

I hereby certify that the following agenda was posted at least 24 hours prior to the time of the meeting so noticed below at 24251 Los Alisos Boulevard, Lake Forest, California.

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Robert R. Hill, Secretary  
of the El Toro Water District and  
of the Board of Directors thereof

## **A G E N D A**

### **EL TORO WATER DISTRICT SPECIAL BOARD BUDGET WORKSHOP**

**(Director William Kahn participating via teleconference  
from 23906 Ash Lane, Mission Viejo, CA 92691 (949) 633-6050)**

**April 19, 2018  
7:30 a.m.**

- 1. CALL MEETING TO ORDER – President Goldman**
- 2. PLEDGE OF ALLEGIANCE – President Goldman**
- 3. ORAL COMMENT AND PUBLIC COMMUNICATIONS**

Members of the public may address the Committee at this time or they may reserve this opportunity with regard to an item on the agenda, until the Committee discusses said item later in the meeting.

#### **ACTION ITEMS**

- 4. REVIEW MINUTES OF THE APRIL 12, 2018 BUDGET COMMITTEE MEETING #2**

The Committee will consider approving the April 12, 2018 Budget Committee meeting #2 minutes.

**Recommended Action:** The Board will consider approving the April 12, 2018 Budget Committee #2 meeting minutes.

## 5. EL TORO WATER DISTRICT DRAFT 2018/19 BUDGET, WATER, SEWER & RECYCLED WATER COST OF SERVICE (COS) AND PROPOSITION 218 NOTICE

Staff and the Committee will review and discuss the Draft 2018/19 Budget Assumptions and Associated Fiscal Implications, the Draft COS, the Draft Proposition 218 Notice and the Schedule to Distribute and Conduct a Public Hearing on same.

**Recommended Action:** Subject to Board input, Staff and the Committee recommend that the Board of Directors approve the El Toro Water District:

- a. 2018/19 Operating Budget
- b. 2018/19 Water, Recycled Water, and Wastewater Rate Study dated April 10, 2018
- c. 2018/19 Proposition 218 Notice and authorize distribution of same in accordance with applicable public noticing requirements
- d. Authorize noticing of a Rate Public Hearing to be scheduled for June 28, 2018

## ADJOURNMENT

*The agenda material for this meeting is available to the public at the District's Administrative Office, which is located at 24251 Los Alisos Blvd., Lake Forest, Ca. 92630. If any additional material related to an open session agenda item is distributed to all or a majority of the board of directors after this agenda is posted, such material will be made available for immediate public inspection at the same location.*

### Request for Disability-Related Modifications or Accommodations

*If you require any disability-related accommodation, including auxiliary aids or services, in order to participate in this public meeting, please telephone the District's Recording Secretary, Polly Welsch at (949) 837-7050, extension 225 at least forty-eight (48) hours prior to said meeting. If you prefer, your request may be submitted in writing to El Toro Water District, P.O. Box 4000, Laguna Hills, California 92654, Attention: Polly Welsch*

# MEMO

**TO:** BOARD OF DIRECTORS

**FROM:** *STAFF & BOARD BUDGET COMMITTEE*

**DATE:** April 19, 2018

**SUBJECT:** 2018/19 FINAL BUDGET, WATER, SEWER AND RECYCLED WATER COST OF SERVICE STUDY FINAL REPORT, FINAL PROPOSITION 218 NOTICE

The 2018/19 Budget (Revenue, Expense and Rate Schedule) proposal is the result of:

- Considerable departmental and management review and scrutiny of current and projected expenses and revenue requirements, the 2018/19 Budget and Cost of Service Study Report (COS); and
- Two in depth Budget Meetings with the Board Designated Budget Committee

Expenses and revenues are based upon historical budget to projected actual experience, projected resource/asset investment requirements and certain underlying assumptions regarding internal and external factors. Internal factors include our operating strategy, implementation/operation of existing and new resources and planned capital replacement and refurbishment projects/programs. External factors include our best estimate of expenses that are generally out of our control, i.e. purchased water, energy, insurance, interest rates, SOCWA, regulatory mandates/fees and inflation.

The Operating Budget and Ten-Year Cash Flow incorporates the spirit of the Board established revenue, rate and reserve Financial Objectives and Strategic Financial Planning Principles.

## **Financial Objectives:**

- Establishing a revenue cash flow plan sufficient to fund the Operating Budget inclusive of the Capital R&R Program
- Establishing a reliable, stable and predictable rate adjustment strategy that minimizes impacts to customers
- Maintaining minimum reserve levels sufficient to fund legally restricted, board restricted and board designated requirements
- Employing cost containment and reduction strategies and practices as appropriate to cost effectively maintain reliable service levels

## **Strategic Financial Planning Principles:**

- Annual MWDOC/Met pass-thru as necessary
- Annual Cost of Service evaluation and adjustments as necessary
- An overall annual revenue increase for the three enterprises (Water, Sewer and Recycled Water) capped at 5%
- Individual enterprise rate or charge increases capped at 10%
- Maintenance of a minimum Board Designated Reserve level of \$8.5 million
- Prudent use of reserves to minimize customer impact while maintaining required minimum debt coverage ratios

## **Customer Sensitivity Analysis:**

As part of the annual Budget process each year staff performs a sensitivity analysis to quantify the implications of assumptions and proposed fiscal results on certain customer classes. Based upon the below 2018/19 assumptions and fiscal results, the sensitivity analysis produces the following “Total” Monthly and/or Annual Bill increases:

### **Single Family Residential (SFR)**

SRF “Total” Monthly Bill, assuming 15 CCF usage per month within their calculated water budget, would increase \$2.22 per month or 2.5%.

### **Laguna Woods Village Associations**

Annual “Total” Bill increase to Associations within Laguna Woods Village would range from 0.7% to 2.1%.

### **Laguna Village Association**

Annual “Total” Bill increase would be 2.6%.

### **Cities**

Annual “Total” Bill increase to Cities would range from 1.1% to 2.2%.

***Note:** Increases are influenced by the number and size of meters, water usage within tiers and whether the customer has any sewer service accounts.*

## **2018/19 Budget Assumptions:**

- Potable Water Sales 7,200 AF/Potable Water Purchases 7,500 AF
- Potable Water Purchase Sources (Met/MWDOC & Baker WTP)
  - 4,142 AF Met (55% of total purchases)
  - 3,358 AF Baker WTP (45% of total purchases)
- Recycled Water Sales 1,485 AF (Assumes approximately 60% of Phase II Project Demand)
- Inclusion of a Performance Based Merit Pool consistent with established policy - 2018/19 5.7% of total salaries (3% merit and 2.7% CPI adjustment to total 2017/18 salary ranges)
- Use of remaining Baker WTP Project Reserve Fund to mitigate need for Potable and Recycled Water Commodity (usage) rate increase
- Potable and Recycled Water Fixed O&M Meter and Fire Service charge increase

- Sewer rate increase for residential (fixed) and commercial (flow based) customer classes
- No increase to the existing Water, Sewer and Recycled Water Capital R&R charges
- Prudent use of reserves to achieve a total revenue increase below 5%
- ACWA JPIA projected increases to medical and workers compensation premiums at 7% for PPO, HMO and Kaiser
- Property Tax Revenue based upon projected 2017/18 Collection Experience
- No anticipated ACWA JPIA or SOCWA refunds

**2018/19 Fiscal Results (Proposed Rate/Charge increases based upon the independently prepared Cost of Service Study Report):**

- Total Cost of Service Revenue Increase \$520,000 or 2.2%
  - \$285,000 Water enterprise
  - \$215,000 Sewer enterprise
  - \$20,000 Recycled Water enterprise
- Total labor increase inclusive of base salaries, the performance based merit pool, benefits and workers compensation premiums is \$384,84 or 4.9%
- Fixed O&M meter charge increases for Water and Recycled Water capped at 9.9%
- No Potable Water Commodity rate increase
- No Recycled Water Commodity rate increase
- Sewer charge/rate increase to each residential and commercial customer class applied at approximately 2.8%
- No increase in the Water, Sewer or Recycled Water Capital Replacement and Refurbishment Charges.
- AV Tax Revenue increased from \$835,000 to \$875,000
- Restricted Reserve Revenue for Conservation and RW \$995,000
- Unrestricted Reserve Draw-down \$480,6 – Ensures total revenue increase is below 5%
- Ending Reserve balance, less Legally Restricted Reserves, \$11,550,646 well above the Board established \$8.5 million minimum
- Debt Coverage Ratio 168% (SRF requirement 125%)

In addition to a power point presentation, the following Reference Material/Worksheets are provided to facilitate discussion at the meeting:

- 1) Budget Committee #2 Minutes
- 2) Purchased Water Cost Analysis
- 3) Labor
  - Labor Financial Summary
  - Organizational Chart
  - Organization Position Table
  - Medical Insurance Premium Analysis
- 4) O&M Cost Center Budget Comparison and Analysis
- 5) Five-Year Capital Project and Equipment Program Budget

