilities to serve current and future customers with reliable water and wastewater services.

The budget provides resources to address critical potable water and wastewater facilities:

- Continue efforts to expand preventative maintenance programs for the District’s transmission and distribution facilities. These efforts include projects such as the valve replacement program, cathodic protection program, and meter anode replacement project.
- Complete the analysis of reconstruction of the Peters Canyon Treatment Plant
- Complete the Wholesale Zone Water Quality Study
- Complete the installation of Automated Meter Reading at Wholesale Zone meters
- Complete interim repairs to the Peters Canyon Reservoir Roof
- Complete cathodic protection replenishment in the Wholesale Zone System
- Complete construction of the Crawford Canyon Improvements in the Retail Zone
- Complete construction of the Alexander/Stoller Improvements in the Retail Zone.
- Complete installation of the Orange Knoll Pressure Reducing Station in the Retail Zone
- Complete design and obtain bids for rehabilitation of the Vista Panorama Pump Station in the Retail Zone
- Complete the Improvement District 1 (Sewer) Master Plan/Condition Assessment
- Complete sub area master plan for septic system conversions and form financing entity
- Continue proactive rehabilitation of sewer pipelines through CCTV analysis and subsequent repair using the most appropriate method.

Core Business Plans

Core Business Plans include the operation and maintenance of water and wastewater infrastructure and facilities in a cost-effective manner to protect the District’s investments, reflecting its dedication to providing high-quality customer service.

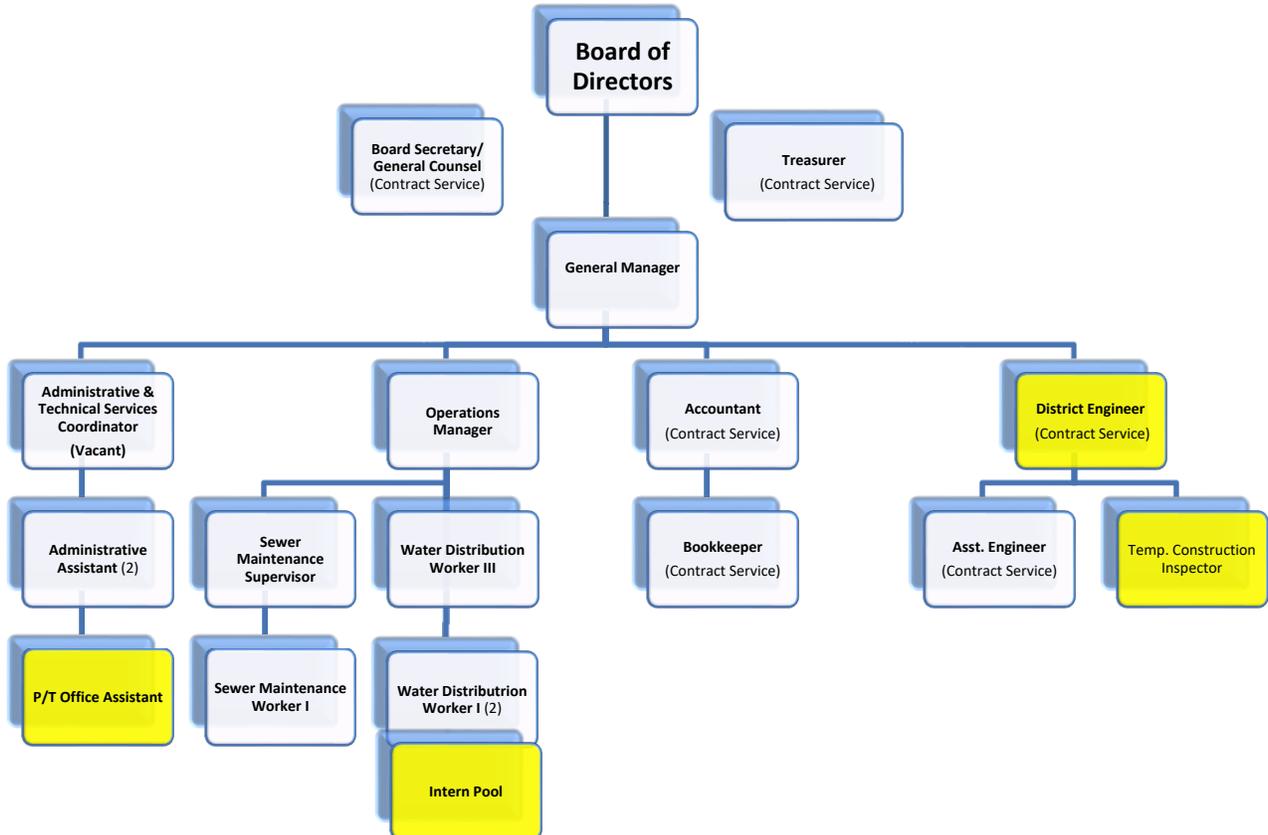
The budget provides resources to achieve the following goals:

- Continue implementation of the District’s Strategic Plan
- Maintain the District’s financial position to support its Capital Project Program.
- Continue implementation cost-saving programs such as the Better Way program.
- Continue public outreach efforts including water conservation programs and information to comply with SWRCB’s emergency regulations.

- Continue using technology and contract services to improve work efficiency and mitigate cost increases.
- Pursue local, state, federal and private grant funding to reduce capital expenditures collected from fees and charges.
- Continue to evaluate valve conditions, prioritize valves requiring replacement, and replace high-priority valves.
- Continue to implement Homeland Security IT and SCADA audit recommendations to improve the District's network and SCADA system security.
- Conduct training with employees throughout the year to ensure safety and technical competence.

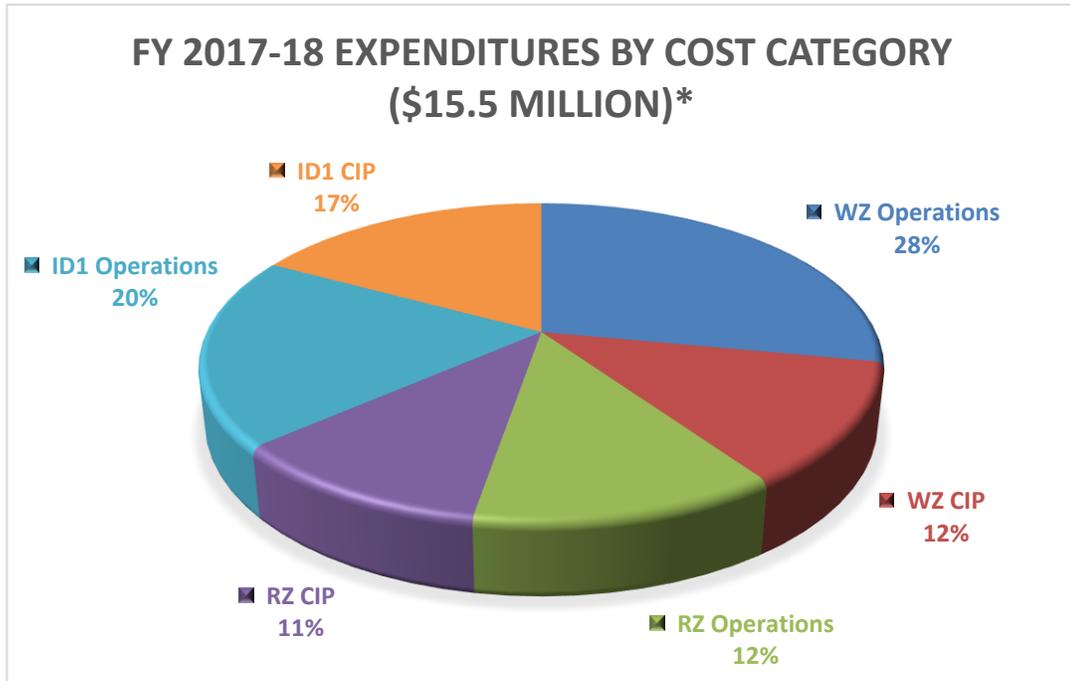
RECOMMENDED STAFFING

Currently, the FY 16/17 Budget funds 10 full-time positions. The FY 17/18 Budget proposes the addition of one permanent, Part-Time Office Assistant, the creation of an intern pool and the retention of a temporary construction inspector as District employees. The retention of a consultant District Engineer is also recommended. The proposed organizational structure is shown below.



THE RECOMMENDED BUDGET

The District's Long-Range Financial Plan provides the framework for establishing the rates and charges to support the budget.



* Total may not add up to 100% due to rounding

Summary of Major Expenditures

The District's expenditures are derived from three operations: Wholesale Water, Retail Water and Wastewater. For the fiscal year 2017-2018 (FY 17-18) budget, total expenditures are projected to be \$15.5 million, consisting of \$9.25 million in operating expenditures and \$6.25 million in capital expenditures (all capital expenditures are Pay-As-You-Go (PAYGO) transfers from rates and charges and reserves. Total expenditures for FY 18-19 are projected to be \$12.4 million, consisting of \$9.6 million in operating expenditures and \$2.8 million in capital expenditures.

Wholesale Zone Operating (28%): The Wholesale Zone (WZ) comprises the largest share of the District's operating and maintenance expenses (\$4.3 million) due to the large amount of water purchased. The District buys 100% of its treated water supply from the Municipal Water District of Orange County (MWDOC)/MET to meet potable water demand for our five wholesale customers (Cities of Tustin and Orange, Golden State Water District, Irvine Ranch Water District and EOCWD's Retail Zone). Due to a continued reduction in

demand projected by WZ customers, the WZ budget is a 28% reduction from the FY 16-17 Budget of \$5.9 million.

Starting January 1, 2017, untreated purchased water wholesale cost is expected to increase from \$979 per acre foot to \$1,015 per acre foot (4%). EOCWD's fixed charges, such as the Metropolitan Water District's Readiness to Serve Charge, and Capacity Charge (both of which are pass-through charges) are decreasing slightly due to a change in the District's historic rolling average (the method by which this cost is allocated by MWDOC), but are expected to rise in 2018-19. EOCWD's own Readiness to Serve and Reserve Fund Charges remained the same. Additional details may be found under the WZ Operating Budget.

Retail Zone Operating (12%): The fiscal year 2017-18 recommended budget of \$1.9 million includes a 0.6% increase in operation and maintenance costs, as compared to the fiscal year 2016-2017 budget of \$1.89 million, despite a 22% increase in water purchase costs (\$91,000). Reductions in some overhead and labor expenditures, as well as a decrease to transfer to capital reserves, offset the water cost increase. Further details may be found under the Retail Zone Operating Budget.

Sewer (ID1) Operating (20%): Fiscal Year 2017-18 budget recommendations total \$3 million, an increase of \$20,000 or 1% over the prior year. Cost increases due to overhead and labor costs were included in this budget and were largely offset by a 22% reduction (\$440,000) in the amount of funds transferred into Sewer reserves, although over \$1.7 million will continue to be transferred to sewer reserves. Details may be found under the Sewer Operating Budget.

WZ Capital (12%): The \$1.9 million capital improvement budget will fund four large projects and several smaller miscellaneous projects: repairs to the Peters Canyon Reservoir roof (\$700,000); administrative office improvements to 185 N. McPherson Rd.(\$255,000); engineering and institutional tasks for the proposed water treatment plant (\$200,000); improvements to the Walnut turnout (\$260,000). Further details may be found under the WZ Capital Improvement Program Budget.

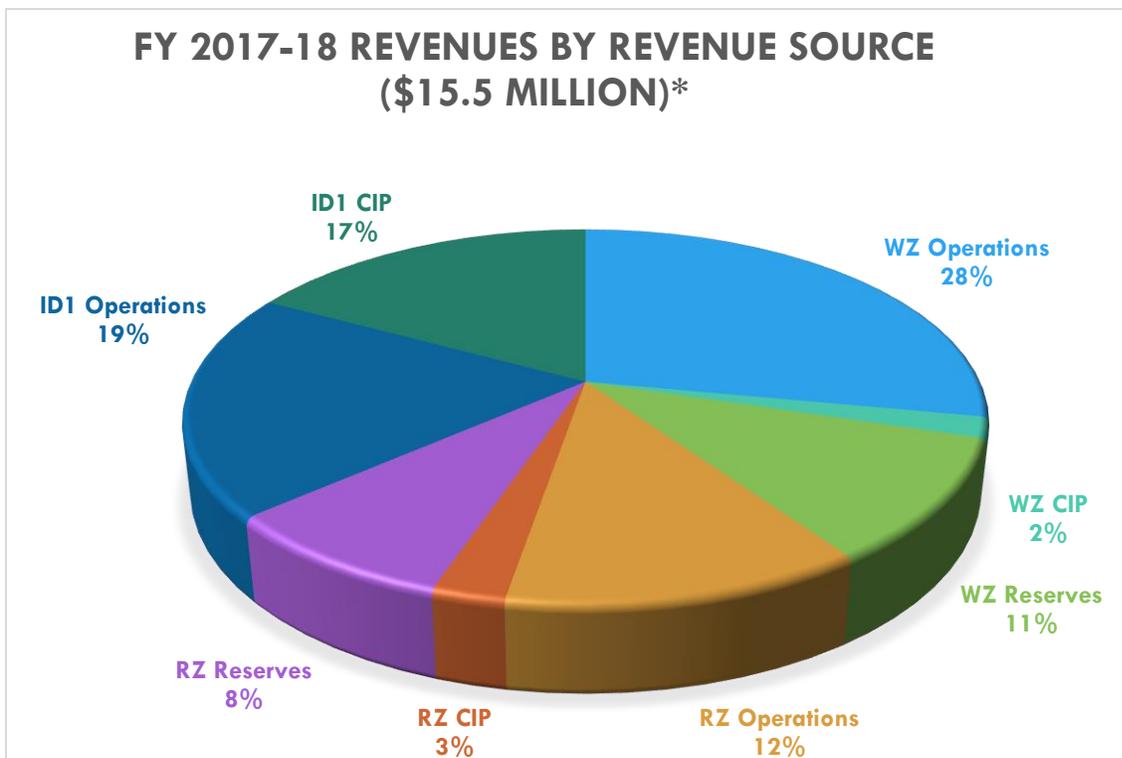
Retail Zone Capital (11%) is budgeted at \$1,7 million and includes four major projects: rehabilitation of the Vista Panorama Reservoir (\$535,000), completion of the Alexander/Stoller project (\$310,000) completion of the Crawford Canyon Project (\$158,000) and; improvements to 185 N. McPherson (\$150,000). Additional details may be found in the RZ Capital Budget detail.

Sewer (ID1) Capital (17%): When the District assumed ownership of the sewer system, many future costs were well identified, however, some capital costs were not. To rectify

this, EOCWD will be required to fund over 120 capital repair/replacement projects that, inclusive of engineering costs, will total more than \$1.1 million. Completion of the Master Plan/Condition Assessment (\$550,000) as well as contributions towards the administrative improvements at 185 N. McPherson (\$630,000) are also included in this budget. Further details can be found in the Sewer Capital Budget section.

Summary of Major Revenues

The District’s major funding sources are rates and charges (potable water and wastewater), property tax revenues, capacity fees, and investment income.



* Total may not add up to 100% due to rounding

Wholesale Zone Operating (28%): The Wholesale Zone is projecting revenues of \$4.3 million for FY 17/18 and \$4.5 million for FY 18/19; a 28% decrease from FY 16/17.

Due to the large amount of snow/rainfall during Winter 2016/17, our regional water supply agencies are projecting that surplus amount of water may be available to refill storage, including the Orange County Groundwater Basin. Because of this, the Wholesale Zone may experience increased water sales during FY 17/18, but it is too early to tell at this time.

Budgeted revenues are based upon groundwater demands of 75%, with 25% being supplied by imported water – the only type of water sold by the Wholesale Zone.

The Wholesale Zone doesn't add any additional fee to the commodity cost of the water sold to our retail customer agencies; the Wholesale Zone water is generally provided by gravity alone, there are no additional energy costs that would normally be recovered under the commodity rate. Because of this, water commodity sales are basically equal to water commodity costs: the revenue matches the expense. The District's fixed costs are paid through three primary sources: Fixed fees that match the fixed fees charges by regional water agencies, property tax revenue and a Readiness-to-Serve Charge that is paid by each retail customer agency in proportion to the number of meters they maintain within the EOCWD service area.

Retail Zone Operating (12%): Retail Zone revenues are projected at \$1.9 million for FY 17/18 and \$2.1 million for FY 18/19; a less than 1% increase from FY 16/17.

The majority of the District's retail water customer base is municipal and industrial (M&I) use. Domestic water use accounts for approximately 95% of the District's potable water deliveries, 2% for commercial/irrigation, and 3% for institutional. Potable water sales and services charges are the primary source of revenue for the Retail Zone. At 95% build-out, the District projects future water sales volume to remain relatively unchanged in the next 10 years; this projection is tempered however, by the relatively large homes and large lots that lend themselves to multi-generational/multi-family housing. If this occurs, there could be a slight increase in water demand, however, it could also be offset by decreased outdoor irrigation as densification occurs. The District is expected to be at 100% build-out by 2050. Water sales are sensitive to external factors such as drought restrictions, variation in weather conditions, and economic conditions.

The District's Board of Directors adopted a financial plan and rates and charges resolution in September 2016 that included pass-through of local and regional water cost increases and annual inflation for a five-year period commencing October 16, 2016 through June, 2021. These rates anticipate a 15% decrease in water consumption from 2013 demand and fully fund both operations and maintenance costs, as well as an annually budgeted transfer of funds to capital reserves. Additionally, the Board adopted commodity drought rates that vary based upon the level of drought declared; these rates are intended to be revenue neutral during periods of reduced water sales and are to only be implemented during drought period.

Sewer (ID1) Operating (20%): Fiscal Year 2017/18 ID1 operating revenues are projected to total \$3 million, an increase of \$20,000 or 1% over the prior year. Operating revenues for FY 18/19 are expected to total \$3.02 million or less than 1% over FY 17/18.

The District currently collects and treats sewage from over 18,000 sewer connections. The District's wastewater service fees are collected on each property owner's property tax bill on an annual basis. Sewer bills are due and payable at the same time when a property

owner's tax bill is due to the Orange County Assessor's office, in April and December of each year. Sewer fees were reduced from \$216 per residential connection in FY 15/16 to \$108 per residential connection in FY 16/17. The District is currently preparing a Master Plan and Condition Assessment that will provide a 25-year CIP, and then will embark upon the preparation of a financial plan and rate study, similar to that which was completed for the water enterprise in 2016.

The primary revenue sources for the ID1 operating budget consists of sewer service charges (\$2.7 million) and property taxes (\$0.3 million). With an operating expense of approximately \$1.3 million, ID1 revenues not only fully fund the operations and maintenance costs, but as noted previously, almost \$1.7 million is budgeted annually to be transferred to the ID1 capital reserve.

WZ Capital (12%): The primary source of revenues for the WZ Capital Improvement Program (CIP) FY 17/18 Budget of \$1.9 million and FY 18/19 Budget of \$1.24 million, are capital reserves, supplemented by the EOCWD Capital Reserve charges (~\$270,000) that are assessed annually to all Wholesale Zone retail customer agencies in proportion to the number of retail water meters they maintain within the EOCWD service area. At this time, the WZ CIP is funded on a PAYGO (pay-as-you-go) basis.

Retail Zone Capital (11%): The primary source of FY 17/18 Retail Zone CIP revenues of \$1.7 million and FY 18/19 CIP revenues of \$570,000 are capital reserve funds supplemented by the Capital Facilities Fee (CFF) collected from retail customers on their bimonthly bill. The CFF revenue for FY 17/18 is estimated to be \$0.4 million and for FY 18/19 is \$0.45 million.

Sewer (ID1) Capital (17%): The primary source of FY 17/18 ID1 CIP revenues of \$2.6 million are transfers from the operating fund augmented by \$0.9 million of capital reserves. For FY 18/19 CIP revenues of \$0.95 million are fully funded through transfer from the operating fund.

CONCLUSION

This budget reflects the Board of Directors' priorities and the adopted 2017 Strategic Plan. The goal of this budget document is to provide the District with a road map for good financial practices, prioritizing major capital improvement programs and ultimately, fulfilling the District's mission statement. This document also demonstrates the District's ability to use its capital resources for completing ambitious capital projects for current and future customers as well as the District's commitment to meet its financial obligations.

ACKNOWLEDGEMENTS

I would like to thank the Board of Directors for their leadership and their support for frugal and prudent fiscal management of the District. I would also like to extend my appreciation to all of

the District's employees for their dedication to providing an exceptional level of customer service. Our goals and objectives cannot be met without your outstanding contributions. Most importantly, on behalf of our Board of Directors and all of the District's employees, thank you to our valued customers, whom we are honored and privileged to serve.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Lisa Ohlund". The signature is fluid and cursive, with the first name "Lisa" written in a larger, more prominent script than the last name "Ohlund".

Lisa Ohlund
General Manager

ABOUT THE DISTRICT

The East Orange County Water District is a special district governed by an elected five-member Board of Directors. The District was incorporated in 1961 under the provisions of the County Water District section (30000 et. seq.) of the California Water Code as amended. The District provides wholesale and retail potable water and wastewater collection services within a 10 square mile area of East Orange/North Tustin.

ABOUT THE BUDGET

This Two-Year Budget is a living document built upon the foundation of several other documents, including the 2017 Strategic Plan and the 2016 Financial Plan; these documents have been appended to the budget as Appendices A and B, respectively. During the ensuing fiscal years, the budget may be amended from time to time by the Board to reflect new or changing information and/or priorities.

**WHOLESALE ZONE
OPERATING BUDGET**

**WHOLESALE ZONE OPERATING BUDGET
TWO-YEAR BUDGET (FY 2017/2018 & FY 2018/19)**

	PROPOSED 17-18 BUDGET	PROPOSED 18-19 BUDGET	2016-17 BUDGET	2015-16 ACTUAL	2014-15 ACTUAL	2013-14 ACTUAL
OPERATING REVENUES:						
4001-10 Water sales	2,400,000	2,500,000	3,950,000	2,544,129	4,215,477	6,243,541
4150-10 Meter Charge	1,000	1,000	1,000	1,522	2,226	2,410
4202-10 Late charge	100	100	100	4,309	452	105
4110-10 New Connection Fees	1,000	1,000	1,000	15,000	7,578	10,745
4101-10 MWDOC Fee	255,000	267,750	228,121	226,038	218,190	174,897
4102-10 MET Readiness to Serve Charge	175,000	183,750	207,704	243,238	216,629	203,925
4104-10 MWDOC Choice-WS	5,000	5,250	25,605	29,180	8,377	1,141
4103-10 MET Capacity Charge	150,000	157,500	139,980	175,635	150,487	108,470
4111-10 EOCWD Reserve Fund Charge	315,000	315,000	312,495	305,776	231,429	209,344
4112-10 EOCWD Readiness to Serve Charge	175,000	175,000	177,080	156,254	57,170	51,921
4901-10 Reimbursed expenses-IRWD	-	-	-	-	-	27,390
4203-10 Refunds	-	-	-	314,511	12,339	-
4603-10 Interest earned-LAIF	7,000	7,000	4,250	6,414	4,467	5,481
4604-10 Interest earned - Raymond James	22,000	22,000	17,000	21,677	17,968	17,798
4701-10 Taxes-secured	630,000	625,000	600,000	635,992	595,941	575,772
4702-10 Taxes-unsecured	20,910	21,500	15,300	21,821	22,976	26,096
4703-10 Taxes-supplemental roll	10,455	10,800	5,100	16,901	23,623	13,449
4704-10 Taxes-prior years	7,000	7,300	7,000	7,097	6,593	7,886
4706-10 Taxes - homeowner subvention	3,500	3,550	3,300	4,437	4,662	-
4707-10 Taxes-public utility	8,700	9,000	8,400	11,660	10,991	-
4708-10 Taxes- Tustin RDA Taxes	40,000	41,000	40,800	67,492	46,755	50,562
4709-10 Taxes-miscellaneous	-	-	-	-	-	-
<i>Subtotal Property Taxes</i>	720,565	718,150	701,150	-	-	673,765
4601-10 Rent income-Cell Tower	55,000	55,000	56,100	54,874	53,907	52,946
4602-10 Rent income-Crown Castle (Mountain Union)	50,000	45,000	52,020	44,876	79,772	47,034
4605-10 AMP Sale proceeds - RPOI distributions	-	-	20,400	144	142	976
4690-10 Miscellaneous income	600	600	600	4,655	818	600
8900-0001-1 Gain or (loss) on sale of assets	-	-	-	-	-	-
TOTAL WHOLESALE OPERATING FUND RECEIPTS	4,332,265	4,454,100	5,873,355	4,913,634	5,988,968	8,506,256
% Increase over prior year's budget	-26%	3%				

	PROPOSED PROP. 17-18	PROPOSED PROP. 18-19	2016-17 BUDGET	2015-16 ACTUAL	2014-15 ACTUAL	2013-14 ACTUAL
EXPENDITURES-OPERATIONS & MAINTENANCE						
Purchases:						
5001-10 Water purchases-EOCF#2 OC43	450,000	475,000	711,000	486,567	958,861	1,461,213
5002-10 Water purchases-EOCF#2 OC48	150,000	175,000	869,000	168,367	1,172,908	1,792,680
5003-10 Water purchases-OC70	1,800,000	1,850,000	2,370,000	1,892,049	2,083,202	2,982,517
5004-10 MET-MWDOC Choice Budget	5,000	5,250	25,605	10,321	11,475	-
5290-10 AMP-FAP lease	-	-	-	-	53,000	15,000
5005-10 MET Readiness to serve charge	175,000	183,750	207,714	238,508	211,519	203,925
5006-10 MET Capacity charge	150,000	157,500	139,980	175,636	150,524	108,470
5007-10 MWDOC Fee	255,000	267,750	228,121	226,038	218,190	175,991
Operations:						
5140-10 Utility- SCADA RTU	2,650	2,700	2,650	2,038	1,745	2,060
5170-10 Regulatory Permits	7,150	7,550	7,150	2,402	1,398	3,605
5120-10 Water quality testing	26,000	27,450	26,000	14,085	13,937	12,710
5122-10 SCADA R/M	10,000	9,905	9,382	139	232	5,266
5161-10 Operations Software	18,000	15,840	15,000	2,966	4,795	9,859
5155-10 Equipment rental	25,000	21,115	20,000	23,773	21,546	20,240
Maintenance:						
5124-10 Production meter purchases and installations	15,000	16,150	15,300	1,997	1,166	9,025
5112-10 PRV-repair and maintenance	5,100	5,390	5,100	276	515	5,044
5101-10 Mains-repair and maintenance	25,500	26,925	25,500	13,348	9,233	1,683
5110-10 Service Connections-repair and maintenance	1,550	1,640	1,550	750	5,168	992
5102-10 Reservoirs-repair and maintenance	15,000	2,640	2,500	15,582	26,446	9,468
5160-10 Small tools	3,600	3,880	3,675	2,701	5,243	3,480
5144-10 Gasoline, oil & diesel fuel	5,500	5,830	5,521	3,131	4,159	3,463
5103-10 Vaults-repair and maintenance	10,200	10,770	10,200	2,521	551	1,098
5131-10 Cathodic protection-monitor, repair and maintenance	25,300	26,710	25,300	1,976	2,064	2,207
5128-10 EOCF # 2 maintenance and operations	50,000	52,500	45,000	39,170	17,000	34,907
5129-10 Meter Testing	3,100	3,230	3,060	2,700	2,100	2,963
5130-10 SAC line maintenance and operations	25,000	26,400	25,000	2,443	16,889	3,555
5150-10 Equipment maintenance	3,600	3,850	3,643	567	352	63
5151-10 Vehicle maintenance	2,900	3,065	2,900	1,151	2,997	1,079
5152-10 Maintenance-buildings and grounds	5,000	4,015	3,800	4,106	6,296	3,022

WHOLESALE ZONE OPERATING BUDGET		PROPOSED	PROPOSED	2016-17	2015-16	2014-15	2013-14
EXPENDITURES-ADMINISTRATIVE & GENERAL		PROP. 17-18	PROP. 18-19	BUDGET	ACTUAL	ACTUAL	ACTUAL
Administrative:							
5401-10	Wages	224,000	229,600	200,000	236,374	217,329	186,678
5402-10	FICA and Medicare	18,000	18,100	17,000	17,664	17,196	14,895
5420-10	Retirement PERS			39,210	-	6,494	25,587
5427-10	PERS Unfunded	6,000	7,500	5,500	5,469	-	-
5421-10	PERS Classic(ER-Contribution)	13,000	13,725	13,000	10,650		
5422-10	PERS Classic (ER-Paid Member)	13,000	6,870	6,500	10,590	648	-
5424-10	PERS PEPRA (ER)	7,000	8,000	4,500	5,192	-	-
5403-10	Retirement - PERS (Employee Contribution)				-	8,236	(2,234)
5426-10	PERS PEPRA (Employee)	(3,000)	(3,300)	(2,500)	(2,658)	-	-
5423-10	PERS Classic (Employee)	(4,000)	(4,400)	(3,000)	(3,224)	(5,718)	-
5404-10	SUI and ETT	1,000	1,060	1,000	757	949	992
5410-10	Health & accident insurance	50,000	52,790	50,000	40,593	35,634	45,146
5411-10	Dental insurance	4,000	4,225	4,000	3,369	3,184	3,508
5412-10	Vision insurance	700	740	700	697	645	674
5413-10	Life insurance	290	320	300	290	300	495
5414-10	Worker's compensation insurance	6,000	5,280	5,000	4,473	4,866	3,066
5415-10	Educational Reimbursement	5,000	5,280	5,000	-	-	-
5181-10	Uniforms	2,500	2,400	2,277	722	1,025	710
5207-10	District website	3,000	2,425	2,295	795	144	2,011
5204-10	McPherson fax	600	630	600	504	506	298
5205-10	McPherson internet	2,500	2,640	2,500	1,305	800	605
5206-10	McPherson office phones	4,000	4,275	2,346	3,546	2,796	2,258
5208-10	Answering service	200	215	200	197	168	209
5210-10	Control system communications	7,000	7,475	7,080	5,235	4,157	4,247
5209-10	Cellphones	2,000	2,155	2,040	1,619	1,690	1,845
5269-10	Underground Service Alert	600	625	400	529	322	387
5220-10	Training / Schools	7,000	7,550	7,150	1,344	969	640
5221-10	Conservation expense	15,500	16,155	15,300	2,698	10,632	2,036
5222-10	Conference and Meeting Expenses	10,000	10,560	10,000	3,149	4,168	2,311
5223-10	Mileage	700	755	715	427	682	490
5230-10	ACWA	4,500	4,015	3,800	1,781	2,350	4,671
5231-10	Orange County Water Works Association	50	110	100	30	25	25
5232-10	American Water Works Association	250	530	500	210	207	413
5233-10	Foothill Communities Association	50	55	50	-	-	10
5234-10	California Special District Association	4,000	4,050	3,570	3,034	1,830	1,079
5235-10	ISDOC / Urban Water Institute	1,000	1,025	1,200	868	976	1,001
5236-10	Southern California Water Committee	500	500	-	-	-	1,001
5237-10	ACC-OC	2,000	2,000	-	-	-	1,001
General:							
5299-10	Miscellaneous expense	500	540	510	134	6,614	4,970
5433-10	Director's fees-Dulebohn	2,500	2,500	2,500	2,813	2,125	1,875
5434-10	Director's fees-Bell	2,500	2,500	2,500	2,200	2,725	2,938
5435-10	Director's fees-Davert	-	-	-	-	-	-
5436-10	Director's fees-Everett	2,500	2,500	2,500	1,200	962	350
5437-10	Director's fees-Sears	2,500	2,500	2,500	863	-	-
5224-10	Meeting Expenses	2,300	2,360	2,000	2,152	1,180	1,268
5240-10	Postage	2,000	2,170	2,050	426	390	246
5241-10	Office supplies / furnishings / small equipment	10,000	10,560	10,000	2,552	6,174	3,356
5250-10	Public Information & Legal Notices	35,000	5,385	5,100	2,264	883	3,367
5251-10	Records Management	3,000	2,640	2,500	314	268	254
5270-10	Bank Charges	2,000	2,115	2,000	2,017	1,907	1,788
5260-10	Outside services	45,000	42,000	15,000	33,778	40,879	4,918
5261-10	Audit	11,900	8,450	8,400	6,500	7,549	6,678
5262-10	Tax collection fees	7,000	7,175	7,100	5,270	11,830	5,879
5263-10	Treasurer	7,150	7,330	7,140	-	2,065	4,201
5264-10	Accounting	25,500	26,925	25,500	25,097	25,986	26,712
5265-10	Legal	45,000	47,510	45,000	33,950	57,789	158,990
5266-10	Computer consulting	15,000	15,250	10,100	7,107	4,661	1,828
5267-10	Engineering	45,000	46,585	40,000	28,000	21,157	49,010
5268-10	LAFCO	8,000	8,500	8,000	295,567	23,454	33,579
5280-10	Insurance-auto and general liability	12,500	13,190	12,500	10,009	9,809	10,325
5281-10	Insurance-property	3,750	3,960	3,750	2,647	2,734	1,350
5282-10	Insurance-fidelity bond	300	320	300	216	219	213
5252-10	Office equipment maintenance	2,000	2,050	800	1,761	1,536	33
5203-10	Dumpster	500	525	500	339	305	817
5201-10	Electric and water-office	3,500	3,600	4,000	3,137	3,413	3,028
5291-10	Security	1,500	1,550	1,500	150	197	-
5292-10	Election expense	40,000	40,000	40,000	261	26,449	-
5920-10	Transfer to Capital	-	-	-	-	-	-
5921-10	Transfer to Reserves	287,250	285,670	350,300	75,873	225,000	39,990
5960-10	Transfer to(from) Capital Projects	27,525	50,000	45,072	302,079	187,638	306,973
5990-10	Market value adjustments to investments	-	-	-	(19,588)	1,993	(10,526)
5670-10	Prior year expenses or (income)	-	-	-	(283,066)	-	4,030
TOTAL WHOLESALE OPERATING FUND EXPENDITURES		4,332,265	4,454,100	5,873,355	4,542,212	5,150,710	7,850,082

RETAIL ZONE OPERATING BUDGET

RETAIL ZONE OPERATING BUDGET

TWO-YEAR BUDGET (FY 2017/2018 & FY 2018/19)

	PROPOSED 17-18 BUDGET	PROPOSED 18-19 BUDGET	2016-17 BUDGET	2015-16 ACTUAL	2014-15 ACTUAL	2013-14 ACTUAL
OPERATING REVENUES:						
4001-20 Water sales	1,050,000	1,189,575	1,072,000	679,494	967,144	1,106,987
4150-20 Meter charges	409,000	450,000	405,900	374,973	358,403	350,167
4202-20 Late charges	11,000	11,000	11,000	10,548	12,931	12,117
4110-20 Connection Fee	-	-	-	-	-	-
4204-20 Returned check charges	1,000	1,000	1,000	530	323	1,092
4205-20 Turn-off charges	600	600	600	400	120	1,281
4206-20 Other charges	-	-	-	1,800	-	2,000
4207-20 Uncollectible accounts	(2,000)	(2,000)	(2,000)	-	-	(2,114)
4208-20 Turn on New Service-old from 14 15	-	-	-	-	2,328	-
4203-20 Refunds	-	-	-	817	-	-
Inactive Service upgrade/downgrade fee	-	-	-	-	-	-
4606-20 Interest earned-Money Market	100	100	100	51	35	470
4603-20 Interest earned-LAIF	4,000	4,000	4,000	7,952	3,439	1,326
4701-20 Taxes-secured	375,000	380,000	350,000	360,237	339,216	315,000
4702-20 Taxes-unsecured	15,100	15,100	15,100	12,439	13,048	13,000
4703-20 Taxes-supplemental roll	9,900	9,900	9,900	9,573	9,683	7,675
4705-20 Taxes-prior years	3,900	3,900	3,900	4,040	3,761	4,471
4706-20 Taxes-homeowners subvention	1,900	1,900	1,900	2,513	2,654	-
4707-20 Taxes-public utility	4,300	4,300	4,300	6,116	5,740	-
4708-20 Taxes- Tustin RDA Taxes	20,000	20,000	20,000	-	-	-
4709-20 Taxes Accrued	-	-	(5,000)	-	-	-
<i>Subtotal Property Taxes</i>	430,100	435,100	400,100	394,918	-	340,147
4690-20 Miscellaneous income	500	500	500	3,097	4,821	-
TOTAL RETAIL OPERATING FUND RECEIPTS	\$ 1,904,300	\$ 2,089,875	\$ 1,893,200	\$ 1,474,859	\$ 1,723,869	\$ 1,813,473
	0.6%	9.7%				

2017-18 RETAIL ZONE OPERATING BUDGET

	PROPOSED PROP. 17-18	PROPOSED PROP 18-19	2016-17 BUDGET	2015-16 ACTUAL	2014-15 ACTUAL	2013-14 ACTUAL
OPERATIONS & MAINTENANCE						
<i>Water Purchases:</i>						
5051-20 Water purchases	230,000	235,750	176,000	161,337	7,201	213,757
5050-20 OCWD- Replenish Assessment	285,000	292,125	247,200	154,680	398,404	228,761
5058-20 MET-MWDOC readiness to serve charges	40,000	41,000	35,000	33,191	30,410	27,856
5057-20 MET-MWDOC capacity charges	20,000	20,500	16,000	15,839	13,144	9,925
5059-20 MWDOC Choice	25,625	26,300	25,000	1,687	-	-
5054-20 MWDOC Retail service connection	13,635	14,000	13,300	13,063	12,689	10,156
5056-20 EOCWD WZ Readiness to Serve Charge	10,560	10,900	10,300	9,030	3,325	2,962
5055-20 EOCWD WZ Reserve Fund Charge	19,890	20,400	19,400	17,458	13,299	11,945
<i>Operations:</i>						
5143-20 Utilities-Stoller Boosters	66,625	68,290	65,000	33,462	53,467	41,829
5142-20 Utilities-Vista Panorama Reservoir	9,225	9,450	9,000	4,297	3,914	5,437
5141-20 Utilities-Wells East/West	70,200	71,955	68,500	37,427	61,042	39,794
5170-20 Regulatory Permits	7,690	7,880	7,500	7,152	6,149	5,560
5120-20 Water quality testing	21,020	21,550	20,500	7,411	8,922	5,847
5121-20 Chlorine generator / salt purchases	1,230	1,260	1,200	820	1,019	884
5122-20 SCADA Replacements / Upgrades	12,300	12,600	12,000	139	220	463
5161-20 Operations Software	18,000	18,450	12,000	7,443	8,132	17,394
5155-20 Equipment rental	22,450	23,015	22,500	19,161	18,131	14,285
<i>Maintenance:</i>						
5160-20 Small tools	4,100	4,200	4,000	2,734	5,358	3,484
5144-20 Gasoline, Oil & Diesel Fuel	6,800	6,950	6,800	3,593	5,861	6,742
5104-20 West well maintenance	5,125	5,250	5,000	4,282	263	739
5105-20 East well maintenance	10,250	10,500	10,000	10,644	519	874
5106-20 Barrett Reservoir & Boosters maintenance	9,225	9,460	9,000	905	12,237	728
5107-20 Vista Panorama Booster maintenance	4,305	4,415	4,200	-	45	279
5108-20 Vista Panorama Reservoir maintenance	10,000	10,250	12,000	536	7,970	199
5109-20 Chlorine generator maintenance	6,000	6,150	6,000	2,605	5,110	342
5111-20 Hydrants- repair and maintenance	16,100	16,500	16,100	8,381	6,956	1,067
5124-20 Meter purchase and testing	21,000	21,525	21,000	3,850	8,480	8,474
5112-20 PRV-repair and maintenance	2,000	2,050	2,000	276	705	1,345
5101-20 Mains-repair and maintenance	30,500	31,270	30,500	14,501	40,031	4,125
5110-20 Service Connections-repair and maintenance	25,500	26,140	25,500	3,258	15,159	20,041
5102-20 Reservoirs-repair and maintenance	10,250	10,500	10,000	8,516	430	759
5103-20 Vaults-repair and maintenance	1,500	1,540	1,500	851	382	46
5131-20 Cathodic Protection- monitoring, repairs & maintenanc	5,100	5,230	5,100	-	149	-
5129-20 Meter testing	1,000	1,025	1,000	300	-	788
5150-20 Equipment maintenance	4,500	4,615	4,500	567	479	63
5151-20 Vehicle maintenance	5,000	5,125	5,000	1,175	3,548	2,015
5152-20 Maintenance-buildings and grounds	4,500	4,615	3,500	4,187	5,351	1,808

2017-18 RETAIL ZONE OPERATING BUDGET

EXPENDITURES-ADMINISTRATIVE	PROPOSED PROP. 17-18	PROPOSED PROP 18-19	2016-17 BUDGET	2015-16 ACTUAL	2014-15 ACTUAL	2013-14 ACTUAL
5401-20 Wages	225,000	229,500	200,000	269,272	258,848	206,272
5402-20 FICA and Medicare	15,700	16,090	13,500	20,201	20,281	17,093
5420-20 Retirement PERS	-	-	-	-	6,151	29,412
5427-20 PERS Unfunded	5,700	8,420	6,000	6,293	-	-
5421-20 Pers Classic(ER-Contribution)	15,500	15,890	15,000	12,279	-	-
5422-20 Pers Classic (ER-paid member)	15,500	15,890	8,000	12,144	746	-
5424-20 PERS PEPRA (ER)	7,000	7,175	5,000	5,973	-	-
5403-20 Retirement - PERS (Employee Contribution)	-	-	-	-	9,809	(2,579)
5423-20 PERS Classic (Employee)	(4,000)	(4,100)	(3,000)	(3,694)	(6,550)	-
5426-20 PERS PEPRA (Employee)	(3,000)	(3,075)	(2,000)	(3,059)	-	-
5404-20 SUI and ETT	3,000	3,075	3,700	865	1,051	1,112
5410-20 Health & Accident Insurance	58,000	59,450	50,000	50,086	55,593	52,308
5411-20 Dental insurance	4,500	4,590	4,000	4,119	4,674	4,036
5412-20 Vision insurance	1,000	1,020	1,000	852	960	776
5413-20 Life insurance	500	510	500	355	434	569
5414-20 Worker's compensation insurance	7,500	7,650	5,000	5,470	6,047	5,531
5415-20 Educational Reimbursement	3,075	3,150	3,000	-	-	-
5181-20 Uniforms	2,800	2,870	2,800	1,018	1,510	1,377
5207-20 District website	10,000	10,250	10,000	795	144	2,011
5204-20 McPherson fax	300	310	500	504	672	297
5205-20 McPherson internet	3,000	3,075	4,000	1,168	800	605
5206-20 McPherson office phones	3,800	3,895	3,700	3,546	2,796	2,258
5208-20 Answering service	200	205	200	197	168	209
5210-20 Control equipment communications	4,000	4,100	3,000	3,426	2,438	2,598
5209-20 Cellphones	1,900	1,950	1,700	1,619	1,525	1,845
5269-20 Underground Service Alert	600	615	500	529	322	387
5220-20 Training / Schools	10,000	10,250	10,000	1,304	1,062	738
5221-20 Conservation	30,000	30,750	20,000	38,912	19,076	637
5222-20 Conference and Meeting Expenses	13,325	13,660	13,000	3,189	7,300	2,266
5223-20 Mileage	2,000	2,050	3,000	410	677	7,059
5230-20 ACWA	4,300	4,410	3,900	1,530	2,350	4,671
5231-20 Orange County Water Works Association	100	105	100	30	25	25
5232-20 American Water Works Association	500	515	500	210	207	413
5233-20 Foothill Communities Association	100	105	100	-	-	10
5234-20 CSDA Membership	3,600	3,690	3,600	3,034	2,239	2,095
5235-20 ISDOC / Urban Water Institute	1,000	1,025	200	868	976	200
5236-20 Southern California Water Committee	350	350	-	-	-	-
5237-20 ACC-OC	500	500	-	-	-	200

2017-18 RETAIL ZONE OPERATING BUDGET

EXPENDITURES-GENERAL	PROPOSED PROP. 17-18	PROPOSED PROP 18-19	2016-17 BUDGET	2015-16 ACTUAL	2014-15 ACTUAL	2013-14 ACTUAL
5299-20 Miscellaneous expense	1,000	1,025	1,000	134	121	1,001
5433-20 Director's fees-J. Dulebohn	2,500	2,500	2,500	2,813	2,125	1,875
5434-20 Director's fees-R.Bell	2,500	2,500	2,500	2,200	2,725	2,938
5435-20 Director's fees-D. Davert	-	-	-	-	-	-
5436-20 Director's fees-S. Everett	2,500	2,500	2,500	1,200	1,138	2,250
5437-20 Director's fees-J. Sears	2,500	2,500	2,500	863	-	6,000
5224-20 Meeting Expenses	2,100	2,500	2,000	2,125	1,162	967
5240-20 Postage	5,100	5,230	5,100	4,714	4,049	3,789
5241-20 Office supplies / furnishings / small equipment	10,000	10,250	10,000	4,367	6,210	3,355
5250-20 Public Information & Legal Notices	20,000	20,500	20,000	1,528	1,162	3,839
5251-20 Records Management	3,000	2,565	2,500	314	268	254
5272-20 Versaterm contract-route manager	5,100	5,230	5,100	550	550	2,269
5270-20 Bank charges	8,200	8,405	8,000	7,881	7,800	6,728
5260-20 Outside services	30,000	30,750	15,200	24,299	18,294	5,147
5261-20 Audit	12,000	8,715	8,500	6,500	4,076	5,922
5262-20 Tax collection fees	7,500	7,690	7,200	4,535	4,678	5,159
5271-20 Computer billing	8,500	8,715	8,500	7,537	5,727	4,582
5263-20 Treasurer	5,000	5,125	5,000	-	2,065	4,169
5264-20 Accounting	27,000	27,675	26,000	25,098	22,344	26,744
5265-20 Legal	35,000	35,875	45,000	29,306	20,139	20,658
5266-20 Computer consulting	7,500	7,690	7,000	7,107	4,670	1,828
5267-20 Engineering	45,000	46,125	40,000	21,628	9,592	22,295
5268-20 LAFCO	5,000	5,125	5,000	2,532	2,410	4,780
5280-20 Insurance-auto and general liability	9,000	9,225	8,000	8,151	6,817	7,175
5281-20 Insurance-property	2,000	2,050	3,000	882	911	2,252
5282-20 Insurance-fidelity bond	700	720	500	197	194	189
5252-20 Office equipment maintenance	1,500	1,540	1,000	1,615	1,536	33
5203-20 Dumpster	500	515	500	339	305	385
5201-20 Electric - Office	4,500	4,615	4,300	3,176	3,884	3,028
5291-20 Security	2,000	2,050	1,500	150	197	-
5292-20 Election expense	10,000	10,250	10,000	261	5,806	-
5920-20 Transfers to capital projects funds	63,545	165,820	181,190	300,000	164,550	174,100
5940-20 Retail Operations Contingency Fund	50,000	51,250	65,000	-	75,000	162,055
5960-20 Funded to/by Reserve	10,000	50,000	50,000	50,000	50,000	50,000
5990-20 Market value adjustments to investments	-	-	-	-	225	(397)
5171-20 NPDS Permit	-	-	-	689	-	-
TOTAL RETAIL OPERATING FUND EXPENDITURES	1,904,300	2,089,875	1,889,690	1,546,967	1,676,911	1,570,775

(0) (0)

**IMPROVEMENT DISTRICT 1
(SEWER)
OPERATING BUDGET**

SEWER OPERATING BUDGET

TWO-YEAR BUDGET (FY 2017/2018 & FY 2018/19)

PROPOSED

	2017-18 PROPOSED	2018-19 PROPOSED	2016-17 AMENDED BUDGET
OPERATING REVENUES:			
4150-30 Sewer Service Fees	2,680,000	2,700,000	2,663,000
4110-30 Connection Fee	-		10,000
4206-30 Other charges	-		500
4207-30 Uncollectible accounts	(2,000)	(2,500)	(2,000)
4208-30 Septic System Fees	-		1,000
4606-30 Interest earned-Money Market	-		1,000
4603-30 Interest earned-Investments	12,000	12,500	2,000
4701-30 Taxes-secured	310,000	315,000	304,000
4709-30 Taxes Accrued			-
Subtotal Property Taxes	310,000	315,000	304,000
4690-30 Miscellaneous income			500
4680-30 Gain or (loss) on sale of assets			-
TOTAL SEWER OPERATING FUND RECEIPTS	3,000,000	3,025,000	2,980,000
	% Increase over prior year's budget	1%	0.8%

	2017-18 PROPOSED	2018-19 PROPOSED	2016-17 AMENDED BUDGET
EXPENDITURES-OPERATIONS & MAINTENANCE			
Operations:			
5051-30 Contract Cleaning Services	325,000	325,000	375,000
5170-30 Regulatory Permits	10,000	10,000	10,000
5120-30 Water quality testing	1,000	1,000	1,000
5161-30 Operations Software	17,000	17,000	8,500
5155-30 Equipment rental	8,500	8,500	6,000
Maintenance:			
5160-30 Small tools	10,000	10,000	5,000
5144-30 Gasoline, Oil & Diesel Fuel	10,000	10,000	5,000
5150-30 Equipment maintenance	5,000	5,000	2,000
5151-30 Vehicle maintenance	15,000	15,000	5,000
5152-30 Maintenance-buildings and grounds	2,000	2,000	2,000
5171-30 Root Control	10,000	10,000	10,000
5172-30 Insecticide	5,000	5,000	5,000
5173-30 Odor Control	5,000	5,000	5,000
5175-30 Grit Disposal Fees	2,500	2,500	2,500
5176-30 Equipment & Supplies	25,000	25,000	25,000
Administrative:			
5401-30 Wages	371,000	390,000	110,000
5402-30 FICA and Medicare	25,000	27,000	8,415
5427-30 PERS Unfunded	10,000	15,000	2,600
5421-30 Pers Classic(ER-Contribution)	26,100	29,000	9,900
5424-30 PERS PEPRA (ER)	9,100	10,000	5,000
5404-30 SUI and ETT	1,500	1,600	800
5410-30 Health Insurance	66,000	70,000	44,000
5411-30 Dental insurance	4,500	4,800	4,000
5412-30 Vision insurance	1,000	1,100	1,000
5413-30 Life/Disability Insurance	4,500	4,800	200
5414-30 Worker's compensation insurance	12,000	13,000	6,050
5415-30 Educational Reimbursement	1,000	1,000	1,000
5181-30 Uniforms	3,000	3,200	1,500

SEWER OPERATING BUDGET

FY 2017-18 & FY 2018-19

EXPENDITURES-ADMINISTRATIVE & GENERAL	FY 2017-17 PROPOSED	FY 2018-19 PROPOSED	2016-17 AMENDED BUDGET
5207-30 District website	2,000	2,500	2,000
5204-30 McPherson fax	500	500	500
5205-30 McPherson internet	1,500	1,500	1,200
5206-30 McPherson office phones	3,800	4,000	3,700
5208-30 Answering service	200	250	200
5209-30 Cellphones	2,300	2,500	1,700
5269-30 Underground Service Alert	4,000	4,100	2,000
5220-30 Training / Schools	3,000	3,100	3,000
5222-30 Conference and Meeting Expenses	3,000	3,100	3,000
5223-30 Mileage	1,000	1,000	1,000
5230-30 SCAP	550	550	5,000
5234-30 CSDA	3,500	3,500	3,500
5237-30 ACC-OC	2,500	2,500	-
5433-30 Director's fees-John Dulebohn	2,250	2,250	2,250
5434-30 Director's fees-Richard Bell	2,250	2,250	2,250
5435-30 Director's fees-Douglass Davert			
5436-30 Director's fees-Sy Everett	2,250	2,250	2,250
5437-30 Director's fees-John Sears	2,250	2,250	2,250
5224-30 Meeting Expenses	1,000	1,050	1,000
General:			
5240-30 Postage	1,000	1,050	1,000
5241-30 Office supplies / furnishings / small equipment	3,000	3,100	2,500
5250-30 Public Information & Legal Notices	40,000	15,000	15,000
5251-30 Records Management	3,500	2,550	2,500
5270-30 Bank charges	5,000	5,000	7,000
5260-30 Outside Services	40,000	40,000	10,500
5261-30 Audit	28,500	9,000	10,000
5262-30 County Service Charge Collection Fee	7,000	7,000	7,000
5263-30 Treasurer	3,600	3,700	3,600
5264-30 Accounting	15,000	16,100	5,000
5265-30 Legal	15,000	16,100	9,000
5266-30 Computer consulting	10,000	10,000	7,000
5267-30 Engineering	45,000	48,000	5,000
5268-30 LAFCO	10,000	10,000	5,000
5280-30 Insurance-auto and general liability	8,000	10,000	8,000
5281-30 Insurance-property	2,500	3,000	2,000
5282-30 Insurance-fidelity bond	300	300	500
5252-30 Office equipment maintenance	1,000	1,000	500
5203-30 Solid Waste	500	500	500
5201-30 Electric - Office	3,800	3,900	2,500
5291-30 Security	4,000	4,000	4,000
5292-30 Election expense	20,000	20,000	20,000
5920-30 Transfers to capital projects funds	100,500	115,000	103,635
5940-30 Retail Operations Contingency Fund	50,000	50,000	50,000
5960-30 Funded to/by Reserve	1,559,250	1,566,550	2,000,000
TOTAL SEWER OPERATING FUND EXPENDITURES	3,000,000	3,021,500	2,980,000
	% Increase over prior year's budget	1%	0.7%

WHOLESALE ZONE CAPITAL IMPROVEMENT BUDGET

**WHOLESALE ZONE
MULTI-YEAR CAPITAL BUDGET
FYs 2018-2022**

PROPOSED

PROJECTED AVAILABLE RESOURCES:

Projected beginning cash and cash equivalents	\$6,353,239
Projected connection fees	
Projected interest earnings	17,000
Proceeds from Financing	
Proceeds from Grants	
Transfers from Operating Expenses	45,072
Income from Water Sales - Debt Payment	
Transfers to Capital Reserves	
Subtotal Annual Revenue	412,372
Total Cash plus Annual Revenue	6,765,611
Debt Issuance Cost	
Debt Service-Reserve/Principal & Interest	
Total Cash/Annual Revenue less Debt Expense	6,765,611

DEBT SERVICE

	2016-17	Carryover*	New	2017-18	2018-19	2019-20	2020-21	2021-22	5 Year Total
Projected beginning cash and cash equivalents	\$6,353,239			\$6,300,000	\$4,658,000	\$3,730,500	\$9,583,000	\$2,900,500	\$6,300,000
Projected connection fees				10,000	10,000	10,000	10,000	10,000	50,000
Projected interest earnings	17,000			17,000	20,000	20,000	15,000	5,000	77,000
Proceeds from Financing						21,700,000			21,700,000
Proceeds from Grants						3,000,000			3,000,000
Transfers from Operating Expenses	45,072			45,000	80,000	80,000	120,000	120,000	445,000
Income from Water Sales - Debt Payment								1,730,000	1,730,000
Transfers to Capital Reserves					\$200,000	\$200,000	\$200,000		800,000
Subtotal Annual Revenue	412,372			272,000	310,000	25,010,000	345,000	1,865,000	34,102,000
Total Cash plus Annual Revenue	6,765,611			6,572,000	4,968,000	28,740,500	9,928,000	4,765,500	
Debt Issuance Cost						500,000			500,000
Debt Service-Reserve/Principal & Interest						\$1,730,000	\$1,730,000	\$1,730,000	5,190,000
Total Cash/Annual Revenue less Debt Expense	6,765,611			6,572,000	4,968,000	26,510,500	8,198,000	3,035,500	28,412,000

CAPITAL PROJECTS AND REPLACEMENTS

71001E1	UWMP Update-Engineering (WS portion) (Completed)							35,000	35,000
71002E1	185 N. McPherson Site Planning/Engineering		50,000	50,000					50,000
71002C1	185 N. McPherson Site Improvements - Construction		200,000	200,000					200,000
71002L1	185 N. McPherson Site Improvements - Labor		5,000	5,000					5,000
7100301	Water Loss Analysis/Recovery	20,000	15,000	5,000	20,000			35,000	55,000
71004C1	Security Gate at 6 MG Site-Const (WZ Portion)		20,000	20,000					20,000
71004L1	Security Gate at 6 MG Site-Labor (WZ Portion)		2,000	2,000					2,000
71005C1	Security System at Peters Canyon Reservoir-Construction		20,000	20,000					20,000
71005L1	Security System at Peters Canyon Reservoir-Labor		2,000	2,000					2,000
71006E1	6 MG Reservoir Roof Repairs-Engineering	100,000	75,000		75,000				75,000
71006C1	6 MG Reservoir Roof Repairs-Construction	1,200,000	600,000		600,000				600,000
71006L1	6 MG Reservoir Roof Repairs-Labor	25,000	25,000		25,000				25,000
71007E1	Cathodic Protection -Pipelines - Engineering	25,000	15,000		15,000				15,000
71007C1	Cathodic Protection - Pipelines-Construction	20,000	20,000	10,000	30,000				30,000
71007L1	Cathodic Protection - Pipelines-Labor	20,000	5,000		5,000				5,000
71008C1	McPherson Office/Yard Improvements-Construction	5,000	5,000	15,000	20,000				20,000
71008L1	McPherson Office/Yard Improvements-Labor	1,000	1,000	4,000	5,000				5,000
71009E1	11.5 MG Reservoir Cathodic Protection System-Engineering	25,000						5,000	5,000
71009C1	11.5 MG Reservoir Cathodic Protection System-Construction	30,000						5,000	5,000
71009L1	11.5 MG Reservoir Cathodic Protection System-Labor	2,000						1,000	1,000
7101001	New Truck for field operations	20,000	20,000		20,000				20,000
71011E1	Flow Metering - Engineering		2,000	2,000					2,000
71011C1	Flow Metering - Construction		5,000	5,000					5,000
71011L1	Flow Metering -Labor		1,000	1,000					1,000
71012E1	6 MG Reservoir Leak Detection System-Engineering	20,000	1,000		1,000				1,000
71012C1	6 MG Reservoir Leak Detection System - Construction	50,000	5,000		5,000				5,000
71012L1	6 MG Reservoir Leak Detection System - Labor	10,000	500		500				500
71013E1	6 MG Reservoir Replacement - Engineering		75,000	75,000	25,000	525,000			625,000
71013C1	6 MG Reservoir Replacement - Construction					6,000,000			6,000,000
71013L1	6 MG Reservoir Replacement - Labor					100,000			100,000
71014E1	6 MG Treatment Plant -Engineering/Insttutional	12,500	12,500	100,000	112,500				112,500
71014X1	6 MG Treatment Plant CEQA	5,000		75,000	75,000	100,000			175,000
71014D1	6 MG Treatment Plant - Preliminary Design	5,000				500,000			500,000
71014C1	6 MG Treatment Plant -Construction					10,000,000	5,000,000		15,000,000
71014L1	6 MG Treatment Plant -Labor		5,000	5,000		20,000	20,000		45,000