- 6) Multi-Year P/L Budget to Actual Comparison
- 7) Ten-Year Cash Flow
- 8) Proposed Water, Sewer and Recycled Water Rates and Charges
- 9) Customer Sensitivity Analysis
- 10) Capital Project and Equipment Budget
- 11) Water, Sewer and Recycled Water Cost of Service Study Report
- 12) Proposition 218 Notice
- 13) Budget
- 14) Approved Budget/218/Hearing Schedule

**Recommended Action:** Subject to Board input, Staff and the Committee recommend that the Board of Directors approve the El Toro Water District:

- a. 2018/19 Operating Budget
- b. 2018/19 Water, Recycled Water, and Wastewater Rate Study dated April 16, 2018
- c. 2018/19 Proposition 218 Notice and authorize distribution of same in accordance with applicable public noticing requirements
- d. Authorize noticing of a Rate Public Hearing to be scheduled for June 28, 2018

# **BUDGET COMMITTEE #2**

## **MINUTES**

MINUTES OF THE BUDGET COMMITTEE MEETING #2  
OF THE  
EL TORO WATER DISTRICT

April 12, 2018

Director Goldman called the meeting of the Budget Committee of the Board of Directors of the ELTORO WATER DISTRICT to order at 7:30 o'clock a.m. on April 12, 2018 at the El Toro Water District Administrative Offices, 24251 Los Alisos Boulevard, Lake Forest, California.

Directors M. SCOTT GOLDMAN and MARK MONIN were present.

Also present were DENNIS P. CAFFERTY, Assistant General Manager/District Engineer, JUDY CIMORELL, Human Resources Manager, and NEELY SHAHBAKHTI, Finance Manager/Controller.

ROBERT R. HILL, General Manager, was absent.

ORAL COMMUNICATIONS - PUBLIC COMMENT

President Goldman stated that at this time members of the public may address the Board or they may reserve this opportunity with regard to an item on the agenda, until said item is discussed by the Board later in the meeting.

There were no comments received.

APPROVAL OF MINUTES

The Committee reviewed and approved the minutes of the March 23, 2018 Budget Committee #1 meeting.

ETWD DRAFT 2018/19 BUDGET

Staff reviewed with the Committee various Worksheets included in the agenda material. The review focused on the draft budget and certain components of the



budget work sheets to address specific Committee #1 requests for additional justification and/or clarification on:

- Purchased Water
- Labor
- Proposed Potable Water Commodity Rates
- Ten-Year Cash Flow
- Sensitivity Analysis

Staff and the Committee also reviewed and discussed the:

- Draft Five-Year Capita; R&R Plan
- Draft Proposition 218 Notice
- Draft Board Workshop Power Point Presentation
- O&M Cost Center Comparison and Analysis
- Approved Budget and Public Hearing Schedule

Staff and Committee consensus was reached on the proposed Budget assumptions and fiscal implications of same. Staff was directed by the Committee to finalize the Draft Budget, Draft Cost of Study Report, Draft Proposition 218 Notice, Board Budget Workshop Power Point Presentation for review and discussion at the April 20, 2017 Board Budget Workshop. Further, Staff and Committee confirmed dates for distribution of the Proposition 218 Notice and the Public Hearing to consider proposed increases to certain fees, rates and charges. Staff and Committee agreed that at the Board Budget Workshop the following 2017/18 approval actions would be considered for the:

- Budget

- Cost of Study Report
- Proposition 218 Notice
- Authorization to notice a Proposition 218 Public Hearing for 6/27/17.

ADJOURNMENT

There being no further business to come before the Board the following motion was duly made and passed:

MOTION: President Goldman moved, seconded by Director Monin that today's meeting be hereby adjourned at 9:00 o'clock a.m.

Respectfully submitted,

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Dennis P. Cafferty, Assistant Secretary

APPROVED:

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M. SCOTT GOLDMAN, President of  
the El Toro Water District and  
the Board of Directors thereof

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DENNIS P. CAFFERTY, Assistant Secretary  
of the El Toro Water District and  
the Board of Directors thereof

**PURCHASED WATER**

**COST ANALYSIS**

**&**

**RATE IMPACT BREAKDOWN**

**EL TORO WATER DISTRICT  
2018/19 PURCHASED WATER BUDGET**

		2017/18 Budget		2017/18 Projected Actual		2018/19 Budget	
		Jul 2017	Jan 2018	Jul 2017	Jan 2018	Jul 2018	Jan 2019
1	Total Period Demand (AF)	3,930	3,370	4,290	3,700	4,000	3,500
2	Total Annual Demand (AF)		7,300		7,990		7,500
3	MWD Period Demand (AF)	2,301	1,741	2,661	2,071	2,321	1,821
4	MWD Annual Demand (AF)		4,042		4,732		4,142
5	<b>MWD Untreated Commodity Rates</b>						
6	System Access Rate	289.00	299.00	289.00	299.00	299.00	326.00
7	System Power Rate	124.00	132.00	124.00	132.00	132.00	127.00
8	Water Stewardship Rate	52.00	55.00	52.00	55.00	55.00	69.00
9	MWD Tier 1 Rate	201.00	209.00	201.00	209.00	209.00	209.00
10	<b>Subtotal Untreated Full Service</b>	<b>666.00</b>	<b>695.00</b>	<b>666.00</b>	<b>695.00</b>	<b>695.00</b>	<b>731.00</b>
11	Treatment Surcharge	313.00	320.00	313.00	320.00	320.00	319.00
12	<b>Total Treated Full Service Rate</b>	<b>979.00</b>	<b>1,015.00</b>	<b>979.00</b>	<b>1,015.00</b>	<b>1,015.00</b>	<b>1,050.00</b>
13	<b>Total Treated Full Service Annual Cost</b>	<b>2,252,752</b>	<b>1,767,190</b>	<b>2,605,119</b>	<b>2,102,065</b>	<b>2,355,815</b>	<b>1,912,050</b>
14	<b>MWD Fixed Charges</b>						
15	Capacity Reservation Charge	66,323	72,126	66,323	72,126	72,126	71,297
16	Readiness To Serve Charge	220,164	228,318	220,164	228,318	228,318	216,902
17	<b>Total MWD Fixed Charges</b>		<b>586,931</b>		<b>586,931</b>		<b>588,643</b>
18	<b>Total MWD Cost</b>		<b>4,606,873</b>		<b>5,294,115</b>		<b>4,856,508</b>
19	<b>Total MWD Unit Cost (\$/AF)</b>		<b>1,140</b>		<b>1,119</b>		<b>1,173</b>
20	<b>MWDOC Connection Rate (\$/meter)</b>	<b>11.25</b>		<b>11.90</b>		<b>12.25</b>	
21	ETWD Meters	9,562		9,562		9,562	
22	<b>MWDOC Connection Charge (\$)</b>		<b>107,573</b>		<b>113,788</b>		<b>117,135</b>
23	<b>Baker Water Treatment Plant</b>						
24	Period Demand (AF)	1,629	1,629	1,629	1,629	1,679	1,679
25	Annual Demand (AF)		3,258		3,258		3,358
26	<b>Baker Raw Water Cost</b>	<b>1,084,864</b>	<b>1,132,103</b>	<b>1,084,914</b>	<b>1,132,155</b>	<b>1,166,905</b>	<b>1,227,349</b>
27	Baker O&M Unit Cost (per AF)	218	218	175	175	182	182
28	SCP Surcharge	8.41	8.41	8.14	8.14	8.38	8.38
29	SAC Surcharge	1.40	1.40	1.40	1.40	1.12	1.12
30	<b>Baker O&amp;M Annual Cost</b>	<b>371,672</b>	<b>371,672</b>	<b>300,616</b>	<b>300,616</b>	<b>321,536</b>	<b>321,536</b>
31	Baker Capital Cost (Debt Service)	342,131	342,131	342,131	342,131	342,131	342,131
32	<b>Total Period Baker Water Treatment Plant Cost</b>	<b>1,798,667</b>	<b>1,845,906</b>	<b>1,727,661</b>	<b>1,774,902</b>	<b>1,830,572</b>	<b>1,891,016</b>
33	<b>Total Annual Baker Water Treatment Plant Cost</b>		<b>3,644,574</b>		<b>3,502,562</b>		<b>3,721,587</b>
34	<b>Baker Water Treatment Plant Unit Cost(\$/AF)</b>		<b>1,119</b>		<b>1,075</b>		<b>1,108</b>
35	<b>Capital Charge Revenue Funding</b>		<b>(500,000)</b>		<b>(500,000)</b>		<b>(600,000)</b>
36	<b>Total Baker Water Treatment Plant Cost</b>		<b>3,144,574</b>		<b>3,002,562</b>		<b>3,121,587</b>
37	<b>Total Purchased Water Cost</b>						
38	MWD		4,606,873		5,294,115		4,856,508
39	MWDOC		107,573		113,788		117,135
40	Baker		3,144,574		3,002,562		3,121,587
41	<b>Total Purchased Water Cost</b>		<b>7,859,019</b>		<b>8,410,465</b>		<b>8,095,230</b>
42	<b>Total Expense (Less Baker Debt Service)</b>		<b>7,674,757</b>		<b>8,226,203</b>		<b>8,010,968</b>
43	Percent Increase Budget to Budget per Unit		2.47%				0.26%
44	<b>Overall Imported Water Effective Rate</b>						
45	Fiscal Year Cost per Acre Foot Purchased		1,077		1,053		1,079
46	Fiscal Year Cost per CCF Purchased		2.47		2.42		2.48
47	Fiscal Year Rate per CCF Sold		2.58		2.51		2.58