	2016-17	Carryover*	New	2017-18	2018-19	2019-20	2020-21	2021-22	5 Year Total
71001E1								35,000	35,000
71002E1			50,000	50,000					50,000
71002C1			200,000	200,000					200,000
71002L1			5,000	5,000					5,000
7100301	20,000	15,000	5,000	20,000				35,000	55,000
71004C1			20,000	20,000					20,000
71004L1			2,000	2,000					2,000
71005C1			20,000	20,000					20,000
71005L1			2,000	2,000					2,000
71006E1	100,000	75,000		75,000					75,000
71006C1	1,200,000	600,000		600,000					600,000
71006L1	25,000	25,000		25,000					25,000
71007E1	25,000	15,000		15,000					15,000
71007C1	20,000	20,000	10,000	30,000					30,000
71007L1	20,000	5,000		5,000					5,000
71008C1	5,000	5,000	15,000	20,000					20,000
71008L1	1,000	1,000	4,000	5,000					5,000
71009E1	25,000							5,000	5,000
71009C1	30,000							5,000	5,000
71009L1	2,000							1,000	1,000
7101001	20,000	20,000		20,000					20,000
71011E1			2,000	2,000					2,000
71011C1			5,000	5,000					5,000
71011L1			1,000	1,000					1,000
71012E1	20,000	1,000		1,000					1,000
71012C1	50,000	5,000		5,000					5,000
71012L1	10,000	500		500					500
71013E1			75,000	75,000	25,000	525,000			625,000
71013C1						6,000,000			6,000,000
71013L1						100,000			100,000
71014E1	12,500	12,500	100,000	112,500					112,500
71014X1	5,000		75,000	75,000	100,000				175,000
71014D1	5,000				500,000				500,000
71014C1						10,000,000	5,000,000		15,000,000
71014L1			5,000	5,000		20,000	20,000		45,000

**WHOLESALE ZONE
MULTI-YEAR CAPITAL BUDGET
FYs 2018-2022**

CAPITAL PROJECTS AND REPLACEMENTS

71015E1	Security -Andres Reservoir-Engineering
71015C1	Security - Andres Reservoir-Construction
71015L1	Security -Andres Reservoir-Labor
71016E1	Valve Replacements (12" - 27")-Engineering
71016C1	Valve Replacements (12" - 27")-Construction
71016L1	Valve Replacements (12" - 27")-Labor
71017E1	Newport Reservoir Mixing System - Engineering
71017C1	Newport Reservoir Mixing System - Construction
71017L1	Newport Reservoir Mixing System - Labor
71018E1	6 MGReservoir Mixing System - Engineering
71018C1	6 MGReservoir Mixing System - Construction
71018L1	6 MG Reservoir Mixing System - Labor
71019E1	Isolation valves - 11.5 & 1 MG Reservoirs - Engineering
71019C1	Isolation Valves - 11.5 & 1 MG - Construction
71019L1	Isolation Valves - 11.5 & 1 MG - Labor
71020E1	OC 33 Reconnection - Engineering
71020C1	OC33 Reconnection - Construction
71020L1	OC33 Reconnection - Labor
71021E1	Security/Rehabilitation - Turnouts - Engineering
71021C1	Security/Rehabilitation - Turnouts - Construction
71021L1	Security/Rehabilitation - Turnouts - Labor
71022E1	Pipeline Repair/Replacement Reserve-Engineering
71022C1	Pipeline Repair/Replacement Reserve-Construction
71022L1	Pipeline Repair/Replacement Reserve-Labor
7102301	Pipeline Testing
71024E1	WZ Turnout Repairs- (Walnut) - Engineering
71024C1	WZ Turnout Repairs- (Walnut) - Construction
71024L1	WZ Turnout Repairs (Walnut) - Labor
7102501	WZ Low Demand Water Quality Study
7102601	Sedaru Improvements
7102701	SCADA System Improvements
7102801	Records Management Implementation

	2016-17	Carryover	New	2017-18	2018-19	2019-20	2020-21	2021-22	TOTAL
					5,000				5,000
	20,000				20,000				20,000
	9,980				5,000				5,000
	5,000				25,000	20,000	20,000	20,000	85,000
	12,000				100,000	50,000	50,000	50,000	250,000
	6,000				10,000	5,000	5,000	5,000	25,000
	5,000								
	25,000								
	1,000								
					5,000				5,000
					25,000				25,000
					5,000				5,000
	5,000	5,000		5,000					5,000
	20,000	20,000		20,000					20,000
	10,000	10,000		10,000					10,000
					25,000				25,000
					25,000				25,000
					50,000				50,000
	20,000	10,000		10,000	5,000	5,000	5,000	5,000	30,000
			20,000	20,000	25,000	25,000	25,000	25,000	120,000
	10,000	10,000		10,000	10,000	5,000	5,000	5,000	35,000
	12,500				12,500	12,500	12,500	12,500	50,000
	62,500				62,500	62,500	62,500	62,500	250,000
					37,500	37,500	37,500	37,500	150,000
			25,000	25,000	50,000	50,000	50,000	50,000	225,000
			50,000	50,000					50,000
	16,250		200,000	200,000					200,000
			10,000	10,000					10,000
	160,000	130,000		130,000					130,000
	5,000	5,000		5,000	10,000	10,000	5,000	5,000	35,000
				15,000	100,000				115,000
	5,000	5,000	3,000	8,000					
	2,005,730	995,000	904,000	1,914,000	1,237,500	16,927,500	5,297,500	358,500	25,727,000
	4,759,881			4,658,000	3,730,500	9,583,000	2,900,500	2,677,000	

TOTAL ANNUAL PROJECTED EXPENDITURES
PROJECTED REMAINING AVAILABLE FUNDS

**RETAIL ZONE
CAPITAL IMPROVEMENT BUDGET**

**RETAIL ZONE
MULTI-YEAR CAPITAL BUDGET
FYs 2018-2022**

DRAFT

PROJECTED AVAILABLE RESOURCES		2016-17	Carryover	New	2017-18	2018-19	2019-2020	2020-21	2021-22	TOTAL
Projected beginning cash and cash equivalents	\$	2,683,950			\$ 2,683,950	\$ 1,391,495	\$ 1,234,995	\$ 1,138,995	\$ 3,717,995	2,683,950
Projected capital project fees		325,000			310,000	327,000	360,000	396,000	436,000	1,829,000
Projected connection fees		5,000			5,000	5,000	5,000	5,000	5,000	25,000
Projected interest earnings		500			500	500	500	500	500	2,500
Projected transfers from operations		181,190			63,545	71,000	159,000	263,000	393,000	949,545
Projected transfers to Capital Reserves		50,000			10,000	10,000	50,000	50,000	50,000	170,000
Loan for System Improvements								3,000,000		3,000,000
Subtotal Projected Annual Revenue		561,690			389,045	413,500	574,500	3,714,500	884,500	
Project Annual Available Resources		3,245,640			3,072,995	1,804,995	1,809,495	4,853,495	4,602,495	
TOTAL ANTICIPATED REVENUE 2016-2021										8,659,995
DEBT SERVICE	Debt Issuance Costs							30,000		30,000
	Debt Service - (10 -Year)							435,000	435,000	870,000
	Subtotal Annual Debt Service							\$465,000	435,000	\$ 900,000
	Total Annual Resources Less Debt Service	3,245,640			3,072,995	1,804,995	1,809,495	4,388,495	4,167,495	\$ 7,759,995

CAPITAL PROJECTS AND REPLACEMENTS		2016-17	Carryover	New	2017-18	2018-19	2019-20	2020-21	2020-22	Total 5 Yr CIP
7200102	UWMP Update								5,000.00	5,000
72002E2	Master Plan & Condition Assessment - Engineering	10,000								
72002L2	Master Plan & Condition Assessment - Labor	10,000								
7200302	Water Loss Recovery Program (WSO)	20,000	15,000	5,000	20,000				20,000	40,000
72004E2	185 McPherson Improvements-Engineering			50,000	50,000					50,000
72004C2	185 McPherson Improvements-Construction	5,000	5,000	95,000	100,000					100,000
72005E2	Cathodic Protection-Engineering				-					
72005C2	Cathodic Protection-Construction				-					
72005L2	Cathodic Protection-Labor				-					
7200602	Replacement Vehicle - 2005 Chevrolet Malibu				-					
72007E2	Mobile Engine Driven Pump- Engineering				-					
72007C2	Mobile Engine Driven Pump- Const.				-					
72007L2	Mobile Engine Driven Pump- Labor				-					
72008L2	185 McPherson Improvements - Labor	1,000	1,000	5,000	6,000					6,000
7200902	New Vehicle for Field Operations	20,000	20,000		20,000					20,000
72010E2	Vista Panorama Reservoir Rehab/Power Supply-Engineering	90,000		75,000	75,000					75,000
72010C2	Vista Panorama Reservoir Rehab/Power Supply-Construction			450,000	450,000	20,000				470,000
72010L2	Vista Panorama Reservoir Rehab/Power Supply-Labor			10,000	10,000	5,000				15,000
72011E2	Valve Raising - Crawford Canyon-Engineering	500	500	1,000	1,500					1,500
72011C2	Valve Raising - Crawford Canyon-Construction	17,000	17,000	6,000	23,000					23,000
72011L2	Valve Raising - Crawford Canyon-Labor	500	500	1,000	1,500					1,500
72012C2	Valve Replacements - System-Construction	5,000	15,000		15,000					15,000
72012L2	Valve Replacements - System-Labor	5,000	5,000		5,000					5,000
72013E2	Allowance for system relocations-Engineering			20,000	20,000					20,000
72013C2	Allowance for system relocations-Construction			180,000	180,000					180,000
72013L2	Allowance for system relocations-Labor			10,000	10,000					10,000

**RETAIL ZONE
MULTI-YEAR CAPITAL BUDGET
FYs 2018-2022**

CAPITAL PROJECTS AND REPLACEMENTS

	2016-17	Carryover	New	2017-18	2018-19	2019-2020	1920-21	1920-22	Total 5 Yr CIP
72014E2 Backup Generator for VPBooster Station - Engineering			20,000	20,000					20,000
72014C2 Backup Generator for VPBooster Station-Construction			70,000	70,000	50,000	50,000	50,000	50,000	270,000
72014L2 Backup Generator for VPBooster Station-Labor			500	500	500	500	500	500	2,500
7201502 Generator Transfer Switch - East/West Well	15,000	15,000		15,000					15,000
7201602 Generator Transfer Switch - Barrett Booster Station	15,000	15,000		15,000					15,000
72017C2 6" Mag Meters @ Barrett PRVs-Construction	10,000	10,000		10,000					10,000
72017L2 6" Mag Meters @ Barrett PRVs-Labor	5,000	5,000		5,000					5,000
72018C2 Barrett Res. 75hp/150hp Booster Pump Replacement-Construction	25,000	25,000		40,000					40,000
72018L2 Barrett Res. 75hp/150hp Booster Pump Replacement-Labor	1,000	1,000		5,000					5,000
72019E2 Stoller/Alexander Lane Pipeline Replacement-Engineering	70,000		20,000	20,000					20,000
72019C2 Stoller/Alexander Lane Pipeline Replacement-Construction	120,000	120,000	150,000	270,000					270,000
72019L2 Stoller/Alexander Lane Pipeline Replacement-Labor			20,000	20,000					20,000
72020E2 Fowler Ave. Service Improvements-Engineering					30,000				30,000
72020C2 Fowler Ave. Service Improvements-Construction					145,000				145,000
72020L2 Fowler Ave. Service Improvements-Labor					5,000				5,000
72021E2 Crawford Canyon Pipeline Relocation-Engineering	20,000	10,000		10,000	30,000				40,000
72021C2 Crawford Canyon Pipeline Relocation-Construction	180,000	140,000		140,000	152,000				292,000
72021L2 Crawford Canyon Pipeline Relocation-Labor	10,000	8,000		8,000	10,000				18,000
72022E2 Replacement Recommendations-Engineering						125,000	125,000	125,000	375,000
72022C2 Replacement Recommendations-Construction						475,000	475,000	475,000	1,425,000
72022L2 Replacement Recommendations-Labor						20,000	20,000	20,000	60,000
72023E2 System PRV - Circula Panorama/ Orange Knoll -Engineering	10,000								-
72023C2 System PRV - Circula Panorama/Orange Knoll - Construction	150,000								-
72023L2 System PRV - Circula Panorama/Orange Knoll -Labor	7,500								-
72024E2 New Well - Engineering								100,000	100,000
72024C2 New Well - Construction								2,300,000	2,300,000
72024L2 New Well - Labor								50,000	50,000
72025C2 Security Improvements - Reservoir Sites-Construction					10,000				10,000
72025L2 Security Improvements - Reservoir Sites-Labor					5,000				5,000
72026E2 Well Disinfection Conversion-Engineering					10,000				10,000
72026C2 Well Disinfection Conversion -Const/Equip					45,000				45,000
72026L2 Well Disinfection Conversion - Labor					2,500				2,500
72027C2 West Well Rehabilitation -Replacement-Construction	60,000								
72027L2 West Well Rehabilitation -Replacement-Labor	2,000								
7202802 SCADA System Site Additions - VP Sidehill and RZ Fire Pump	20,000	20,000	10,000	30,000					30,000
7202902 Sedaru Improvements	10,000		10,000	10,000	50,000				60,000
7203002 Records Management Implementation	5,000		6,000	6,000					
TOTAL ANNUAL PROJECTED EXPENDITURES	919,500	448,000	1,214,500	1,681,500	570,000	670,500	670,500	3,140,500	6,727,000
PROJECTED ANNUAL REMAINING FUNDS	\$2,326,140			\$1,391,495	\$1,234,995	\$1,138,995	\$3,717,995	\$1,026,995	

**IMPROVEMENT DISTRICT 1
(SEWER)
CAPITAL IMPROVEMENT BUDGET**

**SEWER IMPROVEMENT DISTRICT 1
MULTI-YEAR CAPITAL IMPROVEMENT BUDGET
FYs 2018-2022**

PROPOSED

PROJECTED AVAILABLE RESOURCES

	Amended 2016-17	Carrvover	New	2017-18	2018-19	2019-2020	2020-21	2021-22	5 YR TOTAL
Projected beginning cash and cash equivalents	\$ 38,000,000			\$ 39,611,635	\$ 39,091,385	\$ 40,285,935	\$ 41,183,935	\$ 42,211,935	\$ 39,768,635
Projected connection fees	10,000			30,000	30,000	30,000	30,000	30,000	150,000
Projected interest earnings	320,000			380,000	380,000	385,000	390,000	410,000	1,945,000
Projected transfers from operations	153,635			150,500	170,000	170,000	170,000	170,000	830,500
Projected transfers to Capital Reserves	2,000,000			1,559,250	1,566,550	1,575,000	1,600,000	1,625,000	7,925,800
Subtotal Projected Annual Revenue	2,483,635			2,119,750	2,146,550	2,160,000	2,190,000	2,235,000	10,851,300
Projected Annual Available Resources	40,483,635			41,731,385	41,237,935	42,445,935	43,373,935	44,446,935	
TOTAL ANTICIPATED REVENUE 2018-2022									\$50,619,935

DEBT SERVICE

Debt Issuance Costs									
Debt Service-I-Bank Loan									
Subtotal Annual Debt Service									
Total Annual Resources Less Debt Service	40,483,635			\$41,731,385	41,237,935	42,445,935	43,373,935	44,446,935	\$50,619,935

CAPITAL PROJECTS AND REPLACEMENTS

	2015-16			2017-18	2018-19	2019-20	2020-21	2021-22	5 YR TOTAL
7300103 One-Time Acquisition Costs	100,000		25,000	25,000					25,000
73002E3 CIPP - Engineering	35,000		15,000	15,000	35,000	35,000	35,000	35,000	155,000
73002C3 CIPP - Construction	400,000	400,000	200,000	600,000	250,000	250,000	250,000	250,000	1,600,000
73002L3 CIPP - Labor	10,000		10,000	10,000	5,000	5,000	5,000	5,000	30,000
7300303 CCTV	75,000	50,000	50,000	100,000	100,000	100,000	100,000	100,000	500,000
73004E3 Sewer Replacement - Engineering	50,000	50,000		50,000	35,000	35,000	35,000	35,000	190,000
73004C3 Sewer Replacement - Construction	440,000	440,000		440,000	250,000	100,000	100,000	100,000	990,000
73004L3 Sewer Replacement - Labor	10,000	10,000		10,000	5,000	5,000	5,000	5,000	30,000
73005E3 Manhole Replacement - Engineering	20,000		20,000	30,000	20,000	20,000	20,000	20,000	110,000
73005C3 Manhole Replacement - Construction	60,000	20,000	20,000	40,000	40,000	40,000	40,000	40,000	200,000
73005L3 Manhole Replacement - Labor	5,000		5,000	5,000	2,000	2,000	2,000	2,000	13,000
73006E3 FOG Control - Engineering	40,000	35,000		35,000	20,000	20,000	20,000	20,000	115,000
73006C3 FOG Control - Equipment	25,000	25,000		25,000	25,000	25,000	25,000	25,000	125,000
73007E3 Master Plan/Condition Assessment - Engineering	570,000	550,000		550,000	25,000				575,000
7300803 Vehicle Acquisition	45,000					600,000	500,000		1,100,000
7300903 Equipment Acquisition	20,000		25,000	25,000	25,000	25,000	25,000	25,000	125,000
73010E3 210 N. McPherson - Engineering	100,000	100,000		100,000	10,000				110,000
73010C3 210 N. McPherson - Acquisition/Construction	520,000		500,000	500,000	100,000				600,000
73010L3 210 N. McPherson - Labor	20,000	10,000	20,000	30,000	5,000				35,000
7301103 Records Management Implementation			20,000	20,000					
7301203 Manhole Raising			30,000	30,000					
7301303 Septic Sytem Conversions	17,000								
Total Annual Project Expenditures	2,562,000	1,690,000	900,000	2,640,000	952,000	1,262,000	1,162,000	662,000	6,628,000
PROJECTED TOTAL AVAILABLE RESOURCES	\$37,921,635			\$39,091,385	\$40,285,935	\$41,183,935	\$42,211,935	\$43,784,935	

APPENDIX A
2017 STRATEGIC PLAN



**East Orange County
Water District
Strategic Business Plan
2017-2022**

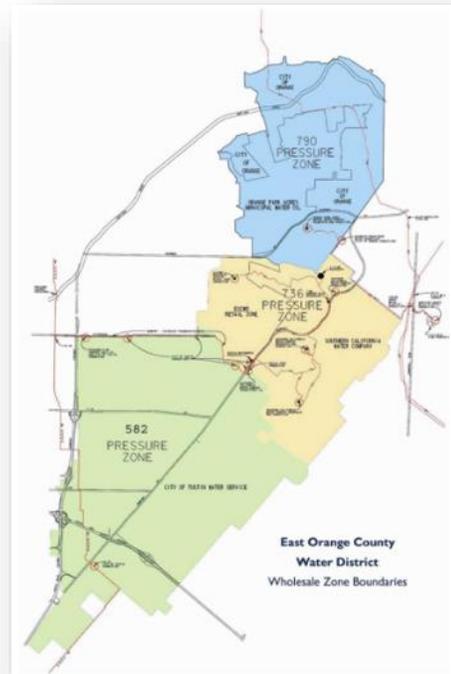


2017 FIVE-YEAR STRATEGIC PLAN

Message from the Board

Welcome to the East Orange County Water District's (EOCWD) 5-Year Strategic Plan. This document is a blueprint for how EOCWD will respond to current challenges and make the best of future opportunities for the benefit of our customers. It confirms our mission and goals as a public agency dedicated to providing high quality water service to the more than 100,000 residents in the EOCWD service area. It outlines the specific goals, strategies, and objectives we will pursue to move us from where we are to where we want to be.

EOCWD is a locally governed, public wholesale and retail water district formed in 1961 encompassing an area of approximately 100,000 acres. It is a member of the Municipal Water District of Orange County, which is a member of the Metropolitan Water District and therefore entitled to receive Colorado River and Northern California imported water. This treated imported water is delivered to the City of Tustin, a portion of the City of Orange and the adjoining unincorporated communities of North Tustin, Lemon Heights, Cowan Heights, Orange Park Acres and Panorama Heights. In addition, in July of 1985, the District assumed the operations of Orange County Water Works District # 8 and became a retail water provider.



On May 11, 2016, the Orange County Local Agency Formation Commission (OCLAFCO) approved EOCWD's application for transfer of the Orange County Sanitation District's (OCSD's) Area 7 Local Sewer System. The actual transfer of the gravity sewer assets and partial transfer of operating and reserve funds from OCSD was performed on August 1, 2016.

The EOCWD Board of Directors and staff are charting a course for continued success in the future through the development and execution of this Strategic Plan. The Plan defines the vision, mission,



2017 FIVE-YEAR STRATEGIC PLAN

values, goals and 5-year business strategy for EOCWD. Our commitments to the communities we serve fall into five areas: water and sewer service reliability, infrastructure, community representation and engagement, professional workforce, and financial integrity. These commitments are established as the five goals of the plan. Our Board actions will consistently support these commitments and we will track our progress against this plan, revisiting the plan regularly to adjust as conditions warrant.

Director Richard Bell, Vice President

Director Douglass S. Davert, President

Director John Dulebohn

Director Seymour Everett

Director John L. Sears

Strategic Plan Project Team

Lisa Ohlund, General Manager

Ed Means, Means Consulting LLC

2017 FIVE-YEAR STRATEGIC PLAN

Message from the General Manager

While our core business has remained constant over time, this plan directs how we will take on the complex issues and challenges we face in the next several years. In developing this Strategic Plan, we focused on five priority areas:

1. Water and sewer service reliability
2. Infrastructure
3. Community representation and engagement
4. Financial integrity
5. Professional workforce

Why these five? These five areas summarize the “big picture” of what we need to do – and do well – so that we achieve our mission to: *“Provide our customers with reliable, high quality water services featuring home town service, fiscal discipline and direct accountability”*.



Why this order? The priority of individual areas will shift in emphasis over the course of this plan as events dictate.

We plan to periodically review the Strategic Plan in conjunction with our budget process to readjust as changing conditions dictate. With the support of the Board, I am confident this plan will help us achieve the expectations of those we serve in the months and years to come.

Respectfully submitted,



Lisa Ohlund,
General Manager



2017 FIVE-YEAR STRATEGIC PLAN

Introduction

Strategic Planning is a structured process to prioritize issues. Due to the reality of finite resources, staff must be focused on the key issues that are critical to its mission.

The planning process enabled the EOCWD board and staff to step back from daily activities and deliberate on ways to achieve the EOCWD mission to “Provide our customers with reliable, high quality water services featuring home town service, fiscal discipline and direct accountability”.

The Strategic Plan was developed under the guidance of the Board of Directors and senior management representing all of the EOCWD’s functions. This team met over a three-month period following the steps in the call out box to the right. The focus of the staff’s strategic deliberations was the key issues EOCWD will face in the next five-year planning horizon (and beyond). Workshops were held with the Board and the Senior Management staff to identify strengths, weaknesses, opportunities and threats (SWOT Analysis) that the plan should consider. A

- *Review background documents*
- *Review current operating environment – strengths, weaknesses, opportunities, & threats*
- *Review Vision, Mission, Values and establish Goals*
- *Develop Strategies and Objectives*
- *Develop staffing and resource needs in conjunction with the Annual Budgeting Process*
- *Regularly update the Plan*

workshop was held with the Board of Directors in March of 2017 to verify the vision, mission, goals and values statements and review the five goals that set the framework for the strategies and objectives development by the management team. The Board adopted the plan on May 18, 2017.

The five-year Strategic Plan will be implemented and tracked through the annual budget process. Strategic Plan activities that are not budgeted in FY2016-17 will be budgeted in later years, subject to Board review and approval. In the future, staff will ensure the proposed budgets reflect the priorities established in the Strategic Plan.

2017 FIVE-YEAR STRATEGIC PLAN

Vision Statement

Our vision is to:

“Maintain our community’s high quality of life through provision of valued water and sewer services”



Mission Statement

Our mission is to:

“Provide our customers with reliable, high quality water and sewer services featuring home town service, fiscal discipline and direct accountability”

Values

EOCWD will embody the following core values in the setting and implementation of its policies and practices:

- Integrity and ethical behavior – EOCWD will consistently adhere to high moral and ethical principles
- Community – EOCWD will cooperatively work together and with stakeholders to further the mission and goals of the organization

2017 FIVE-YEAR STRATEGIC PLAN

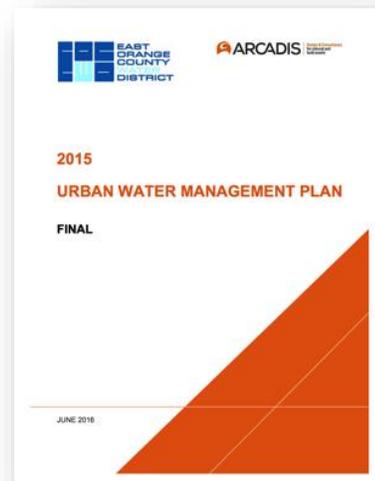
- Customer service – EOCWD will professionally and responsively serve the needs of its customers
- Respect – EOCWD will work with our stakeholders in a respectful, professional, and courteous fashion
- Disciplined (Fiscally and operationally) – EOCWD will be good stewards of the facilities, people, and financial resources entrusted to it
- Creative – EOCWD will encourage and value the introduction of new ideas and methods
- Transparent – EOCWD will engage its stakeholders and interact with them in a fair, open and honest manner



Goals / Strategies / Objectives

The Board developed goal areas that represent the key EOCWD commitments to the community it serves.

- **Goal 1: Water and Sewer Service Reliability** – EOCWD will provide reliable water and sewer services that consider the environment to meet the needs of the community
- **Goal 2: Infrastructure** – EOCWD will acquire, maintain, and operate our infrastructure to ensure reliable water and sewer services





2017 FIVE-YEAR STRATEGIC PLAN

- **Goal 3: Community Representation and Engagement** – EOCWD will provide responsive local governance, value and outreach to the communities we serve
- **Goal 4: Financial Integrity** – EOCWD will manage our financial assets to provide and maintain reliable water and sewer services
- **Goal 5: Professional Workforce** – EOCWD will maintain workforce expertise to ensure service quality, continuity, and reliability

Management and staff identified specific strategies and measurable objectives for each goal area to ensure the proper actions are taken to fulfill the commitment implicit in the goal area. The strategies and objectives listed below encompass both current and new activities. The implementation of these strategies and objectives will be further detailed through specific memoranda.