**EL TORO WATER DISTRICT  
2018/19 PURCHASED WATER BUDGET**

**BUDGET CHANGE & RATE IMPACT BREAKDOWN**

Description	Budget	Budget Impact	Rate Impact
1718 Purchased Water Budget - Total Cost	\$7,859,019		
Increase Budget Volume from 7,300 af to 7,500 af		\$100,632	(\$0.01)
MWD Pass Through Rate Increase		\$258,139	\$0.08
Baker O&M Cost Decrease		(\$123,124)	(\$0.04)
Baker Capital Funding		(\$100,000)	(\$0.03)
MWDOC Rate Increase / Meter Count Decrease		\$9,562	\$0.00
<b>Total</b>	<b>\$8,004,228</b>	<b>\$145,208</b>	<b>\$0.00</b>

**LABOR FINANCIAL SUMMARY**

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**ORGANIZATION CHART & POSITION TABLE**

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**MEDICAL INSURANCE PREMIUM ANALYSIS**

## 2018/19 LABOR BUDGET

	2017/2018 Budget	2017/2018 Projected	2018/2019 Budget	Delta Budget to Budget	% Change Budget to Budget
Salaries	5,663,492	5,787,890	5,893,903	230,411	4.1%
Benefits (Less Employee Paid)	2,063,738	2,091,683	2,233,934	170,196	8.2%
Workers Compensation	175,723	152,416	160,000	(15,723)	-8.9%
<b>Total Labor Cost</b>	<b>7,902,953</b>	<b>8,031,990</b>	<b>8,287,837</b>	<b>384,884</b>	<b>4.9%</b>

### LABOR BUDGET BREAKDOWN

	2017/2018 Budget	2018/2019 Budget	Delta Budget to Budget	% Change Budget to Budget	Portion of Overall Budget Increase
<b>Salary</b>					
2017/18 Merit	0	94,179	94,179	1.2%	
2018/19 Merit	0	179,289	179,289	2.3%	
Car Allowances	0	14,400	14,400	0.2%	
Personnel Changes		(57,457)	(57,457)	-0.7%	
<b>Total</b>			<b>230,411</b>	<b>2.9%</b>	
<b>Benefits</b>					
Employee Contribution	(88,548)	(98,049)	(9,500)	-0.1%	
Medical	1,031,405	1,162,364	130,959	1.7%	
401(k)	900,368	953,878	53,510	0.7%	
Other Benefits	220,513	215,740	(4,773)	-0.1%	
<b>Total</b>			<b>170,196</b>	<b>2.2%</b>	
Workers Compensation	175,723	160,000	(15,723)	-0.2%	
<b>Total Labor</b>			<b>384,884</b>	<b>4.9%</b>	

**EL TORO WATER DISTRICT  
ORGANIZATION CHART 2018 - 2019**

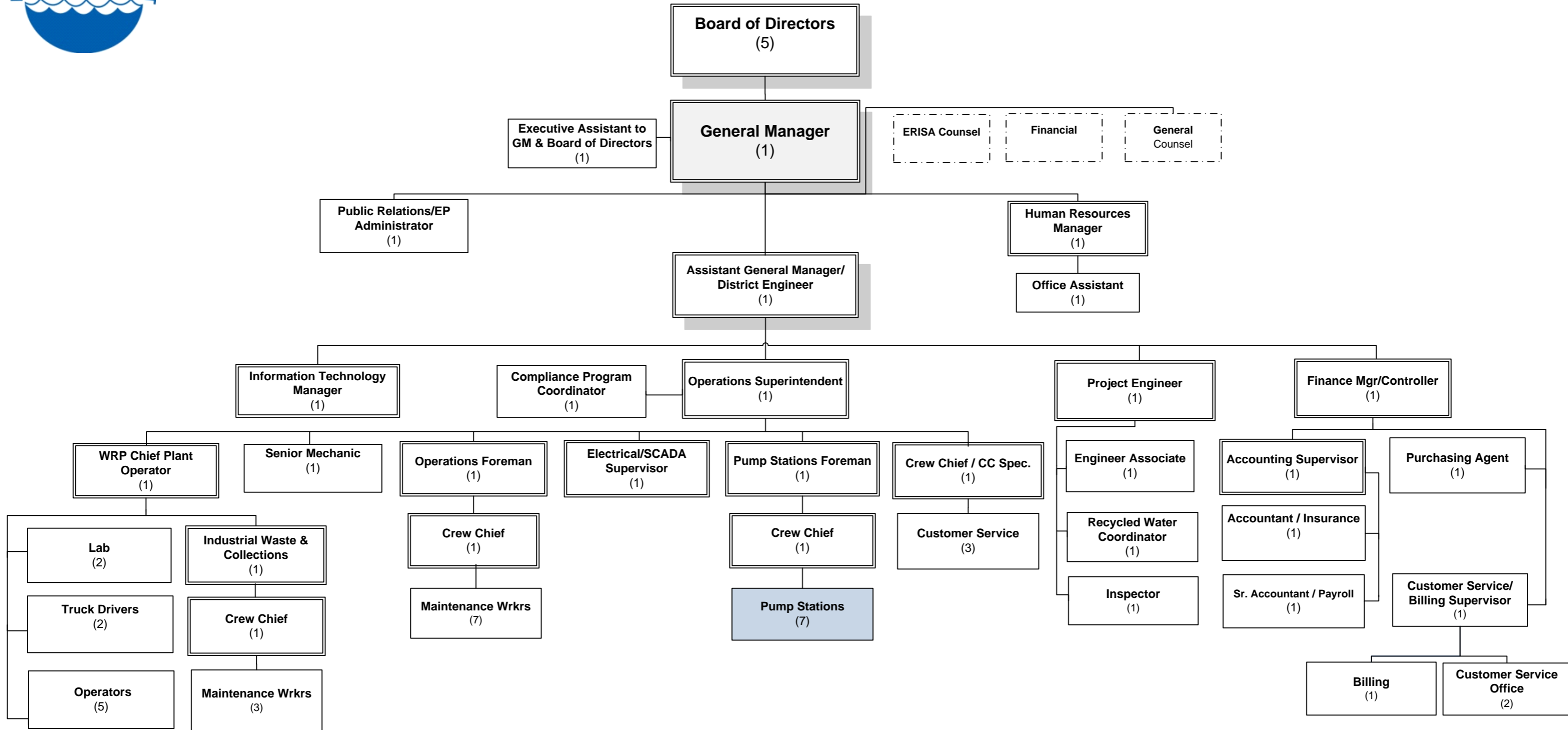
<b>Department</b>	<b>Positions</b>
<b><u>Administrative Services</u></b>	
General Manager	1
Asst GM / District Engineer	1
Human Resources Manager	1
Public Relations / EP Admin	1
Exec. Assistant to BOD & GM	1
Administrative Assistant	0
Office Assistant	1
Total	<u>6</u>
<b><u>Information Systems</u></b>	
Information Technology Manager	1
Total	<u>1</u>
<b><u>Accounting</u></b>	
Manager Finance / Controller	1
Accountant / Sr Accountant	2
Supervisor Accounting	1
Total	<u>4</u>
<b><u>Purchasing/Receiving</u></b>	
Purchasing Agent	1
Total	<u>1</u>
<b><u>Customer Service - Office</u></b>	
C.S / Billing Supervisor	1
C.S. Office Rep. II / Senior	2
Billing Clerk	1
Total	<u>4</u>
<b><u>Customer Service - Field</u></b>	
Crew Chief	1
C.S. Field Rep. III	1
C.S. Field Rep. I	2
Total	<u>4</u>
<b><u>Engineering</u></b>	
Project Engineer	1
Engineer Associate	1
Inspector	1
Recycled Water Coordinator	1
Total	<u>4</u>
<b><u>Electrical</u></b>	
Electrical Sys/SCADA Supv	1
Total	<u>1</u>

<b>Department</b>	<b>Positions</b>
<b><u>Operations</u></b>	
Operations Superintendent	1
Compliance Program Coordinator	1
Total	<u>2</u>
<b><u>Transmission &amp; Distribution Crew</u></b>	
Foreman	1
Crew Chief	1
Maintenance Worker III	2
Maintenance Worker II	1
Maintenance Worker I	4
Total	<u>9</u>
<b><u>Pumping Crew</u></b>	
Foreman	1
Crew Chief	1
Maintenance Worker III	5
Maintenance Worker II	1
Maintenance Worker I	1
Total	<u>9</u>
<b><u>Treatment Plant</u></b>	
Chief Plant Operator	1
Truck Driver	2
Waste Water Operator III	2
Waste Water Operator II	2
Operator In Training	1
Lab Supervisor	1
Lab Technician I	1
Total	<u>10</u>
<b><u>Collections &amp; Transmissions</u></b>	
Industrial Waste Inspector	1
Crew Chief	1
Coll. Maintenance Worker III	1
Coll. Maintenance Worker II	1
Coll. Maintenance Worker I	1
Total	<u>5</u>
<b><u>Automotive</u></b>	
Senior Mechanic	1
Total	<u>1</u>
<b><u>Total Positions</u></b>	<b><u>61</u></b>





# EL TORO WATER DISTRICT 2018 / 2019 ORGANIZATIONAL CHART



**MEDICAL PREMIUM**

**ANALYSIS**

## 2018 / 19 MEDICAL INSURANCE PREMIUM ANALYSIS

Plan	Description	Participants	Employee Share	2018 Medical Insurance Premium (per month)	2018 Employee Cost (per month)	2019 Medical Insurance Premium (per month)	2019 Employee Cost (per month)
HMO	Single (Employee Only)	1	10.0%	\$758.68	\$76	\$811.79	\$81
HMO	Couple	5	10.0%	\$1,507.46	\$151	\$1,612.98	\$161
HMO	Family	17	10.0%	\$2,021.80	\$202	\$2,163.33	\$216
PPO	Single (Employee Only)	3	10.0%	\$852.34	\$85	\$912.00	\$91
PPO	Couple	5	10.0%	\$1,736.91	\$174	\$1,858.49	\$186
PPO	Family	5	10.0%	\$2,335.06	\$234	\$2,498.51	\$250
Kaiser	Single (Employee Only)	9	5.0%	\$607.42	\$0	\$649.94	\$0
Kaiser	Couple	6	5.0%	\$1,204.96	\$60	\$1,289.31	\$64
Kaiser	Family	9	5.0%	\$1,700.90	\$85	\$1,819.96	\$91

Assumes 7% Premium Increase for Each Plan in January 2019

## 2018 / 19 MEDICAL INSURANCE BUDGET ANALYSIS

<b>2017/18 BUDGET</b>	<b>\$1,031,405</b>
2017/18 BUDGET ERROR	\$39,917
2017/18 BUDGET TO ACTUAL RATE RECONCILIATION	\$3,695
PLAN SELECTION CHANGE IMPACTS	\$16,116
2018 RATE IMPACT FOR 2018/19 FISCAL YEAR	\$41,360
2019 BUDGETED RATE IMPACT FOR 2018/19 FISCAL YEAR	\$37,570
PERSONNEL CHANGES	(\$7,699)
<b>SUBTOTAL</b>	<b>\$130,959</b>
<b>2018/19 BUDGET</b>	<b>\$1,162,364</b>

## **O&M COST CENTER**

### **BUDGET COMPARISON & ANALYSIS**

**2018/19 O&M BUDGET  
COST CENTER SUMMARY**

	2014/15 Actual	2015/16 Actual	2016/17 Actual	Projected 2017/18	2017/18 Budget	Proposed 2018/19 Budget	Delta Budget to Budget	%	Comments
Source of Supply	8,701,923	7,497,885	7,358,509	8,357,406	7,810,256	8,148,467	338,211	4.3%	Purchased Water (336,000), Repair Parts (3,600), Equip Maint (6,000), Asphalt Maint (5,000), Consultants (2,000), R6 Repairs (9,500), License & Permits (5,500)
Pumping Water	248,948	234,959	239,544	271,529	290,971	247,971	(43,000)	-14.8%	Power (13,000), Repair Parts (7,000), Equip Maint (2,000), Pump Maint (26,000), Motor Maint (14,000), Electrical Maint (15,500), Small Tools (4,000), Safety Equip (3,000)
Treatment Water	30,796	31,909	45,335	41,725	41,866	49,641	7,775	18.6%	Repair Parts (5,000), Pump Maint (10,000), Electrical Repairs (7,500), Chemicals (5,000)
Transmission & Distribution Water	472,660	391,828	516,443	486,658	523,142	515,692	(7,450)	-1.4%	Repair Parts (9,000), Electrical Maint (3,000), Chemicals (4,500), Asphalt Maint - R-5 (22,000), Asphalt Maint - Repairs (4,000), Contractors (13,000), Lab - UCMR (11,000), Lab-Inside (5,000), Permits (5,000), Temp Help (21,000)
Customer Accounts	767	3	437	51	0	0	0		
Outside Treatment Sewer	867,820	884,822	967,590	924,078	986,100	919,750	(66,350)	-6.7%	SOCWA (68,000)
Pumping Sewer	285,399	364,839	302,746	369,930	377,832	369,848	(7,984)	-2.1%	Power (10,000), Repair Parts (17,000), Equip Maint (20,000), Pump Maint (9,000), Elect Maint (5,000), Asphalt Maint (3,000), Safety Equip (12,000)
Treatment Sewer	920,279	787,877	724,486	826,753	684,408	762,678	78,270	11.4%	Power (70,000), Battery Savings (25,000), Equip Maint (7,000), Elect Maint (5,000), Landscaping (15,000), Small Tools-Lab (5,000)
Transmission & Distribution Sewer	253,209	232,481	232,161	245,492	297,100	284,250	(12,850)	-4.3%	Contractors (15,000)
Operations Support	229,433	250,641	257,792	190,997	240,111	232,911	(7,200)	-3.0%	HVAC Maint (6,000), Engineers (10,000), Landscaping (6,000), Other Employee Cost (5,000)
Tertiary Treatment Plant	9,684	140,615	183,434	222,857	190,300	256,950	66,650	35.0%	Power (30,000), Phase II Power (13,000), Elect Maint (8,500), Chemical (2,000), Chemical - Phase II (6,000), Lab (2,000), Operating Supplies (2,500)
Transmission & Distribution Recycled	0	112	1,309	4,850	0	0	0		
Fleet	368,756	216,090	271,781	227,414	250,175	237,885	(12,290)	-4.9%	Repair Parts (7,000), Equip Repairs (17,000)
Operations Indirect Costs	1,742	161	83,957	65,623	61,500	109,900	48,400	78.7%	Software Licenses (24,000), Data Processng Supplies (8,000), Data Processing Equipment (8,000), Utilities-WRP (10,000)
Administration Direct Costs	268,631	295,916	311,517	205,554	281,700	259,850	(21,850)	-7.8%	Structure Maint (5,000), Consultants (25,000), Other Employee Cost 7,000)
Administration Indirect Costs	4,359,017	5,131,363	6,141,523	6,326,511	6,306,829	6,724,511	417,682	6.6%	Depreciation (300,000), Insurance (65,000), Data Processing Consultants (25,000), Directors Fees (12,000), Dues & Memberships (7,000), Election Expense (30,000), Software Maintenance & Licenses (60,000), Interest Expense (36,000), Meetings (6,000), Public Outreach (17,000), Communications (19,000), Utilities (7,000)
<b>Total</b>	<b>17,019,064</b>	<b>16,461,500</b>	<b>17,638,564</b>	<b>18,767,428</b>	<b>18,342,290</b>	<b>19,120,304</b>	<b>778,014</b>	<b>4.2%</b>	
Labor	7,583,218	7,927,163	8,355,845	7,958,071	7,902,953	8,287,837	384,884	4.9%	
<b>Total O&amp;M Budget</b>	<b>24,602,282</b>	<b>24,388,663</b>	<b>25,994,409</b>	<b>26,725,498</b>	<b>26,245,243</b>	<b>27,408,141</b>	<b>1,162,898</b>	<b>4.4%</b>	
<b>O &amp; M Categories</b>									
Purchased Water (MWD/MWDOC)	8,613,511	7,340,323	6,936,449	8,226,203	7,674,757	8,010,968	336,211	4.4%	
Power	1,065,384	984,350	970,827	1,043,200	964,100	1,077,450	113,350	11.8%	
Fuel	112,724	83,626	83,083	88,399	90,000	90,000	0	0.0%	
SOCWA	852,247	868,213	955,792	910,427	974,100	906,250	(67,850)	-7.0%	
General & Administration (Direct)	225,931	256,133	274,913	167,254	243,000	219,950	(23,050)	-9.5%	
Indirect Costs	1,395,461	1,355,274	1,366,097	1,284,212	1,494,250	1,648,600	154,350	10.3%	
Interest Expense	132,375	397,680	706,683	805,729	805,729	769,061	(36,668)	-4.6%	
Other O & M	1,790,251	1,797,491	2,275,977	2,005,433	2,089,504	2,091,175	1,671	0.1%	
Labor	7,583,218	7,927,163	8,355,845	7,958,071	7,902,953	8,287,837	384,884	4.9%	
<b>Subtotal</b>	<b>21,771,101</b>	<b>21,010,254</b>	<b>21,925,666</b>	<b>22,488,928</b>	<b>22,238,393</b>	<b>23,101,291</b>	<b>862,898</b>	<b>3.9%</b>	
Depreciation & Amortization	2,831,181	3,378,409	4,068,743	4,236,570	4,006,850	4,306,850	300,000	7.5%	
<b>Total</b>	<b>24,602,282</b>	<b>24,388,663</b>	<b>25,994,409</b>	<b>26,725,498</b>	<b>26,245,243</b>	<b>27,408,141</b>	<b>1,162,898</b>	<b>4.4%</b>	
<b>Total O&amp;M Budget Excluding Purchased Water, Interest, Depreciation &amp; Labor</b>	<b>5,574,372</b>	<b>5,742,768</b>	<b>6,633,371</b>	<b>6,304,655</b>	<b>6,660,683</b>	<b>6,802,486</b>	<b>141,803</b>	<b>2.1%</b>	
<b>Total O&amp;M Budget Excluding Interest, Depreciation &amp; Amortization</b>	<b>21,638,726</b>	<b>20,612,575</b>	<b>21,218,983</b>	<b>21,683,200</b>	<b>21,432,664</b>	<b>22,332,230</b>	<b>899,566</b>	<b>4.2%</b>	