Goal 1: EOCWD will provide reliable water and sewer services that consider the environment to meet the needs of the community

Strategy 1 – Operate the system to achieve service level standards

- Objective 1 Track service level goals and metrics
- Objective 2 Meet the service level goals
- Objective 3 Operate the system using cost-effective principles

Strategy 2 – Proactively comply with applicable environmental standards

- Objective 1 Provide 100% compliance with Safe Drinking Water Act standards
- Objective 2 Proactively engage in regulatory processes where appropriate
- Objective 3 Manage the sewer collection system to prevent or mitigate spills

2017 FIVE-YEAR STRATEGIC PLAN

Objective 4 Abandon existing community septic systems and connect to the sewer collection system

Strategy 3 – Develop an energy strategy

Objective 1 Implement and track the strategy

Objective 2 Evaluate backup power requirements



Strategy 4 – Determine appropriate role of water treatment for EOCWD

Objective 1 Refine treatment plant financial and reliability benefits

Objective 2 Provide a decision pathway for board action including budget, grant strategy, and market analysis

Strategy 5 – Provide adequate backup supply for groundwater production

Objective 1 Assess required level of reliability

Objective 2 Implement solution

Strategy 6 – Conduct planning to ensure reliable and high quality water supply and implement appropriate policies and infrastructure

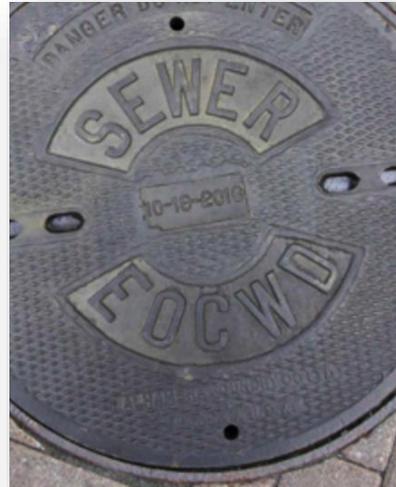
Objective 1 Develop an EOCWD Integrated Resources Plan that informs and integrates with the Master Plan

Objective 2 Develop additional appropriate water supplies if/as needed

Strategy 7 – Maintain active water conservation program

2017 FIVE-YEAR STRATEGIC PLAN

- Objective 1 Implement water conservation projects and programs to reflect the value of water and water service
- Objective 2 Leverage funding through regional water agencies



Goal 2: Infrastructure – EOCWD will acquire, maintain and operate our infrastructure to ensure reliable water and sewer services

Strategy 1 – Ensure EOCWD can adequately respond to anticipated emergencies

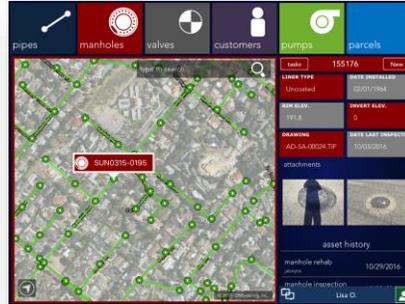
- Objective 1 Update the emergency response plan
- Objective 2 Evaluate expansion of interconnections
- Objective 3 Continue active participation in WEROC
- Objective 4 Explore additional mutual aid agreements
- Objective 5 Evaluate radio communications needs and capability
- Objective 6 Update business continuity plan
- Objective 7 Develop a facilities plan for the headquarters, treatment plant/reservoirs, and property recently acquired on N. MacPherson Road



2017 FIVE-YEAR STRATEGIC PLAN

Strategy 2 – Ensure infrastructure is appropriately maintained and replaced

- Objective 1 Complete the Sewer Master Plan / Condition Assessment Plan
- Objective 2 Continue to refine *Sedaru* system to incorporate remaining facilities
- Objective 3 Annually report on the operations and maintenance status of key assets
- Objective 4 Report to Board on deferred maintenance and provide solutions
- Objective 5 Develop a strategy for well replacement
- Objective 6 Complete self audit for Sewer System Management Plan



Goal 3: Community Representation and Engagement – EOCWD will provide responsive local governance, value and outreach to the communities we serve

Strategy 1 – Build alliances to support the interests of EOCWD

- Objective 1 Develop a communications plan including:
 - Defined goals and objectives
 - Identification of key messages



2017 FIVE-YEAR STRATEGIC PLAN

- Identification of key constituencies (local, regional, State, and federal)
- Outreach projects and programs for key constituencies
- Action plans
- Leveraging of external communications resources
- Identification of funding needs

Strategy 2 – Streamline Board deliberations

- Objective 1 Evaluate and ensure there are adequate checks and balances and proper delegation of authority to the GM



Strategy 3 – Maintain excellent customer service

- Objective 1 Develop measures to assess customer satisfaction
- Objective 2 Measure and report customer satisfaction

Goal 4: Financial Integrity – EOCWD will manage our financial assets to provide and maintain reliable water services

Strategy 1 – Ensure that adequate financial capacity exists to maintain District assets

- Objective 1 Develop an annual budget
- Objective 2 Manage within the budget (beyond emergencies)
- Objective 3 Receive an unqualified audit outcome each year
- Objective 4 Evaluate the adequacy of current insurance coverage

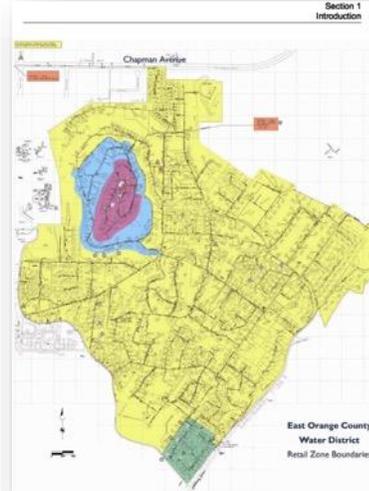
2017 FIVE-YEAR STRATEGIC PLAN

Strategy 2 – Provide mutually beneficial water and wastewater services to area and contiguous utilities

- Objective 1 Examine opportunities for service expansion
- Objective 2 Actively engage in LAFCO proceedings

Strategy 3 – Ensure the District operations are efficient and effective

- Objective 1 Evaluate AWWA benchmarking value
- Objective 2 Propose appropriate benchmarks



Strategy 4 – Implement the Strategic Plan

- Objective 1 Track and report progress to the Board

Strategy 5 – Consolidate policies and make easily assessable to Directors

- Objective 1 Explore website system to house key policies

Goal 5: Professional Workforce – EOCWD will maintain workforce expertise to ensure service quality, continuity, and reliability

Strategy 1 – Develop long-term strategy to retain staff

- Objective 1 Assess staff morale
- Objective 2 Periodically conduct staffing assessment to identify needs and present to Board for consideration

2017 FIVE-YEAR STRATEGIC PLAN

- Objective 3 Determine appropriate mix of financial and benefit incentives (including evaluation of current housing stock)
- Objective 4 Develop a succession plan with a focus on the General Manager, General Counsel, and Operations Manager positions
- Objective 5 Develop a rolling 6 month list of potential General Manager candidates
- Objective 6 Obtain a backup General Counsel plan for outside counsel
- Objective 7 Develop internal capability to assume Operations Manager role
- Objective 8 Hire an executive level manager to assist the General Manager

Strategy 2 – Ensure that technology is appropriately deployed within the District

- Objective 1 Complete evaluation of expanding AMI/AMR (integrating into Neptune and Sedaru)
- Objective 2 Evaluate and implement SCADA system improvements
- Objective 3 Develop and implement knowledge management
- Objective 4 Develop appropriate protocols for texting and email use



Strategy 3 – Ensure staff training (including safety) and certifications are adequate to maintain capability

- Objective 1 Review training plan
- Objective 2 Track training activities

2017 FIVE-YEAR STRATEGIC PLAN

Objective 3 Conduct a safety audit

Next Steps

The plan is intended to be a living document and will be reviewed and updated annually to remain current. It will be used in planning and budgeting the activities of EOCWD. Formal “action plans” will be developed for some of the key strategies.

Key Performance Indicators (KPIs) have been established to measure progress against the Goals of the plan. These include:

1. # of breaks per mile of pipeline
2. # of hours customers are out of service
3. 100% compliance with SDWA
4. Miles of sewer pipe cleaned
5. # of sewer spills
6. CIP dollars budgeted vs. actual expended
7. Number and nature of complaints
8. Demonstrated rising customer satisfaction (through surveys every few years)
9. Maintain a high bond rating
10. Turnover rate
11. Lost time accidents



Glossary

The following key terms are used in this Strategic Plan:



2017 FIVE-YEAR STRATEGIC PLAN

Action Plan – a detailed set of tactical actions that will be developed in order for some of the strategies / objectives to be achieved

Core Values - non-negotiable standards that the staff and the Board believe in and embody how they will act individually and as an organization

Goal - EOCWD's commitment to the community it serves

Mission – the primary reason(s) for the existence of the organization

Objective - measurable work activity that, when accomplished, will directly lead to the success of the strategy

Issue - a problem or opportunity facing the EOCWD

Strategy - how an issue is solved to achieve the goal

Strategic Plan - a structured plan to drive EOCWD to achieve its goals

SWOT Analysis - description of strengths, weaknesses, opportunities and threats to identify areas of focus in the Strategic Plan

Tactic - specific work activities to accomplish a strategy

Vision - what EOCWD aspires to become

APPENDIX B
2016 FINANCIAL PLAN & RATE STUDY



EAST ORANGE COUNTY WATER DISTRICT

Retail Zone Rate Study Report

September 16, 2016



445 S. Figueroa Street
Suite #2270
Los Angeles, CA 90071

Phone 213.262.9300
Fax 213.262.9303

www.raftelis.com

June 7, 2016

Ms. Lisa Ohlund
General Manager
East Orange County Water District
185 N McPherson Road
Orange, CA 92869-3720

Subject: Retail Zone Rate Study Draft Report

Dear Ms. Ohlund,

Raftelis Financial Consultants, Inc. (RFC) is pleased to provide this Retail Zone Rate Study Report (Report) for the East Orange County Water District (District or EOCWD). This report explains the methodologies and rationale used to develop the financial plan and rates for water service within the District's retail service areas that are equitable and compliant with Proposition 218.

The major objectives of the study include the following:

1. Develop a financial plan for the Retail Zone Enterprise to ensure financial sufficiency, meet operational and maintenance (O&M) costs, and maintain sufficient funding for capital refurbishment and replacement (R&R) needs;
2. Conduct a cost of service analysis for water services in the Retail Zone;
3. Develop fair, equitable, and compliant water rates over a five-year period;
4. Conduct a customer impact analysis for the proposed water rates; and
5. Assess the impacts of reduction in water sales at different stages of drought and calculate the corresponding drought rates.

The Report summarizes the key findings and recommendations related to the development of the financial plan and rates for water service for the District's Retail Zone Enterprise.

It has been a pleasure working with you, and we thank you and the District staff for the support provided during the course of this study.

Sincerely,

Raftelis Financial Consultants, Inc.

Sanjay Gaur
Vice President

Khanh Phan
Senior Consultant

TABLE OF CONTENTS

1	INTRODUCTION	6
1.1	About East Orange County Water District	6
1.2	Background of the Study	6
2	LEGAL REQUIREMENTS AND RATE SETTING METHODOLOGY	7
2.1	Legal Requirements.....	7
2.2	Legal Framework.....	7
3	GENERAL ASSUMPTIONS	9
3.1	Inflation	9
3.2	Projected Growth.....	9
3.3	Reserve Policy	10
3.4	Key Financial Information	11
4	FINANCIAL PLAN	13
4.1	Water Revenue Requirements	13
4.1.1	Revenues.....	13
4.1.2	O&M Expenses	15
4.1.3	Projected Capital Improvement Projects	18
4.2	Financial Plan	19
4.2.1	Status Quo Financial Plan.....	19
4.2.2	Proposed Financial Plan	21
5	COST OF SERVICE AND PROPOSED WATER RATES.....	24
6	DROUGHT RATES	32
7	CUSTOMER IMPACTS ANALYSIS	35
8	APPENDICES	38
8.1	Current Adopted Reserve Policy.....	38
8.2	Detailed O&M Budget	41
8.3	Detailed Capital Improvement Projects.....	45
8.4	Asset List and Allocation Factors	49
8.5	Water Cost Allocation Factors	52

LIST OF TABLES AND FIGURES

Table 3-1: Assumed Inflation Factors9

Table 3-2: Projected Retail Zone Account Growth9

Table 3-3: Current Reserve Policy and Fund Balances11

Table 3-4: Proposed Reserve Policy and Fund Balances11

Table 4-1: Current Retail Zone Water Rates13

Table 4-2: Projected Revenues from Current EOCWD Charges.....14

Table 4-3: Projected Other Revenues.....14

Table 4-4: Water Supply Costs Projections16

Table 4-5: Projected Water Supply Costs and Pass-through Water Supply Rates17

Table 4-6: Budgeted and Projected O&M Expenses18

Table 4-7: Status Quo Retail Zone Financial Plan (No Revenue Adjustments).....20

Table 4-8: Proposed Retail Zone Revenue Adjustments.....21

Table 4-9: Proposed Retail Zone Financial Plan.....22

Table 5-1: Annualized Revenue Requirements for FY 2017 for Retail Zone24

Table 5-2: Water System Peaking Factors26

Table 5-3: Allocated Water System Costs to Rate Components26

Table 5-4: Allocated of Revenue Requirements from Operating Rates to Rate Components.....28

Table 5-5: Equivalent Meter Units28

Table 5-6: Unit Rates by Rate Components29

Table 5-7: Proposed Retail Zone Monthly Fixed Charges: Capital Fees and Service Charges29

Table 5-8: Proposed Retail Zone Commodity Rate30

Table 5-9: Proposed 5-year Retail Zone Water Rates31

Table 6-1: Drought Stages Definitions and Projected Sales.....32

Table 6-2: Proforma for FY 2017 under the Drought Stages.....33

Table 6-3: Proposed Drought Rates by Stages.....34

Table 8-1: Retail Operating Budget provided by District Staff.....41

Table 8-2: Detailed Capital Improvement Projects45

Table 8-3: Peaking Factors and Allocation Factors to Base, Max Day, Max Hour Cost Categories49

Table 8-4: Asset List Summary and Allocation Factors49

Table 8-5: Water O&M Expenses Allocations to Water Cost Categories50

Table 8-6: Water Revenue Requirements to Water Cost Categories.....52

Figure 4-1: Projected Retail Zone Capital Expenditures19

Figure 4-2: Retail Zone Operating Financial Plan23

Figure 4-3: Projected Retail Zone Reserve Ending Balances23

Figure 7-1: FY 2017 Sample SFR Monthly Bills (No Drought Rates)35

Figure 7-2: FY 2017 Sample SFR Monthly Bills (with Drought Rate for Stage 1).....36

Figure 7-3: FY 2017 Sample SFR Monthly Bills (with Drought Rate for Stage 2).....36

Figure 7-4: FY 2017 Sample SFR Monthly Bills (with Drought Rate for Stage 3).....37

GLOSSARY

Commonly Used Terms

Terms	Descriptions
AF	Acre foot / Acre feet, 1 AF = 435.6 CCF
AWWA	American Water Works Association
BPP	Basin Pumping Percentage (percentage of water demand to be met by Groundwater)
CCF	Hundred cubic feet or 100 cubic feet, 1 CCF = 748 gallons
CIP	Capital Improvement Projects
COS	Cost of Service
CPI	Consumer Price Index/Indices
EMU	Equivalent Meter Unit
ENR CCI	Engineering News Records Construction Cost Indices
FY	Fiscal Year (July 1 – June 30)
M1 Manual	“Principles of Water Rates, Fees, and Charges: Manual of Water Supply Practices M1” published by AWWA
MWD or MET	Metropolitan Water District of Southern California
MWDOC	Municipal Water District of Orange County
O&M	Operations and Maintenance
OCWD	Orange County Water District
PAYGO	Pay-As-You-Go
R&R	Refurbishment and Replacement
RFC	Raftelis Financial Consultants, Inc.

1 Introduction

1.1 About East Orange County Water District

East Orange County Water District (EOCWD or District) was formed in December 1961. The District is an independent special district governed by its Board of Directors, who are elected by the voters within the District's service area. The District encompasses an area of approximately 10,000 acres (10 square miles) and is a member of the Municipal Water District of Orange County (MWDOC). MWDOC is a member of the Metropolitan Water District of Southern California (MET) and therefore is entitled to receive Colorado River and Northern California imported water through the distribution facilities of the Metropolitan system. In the Wholesale Zone, the District delivers water to five sub-agencies consisting of the City of Tustin, Golden State Water Company, City of Orange, Irvine Ranch Water District, and the District's own Retail Zone. These agencies deliver EOCWD imported water to an estimated population of 100,000.

The District's Retail Zone generally encompasses the Vista Panorama/Panorama View area, an unincorporated area of East Orange. The District delivers local groundwater and imported Wholesale Zone water directly to 1,210 customers representing a population of approximately 3,600.

1.2 Background of the Study

In 2015, the District engaged Raftelis Financial Consultants (RFC) to conduct a comprehensive Rate Study for its Wholesale and Retail Zones.

The major objectives of the Retail Zone Rate Study include the following:

1. Develop a financial plan for the Retail Zone Enterprise to ensure financial sufficiency, meet operational and maintenance (O&M) costs, and maintain sufficient funding for capital refurbishment and replacement (R&R) needs;
2. Conduct a cost of service analysis for water services in the Retail Zone;
3. Develop fair, equitable, and compliant water rates over a five-year period;
4. Conduct a customer impact analysis for the proposed water rates; and
5. Assess the impacts of reduction in water sales at different stages of drought and calculate the corresponding drought rates.

2 Legal Requirements and Rate Setting Methodology

2.1 Legal Requirements¹

There are two Constitutional provisions that govern and impact water rates — Article X, Section 2 (“Article X”) and Article XIII D, Section 6 (“Article XIII D”). Article X was added to the California Constitution in 1928 as former Article XIV, Section 3, and amended in 1976. Article X provides that:

“It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare.”

In November 1996, California voters approved Proposition 218, which amended the California Constitution by adding Article XIII C and Article XIII D. Article XIII D placed substantive limitations on the use of the revenue collected from property-related fees and on the amount of the fee that may be imposed on each parcel. Additionally, it established procedural requirements for imposing new, or increasing existing, property-related fees. Water service fees are property-related fees.

In accordance with these provisions, a property-related fee must meet all of the following requirements: (1) revenues derived from the fee must not exceed the funds required to provide the property-related service; (2) revenues from the fee must not be used for any purpose other than that for which the fee is imposed; (3) the amount of a fee imposed upon any parcel or person as an incident of property ownership must not exceed the proportional cost of the service attributable to the parcel; (4) the fee may not be imposed for a service, unless the service is actually used by, or immediately available to, the owner of the property subject to the fee. A fee based on potential or future use of a service is not permitted, and stand-by charges must be classified as assessments subject to the ballot protest and proportionality requirements for assessments; (5) no fee may be imposed for general governmental services, such as police, fire, ambulance, or libraries, where the service is available to the public in substantially the same manner as it is to property owners. The five substantive requirements in Article XIII D are structured to place limitations on (1) the use of the revenue collected from property-related fees and (2) the allocation of costs recovered by such fees to ensure that they are proportionate to the cost of providing the service attributable to each parcel.

2.2 Legal Framework

Revenue Requirements. The Study uses the revenue requirements method for allocating costs. This methodology is consistent with industry standards established by the American Water Works Association,

¹ RFC does not practice law nor does it provide legal advice. The above discussion means to provide a general review of apparent state institutional constraints and is labeled “legal framework” for literary convenience only. The District should consult with its counsel for clarification and/or specific review of any of the above or other matters.

Principles of Water Rates, Fees and Charges: Manual of Water Supply Practices M1 (the “M1 Manual”). The revenue requirements analysis “compares the revenues of the utility to its operating and capital costs to determine the adequacy of the existing rates to recover the utility’s costs.” American Water Works Association, Principles of Water Rates, Fees and Charges: Manual of Water Supply Practices M1 (6th ed. 2012). The revenue requirements are analyzed through the development of a long-term financial plan. Based on the best information currently available, the financial plan incorporates projected operations and maintenance costs, capital expenditures, debt service, growth, and conservation assumptions to estimate annual required revenues.

Cost of Service. After determining a utility’s revenue requirements, the next step in the analysis is determining the cost of service. The Study arranges the costs, expenses, and assets of the water system by major operating functions to determine the cost of service. After the assets and the costs of operating those assets are properly categorized by function, they are allocated towards the revenue requirements of the various customer classes (e.g. single-family residential, irrigation, and commercial). The allocations are determined by the characteristics of each customer class and its contribution to the incurred costs, such as peaking factors, different delivery costs, service characteristics, and demand patterns. This analysis includes a review of matters such as system operations and water usage data—e.g., capacity (peak demand)², commodity (average demand)³, number of customers, customer service and accounting, equivalent meter size, and public fire protection services.⁴ The impact that these matters have on system operations determines how the costs are allocated among the various customer classes.

Rate Design. The final part of the analysis is the rate design. The rate design involves developing a rate structure that proportionately recovers costs from customers. The final rate structure and rate recommendations are designed to fund the utility’s long-term projected costs of providing service, proportionally allocate costs to all customer classes, provide a reasonable and prudent balance of revenue stability while encouraging conservation, and comply with the substantive requirements of Article XIII D.

² System capacity is the system’s ability to supply water to all delivery points at the time when demanded. It is measured by each customer’s water demand at the time of greatest system demand. The time of greatest demand is known as peak demand. Peak demand costs recover the costs of facilities needed to meet the peak use, or demands, placed on the system by each customer class. Both the operating costs and the capital assets related costs incurred to accommodate the peak flows are allocated to each customer class based upon the class’s contribution to the peak day event.

³ Commodity refers to the amount of metered water usage over a specific time period, typically a twelve-month period.

⁴ This refers to the need to increase the size of mainlines to provide public fire protection requirements.

3 General Assumptions

3.1 Inflation

The Study period is from Fiscal Year (FY) 2016 to 2021. Various types of assumptions and inputs are incorporated into the Study based on discussions with and/or direction from District staff. These include the projected number of accounts and annual growth rates in consumption for different customer classes, inflation factors, and other assumptions. The inflation factor assumptions are presented in Table 3-1.

Table 3-1: Assumed Inflation Factors

KEY FACTORS	FY 2018	FY 2019	FY 2020	FY 2021
General	3%	3%	3%	3%
Salary	5%	5%	5%	5%
Benefits	5%	5%	5%	5%
Utilities	5%	5%	5%	5%
Water Supply Costs⁵	5%	5%	5%	5%
EOCWD Charges⁶	0%	0%	0%	0%
Capital by ENR CCI⁷	3%	3%	3%	3%

The general inflation rate of 3 percent is based on a historical Consumer Price Index (CPI) range of 3-3.5 percent. The salary inflation rate of 5 percent is based on District staff estimates. The benefits inflation rate of 5 percent is based on the District’s estimates of increasing health insurance costs and other factors. The utilities and water supply costs inflation rates of 5 percent are based on District staff estimates.

3.2 Projected Growth

The Retail Zone is essentially at build-out. The District assumes that there is no further growth for the study period. Table 3-2 shows the number of connections for Retail Zone customers, showing no account growth in FY 2017 and beyond.

Table 3-2: Projected Retail Zone Account Growth

Number of Connections	FY 2015	FY 2016	FY 2017	FY 2018 & beyond
Growth Rate			0%	0%
5/8"	9	9	9	9
3/4"	864	864	864	864
1"	289	291	291	291
1-1/2"	28	28	28	28
2"	5	5	5	5
3"	2	2	2	2
Total	1,197	1,199	1,199	1,199

⁵ Water Supply Costs from OCWD and MWDOC

⁶ EOCWD Wholesale Zone Reserve Fund and Readiness-to-Serve Charges

⁷ ENR CCI: Engineering News Record Construction Cost Indices

3.3 Reserve Policy

A reserve policy is a written document that provides a basis for the District to cope with unanticipated reductions in revenues, offset fluctuations in costs of providing services, and fiscal emergencies such as revenue shortfalls, asset failures, natural disasters, etc. It also provides a guideline for sound financial management with an overall long-range perspective to maintain financial solvency and mitigate financial risks associated with revenue instability, volatile capital costs, and emergencies. It also sets funds aside for replacement of capital assets as they age and for new, innovative capital projects. Additionally, adopting and adhering to a sustainable reserve policy enhances financial management transparency and helps achieve or maintain a certain credit rating for future debt issues.

The appropriate amount of reserve and reserve types are determined by a variety of factors, such as the size of the operating budget, the amount of debt, the type of rate structure, frequency of customer billing, and risk of natural disaster. With this being said, most reserves tend to fall into the following categories: operations & maintenance (O&M) cash flow, rate stabilization, capital repair and replacement (R&R), and emergency.

O&M Cash Flow – The purpose of an O&M reserve is to provide working capital to support the operation, maintenance, and administration of the utility. From a risk management perspective, the O&M reserve supports the District’s cash flow needs during normal operations and ensures that operations can continue should there be significant events that impact cash flows. As it is unlikely for a utility to perfectly predict the revenues and revenue requirements for each billing period, a reserve set aside to hedge the risk of monthly negative cash positions is prudent in financial planning. Another factor to consider when creating a cash flow reserve is the frequency of billing. A utility that bills once a month would require less minimum reserves than a utility that bills semi-annually.

Rate Stabilization and Operating Emergency – While it is not typical for utilities to have substantial rate increases in a short period of time, factors such as declining water sales and rapidly increasing water supply costs may result in large rate increases. In order to minimize rate shocks, a rate stabilization reserve could be set up in order to smooth rate increases through gradual increases in rates as opposed to abrupt and large rate increases. A rate stabilization reserve acts as a buffer to protect customers from experiencing large shifts in their bills.

Capital Emergency – The purpose of an emergency fund is to allow the utility to provide uninterrupted service in light of a fiscal emergency, natural disaster, or facility failure. An emergency reserve decreases risk by recognizing the high capital cost of the utilities and setting aside adequate funds to restart the system after an event or replace an essential facility. Critical asset analysis completed by staff can provide the basis for the target level of emergency reserve.

Capital R&R – Capital R&R reserves are used to fund future obligations that are necessary for maintaining a reliable infrastructure. Because water and sewer utilities are highly capital-intensive enterprises, it is important to accurately estimate long-term R&R costs and develop a reserve to fund the eventual replacement of the system and new capital projects.

The District currently has an adopted reserve policy for its Retail Zone Enterprise (see Appendix 8.1). Table 3-3 shows the Retail Zone reserve targets based on the District’s current reserve policy for FY 2016 and FY 2017 and the beginning fund balances as of July 1, 2015, extracted from the Annual Financial Report.

Table 3-3: Current Reserve Policy and Fund Balances

Retail Zone Enterprise	Descriptions	FY 2016 Targets	FY 2017 Targets
Operating	10 months of operating budget	\$951K	\$1,382K
Capital	1x of 10-year rolling future CIP average	\$648K	\$651K
Total Targets		\$1,599K	\$2,033K
Fund Balance as of June 30, 2015		\$2,265K	

RFC recommends that the District establish a Rate Stabilization reserve in order to minimize rate shocks and to provide additional working capital during fiscal emergencies, such as a temporary increase in expenses, greater water sales reduction than previously anticipated, etc. With a Rate Stabilization reserve, the District will be able to implement gradual rate increases rather than abrupt and large rate increases in the event of a fiscal emergency. RFC recommends that the Rate Stabilization reserve target equal 25 percent of the District’s Retail Zone commodity revenues. Table 3-4 shows the proposed FY 2016 and FY 2017 Rate Stabilization reserve targets, as well as the District’s current Operating and Capital reserve targets.

Table 3-4: Proposed Reserve Policy and Fund Balances

Retail Zone Enterprise	Descriptions	FY 2016 Targets	FY 2017 Targets
Operating	10 months of operating budget	\$951K	\$1,382K
Rate Stabilization	25% of commodity revenues	\$177K	\$229K
Capital	1x of 10-year rolling future CIP average	\$648K	\$651K
Total Targets		\$1,776K	\$2,262K
Fund Balance as of June 30, 2015		\$2,265K	

3.4 Key Financial Information

During the course of the Study, RFC and District staff have completed a detailed review of projected revenues, operating expenses, and capital expenditures over the next several years. The Financial Plan Model is a comprehensive spreadsheet model of the District's revenues, operating and maintenance expenses, capital expenditures, and reserves for the Study period (FY 2016 to FY 2021). These projections

are derived from other planning tools and models, including the District's recently prepared draft Master Plan/Capital Improvement Program by Carollo Engineers and Operating Budgets for FY 2016 and FY 2017.

The Study utilized the following key financial documents and figures.

1. **Operating Budget** for Fiscal Year (FY) 2016 and FY 2017 for the Retail Zone Enterprise
2. **Reserve Policy** provided by District Staff
3. **Capital Improvement Plan (CIP)** for the Retail Zone Enterprise for the Study Period provided by the District
4. **Financial Information** (i.e. outstanding debt, reserve levels, etc.) as of June 30, 2015 provided by the District, extracted from "East Orange County Water District, Annual Financial Report for the Year Ended June 30, 2015"

4 Financial Plan

4.1 Water Revenue Requirements

A review of a utility’s revenue requirements is a key first step in the rate study process. The review involves an analysis of annual operating revenues under the status quo, operation and maintenance (O&M) expenses, transfers between funds, and reserve requirements. This section of the report provides a discussion of the projected revenues, O&M expenses, other reserve funding, and revenue adjustments estimated as required to ensure the fiscal sustainability and solvency of the Retail Zone Enterprise.

4.1.1 Revenues

The District’s current Retail Zone rates were last updated in August 2013. The rates consist of three distinct components: a monthly capital project fee of \$20 per meter per month, a monthly service charge that varies by meter size, and a uniform commodity rate applied to all usage at \$2.67 per ccf⁸. Table 4-1 shows the District’s current water rates for Retail Zone customers.

Table 4-1: Current Retail Zone Water Rates

Current	
Effective Date	August 18, 2013
Monthly Capital Project Fees	\$20.00/meter
Monthly Service Charges	
5/8"	\$18.10
3/4"	\$20.50
1"	\$34.25
1-1/2"	\$52.00
2"	\$90.75
3"	\$128.75
Commodity Rate	\$2.67 / ccf

The revenues recovered from the Capital Project Fee are calculated by multiplying the \$20 monthly Capital Project Fee by the total amount of connections (shown in Table 3-2) for each monthly billing period. The Monthly Service Charge revenue for each meter is calculated by multiplying the service charge for a meter size with the number of connections for that meter size for each monthly billing period. The total service charge revenues are the sum of the revenues of each meter size individually. The commodity rate revenue is calculated by multiplying the total usage by the commodity rate. The projected and calculated revenues for all three rates are shown in Table 4-2.

⁸ 1 ccf = 100 cubic feet = 748 gallons of water

Table 4-2: Projected Revenues from Current EOCWD Charges

	FY 2015	FY 2016	FY 2017	FY 2018 & beyond
Number of connections (meters)				
5/8"	9	9	9	9
3/4"	864	864	864	864
1"	289	291	291	291
1-1/2"	28	28	28	28
2"	5	5	5	5
3"	2	2	2	2
Total	1,197	1,199	1,199	1,199
Projected Normal Water Sales⁹				
	367,439	323,074	323,074	323,074
Calculated Annual Revenues from Current Retail Water Rates				
Capital Project Fees	\$287,280	\$287,760	\$287,760	\$287,760
Service Charges	\$359,285	\$360,107	\$360,107	\$360,107
Commodity Rates	\$981,062	\$862,608	\$862,608	\$862,608
Total	\$1,627,626	\$1,510,474	\$1,510,474	\$1,510,474
Annual Revenues from Current Retail Water Rates from District's Budget				
Capital Project Fees	\$164,550	\$288,000		
Service Charges	\$350,000	\$359,269		
Commodity Rates	\$900,000	\$708,287		
Total	\$1,414,550	\$1,355,555		

In addition to revenues produced by water rates, the Retail Zone receives other revenues from different sources such as interest income, taxes, and rent income. Table 4-3 outlines the other miscellaneous revenues for the District's Retail Zone over the Study period.

Table 4-3: Projected Other Revenues

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Other Revenues						
Misc. Operating Revenues	\$ 14,703	\$ 5,600	\$ 12,726	\$ 12,853	\$ 12,982	\$ 13,112
Interest Income	\$ 6,266	\$ 2,030	\$ 21,554	\$ 18,489	\$ 17,816	\$ 21,466
Taxes	\$ 334,882	\$ 400,100	\$ 409,151	\$ 413,243	\$ 417,375	\$ 421,549
Misc. Non-Operating Revenues	\$ 4,590	\$ -	\$ -	\$ -	\$ -	\$ -
SUBTOTAL OTHER REVENUES	\$ 360,440	\$ 407,730	\$ 443,431	\$ 444,585	\$ 448,172	\$ 456,127

⁹ Non-drought sales

4.1.2 O&M Expenses

4.1.2.1 Water Supply Costs

The District has two sources of water supply – (1) local groundwater and (2) treated import water. The groundwater supply is managed by Orange County Water District (OCWD), while the imported supply is managed by Municipal Water District of Orange County (MWDOC) via the distribution system operated by East Orange County Water District’s Wholesale Zone (WZ) Enterprise. As managers of the groundwater basin, OCWD sets the limits for the amount of water that can be pumped from the local groundwater basin. This is referred to as the Basin Pumping Percentage (BPP). As a member agency of OCWD, the District has access to this water supply at the limits set by OCWD. The variable unit charges that OCWD assesses are \$322 per AF and \$412 per AF for FY 2016 and FY 2017, respectively. These charges are expected to increase at 5 percent per year beyond FY 2017, as assumed in Table 3-1.

The District is reliant on imported water from MWDOC to meet the remaining demand beyond the BPP limit. The District incurs three separate base fees (readiness to serve, capacity charge, and retail charge) from MWDOC as well as the EOCWD Reserve Fund and Readiness-to-Serve Charges assessed by the EOCWD WZ.

Based on projections and inputs from District staff, the respective sources of water, per unit price, and expected purchase quantities are shown in Table 4-4. The water demand to be met by OCWD is calculated by multiply the total water demand, including water loss, by the BPP for that year. The water demand to be met by MWDOC is the total remaining demand after pumping. The water supply cost components are separated into the unit costs and associated fees for each source of water.

Table 4-4: Water Supply Costs Projections

		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
1	Water Sales	742 AF					
2	Water Demand (with 5.2% loss)	780 AF					
3	BPP	72.0%	70.0%	65.0%	65.0%	65.0%	65.0%
Water Demand to be met by							
4	OCWD	562 AF	546 AF	507 AF	507 AF	507 AF	507 AF
5	MWDOC	218 AF	234 AF	273 AF	273 AF	273 AF	273 AF
Water Supply Cost Components							
6	OCWD						
7	Replenish Assessment (RA)	\$322 / AF	\$412 / AF	\$433 / AF	\$454 / AF	\$477 / AF	\$501 / AF
8	MWDOC						
9	MET-MWDOC RTS	\$33,531	\$35,000	\$36,750	\$38,588	\$40,517	\$42,543
10	MET-MWDOC Capacity Charge	\$16,000	\$16,000	\$16,800	\$17,640	\$18,522	\$19,448
11	MWDOC Choice	\$2,530	\$0	\$0	\$0	\$0	\$0
12	MWDOC Retail Charge	\$13,063	\$12,300	\$12,915	\$13,561	\$14,239	\$14,951
13	MWDOC Unit Cost	\$942/AF	\$979/AF	\$1,028/AF	\$1,079/AF	\$1,133/AF	\$1,190/AF
14	EOCWD WZ						
15	EOCWD WZ RTS Charge	\$9,030	\$4,800	\$4,800	\$4,800	\$4,800	\$4,800
16	EOCWD WZ Reserve Fund Charge	\$17,458	\$14,450	\$14,450	\$14,450	\$14,450	\$14,450

Based on the information provided in Table 4-4, the projected water supply costs, the pass-through water supply rates, and the total pass-through water supply costs are shown in Table 4-5. The total projected water supply costs are determined by multiplying the per unit cost for each source of water by the corresponding quantity purchased from that source and adding the fixed costs associated with each source. The All-in Water Supply Unit Rate, which includes the fixed charges from MET/MWDOC and EOCWD, is calculated by dividing the total water supply cost amount by the total water sales, resulting in an All-in Water Supply Unit Rate of \$644.89 per AF and \$1.49 per ccf. The Pass-through Water Supply Cumulative Unit Rate for each year is calculated by subtracting the current year's amount by the All-in Water Supply Unit Rate for FY 2016. The Pass-through Water Supply Incremental Rate is the incremental increase for each successive year. The next two lines in the table show the effective month and corresponding effective months of the Pass-through rates for the fiscal year. From there, the total Pass-through Water Supply Cost is calculated by multiplying the total water sales (ccf) by the corresponding year's cumulative rate multiplied by that year's effective months out of a total of 12 months out of the year, then multiplied by the previous year's cumulative rate multiplied by the remaining months out of corresponding year.

For example, in FY 2018, the Pass-through Water Supply Cumulative Rate is equal to \$0.33 per ccf, which will be effective in February, or for three months out of the fiscal year. To calculate the Pass-through Water Supply Costs for the effective three months of FY 2018, multiply the total water sales (323,074 ccf) by the Cumulative Rate of \$0.33 per ccf by the three effective months out of a total of 12 months (3 months/12 months). Since this calculation only takes into account the three effective months of the Cumulative Rate, an additional calculation needs to be made for the nine remaining months out of FY 2018 (12 months-3 months=9 months). To calculate the Pass-through Water Supply Costs for the remaining months of FY 2018, multiply the water sales (323,074 ccf) by the Cumulative Rate for the previous year (\$0.18 per ccf) by the remaining months out of FY 2018 (9 months/12 months). The total Pass-through Water Supply Cost for the entirety of FY 2018 is the sum of the previous two calculations (\$70,269).

Table 4-5: Projected Water Supply Costs and Pass-through Water Supply Rates

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
OCWD - RA	\$180,892	\$225,022	\$219,397	\$230,366	\$241,885	\$253,979
Water purchases	\$205,797	\$229,157	\$280,718	\$294,754	\$309,491	\$324,966
MET-MWDOC RTS	\$33,531	\$35,000	\$36,750	\$38,588	\$40,517	\$42,543
MET-MWDOC Capacity Charges	\$16,000	\$16,000	\$16,800	\$17,640	\$18,522	\$19,448
MWDOC Choice	\$2,530	\$0	\$0	\$0	\$0	\$0
MWDOC Retail Service Connection	\$13,063	\$12,300	\$12,915	\$13,561	\$14,239	\$14,951
EOCWD WZ RTS Charge	\$9,030	\$4,800	\$4,800	\$4,800	\$4,800	\$4,800
EOCWD WZ Reserve Fund Charge	\$17,458	\$14,450	\$14,450	\$14,450	\$14,450	\$14,450
Total Water Supply Costs	\$478,301	\$536,729	\$585,829	\$614,158	\$643,904	\$675,136
Water Sales	742 AF	742 AF	742 AF	742 AF	742 AF	742 AF
	323,074 ccf	323,074 ccf	323,074 ccf	323,074 ccf	323,074 ccf	323,074 ccf
All-in Water Supply Unit Rate¹⁰	\$644.89/AF	\$723.67/AF	\$789.87/AF	\$828.07/AF	\$868.17/AF	\$910.28/AF
	\$1.49/ccf	\$1.67/ccf	\$1.82/ccf	\$1.91/ccf	\$2.00/ccf	\$2.09/ccf
Pass-through WS Cumulative Unit Rate	\$0.00/ccf	\$0.18/ccf	\$0.33/ccf	\$0.42/ccf	\$0.51/ccf	\$0.60/ccf
Pass-through WS Incremental Rate		\$0.18/ccf	\$0.15/ccf	\$0.09/ccf	\$0.09/ccf	\$0.09/ccf
Effective Month		Oct	Feb	Feb	Feb	Feb
Effective Months		7 months ¹¹	3 months	3 months	3 months	3 months
Pass-through Water Supply Costs¹²		\$33,923	\$70,269	\$113,884	\$142,960	\$172,037

¹⁰ Includes fixed charges from MET/MWDOC and EOCWD

¹¹ New Rates are effective for usage in October and after, which will show in Nov bills and Revenues Collected in Dec → 2 months delayed. Total bills in Fiscal Year collected under new rates are 7 months for Oct 1st effective rates

¹² Example for FY 2018: 323,074 ccf / 12 months * (\$0.18/ccf*9 months + \$0.33/ccf *3 months) = \$70,269

4.1.2.2 Water O&M Expenses

The District’s FY 2016 and FY 2017 budget values and inflation factors from Table 3-1 were assigned to each line item to determine future O&M costs for the Retail Zone. RFC worked closely with District staff to identify any non-recurring costs and other anticipated expenses for the Study period. In addition, RFC recommends that the District initiate pass through costs to its Retail customers to recover the increases in water supply costs. Table 4-6 summarizes the budgeted and projected O&M expenses for the District’s Retail Zone during the Study period.

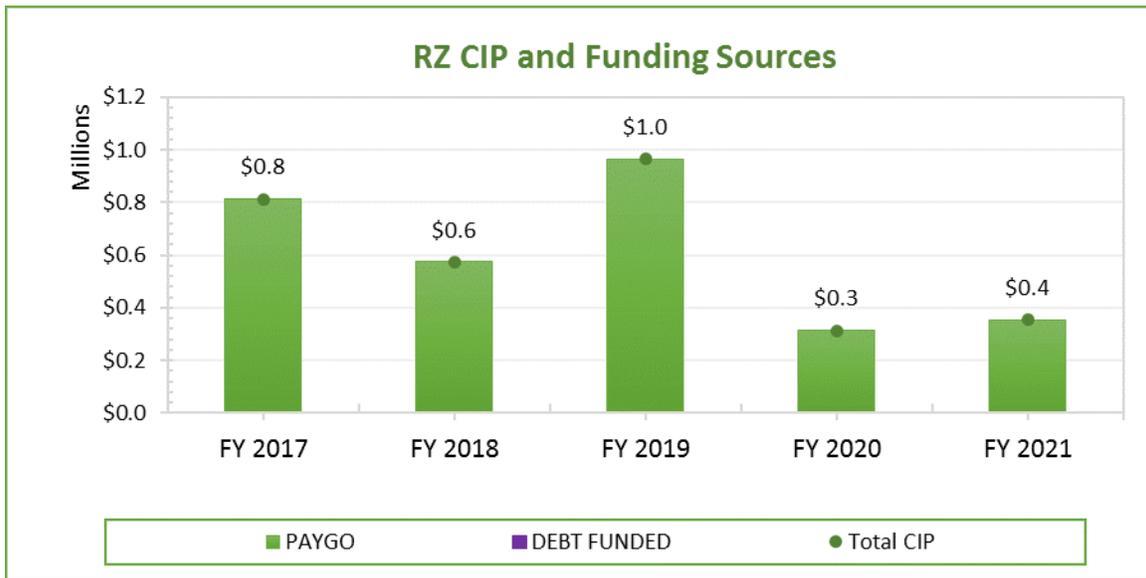
Table 4-6: Budgeted and Projected O&M Expenses

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
EXPENSES						
Operating Expenses	\$ 938,514	\$ 1,351,059	\$ 1,435,046	\$ 1,499,831	\$ 1,567,675	\$ 1,638,725
Water Purchases	\$ 172,647	\$ 229,157	\$ 280,718	\$ 294,754	\$ 309,491	\$ 324,966
OCWD- Replenish Assessment	\$ 138,324	\$ 225,022	\$ 219,397	\$ 230,366	\$ 241,885	\$ 253,979
MET-MWDOC readiness to serve charges	\$ 33,531	\$ 35,000	\$ 36,750	\$ 38,588	\$ 40,517	\$ 42,543
MET-MWDOC capacity charges	\$ 16,000	\$ 16,000	\$ 16,800	\$ 17,640	\$ 18,522	\$ 19,448
MWDOC Choice	\$ 2,530	\$ -	\$ -	\$ -	\$ -	\$ -
MWDOC Retail service connection	\$ 13,063	\$ 12,300	\$ 12,915	\$ 13,561	\$ 14,239	\$ 14,951
EOCWD WZ Readiness to Serve Charge	\$ 9,030	\$ 4,800	\$ 4,800	\$ 4,800	\$ 4,800	\$ 4,800
EOCWD WZ Reserve Fund Charge	\$ 17,458	\$ 14,450	\$ 14,450	\$ 14,450	\$ 14,450	\$ 14,450
Other Operating Expenses	\$ 182,104	\$ 363,000	\$ 375,320	\$ 388,081	\$ 401,300	\$ 414,995
Labor	\$ 242,448	\$ 281,700	\$ 295,785	\$ 310,574	\$ 326,103	\$ 342,408
Benefits	\$ 111,379	\$ 169,630	\$ 178,112	\$ 187,017	\$ 196,368	\$ 206,186
Non-Operating Expenses	\$ 202,984	\$ 307,045	\$ 314,084	\$ 321,335	\$ 328,803	\$ 336,495
Rate Stabilization Funding	\$ 75,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -
TOTAL EXPENSES	\$ 1,216,498	\$ 1,758,104	\$ 1,749,130	\$ 1,821,166	\$ 1,896,478	\$ 1,975,220

4.1.3 Projected Capital Improvement Projects

The District has budgeted approximately \$3M in capital expenditures during the Study period for the Retail Zone, as shown in Figure 4-1. (A full list of projects and costs can be found in the Appendix 8.3). The CIP costs for future years is determined by using the programmed/budgeted costs and inflating the value by the capital cost inflation factor shown in Table 3-1. The District plans to fund 100 percent of its planned CIP by Pay-as-you-go (PAYGO) from rates and reserves.

Figure 4-1: Projected Retail Zone Capital Expenditures



4.2 Financial Plan

4.2.1 Status Quo Financial Plan

Table 4-7 displays the pro forma of the District’s Retail Zone under current rates over the Study period. All projections shown in the table are based upon the District’s current rate structure and do not include any rate adjustments and pass-through water supply revenues. The pro-forma incorporates the data shown in Table 4-2 through Table 4-6 and Figure 4-1.

Under the “status-quo” scenario, revenues generated from current rates and other miscellaneous revenues are inadequate to sufficiently recover operating and capital expenses of the utility beginning in FY 2017, shown by negative net cash changes in Table 4-7. While the ending reserve balance is currently above target levels (see Table 3-3), it falls below the targets starting FY 2017 and continues to drop below \$1M starting FY 2019 under this scenario. In short, the District is unable to maintain fiscal sustainability under the current rates.

Table 4-7: Status Quo Retail Zone Financial Plan (No Revenue Adjustments)

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	
REVENUES							
Current Water sales	\$ 708,287	\$ 862,608	\$ 862,608	\$ 862,608	\$ 862,608	\$ 862,608	
Commodity Rates Rev Adjmts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Current Meter charges	\$ 359,269	\$ 360,107	\$ 360,107	\$ 360,107	\$ 360,107	\$ 360,107	
Meter Charges Rev Adjmts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Current Capital Fees	\$ 288,000	\$ 287,760	\$ 287,760	\$ 287,760	\$ 287,760	\$ 287,760	
Capital Fees Rev Adjmts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal Revenues from Rates	\$ 1,355,555	\$ 1,510,474					
Other Revenues	\$ 360,440	\$ 407,730	\$ 441,411	\$ 439,590	\$ 438,359	\$ 439,452	
Pass-through Water Supply Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Misc. Operating Revenues	\$ 14,703	\$ 5,600	\$ 12,726	\$ 12,853	\$ 12,982	\$ 13,112	
Interest Income	\$ 6,266	\$ 2,030	\$ 19,534	\$ 13,494	\$ 8,003	\$ 4,791	
Taxes	\$ 334,882	\$ 400,100	\$ 409,151	\$ 413,243	\$ 417,375	\$ 421,549	
Misc. Non-Operating Revenues	\$ 4,590	\$ -	\$ -	\$ -	\$ -	\$ -	
Funding from Rate Stabilization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Connection Fee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
TOTAL REVENUES	\$ 1,715,996	\$ 1,918,204	\$ 1,951,886	\$ 1,950,064	\$ 1,948,834	\$ 1,949,926	
EXPENSES							
Operating Expenses							
Water Supply Costs	\$ 402,584	\$ 536,729	\$ 585,829	\$ 614,158	\$ 643,904	\$ 675,136	
Labor & Benefits	\$ 353,827	\$ 451,330	\$ 473,897	\$ 497,591	\$ 522,471	\$ 548,594	
Other Operating Expenses	\$ 182,104	\$ 363,000	\$ 375,320	\$ 388,081	\$ 401,300	\$ 414,995	
Non-Operating Expenses	\$ 202,984	\$ 307,045	\$ 314,084	\$ 321,335	\$ 328,803	\$ 336,495	
Rate Stabilization Funding	\$ 75,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	
TOTAL EXPENSES	\$ 1,216,498	\$ 1,758,104	\$ 1,749,130	\$ 1,821,166	\$ 1,896,478	\$ 1,975,220	
NET OPERATING REVENUES	\$ 499,497	\$ 160,100	\$ 202,755	\$ 128,899	\$ 52,356	\$ (25,294)	
CAPITAL EXPENDITURES							
PAYGO	\$ 147,500	\$ 813,000	\$ 574,225	\$ 965,419	\$ 314,159	\$ 355,154	
Debt Funded	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
TRANSFERS TO OTHER FUNDS							
Transfers to Legal Reserves	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Transfers to/(from) Rate Stab	\$ (75,000)	\$ (100,000)	\$ -	\$ -	\$ -	\$ -	
NET CASH CHANGES	\$ 426,997	\$ (552,900)	\$ (371,470)	\$ (836,520)	\$ (261,803)	\$ (380,449)	
BEGINNING RZ RESERVE BALANCES	\$ 2,265,055	\$ 2,692,052	\$ 2,139,152	\$ 1,767,683	\$ 931,163	\$ 669,360	
ENDING BALANCES	\$ 2,692,052	\$ 2,139,152	\$ 1,767,683	\$ 931,163	\$ 669,360	\$ 288,911	
TARGET BALANCE	\$ 1,775,932	\$ 2,248,800	\$ 2,354,868	\$ 2,408,621	\$ 2,532,938	\$ 2,658,804	
Target RZ Operating Reserve	10 mos of Operating Budget	\$ 951,249	\$ 1,381,754	\$ 1,457,608	\$ 1,517,638	\$ 1,580,398	\$ 1,646,017
Target RZ Rate Stab Reserve	25% of Commodity Revenues	\$ 177,072	\$ 215,652	\$ 215,652	\$ 215,652	\$ 215,652	\$ 215,652
Target RZ Capital Reserve	1 year Capital Spending	\$ 647,611	\$ 651,395	\$ 681,608	\$ 675,331	\$ 736,888	\$ 797,135

4.2.2 Proposed Financial Plan

Assembly Bill (AB) 3030¹³ enables retail utilities to establish a provision for directly passing through the increased costs of imported water supply costs from its suppliers to its customers as part of a five year rate adoption. RFC recommends that the District establish the pass-through water supply cost provision as allowed by AB 3030 as part of the proposed rate adoption. This provision reduces risk to the District by providing an additional source of revenue independent of rate increases that may be difficult to approve or may be late in implementing. Actual water supply pass-through costs will be determined annually to align with actual water cost increases imposed on the District.

In addition to the pass-through water supply costs, the Retail Zone needs additional revenue adjustments as shown in Table 4-8 to meet the target reserve requirement and maintain financial sufficiency for its expenses and other funding obligations.

Table 4-8: Proposed Retail Zone Revenue Adjustments

Fiscal Year	Effective Date	Proposed Revenue Adjustments
2017	October 1, 2016	11%
2018	Feb 1, 2018	10%
2019	Feb 1, 2019	10%
2020	Feb 1, 2020	10%
2021	Feb 1, 2021	10%

Table 4-9 shows the pro-forma for the Retail Zones with revenues with proposed revenue adjustments shown above, as well as the pass-through water supply costs shown in other revenues. By implementing the proposed revenue adjustments and the pass-through water supply costs, the District will have a positive net cash position by FY 2020 and eventually meet its reserve targets by FY 2021. The District will be less dependent on reserves for its funding obligations, thus increasing financial sufficiency.

¹³ An act to add Section 53756 to the Government Code of the State of California

Table 4-9: Proposed Retail Zone Financial Plan

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	
REVENUES							
Current Water sales	\$ 708,287	\$ 862,608	\$ 862,608	\$ 862,608	\$ 862,608	\$ 862,608	
Commodity Rates Rev Adjmts	\$ -	\$ 55,351	\$ 118,824	\$ 216,967	\$ 324,925	\$ 443,678	
Current Meter charges	\$ 359,269	\$ 360,107	\$ 360,107	\$ 360,107	\$ 360,107	\$ 360,107	
Meter Charges Rev Adjmts	\$ -	\$ 23,107	\$ 49,605	\$ 90,576	\$ 135,644	\$ 185,219	
Current Capital Fees	\$ 288,000	\$ 287,760	\$ 287,760	\$ 287,760	\$ 287,760	\$ 287,760	
Capital Fees Rev Adjmts	\$ -	\$ 18,465	\$ 39,639	\$ 72,379	\$ 108,393	\$ 148,008	
Subtotal Revenues from Rates	\$ 1,355,555	\$ 1,607,396	\$ 1,718,542	\$ 1,890,396	\$ 2,079,436	\$ 2,287,380	
Other Revenues	\$ 360,440	\$ 441,653	\$ 514,393	\$ 560,095	\$ 594,066	\$ 632,709	
Pass-through Water Supply Costs	\$ -	\$ 33,923	\$ 70,269	\$ 113,884	\$ 142,960	\$ 172,037	
Misc. Operating Revenues	\$ 14,703	\$ 5,600	\$ 12,726	\$ 12,853	\$ 12,982	\$ 13,112	
Interest Income	\$ 6,266	\$ 2,030	\$ 22,248	\$ 20,115	\$ 20,749	\$ 26,012	
Taxes	\$ 334,882	\$ 400,100	\$ 409,151	\$ 413,243	\$ 417,375	\$ 421,549	
Misc. Non-Operating Revenues	\$ 4,590	\$ -	\$ -	\$ -	\$ -	\$ -	
Funding from Rate Stabilization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Connection Fee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
TOTAL REVENUES	\$ 1,715,996	\$ 2,049,049	\$ 2,232,936	\$ 2,450,491	\$ 2,673,502	\$ 2,920,089	
EXPENSES							
Operating Expenses							
Water Supply Costs	\$ 402,584	\$ 536,729	\$ 585,829	\$ 614,158	\$ 643,904	\$ 675,136	
Labor & Benefits	\$ 353,827	\$ 451,330	\$ 473,897	\$ 497,591	\$ 522,471	\$ 548,594	
Other Operating Expenses	\$ 182,104	\$ 363,000	\$ 375,320	\$ 388,081	\$ 401,300	\$ 414,995	
Non-Operating Expenses	\$ 202,984	\$ 307,045	\$ 314,084	\$ 321,335	\$ 328,803	\$ 336,495	
Rate Stabilization Funding	\$ 75,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	
TOTAL EXPENSES	\$ 1,216,498	\$ 1,758,104	\$ 1,749,130	\$ 1,821,166	\$ 1,896,478	\$ 1,975,220	
NET OPERATING REVENUES	\$ 499,497	\$ 290,945	\$ 483,806	\$ 629,326	\$ 777,025	\$ 944,869	
CAPITAL EXPENDITURES							
PAYGO	\$ 147,500	\$ 813,000	\$ 574,225	\$ 965,419	\$ 314,159	\$ 355,154	
Debt Funded	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
TRANSFERS TO OTHER FUNDS							
Transfers to Legal Reserves	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Transfers to/(from) Rate Stab	\$ (75,000)	\$ (100,000)	\$ -	\$ -	\$ -	\$ -	
NET CASH CHANGES	\$ 426,997	\$ (422,055)	\$ (90,419)	\$ (336,093)	\$ 462,866	\$ 589,714	
BEGINNING RZ RESERVE BALANCES	\$ 2,265,055	\$ 2,692,052	\$ 2,269,997	\$ 2,179,578	\$ 1,843,484	\$ 2,306,350	
ENDING BALANCES	\$ 2,692,052	\$ 2,269,997	\$ 2,179,578	\$ 1,843,484	\$ 2,306,350	\$ 2,896,064	
TARGET BALANCE	\$ 1,775,932	\$ 2,262,638	\$ 2,384,574	\$ 2,462,863	\$ 2,614,169	\$ 2,769,723	
Target RZ Operating Reserve	10 mos of Operating Budget	\$ 951,249	\$ 1,381,754	\$ 1,457,608	\$ 1,517,638	\$ 1,580,398	\$ 1,646,017
Target RZ Rate Stab Reserve	25% of Commodity Revenues	\$ 177,072	\$ 229,490	\$ 245,358	\$ 269,894	\$ 296,883	\$ 326,571
Target RZ Capital Reserve	1 year Capital Spending	\$ 647,611	\$ 651,395	\$ 681,608	\$ 675,331	\$ 736,888	\$ 797,135

The operating financial plan, which incorporates both the District's current and proposed revenues (as shown by the red and green lines, respectively), is shown graphically in Figure 4-2 for FY 2017 to FY 2021. The positive red bars indicate that the proposed revenues are sufficient to meet operating expenses with additional revenue to fund reserves and capital expenditures.

Figure 4-2: Retail Zone Operating Financial Plan

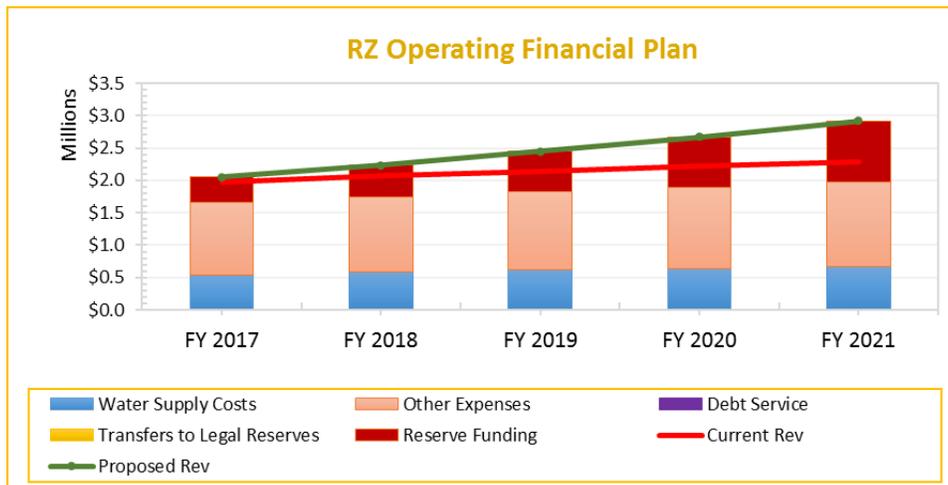
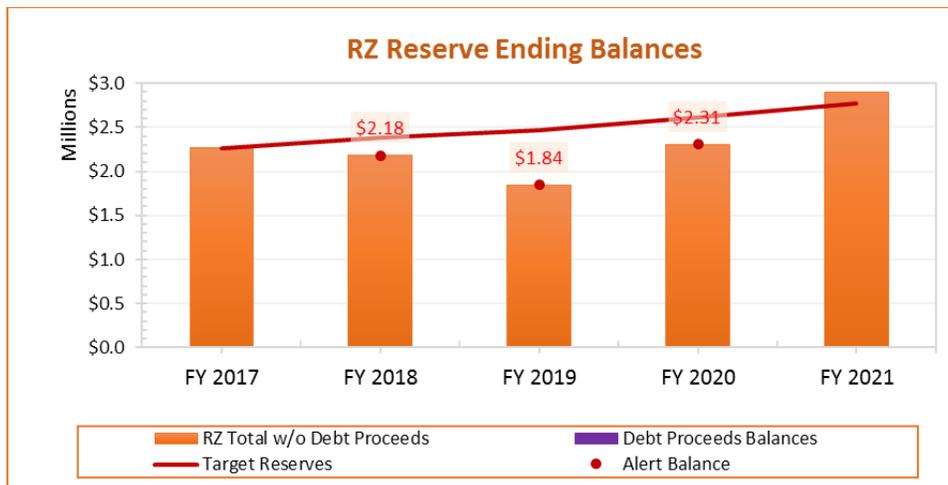


Figure 4-3 graphically depicts the District’s reserve ending balances with the proposed revenue adjustments as well as the pass-through water supply costs after funding projected operational and capital expenditures for FY 2017 to FY 2021.

Figure 4-3: Projected Retail Zone Reserve Ending Balances



5 Cost of Service and Proposed Water Rates

Proposition 218 requires a nexus between the rates charged and the costs of providing service. Based on the proposed financial plan, the cost of service analysis translates this financial requirement into actual rates. The first step in the cost of service analysis is to determine how much revenue is required to be collected from rates. The methodology used is based upon the premise that the utility must generate annual revenues adequate to meet its projected annual expenses. Revenues from sources other than water rates and charges (e.g. revenues from miscellaneous services) are deducted. The financial plan shows the required revenue adjustment for FY 2016 effective October 1, 2015, or 9 months of revenues under new rates, however, the calculated revenue requirement shown in Table 5-1 is annualized for FY 2017.

Table 5-1: Annualized Revenue Requirements for FY 2017 for Retail Zone

	REVENUE REQUIREMENTS	FY 2017	Notes
1	Operating Expenses, excluding Rate Stab Funding	\$1,658,104	Table 4-7
2	Rate Funded CIP	\$813,000	Table 4-7
3	Reserve Funding	-\$518,977	Table 4-7
4	SUBTOTAL REVENUE REQUIREMENTS	\$1,952,127	
	<i>Less Non-Operating Revenues</i>		
5	Pass-through Water Supply Costs	-\$33,923	Table 4-7
6	Misc. Operating Revenues	-\$5,600	Table 4-7
7	Interest Income	-\$2,030	Table 4-7
8	Taxes	-\$400,100	Table 4-7
9	Misc. Non-Operating Revenues	\$0	Table 4-7
10	Connection Fee	\$0	Table 4-7
11	SUBTOTAL NON-OPERATING REVENUES	-\$441,653	
12	NET REVENUE REQUIREMENTS FROM CURRENT RATES	\$1,510,474	Row 4+ Row 11
13	Proposed Revenue Adjustment for FY 2016	11%	Table 4-8
14	Annualized Revenue Adjustment	\$166,152	Row 12*Row13
15	ANNUALIZED REVENUE REQUIREMENTS FROM PROPOSED RATES	\$1,676,627	Row 12 + Row 14
16	Plus Pass-through Water Supply Costs	\$33,923	Table 4-7
17	NET ANNUALIZED REVENUE REQUIREMENTS FROM PROPOSED RATES	\$1,710,549	Row 15 + Row 16
18	Less Capital Fees after Revenue Adjustment	\$319,414	\$287,760*1.11
19	NET ANNUALIZED REVENUE REQUIREMENTS FROM PROPOSED OPERATING RATES (NO CAPITAL FEES)	\$1,391,136	Row 17 – Row 18

According to AWWA M1 Manual (Principles of Water Rates, Fees and Charges), the costs incurred in a water utility are based upon the specific service requirements or cost drivers imposed on the system by its customers. Each of the various water utility facilities are designed and sized to meet one or more of these cost drivers. The capital costs incurred in the construction/installation of these facilities, as well as the O&M expenses incurred in running the system, are linked to these service requirements. The principal service requirements that drive costs include the annual volume of water consumed, the peak water demands incurred, the number of customers in the system, and the number of fire services required to maintain adequate fire protection. Accordingly, these service requirements are the basis for the selection of the cost components used in the second step in the cost-of-service allocation process.