## **MULTI-YEAR**

### **P/L BUDGET TO ACTUAL COMPARISON**

El Toro Water District Income Statement												
		2014 - 2015		2015 - 2016		2016 - 2017		2017 - 2018				
		Actual	Budget	Actual	Budget	Actual	Budget	Projected Actual	2017 - 2018 Annual Budget	Proposed 2018 - 2019 Budget	Delta Budget	%
Income												
	4850 - Allocation Penalty	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
	4500 - Contribution in Aid	0.00	0.00	577,471.28	0.00	85,820.87	0.00	23,302.26	0.00	0.00	0.00	0%
	4750 - Capital Facilities Charge	3,003,634.83	3,000,000.00	3,002,558.40	3,000,000.00	3,012,474.97	3,000,000.00	2,966,584.50	3,015,000.00	3,015,000.00	0.00	0%
	4800 - Commodity Charge	9,998,984.51	10,047,606.00	8,535,824.52	9,209,505.00	8,718,545.65	9,209,505.00	10,122,498.51	8,908,451.00	9,416,278.00	507,827.00	6%
	4600 - Water Service Charge	2,777,291.07	2,750,000.00	2,591,969.77	2,750,000.00	2,802,962.41	2,865,000.00	3,031,000.00	3,073,290.00	3,364,095.00	290,805.00	9%
	4700 - Sanitary Service	6,815,410.71	6,790,000.00	7,011,325.48	7,275,000.00	7,359,924.20	7,450,000.00	7,585,000.00	7,565,000.00	7,800,000.00	235,000.00	3%
	4720 - Recycled Water Sales	72,696.34	108,750.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
	4722 - Recycled Tertiary Sales	233,532.21	288,694.00	940,417.34	1,171,873.00	1,492,518.88	1,444,014.00	1,511,272.15	1,450,000.00	1,695,000.00	245,000.00	17%
	4724 - Recycled Water Service Charge	6,541.60	0.00	140,356.89	0.00	186,521.50	194,000.00	205,000.00	208,000.00	225,000.00	17,000.00	8%
	4950 - Other Operating Income	56,179.78	37,300.00	56,988.00	37,300.00	125,859.84	55,000.00	50,000.00	55,000.00	55,000.00	0.00	0%
	4960 - Other Income	503,172.24	214,800.00	475,890.65	350,000.00	549,450.89	417,500.00	491,643.45	427,500.00	549,750.00	122,250.00	29%
	4967 - SMWD	95,200.94	120,000.00	97,056.11	120,000.00	94,528.85	100,000.00	111,601.91	100,000.00	110,000.00	10,000.00	10%
	4970 - MNWD	21,756.01	23,000.00	21,418.68	23,000.00	21,399.90	21,000.00	22,843.29	21,000.00	23,000.00	2,000.00	10%
	4974 - Contract Services - Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
	4975 - Standby Charge	4,817.64	0.00	3,291.71	0.00	1,525.08	0.00	153.09	0.00	0.00	0.00	0%
	4980 - Interest Income	76,803.65	80,000.00	147,448.01	50,000.00	137,911.87	50,000.00	190,259.33	100,000.00	135,000.00	35,000.00	35%
	4985 - Change FMV Investment	0.00	0.00	0.00	0.00	-49,969.42	0.00	-26,563.14	0.00	0.00	0.00	0%
	4986 - Changes FMV LAIF	0.00	0.00	0.00	0.00	-12,829.29	0.00	-256.54	0.00	0.00	0.00	0%
	4990 - Property Taxes	815,553.70	740,000.00	843,300.63	740,000.00	888,972.64	800,000.00	875,241.80	835,000.00	875,000.00	40,000.00	5%
	4997 - Purchase Discount Taken	0.00	0.00	1,049.28	0.00	1,362.40	0.00	1,278.61	0.00	0.00	0.00	0%
	4999 - Uncategorized Income	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
	<b>Total Income</b>	<b>24,481,575.23</b>	<b>24,200,150.00</b>	<b>24,446,366.75</b>	<b>24,726,678.00</b>	<b>25,416,981.24</b>	<b>25,606,019.00</b>	<b>27,160,859.21</b>	<b>25,758,241.00</b>	<b>27,263,123.00</b>	<b>1,504,882.00</b>	<b>6%</b>
Gross Profit												
Expense												
	5100 - Personnel Cost	7,583,217.54	6,729,089.00	7,927,163.34	7,077,652.00	8,355,845.28	7,495,905.00	7,958,070.51	7,902,953.00	8,287,837.25	384,884.25	5%
	5405 - Water Purchases	8,623,110.77	8,701,171.00	7,350,016.28	7,997,953.00	7,244,462.74	7,760,674.00	8,240,800.17	7,691,757.00	8,027,968.00	336,211.00	4%
	5410 - Electrical Power	1,065,383.67	980,480.00	984,350.00	1,198,000.00	970,827.26	1,013,100.00	1,043,200.00	964,100.00	1,077,450.00	113,350.00	12%
	5415 - Repair Parts & Materials	295,805.87	363,665.00	320,797.01	382,350.00	374,060.72	360,285.00	431,012.23	412,470.00	385,605.00	-26,865.00	-7%
	5420 - Equipment Maintenance & Repair	240,912.20	121,614.50	124,662.90	137,600.00	131,383.23	122,720.00	113,131.65	132,550.00	98,070.00	-34,480.00	-26%
	5425 - Pump Maintenance & Repair	96,671.66	77,300.00	130,795.58	112,500.00	155,270.88	130,500.00	159,997.53	152,900.00	126,300.00	-26,600.00	-17%
	5430 - Motor Maintenance & Repair	24,876.11	31,700.00	41,952.60	53,200.00	21,016.64	39,500.00	45,478.95	37,700.00	25,800.00	-11,900.00	-32%
	5435 - Generator Maintenance & Repair	0.00	0.00	0.00	0.00	133.53	0.00	0.00	0.00	0.00	0.00	0%
	5440 - Electrical/Contl Maint & Repair	42,664.74	44,500.00	43,289.82	28,000.00	32,013.80	46,000.00	39,252.33	66,000.00	69,500.00	3,500.00	5%
	5445 - Meter Maintenance & Repair	1,427.90	3,400.00	2,006.90	1,800.00	2,189.76	5,200.00	3,611.51	2,200.00	3,500.00	1,300.00	59%
	5455 - Chemicals	159,524.39	134,950.00	182,856.77	164,344.00	192,963.81	183,900.00	196,639.86	207,300.00	216,100.00	8,800.00	4%
	5460 - Structure Maint & Repair	51,556.23	41,950.00	58,995.59	38,000.00	63,872.02	34,360.00	25,548.51	32,660.00	21,360.00	-11,300.00	-35%
	5465 - Asphalt Maintenance & Repair	93,859.00	58,240.00	77,073.00	71,800.00	112,076.00	107,500.00	55,830.00	73,500.00	97,700.00	24,200.00	33%
	5470 - Consultants	105,803.63	76,700.00	67,111.58	76,950.00	169,120.51	126,950.00	89,933.75	137,200.00	114,200.00	-23,000.00	-17%
	5475 - Contractors	1,197,291.05	1,229,047.26	1,216,737.77	1,198,279.00	1,252,598.54	1,238,391.00	1,169,996.33	1,314,429.00	1,231,190.00	-83,239.00	-6%
	5480 - Engineers	67,035.32	58,600.00	94,639.97	157,000.00	60,913.05	87,500.00	92,476.84	85,700.00	76,000.00	-9,700.00	-11%
	5482 - Dump Fees	15,282.34	27,100.00	16,918.33	25,000.00	18,624.99	20,000.00	15,151.16	16,000.00	16,000.00	0.00	0%
	5485 - Laboratory	12,091.21	19,200.00	13,018.90	30,700.00	16,834.48	20,700.00	27,138.43	18,700.00	35,400.00	16,700.00	89%
	5490 - License & Permits	90,813.44	106,935.00	98,275.69	107,825.00	124,904.51	130,675.00	113,225.18	127,680.00	128,835.00	1,155.00	1%
	5495 - Gas & Oil	112,723.65	125,343.85	83,626.27	130,000.00	83,083.00	100,000.00	88,398.91	90,000.00	90,000.00	0.00	0%
	5500 - Equipment Rental	16,487.79	21,000.00	17,611.96	21,000.00	18,539.39	13,200.00	13,284.12	16,400.00	16,400.00	0.00	0%
	5505 - Landscaping	89,702.40	86,991.00	87,871.05	86,991.00	71,529.12	94,660.00	97,912.49	82,660.00	104,060.00	21,400.00	26%
	5510 - Small Tools & Equipment	43,617.36	42,900.00	32,797.00	48,000.00	42,299.93	40,900.00	60,769.27	56,500.00	61,550.00	5,050.00	9%
	5515 - Security	14,115.59	22,470.00	17,465.91	22,470.00	16,409.20	19,055.00	22,615.45	19,055.00	19,055.00	0.00	0%
	5520 - Operating Supplies	44,367.42	48,700.00	61,893.01	45,000.00	47,418.60	49,500.00	53,392.64	47,500.00	52,000.00	4,500.00	9%
	5525 - Safety Equipment	3,620.23	7,500.00	16,192.54	16,000.00	23,600.05	14,500.00	33,231.97	23,500.00	38,600.00	15,100.00	64%
	5530 - Temporary Help	16,732.82	59,000.00	42,358.02	71,000.00	13,283.47	86,500.00	23,300.00	55,000.00	34,000.00	-21,000.00	-38%
	5535 - Other Employee Cost	95,740.69	85,000.00	110,342.38	85,000.00	129,682.80	88,000.00	89,237.05	79,000.00	90,000.00	11,000.00	14%
	5540 - Depreciation	2,824,335.26	2,900,000.00	3,371,563.00	2,900,000.00	4,061,897.60	2,900,000.00	4,229,724.00	4,000,000.00	4,300,000.00	300,000.00	8%
	5545 - Insurance	347,745.26	408,500.00	360,725.99	400,000.00	416,094.35	400,000.00	447,959.21	422,300.00	488,550.00	66,250.00	16%
	5555 - Advertising & Publicity	14,542.00	2,000.00	5,390.00	2,500.00	2,952.00	2,500.00	3,161.00	2,500.00	2,500.00	0.00	0%
	5560 - Amortization	6,845.88	6,845.00	6,845.88	6,845.00	6,845.88	6,850.00	6,845.88	6,850.00	6,850.00	0.00	0%
	5570 - Annual Event	4,387.37	3,000.00	5,083.02	3,200.00	4,991.54	5,300.00	5,350.00	5,350.00	5,350.00	0.00	0%
	5575 - Audit	31,000.00	30,000.00	27,000.00	30,000.00	28,500.00	30,000.00	18,400.00	30,000.00	30,000.00	0.00	0%
	5580 - Bad Debts	12,149.89	30,000.00	15,037.06	30,000.00	26,757.99	25,000.00	17,407.08	20,000.00	20,000.00	0.00	0%
	5585 - Bank Charges	46,883.14	44,000.00	48,816.64	48,000.00	53,181.35	48,000.00	54,153.94	54,000.00	56,500.00	2,500.00	5%
	5590 - Data Processing Supply & Access	93,344.93	75,000.00	86,887.69	75,000.00	10,701.72	80,000.00	22,726.28	20,000.00	36,500.00	16,500.00	83%
	5595 - Data Processing Equipment	0.00	0.00	0.00	0.00	35,183.78	0.00	25,714.64	40,000.00	40,000.00	0.00	0%
	5600 - Data Processing Consultants	1,890.00	40,000.00	5,870.80	40,000.00	34,331.56	75,000.00	45,814.00	50,000.00	25,000.00	-25,000.00	-50%
	5605 - Directors Fees	83,340.00	100,000.00	93,432.00	100,000.00	97,392.00	90,000.00	37,906.00	93,000.00	105,000.00	12,000.00	13%
	5610 - Dues & Memberships	61,964.03	78,000.00	67,728.51	80,000.00	70,941.26	80,000.00	81,758.13	75,000.00	82,000.00	7,000.00	9%
	5615 - Education & Training	37,087.18	47,500.00	36,319.30	27,500.00	23,971.63	29,500.00	30,727.57	31,500.00	29,250.00	-2,250.00	-7%
	5620 - Election Expense	0.00	45,000.00	0.00	0.00	27,709.12	30,000.00	0.00	0.00	30,000.00	30,000.00	0.00
	5625 - Employee Service Awards	1,271.28	4,000.00	2,469.67	4,000.00	255.96	4,000.00	0.00	4,000.00	5,800.00	1,800.00	45%
	5630 - Software Maintenance & Licenses	53,206.62	60,000.00	64,821.16								