The AWWA recommends two methods for classifying costs among various customers: (1) the Base-Extra Capacity method in which costs are allocated to the different customer categories proportionate to their use of the water system; and (2) the Commodity-Demand method in which costs are proportionately allocated to each customer category based on their peak demand. Although the two methods vary in the way in which costs are allocated, both result in rates designed to recover the reasonable cost of service during periods of both average and peak demands. This Study uses the Base-Extra Capacity method, which is widely used in the water industry to serve retail customers.

The second step in the cost of service analysis is to functionalize the revenue requirements into cost components. This analysis employs the “Base-Extra Capacity” method, under which water utility costs of service are assigned to basic functional cost components including: water supply costs; base costs (fixed costs incurred to meet average demand); extra capacity or peaking costs (fixed water system costs to meet maximum day and maximum hour, or peaking, demand); and conservation, meter service and customer-service related costs as described in the M1 Manual. Base costs include fixed water supply costs and operations and maintenance costs, capital costs under average (base) demand conditions, a portion of operations and maintenance costs associated with storage, treatment, pumping and distributions facilities, and certain water capital cost investments. Extra capacity costs are costs associated with meeting water demands that exceed average (base) levels of use by system customers. These costs are incurred because of water use variations and peak demands of customers. Both base and peaking costs are considered fixed costs along with billing and customer service costs, fire protection, and meter service costs. Customer costs are costs associated with serving customers, such as meter reading, billing, customer service, etc.

Table 5-2 summarizes the peaking characteristics of the District’s water system estimated by the District Staff. The Average Daily Flow is the volume of water delivered to the system over the course of a year divided by 365 days. The Peak Day Demand is the largest volume of water delivered to the system in a single day. Similarly, the Peak Hour Demand is the maximum volume of water delivered to the system in a single hour. The Max Day peaking factor, which is the ratio of Peak Day Demand over Average Daily Flow, is 1.8 and the Max Hour peaking factor, or Peak Hour Demand over Average Daily Flow, is 3.00. These ratios are used to determine the appropriate percentage allocation of total O&M and capital costs towards peaking, as shown in the Appendix 8.5.

Table 5-2: Water System Peaking Factors

Peaking Factors	
Base	1.00
Max Day	1.80
Max Hour	3.00

The revenue to be recovered from rates, shown in Table 5-1, is allocated according to the categories listed below in Table 5-3 (see Appendices 8.4 and 8.5 for details). The Capital Fees recover a portion of the District’s fixed system costs, such as meters and customer service, base and peaking costs. 100 percent of the water supply costs are recovered by the Operating Rates via the Commodity Rate. The Operating Rates column is the difference between the annualized revenue requirements from proposed rates and capital fees for each allocation category. For further detail please see the Appendices 8.4 and 8.5, which shows the step-by-step allocations.

Table 5-3: Allocated Water System Costs to Rate Components

	FY 2017 (A)	Capital Fees ¹⁴ (B)	Operating Rates ¹⁵ (C = A – B)
Water Supply	\$536,729		\$536,729
Base	\$627,512	\$109,663	\$517,849
Peaking	\$420,562	\$208,502	\$212,510
Meters & Customer Service	125,745	\$1,699	\$124,046
Total	\$1,676,627	\$319,414¹⁶	\$1,391,136
Current Revenues	\$1,510,474	\$287,760	\$1,222,714
% Change	13.6%	11.0%	13.8%

¹⁴ Revenue Requirements (\$319,414) allocated to Cost Categories using Asset Allocation Factor, shown in Appendix 8.4

¹⁵ Operating Rates = Service Charges + Commodity Rates

¹⁶ Proposed Revenue Requirement = Current Revenues (\$287,760) * (1 + 11%) = \$319,414

According to the M1 Manual, the cost-of-service approach to setting water rates results in the proportionate distribution of costs to each customer or customer class based on the costs that each incurs. A dual set of fees—fixed and variable—is an extension of this cost causation theory. For example, a utility incurs some costs associated with serving customers irrespective of the amount or rate of water they use, such as billing and customer service costs. These types of costs are referred to as customer-related costs and typically are costs that would be recovered through a fixed charge. These costs are usually recovered on a per-customer basis or some other non-consumptive basis. Regardless of the level of a customer’s consumption, a customer will be charged this minimum amount in each bill.

Utilities invest in and continue to maintain facilities to provide capacity to meet all levels of desired consumption including the peak¹⁷ demand plus fire protection, and these costs must be recovered regardless of the amount of water used during a given period. Thus, peaking costs along with base costs and fixed water system costs to meet average demand are generally considered fixed water system costs. It is ideal that agencies recover 100 percent of the fixed costs through monthly fixed fees, however, it forgoes the affordability for essential use and heavily impacts efficient users. To balance between affordability and revenue stability, it is a common practice that a portion of the base costs and peaking costs are recovered in the monthly fixed charges (capital fees and service charges) along with the customer-related costs and meter-related costs.

The most common method for levying base fees is by meter size. Meter size is a proxy for the estimated demand that each customer places on the water system. The District’s base meter is most commonly a 5/8-inch meter. The ratio at which the meter charge increases is a function of the meter’s safe operating capacity. For example, based on the AWWA meter capacity ratios, a customer that has a 2-inch meter has the capacity equivalency of 8.00 5/8-inch meters. (A 2-inch meter has a safe operating capacity of 160 gallons per minute (gpm) compared to a 5/8-inch meter which has a safe operating capacity of 20 gpm as listed in Table B-1 in the M1 Manual).

The components of water system costs are recovered through either service charges or commodity rates, or a combination of both. As shown in Table 5-4, the entirety of the water supply costs is recovered from commodity rates. On the other hand, peaking costs and meter costs and customer service costs are entirely recovered from fixed service charges. Base costs are recovered from both service charges and commodity rates.

¹⁷ Peaking costs are the costs related to providing water during high-demand periods.

Table 5-4: Allocated of Revenue Requirements from Operating Rates to Rate Components

	FY 2017	Service Charges	Commodity Rates
Water Supply	\$536,729		\$536,729
Base	\$517,849	\$77,677	\$440,172
Peaking	\$212,510	\$212,510	
Meters & Customer Service	\$124,046	\$124,046	
Total	\$1,391,136	\$414,234	\$976,902
Current Revenues	\$1,222,714	\$360,107	\$862,608
% Change	13.8%	15.0%	13.9%

In order to create parity across the various meter sizes, each meter size is assigned a factor relative to a 5/8-inch meter, which has a value of 1. According to the AWWA M1 Manual, a particular meter size’s ratio of meter and capacity servicing costs relative to that of a 5/8-inch meter is its “Equivalent Meter Units” (EMU). The Meter & Capacity factor escalates as meter size increases because the District’s cost to service a meter increases with its size. To calculate the total EMUs per year for the District’s Retail Zone, the number of accounts per meter size is multiplied by 12 to represent the number of monthly bills per year. Then, the amount of monthly bills for each meter size is multiplied by its corresponding Meter Equivalent Factor based on the AWWA meter capacity ratios, which results in the total EMUs per year for each meter size. The sum of all EMUs per year for each meter size is 26,970, shown in Table 5-5, which represents the total EMUs per year for the entire Retail Zone.

Table 5-5: Equivalent Meter Units

Meter Sizes	Number of Accts (A)	Monthly Bills (B)	Meter Equivalent Factor (C)	EMUs per Yr (D= B*C)
5/8	9	108	1.00	108
3/4	864	10,368	1.50	15,552
1	291	3,492	2.50	8,730
1 1/2	28	336	5.00	1,680
2	5	60	8.00	480
3	2	24	17.50	420
Total	1,199	14,388 bills		26,970

Table 5-6 depicts the unit rates for each rate component. For the Capital Fees, the revenue requirements (calculated in Table 5-3) are divided by the total number of monthly bills per year for the entire system to result in a unit rate of \$22.20 per monthly bill. For the Service Charges, the revenue requirements (Table 5-4) are divided by the total EMUs per year for the system (Table 5-5) to result in a unit rate of \$15.36 per EMU. Finally, the Commodity Rate is calculated by dividing the revenue

requirements (Table 5-4) by the total usage per year in ccf (Table 4-5) to determine the rate of \$3.04 per ccf.

Table 5-6: Unit Rates by Rate Components

	Capital Fees	Service Charges	Commodity Rates	Delivery Rate	Water Supply Rate
Revenue Requirements¹⁸	\$319,414	\$414,234	\$976,902	\$440,172	\$536,729
Annual Units of Service	14,388 monthly bills	26,970 EMUs / year	323,074 ccf	323,074 ccf	323,074 ccf
Unit Rate	\$22.20	\$15.36	\$3.04 / ccf	\$1.37 / ccf	\$1.67 / ccf

From the calculations in Table 5-6, the proposed fixed charges are determined for each meter size. Because the unit rate of the Capital Fees is per monthly bill, all meter sizes are charged the same monthly amount. The proposed Capital Fee is \$22.20 per month. For the monthly Service Charge, the unit rate of \$15.36 per EMU is multiplied by the Meter Equivalent Factor (Table 5-5) to determine the proposed Service Charge for each meter size, as shown in Table 5-7. The District’s current Capital Fees and Service Charges for each meter size and the difference between the proposed rates and the current rates are also shown in Table 5-7 for reference.

Table 5-7: Proposed Retail Zone Monthly Fixed Charges: Capital Fees and Service Charges

Meter Sizes	Current		Proposed FY 2017 <i>Effective Oct 1, 2016</i>		\$ Change	
	Capital Fees	Service Charges	Capital Fees	Service Charges ¹⁹	Capital Fees	Service Charges
5/8	\$20.00	\$18.10	\$22.20	\$15.36	\$2.20	-\$2.74
3/4	\$20.00	\$20.50	\$22.20	\$23.04	\$2.20	\$2.54
1	\$20.00	\$34.25	\$22.20	\$38.40	\$2.20	\$4.15
1 1/2	\$20.00	\$52.00	\$22.20	\$76.80	\$2.20	\$24.80
2	\$20.00	\$90.75	\$22.20	\$122.88	\$2.20	\$32.13
3	\$20.00	\$128.75	\$22.20	\$268.80	\$2.20	\$140.05

The Uniform Commodity Rate has two components: the Delivery Rate and the Water Supply Rate. The Water Supply Rate is derived from the calculation in Table 4-5 and Table 5-6, and the Delivery Rate is calculated as shown Table 5-6. Table 5-8 shows the current and proposed Delivery Rate, Water Supply Rate, and Uniform Commodity Rate, as well as the change in dollar amount between the current and proposed rates.

¹⁸ From Table 5-4

¹⁹ Unit Rate \$15.36 * Meter Equivalent Factor shown in Table 5-5 for each meter size

Table 5-8: Proposed Retail Zone Commodity Rate

Commodity Rate	Current FY 2017	Proposed FY 2017 <i>(Effective Oct 1, 2016)</i>	\$ Change
Delivery Rate (1)	\$1.18	\$1.37	\$0.19
Water Supply Rate (2)	\$1.49	\$1.67	\$0.18
Uniform Commodity Rate (1+2)	\$2.67 / ccf	\$3.04 / ccf	\$0.37 /ccf

The proposed five-year Retail Zone water rates are shown in Table 5-9. The proposed revenue adjustments from Table 4-8 are used to determine the proposed Retail Zone water rates for the next five years applied to the proposed rates for FY 2017.

The monthly Capital Fee for each successive year is determined by increasing the current year’s rate by the successive year’s proposed revenue adjustment. For example, the proposed monthly Capital Fee for FY 2018 is calculated by increasing the prior year’s rate (\$22.20 per month) by the proposed revenue adjustment for FY 2018 (10%), resulting in a proposed rate of \$24.42 per month for FY 2018. The monthly Service Charge is calculated similarly, resulting in the proposed rates for five successive years per meter size.

The base Commodity Rates are calculated similarly to the monthly fixed charges. For FY 2018 and beyond, the estimated Cumulative Pass-through Water Supply Rates are included into the final proposed Commodity Rates to result in the Commodity Rates including Pass-through for five successive years. Actual water supply pass-through costs will be determined annually to align with actual water cost increases imposed on the District.

Table 5-9: Proposed 5-year Retail Zone Water Rates

	FY 2017	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Effective Month	Current	Oct 2016	Feb 2018	Feb 2019	Feb 2020	Feb 2021
Proposed Revenue Adjustments			10.0%	10.0%	10.0%	10.0%
Monthly Capital Fees						
5/8"	\$20.00	\$22.20	\$24.42	\$26.87	\$29.56	\$32.52
3/4"	\$20.00	\$22.20	\$24.42	\$26.87	\$29.56	\$32.52
1"	\$20.00	\$22.20	\$24.42	\$26.87	\$29.56	\$32.52
1-1/2"	\$20.00	\$22.20	\$24.42	\$26.87	\$29.56	\$32.52
2"	\$20.00	\$22.20	\$24.42	\$26.87	\$29.56	\$32.52
3"	\$20.00	\$22.20	\$24.42	\$26.87	\$29.56	\$32.52
Monthly Service Charges						
5/8"	\$18.10	\$15.36	\$16.90	\$18.59	\$20.45	\$22.50
3/4"	\$20.50	\$23.04	\$25.35	\$27.89	\$30.68	\$33.75
1"	\$34.25	\$38.40	\$42.24	\$46.47	\$51.12	\$56.24
1-1/2"	\$52.00	\$76.80	\$84.48	\$92.93	\$102.23	\$112.46
2"	\$90.75	\$122.88	\$135.17	\$148.69	\$163.56	\$179.92
3"	\$128.75	\$268.80	\$295.68	\$325.25	\$357.78	\$393.56
Commodity Rates						
Commodity Rates (\$/ccf)	\$2.67/ccf	\$3.04/ccf	\$3.35/ccf	\$3.69/ccf	\$4.06/ccf	\$4.47/ccf
+ Est. Cum. Pass-through WS Rates			\$0.33/ccf	\$0.42/ccf	\$0.51/ccf	\$0.60/ccf
Commodity Rates incl. Pass-through	\$2.67/ccf	\$3.04/ccf	\$3.68/ccf	\$4.11/ccf	\$4.57/ccf	\$5.07/ccf

6 Drought Rates

Due to the current state of California’s drought, it is necessary to analyze the financial impact of each stage of drought for the District’s Retail Zone. Based on District staff’s reduction estimations for each stage of drought, the projected demand and projected sales for the Retail Zone for Stages 1, 2, and 3 of the drought are depicted in Table 6-1.

Table 6-1: Drought Stages Definitions and Projected Sales

	Stage 1	Stage 2	Stage 3
Demand w/ loss	720 - 780 AF	660 – 720 AF	600 - 660 AF
Reduction (Non-Drought Sales ≥ 780AF)	1 - 8%	8 - 15%	15 - 23%
Projected Sales	685 AF	628 AF	571 AF
Projected Sales	298,222 ccf	273,370 ccf	248,518 ccf

Applying the demand estimates from Table 6-1, the following Proforma for each stage of drought is depicted in Table 6-2. The No Drought demand is 742 AF, derived earlier in Table 4-5. The demand estimates for Stages 1, 2, and 3 of drought are 720 AF, 660 AF, and 600 AF, respectively, as estimated in Table 6-1. The Proforma shows the differences between both revenues, expenses, and net operating revenues for each stage of drought at the proposed revenue adjustment percentages listed in Table 4-8 and Table 4-9.

Table 6-2: Proforma for FY 2017 under the Drought Stages

	No Drought	Stage 1	Stage 2	Stage 3
REVENUES				
Current Water sales	\$ 862,608	\$ 796,253	\$ 729,899	\$ 663,544
Commodity Rates Rev Adjmts	\$ 55,351	\$ 51,093	\$ 46,835	\$ 42,577
Current Meter charges	\$ 360,107	\$ 360,107	\$ 360,107	\$ 360,107
Meter Charges Rev Adjmts	\$ 23,107	\$ 23,107	\$ 23,107	\$ 23,107
Current Capital Fees	\$ 287,760	\$ 287,760	\$ 287,760	\$ 287,760
Capital Fees Rev Adjmts	\$ 18,465	\$ 18,465	\$ 18,465	\$ 18,465
Subtotal Revenues from Rates	\$ 1,607,396	\$ 1,536,784	\$ 1,466,172	\$ 1,395,560
Other Revenues	\$ 441,653	\$ 442,523	\$ 442,813	\$ 443,972
Drought Surcharge	\$ -	\$ -	\$ -	\$ -
Pass-through Water Supply Costs	\$ 33,923	\$ 34,793	\$ 35,083	\$ 36,242
Misc. Operating Revenues	\$ 5,600	\$ 5,600	\$ 5,600	\$ 5,600
Interest Income	\$ 2,030	\$ 2,030	\$ 2,030	\$ 2,030
Taxes	\$ 400,100	\$ 400,100	\$ 400,100	\$ 400,100
Misc. Non-Operating Revenues	\$ -	\$ -	\$ -	\$ -
Funding from Rate Stabilization	\$ -	\$ -	\$ -	\$ -
Connection Fee	\$ -	\$ -	\$ -	\$ -
TOTAL REVENUES	\$ 2,049,049	\$ 1,979,307	\$ 1,908,985	\$ 1,839,532
EXPENSES				
Operating Expenses				
Water Supply Costs	\$ 536,729	\$ 501,793	\$ 466,856	\$ 431,919
Labor & Benefits	\$ 451,330	\$ 451,330	\$ 451,330	\$ 451,330
Other Operating Expenses	\$ 363,000	\$ 363,000	\$ 363,000	\$ 363,000
Non-Operating Expenses	\$ 307,045	\$ 307,045	\$ 307,045	\$ 307,045
Rate Stabilization Funding	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
TOTAL EXPENSES	\$ 1,758,104	\$ 1,723,168	\$ 1,688,231	\$ 1,653,294
NET OPERATING REVENUES	\$ 290,945	\$ 256,139	\$ 220,754	\$ 186,238

The Proforma for No Drought, Stage 1, Stage 2, and Stage 3 of the drought serves as the basis for calculating the proposed drought rates for each stage, shown in Table 6-3. The Non-Drought Net Revenues in Row 1 is equal to the net operating revenues for No Drought in Table 6-2. The Drought Stage Net Revenues in Row 2 are the net operating revenues of each corresponding stage of drought. The Drought Surcharges Revenue Requirements is the difference between Row 1 and Row 2, which represents the additional revenue required at each stage of drought to maintain the District's financial sufficiency. It is important to note that the net operating revenues determined in Table 6-2 and in Rows 1 and 2 are proposed net operating revenues, which include the proposed revenue adjustments in Table 4-8.

To calculate the per unit drought surcharge, the Drought Surcharges Revenue Requirements figure (Row 3) is divided by the total Drought Sales (Row 4), calculated earlier in Table 6-1. The Uniform Commodity Drought Rates are the per unit increase for each stage of drought to maintain the Retail Zone Enterprises'

financial sufficiency. For example, the Commodity Rate for Stage 1 of drought is determined by adding the base Uniform Commodity Rate (\$3.04 per ccf) with the drought surcharge (\$0.12 per ccf) to define the final rate as \$3.16 per ccf.

Table 6-3: Proposed Drought Rates by Stages

		Stage 1	Stage 2	Stage 3
1	Non-Drought Net Revenues <i>(Table 6-2, No Drought)</i>	\$290.9K	\$290.9K	\$290.9K
2	Drought Stage Net Revenues <i>(Table 6-2)</i>	\$256.1K	\$220.8K	\$186.2K
3	Drought Surcharges Revenue Requirements <i>(Row 1 – Row 2)</i>	\$34.8K	\$70.2K	\$104.7K
4	Drought Sales <i>(Table 6-1)</i>	298,222 ccf	273,370 ccf	248,518 ccf
5	Uniform Commodity Drought Rates <i>(Row 3 / Row 4)</i>	\$0.12/ccf	\$0.26/ccf	\$0.43/ccf

7 Customer Impacts Analysis

While proposed rate adjustments are important to maintain the District’s financial sufficiency, it is equally important to understand and analyze the potential customer impacts associated with these proposed changes. The following four figures graphically depict the customer impacts associated with each stage of drought, using the current monthly bill amount as a baseline.

Figure 7-1 depicts the monetary impact to a typical single-family residential customer with a 3/4-inch meter under the proposed rate structure in Table 5-9 (for FY 2017 rates). For instance, if the customer has a monthly usage of 15 ccf, the impact to the monthly bill will be an additional \$10.29, or a 12.8% increase.

For each stage of drought, the proposed bill amount includes the drought rates determined in Table 6-3. For that same customer in the first stage of drought, the proposed monthly bill will be \$92.64. The impact on this customer from No Drought to Stage 1 of drought will be an additional \$1.80 from the proposed monthly bill shown in Figure 7-1, or a 2.0% increase in their monthly bill (Figure 7-2). Similarly, the same customer will see an increase of \$3.90 per monthly bill in Stage 2 of drought as compared to the proposed No Drought monthly bill, or a 4.3% increase (Figure 7-3). Finally, the same customer will see an increase of \$6.45 per monthly bill in Stage 3 of drought, or a 7.1% increase (Figure 7-4).

Figure 7-1: FY 2017 Sample SFR Monthly Bills (No Drought Rates)

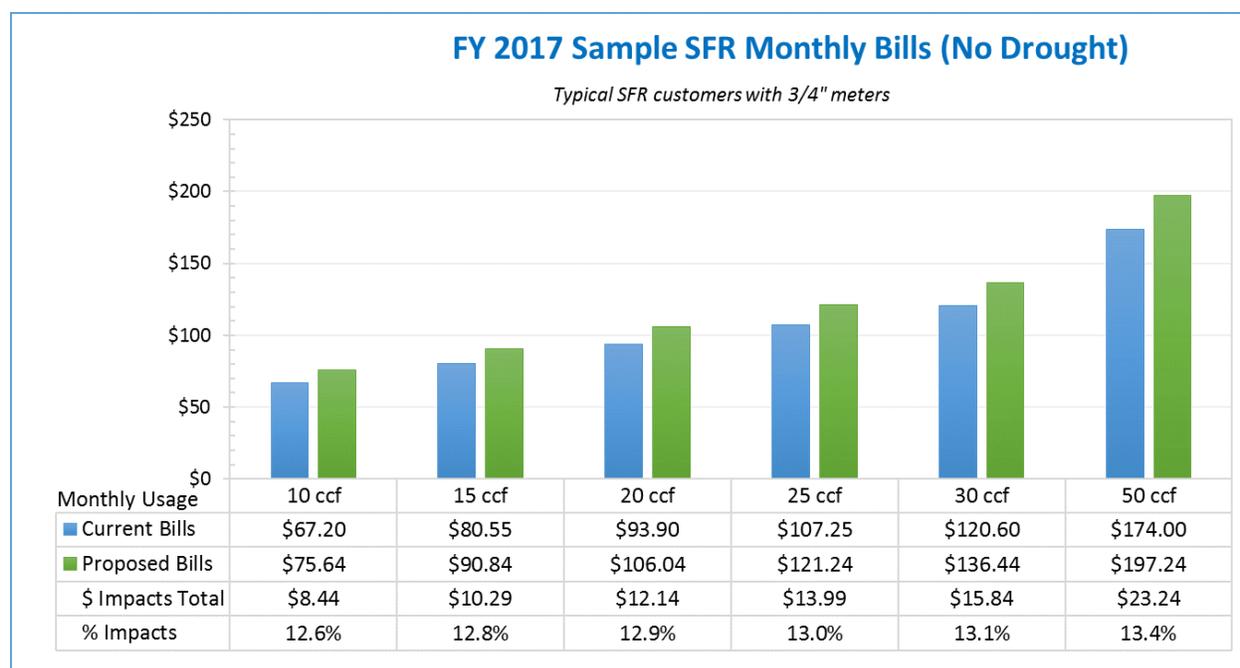


Figure 7-2: FY 2017 Sample SFR Monthly Bills (with Drought Rate for Stage 1)

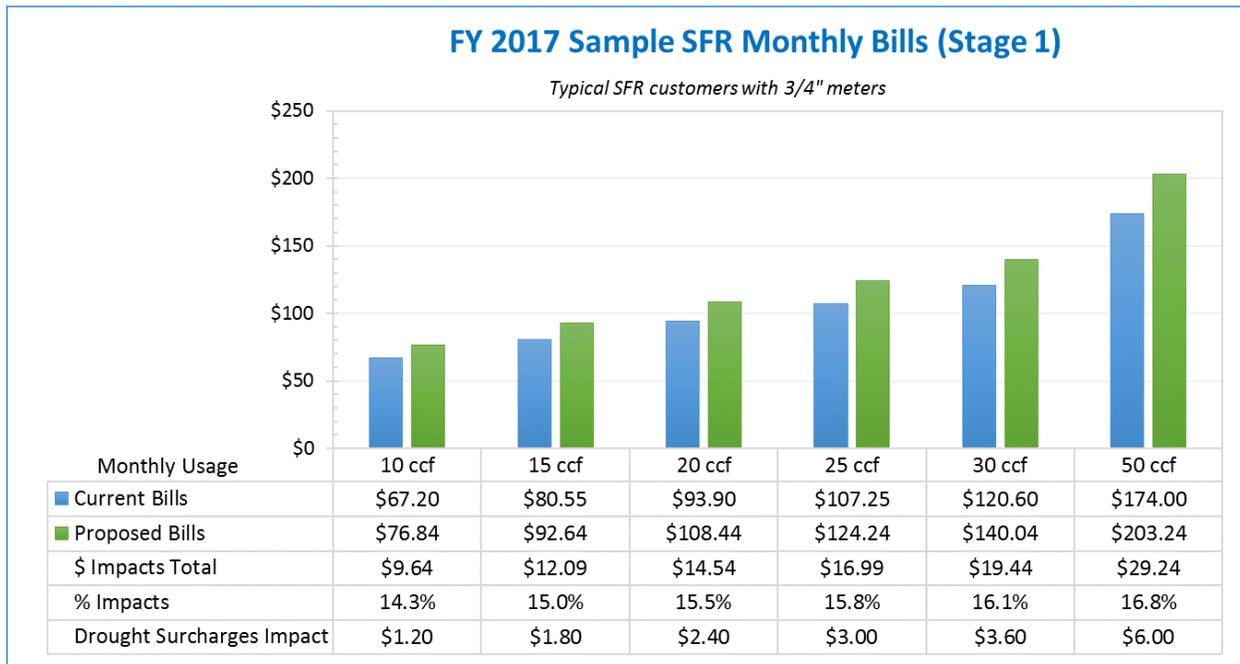


Figure 7-3: FY 2017 Sample SFR Monthly Bills (with Drought Rate for Stage 2)

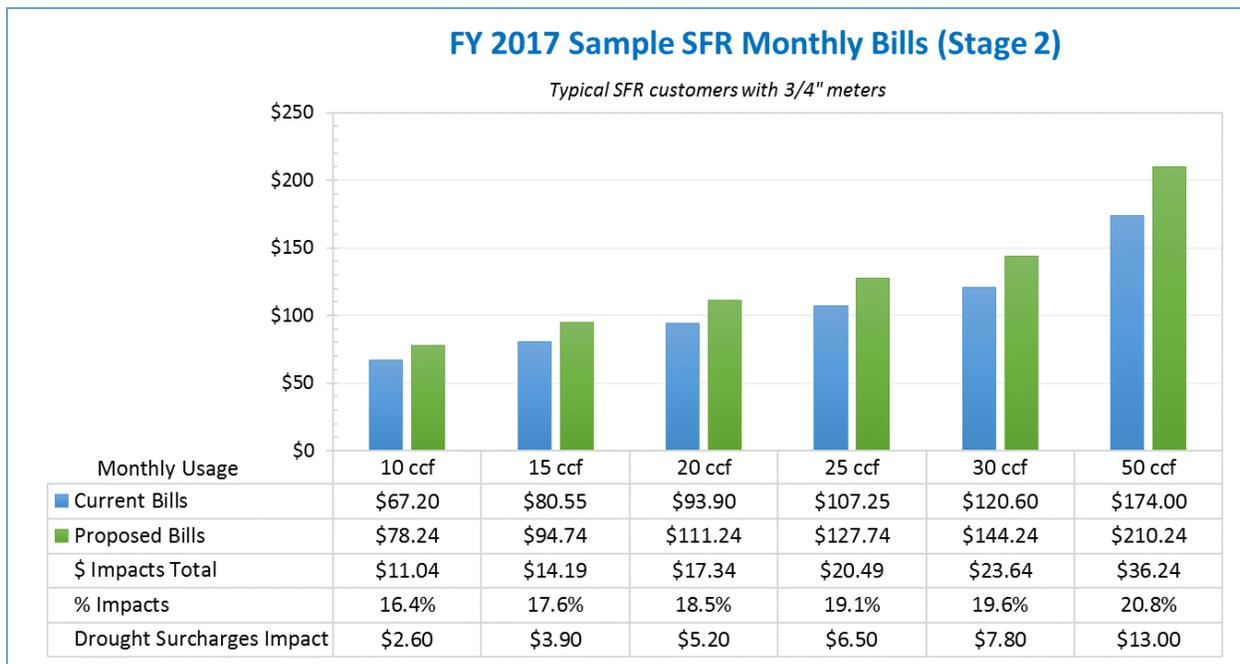
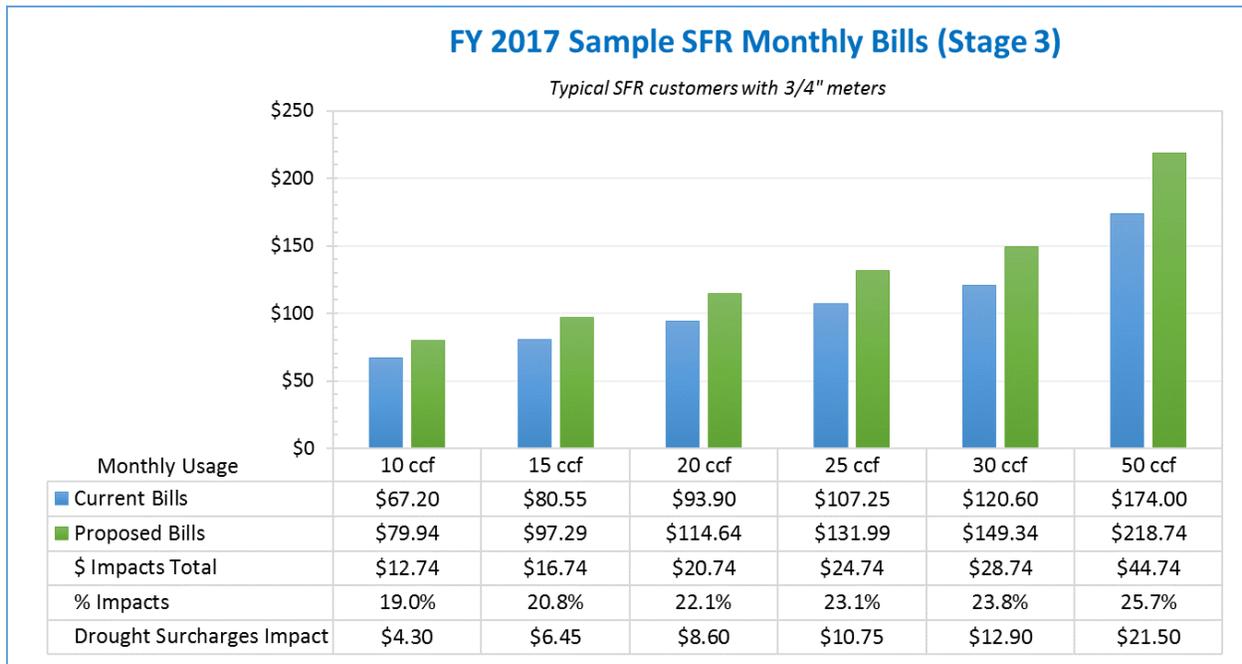


Figure 7-4: FY 2017 Sample SFR Monthly Bills (with Drought Rate for Stage 3)



8 Appendices

8.1 Current Adopted Reserve Policy

East Orange County Water District Reserve Funds Policy

PURPOSE

A key element of prudent financial planning is to ensure that sufficient funding is available for current operating, capital and debt service cost needs. An additional critical element of fiscal responsibility is to anticipate and prepare for future funding requirements as well as for unforeseen disasters and other unforeseen events. The East Orange County Water District (District) will at all times strive to have sufficient funding available to meet its operating, capital, and debt service cost obligations. Reserve funds will be accumulated and maintained in a manner, which allows the District to fund costs consistent with long range financial and capital planning, avoiding significant rate fluctuations due to changes in cash flow requirements. Reserve funds will also include an emergency reserve position that may be utilized to fund unexpected disasters or unanticipated major failures. The Board of Directors will annually review the level of reserve funds maintained, including as provided in Resolution No. 595 (restating policy concerning maintenance and use of emergency/contingency/reserve (“ECR”) fund and establishing replacements and capital improvements (“RCI”) fund – wholesale system) and Resolution No. 596 (designating capital projects fund as replacements and capital improvements (“RCI”) fund – retail zone, and restating policy concerning maintenance and use thereof) (the “Reserve Fund Resolutions”).