**10 – YEAR**

**CASH FLOW**

**TEN YEAR REVENUE PLAN AND RESERVE ANALYSIS**

	<u>Projected</u>	<u>Budget</u>									
	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	<u>2023-24</u>	<u>2024-25</u>	<u>2025-26</u>	<u>2026-27</u>	<u>2027-28</u>
1 <b>BEGINNING RESERVE BALANCE</b>	<b>13,024,042</b>	<b>12,998,519</b>	<b>12,517,895</b>	<b>12,087,207</b>	<b>11,815,546</b>	<b>11,716,104</b>	<b>11,723,423</b>	<b>11,736,455</b>	<b>11,746,945</b>	<b>11,755,945</b>	<b>11,765,812</b>
<b>OPERATIONS &amp; MAINTENANCE CASH FLOW</b>											
<b>O&amp;M REVENUES</b>											
2 Revenue from 17/18 Commodity Rate	9,053,283	8,421,658	8,421,658	8,421,658	8,421,658	8,421,658	8,421,658	8,421,658	8,421,658	8,421,658	8,421,658
3 Revenue from 17/18 Fixed Meter Rate	2,925,000	2,958,095	2,910,000	2,910,000	2,910,000	2,910,000	2,910,000	2,910,000	2,910,000	2,910,000	2,910,000
4 Revenue from 17/18 Fire / Flooding Meters	110,000	121,000	132,979	146,239	160,446	172,759	182,230	191,702	201,173	211,592	222,579
5 Revenue from 17/18 Sewer Service Rate	7,585,000	7,585,000	7,585,000	7,585,000	7,585,000	7,585,000	7,585,000	7,585,000	7,585,000	7,585,000	7,585,000
6 Revenue from Recycled Water 1718 Commodity Rate	1,510,000	1,695,000	1,850,342	1,898,672	1,960,810	2,022,948	2,078,182	2,133,416	2,188,650	2,243,885	2,299,119
7 Revenue from Recycled Water Fixed Meter Rate	205,000	205,000	264,000	264,000	264,000	264,000	264,000	264,000	264,000	264,000	264,000
<b>Additional Service Revenue Required</b>											
8 2018/19			0	0	0	0	0	0	0	0	0
9 2018/19											
10 2019/20											
11 2019/20											
12 2020/21											
13 2020/21											
14 2021/22											
15 2021/22											
16 2022/23											
17 2022/23											
18 2023/24											
19 2023/24											
20 2024/25											
21 2024/25											
22 2025/26											
23 2025/26											
24 2026/27											
25 2026/27											
26 2027/28											
27 2027/28											
28 <b>Total Unrestricted Rate Revenue</b>	<b>21,388,283</b>	<b>21,505,753</b>	<b>22,600,521</b>	<b>23,629,017</b>	<b>24,745,631</b>	<b>25,846,714</b>	<b>26,840,689</b>	<b>27,859,663</b>	<b>28,893,638</b>	<b>29,970,559</b>	<b>31,118,049</b>
<b>Other Sources of Cash</b>											
29 Restricted Reserves Funding of Conservation Program	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
30 Capital Charge Funding of Baker Debt Service	500,000	600,000	625,000	625,000	600,000	550,000	525,000	500,000	500,000	500,000	500,000
31 MWD LRP Rebate	250,000	314,750	362,250	362,250	362,250	362,250	362,250	362,250	362,250	362,250	362,250
32 Restricted Reserves Funding of RW Debt Service	509,779	312,469	540,211	510,230	466,737	420,644	379,971	361,937	346,679	332,330	321,029
33 Recycled Water Meter Capital Charge Funding of Debt	115,000	131,000	147,000	147,000	147,000	157,000	177,000	177,000	177,000	177,000	177,000
34 Property Taxes	653,809	685,309	702,734	720,442	738,437	756,725	775,310	794,197	813,391	832,897	852,720
35 Property Taxes (Funds Tier 1 Offset)	221,191	189,691	185,391	181,005	176,531	171,968	167,314	162,566	157,724	152,784	147,746
36 Miscellaneous Revenue	50,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
37 Cellular Site Lease Revenue (Funds Tier 1 Offset)	183,500	215,000	219,300	223,686	228,160	232,723	237,377	242,125	246,967	251,907	256,945
38 Other Income (R-6 Partners)	123,400	122,000	124,440	126,929	129,467	132,057	134,698	137,392	140,140	142,942	145,801
39 MNWD Payment for RW Service to Golf Course	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000
40 Investment Income	171,000	135,000	62,589	60,436	59,078	58,581	58,617	58,682	58,735	58,780	25,405
41 <b>Subtotal Other Sources of Cash</b>	<b>2,888,679</b>	<b>2,891,219</b>	<b>3,154,915</b>	<b>3,142,977</b>	<b>3,093,661</b>	<b>3,027,947</b>	<b>3,003,537</b>	<b>2,982,149</b>	<b>2,988,885</b>	<b>2,996,890</b>	<b>2,974,896</b>
42 <b>TOTAL O&amp;M REVENUES</b>	<b>24,276,962</b>	<b>24,396,972</b>	<b>25,755,436</b>	<b>26,771,994</b>	<b>27,839,292</b>	<b>28,874,661</b>	<b>29,844,225</b>	<b>30,841,812</b>	<b>31,882,523</b>	<b>32,967,450</b>	<b>34,092,945</b>
<b>O&amp;M REVENUE REQUIREMENTS</b>											
43 Total O & M Expense Budget	21,757,119	22,332,230	23,176,110	24,033,641	24,928,720	25,857,329	26,821,180	27,821,308	28,863,509	29,947,569	31,072,835
<b>Debt Service</b>											
45 Baker Water Treatment Plant	684,262	684,262	684,262	684,262	684,262	684,262	684,262	684,262	684,262	684,262	684,262
46 Northline Lift Station	258,146	258,146	258,146	258,146	258,146	258,146	258,146	258,146	258,146	258,146	258,146
47 Recycled Water SRF Loan - Phase I	1,602,958	1,602,958	1,602,958	1,602,958	1,602,958	1,602,958	1,602,958	1,602,958	1,602,958	1,602,958	1,602,958