The District shall maintain reserve funds within each of the separate enterprise funds (including the Wholesale System and Retail Zone operating funds and RCI funds and the Wholesale ECR Fund maintained within such enterprise funds) and within such other enterprise funds as the District may establish and maintain from time to time (ref. Resolution No. 669). This policy establishes the level of reserves necessary for maintaining the District’s credit worthiness and for adequately providing for:

- Funding infrastructure replacement.
- Economic uncertainties and other financial hardships.
- Loss of significant revenue sources such as property tax receipts or connection fees.
- Local disasters or catastrophic events.
- Future debt or capital obligations.
- Cash flow requirements.
- Unfunded mandates including costly regulatory requirements.
- Projects or programs, including litigation, that the Board has determined to be of significant benefit to the majority of the customers of the District.

DEFINITIONS:

Restricted Reserves: Restrictions on their use are imposed by an outside source such as creditors, grantors, contributors, or laws or regulations of other governments.

Unrestricted Reserves: Have no externally imposed use restriction. The use of Unrestricted Reserve funds is at the discretion of the Board of Directors. There are two categories of Unrestricted Reserves - Designated and Undesignated. At the District, all Unrestricted Reserves are Designated Reserves.

Designated Reserves: Set-aside for a specific purpose, which is, determined by the Board of Directors. The Board of Directors also has the authority to redirect the use of these reserve funds as needs of the District change. These reserves have various names (e.g., Operating Reserve, Capital Reserve, etc.) to indicate the subgroup use for the specific reserve fund.

Capital Reserve Fund Charge (Wholesale): a fee or charge, which may from time to time be levied by the Board of Directors relative to wholesale water sales, connections, or otherwise in the wholesale system pursuant to Resolution No. 595, to provide funds necessary to contribute such amounts to the wholesale RCI, ECR or reserves within the wholesale enterprise funds as the Board may deem reasonable and proper.

Capital Projects Fee (Retail): The monthly fee, referred to in the schedule of rates as the “Monthly Fee for Existing Water System Capital Projects” or similar term, levied for the cost of repairing, rehabilitating, replacing and/or improving capital facilities in the Retail Zone water system.

POLICY

Operating Reserves

Operating reserves are used to fund ongoing cash flow needs of the agency. Due to the large variability in the month-to-month cash flow needs due to the seasonal demand for water, the minimum amount of operating reserves will equal ten (10) months of budgeted operating expenses. The maximum amount of operating reserves will equal twelve (12) months of operating expenses.

Capital Reserves

Capital reserves will be accumulated to fund infrastructure projects and will be an integral part of the District’s capital plan documented in its Five-Year Capital Improvement Program, Ten-Year Forecast and Reserve Fund Resolutions. A key objective for accumulating capital reserves is to minimize external borrowing and interest expense. The minimum amount of capital reserves will equal one year’s capital spending. The maximum amount of capital reserves will equal two times the accumulated depreciation balance.

It is the practice of the District, in regards to capital expenditures, to follow a “pay as you go (PAYGO)” philosophy. That is, capital expenditures are funded out of the current year collections of the Capital Reserve Fund Charge and/or Capital Projects Fee for all funds. To the extent that the current year’s Capital Replacement/Reserve Fees plus capital reserves in a fund are insufficient to cover the District’s Five-Year Capital Improvement Program, then the District will investigate alternative funding or rate adjustments.

The appropriate Capital Reserve Fund balances will be determined as follows:

1. Funds available from Capital Replacement Fees will be projected for five- and ten-year periods.
2. Capital expenditures will be projected for five- and ten-year periods.
3. The Capital Reserve will be the difference between the funds available (Item 1) and the funds required (Item 2), but no less than two times the accumulated depreciation balance.

Advances from any enterprise funds Capital Reserves may be made to meet expenses in another enterprise funds upon the determination of the Board of Directors of the need for the advance and satisfactory assurance of repayment, and upon such terms for repayment as the Board shall establish.

Self-Insurance and Litigation Reserves

The District is self-insured up to \$25,000 for each claim and maintains pooled property and liability insurance through the Association of California Water Agencies for claims up to \$2,000,000. Additionally, periodically the District may have extraordinary litigation expenses that exceed annual operating budget expenses. The minimum self-insurance and litigation reserve will equal \$500,000; the maximum self-insurance and litigation reserve will total \$5,000,000.

PROCEDURE FOR USING RESERVE FUNDS

Operating and Self-Insurance and Litigation Reserves

Operating and self-insurance reserves can be used at any time to meet cash flow requirements of District operations. Authority to use the funds will be consistent with the District's Purchasing Policy.

Capital Reserves

The Board of Directors will authorize use of capital reserves during the budget process. Capital reserves are also available for unplanned (unbudgeted) capital replacement. Authorization for the use of capital reserves for unplanned capital replacement will be consistent with the District's Purchasing Policy.

PROCEDURE FOR MONITORING RESERVE LEVELS

The Accountant shall perform a reserve analysis to be submitted to the Board of Directors upon the occurrence of the following events:

- Board of Directors' deliberation of the annual budget;
- Board of Directors' deliberation of a service charge rate increase;
- Upon renewal of the self-insurance excess insurance coverage; or,
- When a major change in conditions threatens the reserve levels established within this policy.

If the analysis indicates projected or actual reserve levels falling 10% below or above the levels outlined in this policy, at least one of the following actions shall be included with the analysis:

- An explanation of why the reserve levels are not at the targeted level, and/ or
- An identified course of action to bring reserve levels within the minimum and maximum levels prescribed.

8.2 Detailed O&M Budget

Table 8-1: Retail Operating Budget provided by District Staff

EAST ORANGE COUNTY WATER DISTRICT								
RETAIL ZONE OPERATING BUDGET								
FY 2015-16								
Account	Title	Detail	PROPOSED 2016-17 16-17	2015-16 Projected	ACTUAL JUL TO FEB 16	BUDGET 15-16 Proposed	2014-15 Projected 2014-15	
RECEIPTS								
4001-20	Water sales	6		708,287	472,191	1,020,115	900,000	
4002-20	Drought Surcharge			-	-	250,000		
4150-20	Meter charges	6		359,269	239,513	387,415	350,000	
4202-20	Late charges	6	11,000	10,446	6,964	11,000	11,400	
4110-20	Connection Fee	6		-	-	-	-	
4204-20	Returned check charges	6	1,000	480	320	1,000	1,000	
4205-20	Turn-off charges	6	600	600	400	600	100	
4206-20	Other charges	6		1,950	1,300	-	-	
4207-20	Uncollectible accounts	6	(2,000)	-	-	(2,000)	(2,114)	
4606-20	Interest earned-Money Market	7	30	54	36	30	30	
4603-20	Interest earned-LAIF	7	2,000	6,212	4,141	4,050	3,000	
4701-20	Taxes-secured	7	350,000	301,874	201,249	346,545	330,200	
4702-20	Taxes-unsecured	7	15,100	15,289	10,193	15,100	15,100	
4703-20	Taxes-supplemental roll	7	9,900	7,494	4,996	9,900	9,900	
4705-20	Taxes-prior years	7	3,900	3,663	2,442	3,900	3,900	
4706-20	Taxes-homeowners subvention	8	1,900	1,883	1,255	1,900	1,900	
4707-20	Taxes-public utility	8	4,300	4,679	3,119	4,300	4,300	
4708-20	Taxes- Tustin RDA Taxes		20,000	-	-	20,945	20,000	
	Inactive Taxes Accrued		(5,000)	-	-	(5,000)	-	
4709-20	Taxes-miscellaneous	8		-	-	-	-	
	Subtotal Property Taxes		400,100	334,882	223,254	397,590	385,300	
4690-20	Miscellaneous income	8	500	4,590	3,060	500	3,900	
4680-20	Gain or (loss) on sale of assets	9	-	-	-	-	-	
TOTAL RETAIL OPERATING FUND RECEIPTS			813,330	1,427,996	951,997	2,070,300	1,652,616	

Retail Zone Rate Study Report
East Orange County Water District



Table 8-1 (cont.)

EAST ORANGE COUNTY WATER DISTRICT RETAIL OPERATING FUND-BUDGET FOR 2015-16			PROPOSED 16-17	2015-16 Projected	ACTUAL JUL TO FEB 16	2015-16 BUDGET	2014-15 Projected
EXPENDITURES							
5051-20	Water purchases	9	251,603	172,647	115,098	251,600	1,000
5051-20	In-lieu water purchases	9	-	-	-	-	-
5052-20	In-Lieu credit on water purchases	9	-	-	-	-	-
5050-20	OCWD- Replenish Assessment	9	247,200	138,324	92,216	247,200	301,100
5058-20	MET-MWDOC readiness to serve charges	13	30,000	33,531	22,354	35,000	30,900
5057-20	MET-MWDOC capacity charges	13	15,000	16,000	10,667	16,000	11,600
5059-20	MWDOC Choice		3,000	2,530	1,687		
5054-20	MWDOC Retail service connection	9	13,000	13,063	8,709	12,300	12,700
5056-20	EOCWD WZ Readiness to Serve Charge		9,204	9,030	6,020	4,800	3,300
5055-20	EOCWD WZ Reserve Fund Charge		17,809	17,458	11,639	14,450	13,300
5143-20	Utilities-Stoller Boosters	9	65,000	31,933	21,288	60,000	55,700
5142-20	Utilities-Vista Panorama Reservoir	9	9,000	2,815	1,876	8,000	4,400
5141-20	Utilities-Wells East/West	9	68,500	36,550	24,367	67,000	63,500
5160-20	Small tools	11	4,000	3,743	2,495	3,600	3,500
5144-20	Gasoline, Oil & Diesel Fuel	11	6,850	3,884	2,590	6,700	5,800
5170-20	Regulatory Permits	11	7,500	4,105	2,737	6,600	6,500
5120-20	Water quality testing	12	20,500	7,404	4,936	20,000	9,500
5121-20	Chlorine generator / salt purchases	12	1,200	632	421	1,200	1,000
5104-20	West well maintenance	12	5,000	346	231	3,500	400
5105-20	East well maintenance	12	10,000	15,412	10,275	5,000	800
5106-20	Barrett Reservoir & Boosters maintenance	12	9,000	1,358	905	9,000	8,800
5107-20	Vista Panorama Booster maintenance	12	4,200	-	-	4,200	100
5108-20	Vista Panorama Reservoir maintenance	12	12,000	-	-	12,000	9,200
5109-20	Chlorine generator maintenance	12	6,000	3,598	2,399	6,000	5,600
5122-20	SCADA Replacements / Upgrades	13	12,000	-	-	12,000	100
5161-20	Operations Reporting Software	13	16,000	7,794	5,196	16,000	7,800
5111-20	Hydrants- repair and maintenance	12	16,100	10,704	7,136	16,100	5,600
5124-20	Meter purchase and testing	12	21,000	4,356	2,904	20,000	9,200
5112-20	PRV-repair and maintenance	13	2,000	-	-	2,000	400
5101-20	Mains-repair and maintenance	12	30,500	18,359	12,239	30,000	36,400

Retail Zone Rate Study Report

East Orange County Water District



Table 8-1 (cont.)

EAST ORANGE COUNTY WATER DISTRICT RETAIL OPERATING FUND-BUDGET FOR 2015-16				PROPOSED 16-17	2015-16 Projected	ACTUAL JUL TO FEB 16	2015-16 BUDGET	2014-15 Projected
EXPENDITURES								
5110-20	Service Connections-repair and maintenance	12		25,500	4,869	3,246	25,000	18,100
5102-20	Reservoirs-repair and maintenance	13		2,050	321	214	2,000	600
5103-20	Vaults-repair and maintenance			1,550	1,277	851	1,500	600
5131-20	Catholic Protection- monitoring, repairs & maintenance	13		5,100	-	-	5,000	-
5129-20	Meter testing	13		1,050	450	300	1,000	-
5155-20	Equipment rental	13		20,500	18,443	12,296	20,000	16,200
5150-20	Equipment maintenance	16		4,500	851	567	4,500	700
5151-20	Vehicle maintenance	17		3,550	1,635	1,090	3,500	3,500
5152-20	Maintenance-buildings and grounds	17		3,550	1,266	844	3,500	700
5401-20	Wages	11		245,000	242,448	161,632	281,700	260,200
5402-20	FICA and Medicare	13		18,000	19,540	13,027	21,600	22,000
5498-20	Retirement PERS 5420-20	14		45,000	-	-	46,300	35,400
5427-20	PERS Unfunded				6,293	4,195	-	-
5421-20	Pers Classic(ER-Contribution)				16,053	10,702	-	-
5422-20	Pers Classic (ER-paid member)				8,830	5,887	-	-
5424-20	PERS PEPRA (ER)				5,195	3,463	-	-
5403-20	Retirement - PERS (Employee Contribution)	14		(8,000)	-	-	(7,100)	(7,000)
5423-20	PERS Classic (Employee)				(3,527)	(2,351)		
5426-20	PERS PEPRA (Employee)				(2,869)	(1,913)		
5404-20	SUI and ETT	14		4,200	1,265	843	4,100	1,000
5410-20	Health & Accident Insurance	14		70,000	49,624	33,083	87,900	59,600
5411-20	Dental insurance	14		5,000	4,185	2,790	5,300	4,900
5412-20	Vision insurance	14		1,000	844	563	1,100	1,000
5413-20	Life insurance	14		500	352	234	430	500
5414-20	Worker's compensation insurance	14		10,200	5,594	3,730	10,000	6,100
5181-20	Uniforms	13		2,754	1,046	697	2,700	1,800
5207-20	District website	10		10,000	648	432	10,650	1,500
5204-20	McPherson fax	10		550	495	330	300	600
5205-20	McPherson internet	10		4,080	1,128	752	4,000	700
5206-20	McPherson office phones	10		3,550	3,694	2,463	3,525	2,700
5208-20	Answering service	10		255	190	127	250	200
5210-20	Control equipment communications	10		3,000	3,278	2,186	3,000	2,300
5209-20	Cellphones	10		1,750	1,619	1,079	1,700	1,500
5269-20	Underground Service Alert	10		500	509	339	500	300
5220-20	Training / Schools	11		6,500	454	303	6,500	3,000
5221-20	Conservation	11		22,400	35,690	23,793	20,000	2,100
5222-20	Conference and Meeting Expenses	15		10,000	4,019	2,679	9,500	4,900
5223-20	Mileage	11		1,000	652	435	900	800
5230-20	ACWA	15		3,825	765	510	3,750	2,400
5231-20	Orange County Water Works Association	15		75	45	30	75	25
5232-20	American Water Works Association	15		500	-	-	400	400
5233-20	Foothill Communities Association			20	-	-	20	20
5234-20	CSDA Membership			3,570	4,305	2,870	3,500	2,000
5235-20	ISDOC / Urban Water Institute	15		1,020	212	142	1,000	350
5299-20	Miscellaneous expense	15		510	202	134	500	160
5433-20	Director's fees-John Dulebohn	15		3,675	2,719	1,813	3,600	1,700
5434-20	Director's fees-Richard Bell	15		3,675	2,175	1,450	3,600	2,600
5435-20	Director's fees-Douglass Davert	15		-	-	-	-	-
5436-20	Director's fees-Sy Everett	15		3,675	1,181	788	3,600	1,100
5437-20	Director's fees-John Sears	15		3,675	263	175		
5224-20	Meeting Expenses	15		2,050	2,391	1,594	2,000	1,000
5240-20	Postage	15		5,100	5,048	3,365	5,000	4,900
5241-20	Office supplies / furnishings / small equipment	15		6,120	4,464	2,976	6,000	2,300
5250-20	Public Information & Legal Notices	15		20,400	892	594	20,000	1,000
5251-20	Copier contract	13		5,650	351	234	650	300
5272-20	Versaterm contract-route manager	13		5,100	825	550	5,000	800

Retail Zone Rate Study Report
East Orange County Water District



Table 8-1 (cont.)

EAST ORANGE COUNTY WATER DISTRICT RETAIL OPERATING FUND-BUDGET FOR 2015-16							
PENDITURES			PROPOSED 16-17	2015-16 Projected	ACTUAL JUL TO FEB 16	2015-16 BUDGET	2014-15 Projected
5270-20	Bank charges	15	8,000	8,152	5,435	7,900	7,700
5260-20	Outside services	11	11,200	15,407	10,271	10,000	7,400
5261-20	Audit	16	8,500	5,063	3,375	8,400	8,200
5262-20	Tax collection fees	16	7,200	819	546	7,000	5,100
5271-20	Computer billing	15	7,300	7,995	5,330	7,100	7,000
5263-20	Treasurer	16	5,000	-	-	5,000	1,800
5264-20	Accounting		26,000	23,259	15,506	25,500	25,000
5265-20	Legal	16	35,000	24,508	16,339	35,000	18,200
5266-20	Computer consulting	16	6,500	6,907	4,605	5,000	2,500
5267-20	Engineering	16	41,000	8,143	5,428	40,000	8,400
5268-20	LAFCO	16	5,100	3,536	2,357	5,000	3,600
5280-20	Insurance-auto and general liability	16	8,160	7,900	5,266	8,000	6,900
5281-20	Insurance-property	16	3,060	876	584	3,000	900
5282-20	Insurance-fidelity bond	16	408	194	129	400	200
5252-20	Office equipment maintenance	16	1,020	691	461	1,000	800
5203-20	Dumpster	17	510	352	235	500	300
5201-20	Electric - Office	17	4,284	3,326	2,217	4,200	4,200
5291-20	Security		1,530	-	-	1,500	300
5292-20	Election expense	17	8,160	391	261	8,000	8,700
5920-20	Transfers to capital projects funds	17	350,000	300,000	200,000	300,000	164,600
5940-20	Retail Operations Contingency Fund	17	100,000	65,000	43,333	65,000	75,000
5960-20	Funded to/by Reserve	17	50,000	50,000	33,333	50,000	50,000
5990-20	Market value adjustments to investments	17	-	-	-	-	-
5670-20	Prior year expense		-	-	-	-	-
TOTAL RETAIL OPERATING FUND EXPENDITURES			2,194,328	1,556,498	1,037,666	2,133,800	1,488,955

8.3 Detailed Capital Improvement Projects

Table 8-2: Detailed Capital Improvement Projects

Project # / Map ID	Descriptions	Wholesale Retail	FY 2015 Actual	FY 2016 Est. Actual	FY 2017 Budgeted	FY 2018 Projected	FY 2019 Projected	FY 2020 Projected	FY 2021 Projected	FY 2022 Projected	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	FY 2027 Projected
MULTI YEAR CIP															
70202E1	UWMP Update-Engineering (WS portion) (Completed)	Wholesale		\$ 30,000			\$ -	\$ -	\$ -	\$ -					
70102E1	Water Loss Analysis/Recovery	Wholesale	\$ -	\$ 20,000		\$ -	\$ -	\$ -	\$ -						
70103C1	Security Gate at 6 MG Site-Const (WZ Portion)(Carryover)	Wholesale				\$ -	\$ -	\$ -	\$ -						
70103L1	Security Gate at 6 MG Site-Labor (WZ Portion)(Carryover)	Wholesale				\$ -	\$ -	\$ -	\$ -						
70105C1	Security System at Peters Canyon Reservoir-Construction	Wholesale	\$ 10,000			\$ -	\$ -	\$ -	\$ -						
70105L1	Security System at Peters Canyon Reservoir-Labor	Wholesale	\$ 1,000			\$ -	\$ -	\$ -	\$ -						
70107E1	Backup generator at OC70 Pump Station-Engineering	Wholesale	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -						
70107C1	Backup generator at OC70 Pump Station-Const (Carryover)	Wholesale	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -						
70107L1	Backup generator at OC70 Pump Station-Labor	Wholesale	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -						
70108E1	Electrical modifications for Backup Generator-Engineering	Wholesale	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -						
70108C1	Electrical modifications for Backup Generator-Construction (Carryover)	Wholesale	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -						
70108L1	Electrical modifications for Backup Generator-Labor	Wholesale	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -						
	Metering Improvements for WZ Billing-Engineering	Wholesale	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -						
	Metering Improvements for WZ Billing-Construction	Wholesale	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -						
	Metering Improvements for WZ Billing-Labor	Wholesale	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -						
70110E1	Pipeline Inspections-Engineering (Carryover)	Wholesale	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -						
70110L1	Pipeline Inspections-Labor	Wholesale	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -						
70201E1	Master Plan/Condition Assessment	Wholesale	\$ 70,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
70201Q1	Programmatic CEQA - CIP	Wholesale		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
71102E1	6 MG Reservoir Roof Repairs-Engineering	Wholesale	\$ 125,000	\$ 100,000		\$ -	\$ -	\$ -	\$ -						
71102C1	6 MG Reservoir Roof Repairs-Construction	Wholesale	\$ 250,000	\$ 1,200,000		\$ -	\$ -	\$ -	\$ -						
71102L1	6 MG Reservoir Roof Repairs-Labor	Wholesale	\$ 20,000	\$ 25,000		\$ -	\$ -	\$ -	\$ -						
71104E1	6 MG Reservoir - Landscape/V-Ditch-Engineering	Wholesale	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -						
71104C1	6 MG Reservoir - Landscape/V-Ditch-Construction	Wholesale	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -						
71104L1	6 MG Reservoir - Landscape/V-Ditch-Labor	Wholesale	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -						
71106E1	Cathodic Protection -Pipelines - Engineering	Wholesale	\$ -	\$ 25,000		\$ -	\$ -	\$ -	\$ -						
71106C1	Cathodic Protection - Pipelines-Construction	Wholesale	\$ -	\$ 20,000		\$ -	\$ -	\$ -	\$ -						
71106L1	Cathodic Protection - Pipelines-Labor	Wholesale	\$ -	\$ 5,000		\$ -	\$ -	\$ -	\$ -						
71201C1	McPherson Office/Yard Improvements-Construction	Wholesale	\$ 2,000	\$ 6,000		\$ -	\$ -	\$ -	\$ -						
71201L1	McPherson Office/Yard Improvements-Labor	Wholesale	\$ 2,000	\$ 1,000		\$ -	\$ -	\$ -	\$ -						
71202E1	11.5 MG Reservoir Cathodic Protection System-Engineering	Wholesale	\$ -	\$ 25,000		\$ -	\$ -	\$ -	\$ -						
71202C1	11.5 MG Reservoir Cathodic Protection System-Construction	Wholesale	\$ -	\$ 30,000		\$ -	\$ -	\$ -	\$ -						
71202L1	11.5 MG Reservoir Cathodic Protection System-Labor	Wholesale	\$ -	\$ 2,000		\$ -	\$ -	\$ -	\$ -						
71203C1	Vehicle to supplement fleet	Wholesale	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -						
71204C1	New Truck for field operations	Wholesale	\$ -	\$ 20,000		\$ -	\$ -	\$ -	\$ -						
71205E1	OC-70 Magnetic Flow Meter Purchase and Installation-Engineering	Wholesale	\$ 9,000	\$ -		\$ -	\$ -	\$ -	\$ -						
71205C1	OC-70 Magnetic Flow Meter Purchase and Installation-Construction	Wholesale	\$ 20,000	\$ -		\$ -	\$ -	\$ -	\$ -						
71205L1	OC-70 Magnetic Flow Meter Purchase and Installation-Labor	Wholesale	\$ 5,000	\$ -		\$ -	\$ -	\$ -	\$ -						

Retail Zone Rate Study Report

East Orange County Water District



Table 8-2 (cont.)