48 Recycled Water SRF Loan - Phase II			464,648	464,648	464,648	464,648	464,648	464,648	464,648	464,648	464,648
49 <b>Subtotal Debt Service</b>	<b>2,545,366</b>	<b>2,545,366</b>	<b>3,010,014</b>	<b>3,010,014</b>	<b>3,010,014</b>	<b>3,010,014</b>	<b>3,010,014</b>	<b>3,010,014</b>	<b>3,010,014</b>	<b>3,010,014</b>	<b>3,010,014</b>
50 <b>TOTAL O&amp;M REVENUE REQUIREMENTS</b>	<b>24,302,485</b>	<b>24,877,596</b>	<b>26,186,124</b>	<b>27,043,655</b>	<b>27,938,733</b>	<b>28,867,342</b>	<b>29,831,194</b>	<b>30,831,322</b>	<b>31,873,523</b>	<b>32,957,583</b>	<b>34,082,848</b>
51 <b>ANNUAL O&amp;M SURPLUS (DEFICIT)</b>	<b>(25,523)</b>	<b>(480,624)</b>	<b>(430,688)</b>	<b>(271,661)</b>	<b>(99,442)</b>	<b>7,319</b>	<b>13,031</b>	<b>10,490</b>	<b>9,000</b>	<b>9,867</b>	<b>10,097</b>
<b>CAPITAL REPLACEMENT &amp; REFURBISHMENT PROGRAM</b>											
<b>CAPITAL EXPENDITURES</b>											
52 Capital Replacement & Refurbishment Program	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,650,000	2,900,000	2,900,000	2,900,000	2,900,000	2,900,000
53 <b>TOTAL CAPITAL EXPENDITURES</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,650,000</b>	<b>2,900,000</b>	<b>2,900,000</b>	<b>2,900,000</b>	<b>2,900,000</b>	<b>2,900,000</b>
<b>CAPITAL PROGRAM REVENUE</b>											
54 Revenue from Current Capital Charge	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000
55 Capital Charge Revenue Increase	0	0	0	0	0	250,000	250,000	250,000	250,000	250,000	250,000
56 Capital Charge Revenue Increase	0	0	0	0	0	0	250,000	250,000	250,000	250,000	250,000
57 <b>Subtotal Capital Charge Revenue</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,650,000</b>	<b>2,900,000</b>	<b>2,900,000</b>	<b>2,900,000</b>	<b>2,900,000</b>	<b>2,900,000</b>
58 <b>TOTAL CAPITAL REVENUE</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,650,000</b>	<b>2,900,000</b>	<b>2,900,000</b>	<b>2,900,000</b>	<b>2,900,000</b>	<b>2,900,000</b>
59 <b>ANNUAL CAPITAL SURPLUS (DEFICIT)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
60 <b>TOTAL ANNUAL RESERVE IMPACT</b>	<b>(25,523)</b>	<b>(480,624)</b>	<b>(430,688)</b>	<b>(271,661)</b>	<b>(99,442)</b>	<b>7,319</b>	<b>13,031</b>	<b>10,490</b>	<b>9,000</b>	<b>9,867</b>	<b>10,097</b>
61 <b>ENDING RESERVE BALANCE</b>	<b>12,998,519</b>	<b>12,517,895</b>	<b>12,087,207</b>	<b>11,815,546</b>	<b>11,716,104</b>	<b>11,723,423</b>	<b>11,736,455</b>	<b>11,746,945</b>	<b>11,755,945</b>	<b>11,765,812</b>	<b>11,775,909</b>
62 <b>ANNUAL REVENUE INCREASE</b>		2.2%	4.5%	4.0%	4.2%	4.9%	4.3%	3.3%	3.3%	3.3%	3.4%
63 <b>DEBT COVERAGE RATIO (w/ Rate Stabilization)</b>	185%	168%	159%	164%	170%	173%	174%	173%	173%	173%	173%
64 <b>SIX MONTH OPERATING EXPENSE RESERVE TEST</b>	11,281,424	11,550,646	11,989,654	12,395,883	12,820,390	13,261,154	13,719,021	14,194,494	14,690,459	15,206,795	15,743,164
65 <b>ASSUMPTIONS</b>	<p align="center"><b>Debt Coverage Calculations</b>                      (L41-L43+2,200,000) / (L48)</p> <p>O&amp;M Expense Inflated at 3% per Year                      Power Expense Inflated at 5% per Year                      Admin Expense Inflated at 2.5% per Year                      Indirect Expense Inflated at 2% per Year                      Labor Expense (including Benefits &amp; Workers Comp) Inflated at 5% per Year                      Purchased Water Expense Based on MWDOC/MWD Projections                      Capital Charge Revenue from Recycled Meters Used to Fund Recycled Debt Service</p>										

**PROPOSED**

**WATER, SEWER & RECYCLED WATER**

**RATES & CHARGES**



## PROPOSED 18/19 FIXED METER RATES

Meter Size	Existing 2017-18 Rates	Proposed 2018-19 Rates	Billing & CS	Meters & Capacity	Rate Increase	# of Accounts	Water	RW
5/8-in	\$11.80	<b>\$12.96</b>	\$4.14	\$8.88	<b>9.8%</b>	2,384	2,384	0
3/4-in	\$15.82	<b>\$17.37</b>	\$4.14	\$13.32	<b>9.8%</b>	4,856	4,856	0
1-in	\$23.85	<b>\$26.20</b>	\$4.14	\$22.19	<b>9.9%</b>	444	444	0
1 1/2-in	\$43.92	<b>\$48.25</b>	\$4.14	\$44.39	<b>9.9%</b>	693	683	10
2-in	\$84.07	<b>\$92.36</b>	\$4.14	\$88.77	<b>9.9%</b>	1,401	1,201	200
<b>Total Projected</b>	<b>\$3,165,134</b>	<b>\$3,476,541</b>	<b>\$485,771</b>	<b>\$3,009,999</b>		<b>9,778</b>	<b>9,568</b>	<b>210</b>
Water	<b>\$2,958,095</b>	<b>\$3,249,087</b>	<b>\$475,338</b>	<b>\$2,791,624</b>				
Recycled Water	<b>\$207,038</b>	<b>\$227,454</b>	<b>\$10,433</b>	<b>\$218,375</b>				

## PROPOSED 18/19 SEWER RATES

Current WW Rates for	Existing 2017-18 Sewer Rates	Proposed 2018-19 Sewer Rates	Rate Increase
Residential Unrestricted	\$23.63 / EDU	\$24.30 / EDU	2.84%
Multi-Family Restricted	\$18.74 / EDU	\$19.28 / EDU	2.88%
Multi-Family Unrestricted	\$22.28 / EDU	\$22.92 / EDU	2.87%