Project # / Map ID	Descriptions	Wholesale Retail	FY 2015 Actual	FY 2016 Est. Actual	FY 2017 Budgeted	FY 2018 Projected	FY 2019 Projected	FY 2020 Projected	FY 2021 Projected	FY 2022 Projected	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	FY 2027 Projected
MULTI YEAR CIP															
71206E1	6 MG Reservoir Leak Detection System-Engineering	Wholesale		\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -						
71206C1	6 MG Reservoir Leak Detection System - Construction	Wholesale		\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -						
71206L1	6 MG Reservoir Leak Detection System - Labor	Wholesale		\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ -						
72101Q1	6 MG Treatment Plant Feasibility Study-Engineering	Wholesale		\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ -						
72101Q1	6 MG Treatment Plant CEQA	Wholesale		\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ -						
72101E1	6 MG Treatment Plant - Preliminary Design	Wholesale		\$ 300,000	\$ -				\$ -						
72101C1	6 MG Treatment Plant - Construction	Wholesale		\$ -	\$ -				\$ -						
72101L1	6 MG Treatment Plant -Labor	Wholesale		\$ 2,500	\$ 5,000	\$ 75,000	\$ -	\$ -	\$ -						
72102E1	Security -Andres Reservoir-Engineering	Wholesale		\$ 5,000	\$ -	\$ 5,000	\$ -	\$ -	\$ -						
72102C1	Security - Andres Reservoir-Construction	Wholesale		\$ 9,000	\$ -	\$ 9,000	\$ -	\$ -	\$ -						
72102L1	Security -Andres Reservoir-Labor	Wholesale		\$ 1,000	\$ -	\$ 1,000	\$ -	\$ -	\$ -						
72103E1	Valve Replacements (12" - 27")-Engineering	Wholesale		\$ -	\$ 5,000	\$ -	\$ -	\$ -	\$ -						
72103C1	Valve Replacements (12" - 27")-Construction	Wholesale		\$ -	\$ 12,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000						
72103L1	Valve Replacements (12" - 27")-Labor	Wholesale		\$ -	\$ 6,000	\$ -	\$ -	\$ -	\$ -						
72201C1	Replace backhoe	Wholesale		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
72104E1	Newport Reservoir Mixing System - Engineering	Wholesale		\$ -	\$ 5,000	\$ 5,000	\$ -	\$ -	\$ -						
72104C1	Newport Reservoir Mixing System - Construction	Wholesale		\$ -	\$ 25,000	\$ 25,000	\$ -	\$ -	\$ -						
72104L1	Newport Reservoir Mixing System - Labor	Wholesale		\$ -	\$ 1,000	\$ 1,000	\$ -	\$ -	\$ -						
72105E1	6 MGReservoir Mixing System - Engineering	Wholesale		\$ -	\$ -	\$ 2,500	\$ -	\$ -	\$ -						
72105C1	6 MGReservoir Mixing System - Construction	Wholesale		\$ -	\$ -	\$ 12,500	\$ -	\$ -	\$ -						
72105L1	6 MG Reservoir Mixing System - Labor	Wholesale		\$ -	\$ -	\$ 500	\$ -	\$ -	\$ -						
70109E1	Isolation valves - 11.5 & 1 MG Reservoirs - Engineering	Wholesale		\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ -						
70109C1	Isolation Valves - 11.5 & 1 MG - Construction	Wholesale		\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ -						
70109L1	Isolation Valves - 11.5 & 1 MG - Labor	Wholesale		\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ -						
72018C1	OC 33 Reconnection - Engineering	Wholesale		\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -						
7204011	New Project- Construction- OC33 Reconnection	Wholesale		\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -						
72018L1	OC33 Reconnection - Labor	Wholesale		\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -						
72060C1	Security-OC-70 turnout & pump station-Construction	Wholesale		\$ -	\$ -	\$ 12,000	\$ 12,000	\$ -	\$ -						
72010C1	Security OC-48	Wholesale		\$ -	\$ -	\$ 15,000	\$ -	\$ -	\$ -						
72010L1	Security-Fairhaven TM-	Wholesale		\$ -	\$ -	\$ 15,000	\$ -	\$ -	\$ -						
72010E1	Sedaru Improvements	Wholesale		\$ 10,000	\$ 10,000	\$ 10,000	\$ -	\$ -	\$ -						
72020C1	Pipeline Repair/Replacement Reserve-Engineering	Wholesale		\$ -	\$ -										
72030C1	Pipeline Repair/Replacement Reserve-Construction	Wholesale		\$ -	\$ -										
72030C1	Pipeline Repair/Replacement Reserve-Labor	Wholesale		\$ -	\$ -										
72040C1	Pipeline Accoustic Testing	Wholesale		\$ -	\$ -										
72041C1	Pipeline Other Testing	Wholesale		\$ -	\$ -										
72050C1	Turnout/Takeout Condition Assessment	Wholesale		\$ -	\$ -										
70201E2	Master Plan & Condition Assessment - Engineering	Retail		\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -						
70201C2	Master Plan & Condition Assessment - CEQA	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
70201L2	Master Plan & Condition Assessment - Labor	Retail		\$ 1,000	\$ -	\$ -	\$ -	\$ -	\$ -						
70102E2	Water Loss Recovery Program (WSO)	Retail		\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -						
71201C2	McPherson Office/Yard/House Improvements-Construction	Retail		\$ 2,000	\$ 3,000	\$ -	\$ -	\$ -	\$ -						
71201L2	McPherson Office/Yard/House Improvements-Labor	Retail		\$ 1,000	\$ -	\$ -	\$ -	\$ -	\$ -						
71202E2	Cathodic Protection-Engineering	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
71202C2	Cathodic Protection-Construction	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
71202L2	Cathodic Protection-Labor	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
71203C2	New Vehicle for Field Operations	Retail		\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -						
71204E2	Mobile Engine Driven Pump- Engineering	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
71204C2	Mobile Engine Driven Pump- Const.	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
71204L2	Mobile Engine Driven Pump- Labor	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
71204C2	New Vehicle for Field Operations	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
71503E2	VP Hydro Tank Seismic Upgrade -Engineering	Retail		\$ 15,000	\$ 10,000	\$ -	\$ -	\$ -	\$ -						
71503C2	VP Hydro Tank Seismic Upgrade -Construction	Retail		\$ 20,000	\$ 40,000	\$ -	\$ -	\$ -	\$ -						
71503L2	VP Hydro Tank Seismic Upgrade -Labor	Retail		\$ 2,000	\$ 2,000	\$ -	\$ -	\$ -	\$ -						

Retail Zone Rate Study Report

East Orange County Water District



Table 8-2 (cont.)

Project # / Map ID	Descriptions	Wholesale Retail	FY 2015 Actual	FY 2016 Est. Actual	FY 2017 Budgeted	FY 2018 Projected	FY 2019 Projected	FY 2020 Projected	FY 2021 Projected	FY 2022 Projected	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	FY 2027 Projected
MULTI YEAR CIP															
71504E2	Vista Panorama Reservoir Repair-Engineering	Retail			\$ 60,000	\$ -	\$ -	\$ -	\$ -						
71504C2	Vista Panorama Reservoir Repair-Construction	Retail			\$ 180,000	\$ -	\$ -	\$ -	\$ -						
71504L2	Vista Panorama Reservoir Repair-Labor	Retail		\$ 3,000	\$ 10,000	\$ -	\$ -	\$ -	\$ -						
71507E2	Valve Raising - Crawford Canyon-Engineering	Retail		\$ -	\$ -	\$ -	\$ 500	\$ -	\$ -						
71507C2	Valve Raising - Crawford Canyon-Construction	Retail		\$ -	\$ -	\$ -	\$ 17,000	\$ -	\$ -						
71507L2	Valve Raising - Crawford Canyon-Labor	Retail		\$ -	\$ -	\$ -	\$ 500	\$ -	\$ -						
71508C2	Valve Replacements - System-Construction	Retail		\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ -						
71508L2	Valve Replacements - System-Labor	Retail		\$ -	\$ 5,000	\$ -	\$ -	\$ -	\$ -						
71509E2	Allowance for system relocations-Engineering	Retail		\$ -	\$ -	\$ -	\$ 5,000	\$ -	\$ -						
71509C2	Allowance for system relocations-Construction	Retail		\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -						
71509L2	Allowance for system relocations-Labor	Retail		\$ -	\$ -	\$ -	\$ 5,000	\$ -	\$ -						
71510C2	Backup Generator for VPBooster Station-Construction	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
71510L2	Backup Generator for VPBooster Station-Labor	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
71600C2	Generator Transfer Switch - East/West Well	Retail		\$ -	\$ 15,000	\$ -	\$ -	\$ -	\$ -						
71601C2	Generator Transfer Switch - Barrett Booster Station	Retail		\$ -	\$ 15,000	\$ -	\$ -	\$ -	\$ -						
71511C2	6" Mag Meters @ Barrett PRVs-Construction	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
71511L2	6" Mag Meters @ Barrett PRVs-Labor	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
71512C2	Barrett Res. 150hp Booster Pump - Construction	Retail		\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -						
71512L2	Barrett Res. 150hp Booster - Labor	Retail		\$ 1,000	\$ -	\$ -	\$ -	\$ -	\$ -						
71520C2	Barrett Res. 75hp Booster Pump Replacement-Construction	Retail		\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -						
71520L2	Barrett Res. 75hp Booster Pump Replacement-Labor	Retail		\$ -	\$ 1,000	\$ -	\$ -	\$ -	\$ -						
72530E2	Stoller Lane Pipeline Replacement-Engineering	Retail		\$ -	\$ -	\$ -	\$ 20,000	\$ -	\$ -						
72530C2	Stoller Lane Pipeline Replacement-Construction	Retail		\$ -	\$ -	\$ -	\$ 105,000	\$ -	\$ -						
72530L2	Stoller Lane Pipeline Replacement-Labor	Retail		\$ -	\$ -	\$ -	\$ 5,000	\$ -	\$ -						
72531E2	Fowler Ave. Service Improvements-Engineering	Retail		\$ -	\$ -	\$ -	\$ 30,000	\$ -	\$ -						
72531C2	Fowler Ave. Service Improvements-Construction	Retail		\$ -	\$ -	\$ -	\$ 145,000	\$ -	\$ -						
72531L2	Fowler Ave. Service Improvements-Labor	Retail		\$ -	\$ -	\$ -	\$ 5,000	\$ -	\$ -						
72532E2	Crawford Canyon Service Line/ 12" Main Renewal-Engineering	Retail		\$ -	\$ -	\$ -	\$ 30,000	\$ -	\$ -						
72532C2	Crawford Canyon Service Lines/12" Mainline Renewal-Construction	Retail		\$ -	\$ -	\$ -	\$ 152,000	\$ -	\$ -						
72532L2	Crawford Canyon Service Line/12" Mainline Renewal-Labor	Retail		\$ -	\$ -	\$ -	\$ 10,000	\$ -	\$ -						
72501E2	Replacement Recommendations-Engineering	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
72501C2	Replacement Recommendations-Construction	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
72501L2	Replacement Recommendations-Labor	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
72503E2	Backup System PRV - Circula Panorama/ Orange Knoll PRV Replaceme	Retail		\$ 20,000	\$ 10,000	\$ -	\$ -	\$ -	\$ -						
72503C2	Backup System PRV - Circula Panorama/Orange Knoll PRV Replaceme	Retail		\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -						
72503L2	Backup System PRV - Circula Panorama/Orange Knoll PRV Replaceme	Retail		\$ 2,500	\$ 7,500	\$ -	\$ -	\$ -	\$ -						
7250500	New Well - Engineering	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
72505C2	New Well - Construction	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
72505L2	New Well - Labor	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
72506C2	Security Improvements - Reservoir Sites-Construction	Retail		\$ -	\$ -	\$ 10,000	\$ -	\$ -	\$ -						
72506L2	Security Improvements - Reservoir Sites-Labor	Retail		\$ -	\$ -	\$ 5,000	\$ -	\$ -	\$ -						
72507E2	Joint Well - Engineering	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
72507C2	Joint Well- Construction	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
72507L2	Joint Well - Labor	Retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
72508E2	Well Disinfection Conversion-Engineering	Retail		\$ -	\$ -	\$ -	\$ 10,000	\$ -	\$ -						
72508C2	Well Disinfection Conversion -Const/Equip	Retail		\$ -	\$ -	\$ -	\$ 45,000	\$ -	\$ -						
72508L2	Well Disinfection Conversion - Labor	Retail		\$ -	\$ -	\$ -	\$ 2,500	\$ -	\$ -						
72509C2	West Well Rehabilitation -Replacement-Construction	Retail		\$ -	\$ 80,000	\$ 400,000	\$ -	\$ -	\$ -						
72509L2	West Well Rehabilitation -Replacement-Labor	Retail		\$ -	\$ 2,000	\$ 10,000	\$ -	\$ -	\$ -						
72540E2	SCADA System Site Additions - VP Sidehill and RZ Fire Pump	Retail		\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -						
72010E1	Sedaru Improvements	Retail		\$ 10,000	\$ 10,000	\$ -	\$ -	\$ -	\$ -						

Retail Zone Rate Study Report

East Orange County Water District



Table 8-2 (cont.)

Project # / Map ID	Descriptions	Wholesale Retail	FY 2015 Actual	FY 2016 Est. Actual	FY 2017 Budgeted	FY 2018 Projected	FY 2019 Projected	FY 2020 Projected	FY 2021 Projected	FY 2022 Projected	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	FY 2027 Projected
MASTER PLAN CIP															
H-3	Replace 4" along Via Aventura due to hot soil	Retail			\$ -	\$ -	\$ -	\$ -		\$ 18,100	\$ 18,100	\$ 18,100	\$ 18,100	\$ 18,100	\$ 18,100
H-4	Replace 4" along XX Driveway due to hot soil	Retail			\$ -	\$ -	\$ -	\$ -		\$ 15,500	\$ 15,500	\$ 15,500	\$ 15,500	\$ 15,500	\$ 15,500
H-5	Replace undersized 4" along Kierys Place	Retail			\$ -	\$ -	\$ -	\$ -		\$ 23,300	\$ 23,300	\$ 23,300	\$ 23,300	\$ 23,300	\$ 23,300
H-6	Repair 8" along Fairhaven Extension	Retail			\$ -	\$ -	\$ -	\$ -		\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000
H-7	Replace 6" along Fairhaven Extension due to hot soil (included in CIP)	Retail							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H-8	Upsize 4" along Fairhaven Ext and Circula Panorama for future PRS	Retail			\$ -	\$ -	\$ -	\$ -		\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000
H-9	Replace undersized 4" pipeline along Pine Canyon Rd	Retail			\$ -	\$ -	\$ -	\$ -		\$ 18,100	\$ 18,100	\$ 18,100	\$ 18,100	\$ 18,100	\$ 18,100
H-14	Install future connection on E Los Arboles Ave	Retail								\$ 15,500	\$ 15,500	\$ 15,500	\$ 15,500	\$ 15,500	\$ 15,500
H-15	Replace undersized 4" pipeline along E Smiley Dr	Retail								\$ 7,800	\$ 7,800	\$ 7,800	\$ 7,800	\$ 7,800	\$ 7,800
FF-2	Fire flow improvement at the end of St. Marks Dr (upsized 4" to 8")	Retail								\$ 10,300	\$ 10,300	\$ 10,300	\$ 10,300	\$ 10,300	\$ 10,300
FF-3	Fire flow improvement along Kierys Place (upsized 4" to 8")	Retail								\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000
FF-4	Fire flow improvement along Springwood Dr and Villa Rose Dr (upsized 4" to 8")	Retail			\$ -	\$ -	\$ -	\$ -		\$ 25,700	\$ 25,700	\$ 25,700	\$ 25,700	\$ 25,700	\$ 25,700
FF-5	Fire flow improvement along Crawford Canyon Rd and Daniger Drive	Retail			\$ -	\$ -	\$ -	\$ -	\$ 181,000						
FF-6	Fire flow improvement from end of Willis Ln and El Roy Dr (upsized 4" to 8")	Retail			\$ -	\$ -	\$ -	\$ -		\$ 43,800	\$ 43,800	\$ 43,800	\$ 43,800	\$ 43,800	\$ 43,800
FF-7	Fire Flow Improvement: Relocate services along Fowler St and connect to existing main	Retail			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RZ-1	Upsize 6" to 8" along Fairhave Extension to resolves hydraulic bottling	Retail			\$ -	\$ -	\$ -	\$ -		\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000
RZ-2	Shift services from 3.5" to new 8" South of Stoller PS to Circular Panorama	Retail						\$ 130,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
WZ-1	Replace 12" along Newport Blvd with 16" (or 20"?)	Wholesale								\$ 668,000	\$ 668,000	\$ 668,000	\$ 668,000	\$ -	\$ -
WZ-2	Replace valve at Newport Intertie	Wholesale			\$ -	\$ -	\$ -	\$ -	\$ 50,000						
RR-2	Add/ Seismic Retrofit of Peter's Canyon (6 MG) Reservoir (with RR-1 connection)	Wholesale			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 82,900	\$ 82,900	\$ 82,900	\$ 82,900	\$ 82,900	\$ 82,900
RR-6	Acoustic Field Condition Assessments WZ (1 mi/year)	Wholesale			\$ 37,500	\$ 37,500	\$ 37,500	\$ 37,500	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
RR-7	Acoustic Field Condition Assessments RZ (1 mi/year)	Retail			\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000
RR-8	Other Field Condition Assessments WZ (method TBD)	Wholesale			\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 65,000
RR-9	Other Field Condition Assessments RZ (method TBD)	Retail			\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000
RR-10	Age Replacements (2" to 8" by 2020)	Retail							\$ 6,750	\$ 6,750	\$ 6,750	\$ 6,750	\$ -	\$ -	\$ -
RR-11	Age Replacements (4" to 8" by 2030)	Retail			\$ -	\$ -	\$ -	\$ -	\$ 7,800	\$ 7,800	\$ 7,800	\$ 7,800	\$ 7,800	\$ 7,800	\$ 7,800
RR-14	In-line Valve Replacement Program (500 valves in system)	Retail			\$ 62,500	\$ 62,500	\$ 62,500	\$ 62,500	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
RR-16	Replace East Well (excl. land acquisition)	Retail			\$ -	\$ -	\$ -	\$ -					\$ 265,200	\$ 265,200	\$ 265,200
RR-17	Install Corrosion Protection Systems at Barret PS	Retail					\$ 25,000	\$ 25,000		\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ -
RR-23	OC-70 PS - Corrosion improvements for instrumentation (To be funded by other projects)	Wholesale							\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ -
RR-24	All PS -Corrosion Mitigation Project	Retail							\$ -	\$ 31,250	\$ 31,250	\$ 31,250	\$ 31,250	\$ -	\$ -
RR-25	All Retail PRS - Pipe Support R&R	Retail							\$ -	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ -	\$ -
RR-26	All Wholesale PRS - Pipe Support R&R	Wholesale			\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RR-27	All PRS -Corrosion Mitigation Project	Retail							\$ -	\$ 37,500	\$ 37,500	\$ 37,500	\$ 37,500	\$ -	\$ -
RR-28	Orange Knoll PRS - Replace with above grade PRS	Wholesale					\$ 60,000		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RR-29	Ethelbee PRS - Flowmeter Rehab and Corrosion Repairs	Wholesale			\$ 16,250	\$ 65,000	\$ 16,250	\$ 16,250	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RR-30	Vista PRS - Vault Modification w/ventilation	Retail					\$ 65,000		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

8.4 Asset List and Allocation Factors

Table 8-3: Peaking Factors and Allocation Factors to Base, Max Day, Max Hour Cost Categories

Peaking Factors		Base	Max Day	Max Hour
Base	1.0	100%		
MDD / ADD	1.8	57%	43%	
PHD / ADD	3.0	33%	25%	42%

Table 8-4: Asset List Summary and Allocation Factors

Capital Asset Allocation	FY 2015	Water Supply	Base	Max Day	Max Hour	Billing & CS	Meters	General	Total
Total Asset Values as of 06/30/15	Original Cost (OC)								
Equipment Retail	\$390,226							100%	100%
Structures & Improvements	\$7,918,393		33%	25%	42%			0%	100%
Land & Easements	\$12,289							100%	100%
Total	\$8,320,909	\$0	\$2,639,464	\$1,979,598	\$3,299,331	\$0	\$0	\$402,515	\$8,320,909
Asset Allocation %		0%	32%	24%	40%	0%	0%	5%	
General Cost Allocation		0%	54%	16%	19%	0%	11%	-100%	
	\$0	\$0	\$217,314	\$64,055	\$76,891	\$0	\$44,255	-\$402,515	
	\$8,320,909	\$0	\$2,856,779	\$2,043,653	\$3,376,222	\$0	\$44,255	\$0	\$8,320,909
Asset Allocation after General Cost Reallocated		0.0%	34.3%	24.6%	40.6%	0.0%	0.5%	0%	

Retail Zone Rate Study Report

East Orange County Water District



Table 8-5: Water O&M Expenses Allocations to Water Cost Categories

O&M Expenses Allocation		FY 2017	Water Supply	Base	Max Day	Max Hour	Billing & CS	Meters	General	Total
OPERATING EXPENSES		\$1,351,059								
5051-20	Water purchases	\$229,157	100%						0%	100%
5051-20	In-lieu water purchases	\$0	100%						0%	100%
5052-20	In-Lieu credit on water purchases	\$0	100%						0%	100%
5050-20	OCWD- Replenish Assessment	\$225,022	100%						0%	100%
5058-20	MET-MWDOC readiness to serve charges	\$35,000	100%						0%	100%
5057-20	MET-MWDOC capacity charges	\$16,000	100%						0%	100%
5059-20	MWDOC Choice	\$0	100%						0%	100%
5054-20	MWDOC Retail service connection	\$12,300	100%						0%	100%
5056-20	EOCWD WZ Readiness to Serve Charge	\$4,800	100%						0%	100%
5055-20	EOCWD WZ Reserve Fund Charge	\$14,450	100%						0%	100%
5143-20	Utilities-Stoller Boosters	\$60,000		100%					0%	100%
5142-20	Utilities-Vista Panorama Reservoir	\$8,000		100%					0%	100%
5141-20	Utilities-Wells East/West	\$67,000		100%					0%	100%
5160-20	Small tools	\$3,600		100%					0%	100%
5144-20	Gasoline, Oil & Diesel Fuel	\$6,700		100%					0%	100%
5170-20	Regulatory Permits	\$6,600		100%					0%	100%
5120-20	Water quality testing	\$20,000		100%					0%	100%
5121-20	Chlorine generator / salt purchases	\$1,200		57%	43%				0%	100%
5104-20	West well maintenance	\$3,500		57%	43%				0%	100%
5105-20	East well maintenance	\$5,000		57%	43%				0%	100%
5106-20	Barrett Reservoir & Boosters maintenance	\$9,000		57%	43%				0%	100%
5107-20	Vista Panorama Booster maintenance	\$4,200		57%	43%				0%	100%
5108-20	Vista Panorama Reservoir maintenance	\$12,000		57%	43%				0%	100%
5109-20	Chlorine generator maintenance	\$6,000		100%					0%	100%
5122-20	SCADA Replacements / Upgrades	\$100		100%					0%	100%
5161-20	Operations Reporting Software	\$16,000						100%	0%	100%
5111-20	Hydrants- repair and maintenance	\$16,100						100%	0%	100%
5124-20	Meter purchase and testing	\$20,000		100%					0%	100%
5112-20	PRV-repair and maintenance	\$2,000		100%					0%	100%
5101-20	Mains-repair and maintenance	\$30,000						100%	0%	100%
5110-20	Service Connections-repair and maintenance	\$25,000		57%	43%				0%	100%
5102-20	Reservoirs-repair and maintenance	\$2,000		57%	43%				0%	100%
5103-20	Vaults-repair and maintenance	\$1,500		57%	43%				0%	100%
5131-20	Cathodic Protection- monitoring, repairs & maintena	\$5,000						100%	0%	100%
5129-20	Meter testing	\$1,000							100%	100%
5155-20	Equipment rental	\$20,000							100%	100%
5150-20	Equipment maintenance	\$4,500							100%	100%
5151-20	Vehicle maintenance	\$3,500							100%	100%
5152-20	Maintenance-buildings and grounds	\$3,500							100%	100%
5401-20	Wages	\$281,700							100%	100%
5402-20	FICA and Medicare	\$21,600							100%	100%
5498-20	Retirement PERS	\$46,300							100%	100%
5427-20	PERS Unfunded	\$0							100%	100%
5421-20	Pers Classic(ER-Contribution)	\$0							100%	100%
5422-20	Pers Classic (ER-paid member)	\$0							100%	100%
5424-20	PERS PEPRA (ER)	\$0							100%	100%
5403-20	Retirement - PERS (Employee Contribution)	-\$7,100							100%	100%
5423-20	PERS Classic (Employee)	\$0							100%	100%
5426-20	PERS PEPRA (Employee)	\$0							100%	100%
5404-20	SUI and ETT	\$4,100							100%	100%
5410-20	Health & Accident Insurance	\$87,900							100%	100%
5411-20	Dental insurance	\$5,300							100%	100%
5412-20	Vision insurance	\$1,100							100%	100%
5413-20	Life insurance	\$430							100%	100%
5414-20	Worker's compensation insurance	\$10,000							100%	100%

Retail Zone Rate Study Report

East Orange County Water District



Table 8-5 (cont.)

O&M Expenses Allocation		FY 2017	Water Supply	Base	Max Day	Max Hour	Billing & CS	Meters	General	Total
NON-OPERATING EXPENSES		\$307,045								
5181-20	Uniforms	\$2,700							100%	100%
5207-20	District website	\$10,650							100%	100%
5204-20	McPherson fax	\$300							100%	100%
5205-20	McPherson internet	\$4,000							100%	100%
5206-20	McPherson office phones	\$3,550							100%	100%
5208-20	Answering service	\$250							100%	100%
5210-20	Control equipment communications	\$3,000							100%	100%
5209-20	Cellphones	\$1,700							100%	100%
5269-20	Underground Service Alert	\$500							100%	100%
5220-20	Training / Schools	\$6,500							100%	100%
5221-20	Conservation	\$20,000							100%	100%
5222-20	Conference and Meeting Expenses	\$9,500							100%	100%
5223-20	Mileage	\$900							100%	100%
5230-20	ACWA	\$3,750							100%	100%
5231-20	Orange County Water Works Association	\$75							100%	100%
5232-20	American Water Works Association	\$400							100%	100%
5233-20	Foothill Communities Association	\$20							100%	100%
5234-20	CSDA Membership	\$3,500							100%	100%
5235-20	ISDOC / Urban Water Institute	\$1,000							100%	100%
5299-20	Miscellaneous expense	\$500							100%	100%
5430-20	Director's fees-Richard Barrett	\$0							100%	100%
5431-20	Director's fees-William Vanderwerff	\$6,500							100%	100%
Inactive	Director's fees-Douglas Chapman	\$0							100%	100%
5433-20	Director's fees-John Dulebohn	\$3,600							100%	100%
Inactive	Director's fees-Gary Veeh	\$0							100%	100%
5434-20	Director's fees-Richard Bell	\$3,600							100%	100%
5435-20	Director's fees-Douglass Davert	\$0							100%	100%
5436-20	Director's fees-Sy Everett	\$3,600							100%	100%
5437-20	Director's fees-John Sears	\$0							100%	100%
5224-20	Meeting Expenses	\$2,000							100%	100%
5240-20	Postage	\$5,000							100%	100%
5241-20	Office supplies / furnishings / small equipment	\$6,000							100%	100%
5250-20	Public Information & Legal Notices	\$20,000							100%	100%
5251-20	Copier contract	\$650							100%	100%
5272-20	Versaterm contract-route manager	\$5,000							100%	100%
5270-20	Bank charges	\$7,900							100%	100%
5260-20	Outside services	\$10,000							100%	100%
5261-20	Audit	\$8,400							100%	100%
5262-20	Tax collection fees	\$7,000							100%	100%
5271-20	Computer billing	\$7,100							100%	100%
5263-20	Treasurer	\$5,000							100%	100%
5264-20	Accounting	\$25,500							100%	100%
5265-20	Legal	\$35,000							100%	100%
5266-20	Computer consulting	\$5,000							100%	100%
5267-20	Engineering	\$40,000							100%	100%
5268-20	LAFCO	\$5,000							100%	100%
5280-20	Insurance-auto and general liability	\$8,000							100%	100%
5281-20	Insurance-property	\$3,000							100%	100%
5282-20	Insurance-fidelity bond	\$400							100%	100%
5252-20	Office equipment maintenance	\$1,000							100%	100%
5203-20	Dumpster	\$500							100%	100%
Inactive	The Gas Co-McPherson Road	\$0							100%	100%
5201-20	Electric - Office	\$0							100%	100%
5291-20	Security	\$1,500							100%	100%
5292-20	Election expense	\$8,000							100%	100%
5670-20	Prior year expense	\$0							100%	100%
Total		\$1,658,104	\$536,729	\$236,229	\$27,171	\$0	\$0	\$67,100	\$790,875	\$1,658,104
		TRUE								
Operating Expenses Allocation %			32%	14%	2%	0%	0%	4%	48%	

8.5 Water Cost Allocation Factors

Table 8-6: Water Revenue Requirements to Water Cost Categories

	FY 2017	Water Supply	Base	Max Day	Max Hour	Billing & CS	Meters	General	Total		
REVENUE REQUIREMENTS @ CURRENT RATES											
Operating Expenses	\$1,658,104	\$536,729	\$236,229	\$27,171	\$0	\$0	\$67,100	\$790,875	\$1,658,104		
Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Transfers to Legal Reserves	\$0							\$0	\$0		
Rate Funded CIP	\$813,000	\$0	\$257,891	\$193,418	\$322,363	\$0	\$0	\$39,328	\$813,000		
Reserve Funding	-\$518,977	\$0	-\$164,624	-\$123,468	-\$205,780	\$0	\$0	-\$25,105	-\$518,977		
SUBTOTAL REVENUE REQUIREMENTS	\$1,952,127	\$536,729	\$329,495	\$97,121	\$116,583	\$0	\$67,100	\$805,098	\$1,952,127		
Less Non-Operating Revenues											
Pass-through Water Supply Costs	-\$33,923	-\$33,923							-\$33,923		
Misc. Operating Revenues	-\$5,600							-\$5,600	-\$5,600		
Interest Income	-\$2,030							-\$2,030	-\$2,030		
Taxes	-\$400,100							-\$400,100	-\$400,100		
Misc. Non-Operating Revenues	\$0							\$0	\$0		
Connection Fee	\$0							\$0	\$0		
SUBTOTAL NON-OPERATING REVENUES	-\$441,653	-\$33,923	\$0	\$0	\$0	\$0	\$0	-\$407,730	-\$441,653		
NET REVENUE REQUIREMENTS	\$1,510,474	\$502,807	\$329,495	\$97,121	\$116,583	\$0	\$67,100	\$397,368	\$1,510,474		
			54%	16%	19%	0%	11%	-100%			
Reallocation of General Costs			\$214,535	\$63,236	\$75,908	\$0	\$43,689	-\$397,368	\$0		
NET ADJUSTED REV REQMT FROM CURRENT RATES	\$1,510,474	\$502,807	\$544,030	\$160,357	\$192,491	\$0	\$110,789	\$0	\$1,510,474		
			54%	16%	19%	0%	11%	0%			
Annualized Rev Adjustments	\$166,152	\$0	\$83,482	\$29,178	\$38,536	\$0	\$14,956	\$0	\$166,152		
		Current									
Capital Fees	11.0%	\$287,760	\$31,654	\$0	\$10,867	\$7,774	\$12,843	\$0	\$168	\$0	\$31,654
Meter Charges	11.0%	\$360,107	\$39,612	\$0	\$21,386	\$6,304	\$7,567	\$0	\$4,355	\$0	\$39,612
Commodity Rates	11.0%	\$862,608	\$94,887	\$0	\$51,229	\$15,100	\$18,126	\$0	\$10,432	\$0	\$94,887
NET ADJUSTED REV REQMT FROM PROPOSED RATES	\$1,676,627	\$502,807	\$627,512	\$189,535	\$231,027	\$0	\$125,745	\$0	\$1,676,627		
Less Capital Fees		-\$319,414	\$0	-\$109,663	-\$78,449	-\$129,603	\$0	-\$1,699	\$0	-\$319,414	
Plus Pass-through WS Rate		\$33,923	\$33,923							\$33,923	
REV REQMT FROM PROPOSED OPERATING RATES	\$1,391,136	\$536,729	\$517,850	\$111,086	\$101,425	\$0	\$124,046	\$0	\$1,391,136		