### Current Commercial Classes

Animal Kennel	\$3.88 /ccf	\$3.99 /ccf	2.84%
Auto Service Station(repair)	\$3.87 /ccf	\$3.98 /ccf	2.84%
Basic Commercial	\$3.40 /ccf	\$3.50 /ccf	2.94%
Car Wash	\$3.86 /ccf	\$3.97 /ccf	2.85%
Dept. - Retail Store	\$3.88 /ccf	\$3.99 /ccf	2.84%
Dry Cleaner	\$3.40 /ccf	\$3.50 /ccf	2.94%
Health Spa	\$3.87 /ccf	\$3.98 /ccf	2.84%
Hospital	\$3.40 /ccf	\$3.50 /ccf	2.94%
Hotel	\$5.87 /ccf	\$6.04 /ccf	2.90%
Market	\$7.70 /ccf	\$7.92 /ccf	2.86%
Mortuaries	\$7.67 /ccf	\$7.89 /ccf	2.87%
Nursery	\$3.44 /ccf	\$3.54 /ccf	2.91%
Parks Golf Courses	\$3.39 /ccf	\$3.49 /ccf	2.95%
Prof/Financial Office	\$3.88 /ccf	\$3.99 /ccf	2.84%
Public Institution	\$3.82 /ccf	\$3.93 /ccf	2.88%
Restaurants	\$3.66 /ccf	\$3.77 /ccf	3.01%
Schools	\$4.01 /ccf	\$4.13 /ccf	2.99%
Theater	\$3.88 /ccf	\$3.99 /ccf	2.84%
Warehouse/Storage	\$3.07 /ccf	\$3.16 /ccf	2.93%

# **CUSTOMER SENSITIVITY ANALYSIS**

# SINGLE FAMILY RESIDENTIAL SENSITIVITY ANALYSIS

Billing Item	Current Rate	Proposed Rate	% Increase
Tier I (10 ccf)	\$ 25.20	\$ 25.20	0.0%
Tier II (5 ccf)	\$ 14.55	\$ 14.55	0.0%
Water Fixed Meter	\$ 15.82	\$ 17.37	9.8%
Water Capital R & R	<u>\$ 4.66</u>	<u>\$ 4.66</u>	<u>0.0%</u>
<b>Total Water</b>	<b>\$60.23</b>	<b>\$61.78</b>	<b>2.6%</b>
Sewer Fixed Meter	\$ 23.63	\$ 24.30	2.8%
Sewer Capital R & R	<u>\$ 4.93</u>	<u>\$ 4.93</u>	<u>0.0%</u>
<b>Total Sewer</b>	<b>\$28.56</b>	<b>\$29.23</b>	<b>2.3%</b>
<b>Total Bill</b>	<b>\$88.79</b>	<b>\$91.01</b>	
	<b>Increase</b>	<b>\$2.22</b>	<b>2.5%</b>



## LAGUNA WOODS VILLAGE SENSITIVITY ANALYSIS

Mutual	2017/18 Annual Charges	2018/19 Annual Charges	Increase Amount	%
Third Mutual	\$4,674,894	\$4,771,582	\$96,688	2.1%
United Mutual	\$3,787,722	\$3,857,162	\$69,439	1.8%
Golden Rain Foundation	\$805,573	\$811,594	\$6,021	0.7%
Mutual 50	\$162,399	\$165,284	\$2,884	1.8%
<b>Total Community</b>	<b>\$9,430,589</b>	<b>\$9,605,622</b>	<b>\$175,032</b>	<b>1.9%</b>

## CITIES SENSITIVITY ANALYSIS

<b>Mutual</b>	<b>2017/18 Annual Charges</b>	<b>2018/19 Annual Charges</b>	<b>Increase Amount</b>	<b>%</b>
<b>Laguna Woods</b>	<b>\$47,855</b>	<b>\$48,907</b>	<b>\$1,052</b>	<b>2.2%</b>
<b>Lake Forest</b>	<b>\$308,499</b>	<b>\$312,032</b>	<b>\$3,532</b>	<b>1.1%</b>
<b>Mission Viejo</b>	<b>\$124,671</b>	<b>\$126,142</b>	<b>\$1,471</b>	<b>1.2%</b>
<b>Laguna Hills</b>	<b>\$167,950</b>	<b>\$171,356</b>	<b>\$3,405</b>	<b>2.0%</b>
<b>Average Cities</b>	<b>\$162,244</b>	<b>\$164,609</b>	<b>\$2,365</b>	<b>1.5%</b>

**FIVE-YEAR**

**CAPITAL PROJECT AND EQUIPMENT PROGRAM BUDGET**

**EL TORO WATER DISTRICT  
FIVE YEAR CAPITAL IMPROVEMENT PLAN  
F. Y. 2018/19 - 2022/2023**

ITEM #	DESCRIPTION	2018/19	2019/20	2020/21	2021/22	2022/23	TOTAL	WATER	SEWER
<i>Source of Supply / Storage Projects</i>									
1	R-2 Reservoir Interior Recoating (E/C)		262,500				262,500	262,500	
2	R-2 Reservoir Exterior Recoating (E/C)		80,000				80,000	80,000	
3	JRWSS Capital Budget	8,400	26,235	7,380	5,190	66,390	113,595	113,595	
4	Baker WRP Replacement Fund	52,795	52,795	52,795	52,795	52,795	263,975	263,975	
5	P-1 Impellers	36,000					36,000	36,000	
6	R-6 Chlorine & Ammonia Chemical Feed Pump Replacement					110,000	110,000	110,000	
<i>Total Source of Supply / Storage Projects</i>		97,195	421,530	60,175	57,985	229,185	866,070	866,070	0
<i>Pumping (Water) Projects</i>									
1	P-3 New MCC with TS, Nema 3R Main & Generator Installation and Pump Replacements			400,000			400,000	400,000	
2	Water Stations PLC Upgrade to Control Logix	25,000	25,000	25,000			75,000	75,000	
3	Fence Repairs at Main P.R.	25,000					25,000	25,000	
4	VFD Replacement and Bypass SoftStarter 200 HP	17,000					17,000	17,000	
<i>Total Pumping (Water) Projects</i>		67,000	25,000	425,000	0	0	517,000	517,000	0
<i>Pumping (Water) Equipment</i>									
1	Cherry Booster Station Pump Replacement			100,000			100,000	100,000	
2	Shenandoah Booster Station Pump Replacement			100,000			100,000	100,000	
<i>Total Pumping (Water) Equipment</i>		0	0	200,000	0	0	200,000	200,000	0
<i>Pumping (Sanitation) Projects</i>									
1	Aliso Creek Lift Station Skid Pump and Piping	200,000					200,000		200,000
2	Sewer Stations PLC Upgrade to Control Logix	25,000	25,000	25,000			75,000		75,000
3	4920 Siphon Stabilization			150,000			150,000		150,000
4	8-inch Trailer Mounted Emergency Pump	85,000					85,000		85,000
<i>Total Pumping (Sanitation) Projects</i>		310,000	25,000	175,000	0	0	510,000	0	510,000
<i>Pumping (Sanitation) Equipment</i>									
1	Aliso Creek Emergency Generator 350 KW (Unit 215)				200,000		200,000		200,000
2	Delta Wall mount Gas detector	7,000					7,000		7,000
3	Aliso Creek Wall mount Gas detector	7,000					7,000		7,000
4	Aliso Creek Lift Station Wet Well Repairs/Recoating	15,000					15,000		15,000
<i>Total Pumping (Sanitation) Equipment</i>		29,000	0	0	200,000	0	229,000	0	229,000

<u>Treatment (Sanitation) Projects</u>								
1	WRP Main Electrical Power Breaker Upgrade			35,000			35,000	35,000
2	Grit Chamber Rehab/Re-Coating			85,000			85,000	85,000
3	New Scum Station for Clarifiers #3 & #4	40,000					40,000	40,000
4	Secondary Clarifier # 1 Component Replacement		150,000				150,000	150,000
5	Secondary Clarifier # 4 Component Replacement				150,000		150,000	150,000
6	New MCC S-D Electrical Cabinet & Breakers (DAF Unit #1)			30,000			30,000	30,000
7	Reconstruct (West Side) Drainage Swale at the Holding Pond	68,250					68,250	68,250
8	HACH (WIMS) Maint. Job Cal Database Management Software System			10,500			10,500	10,500
9	Retrofit HST Blowers Intake Air Filters with Industra Filters	12,000					12,000	12,000
10	Headworks CB, Remove Eff PS old MCC, Install WAC Level Inst.		20,000				20,000	20,000
11	Replace Aeration Basins D.O. Probe and TSS Solids Probe Sensors	18,500					18,500	18,500
<b>Total Treatment (Sanitation) Projects</b>		<b>138,750</b>	<b>170,000</b>	<b>160,500</b>	<b>150,000</b>	<b>0</b>	<b>619,250</b>	<b>619,250</b>
<u>Treatment (Sanitation) Equipment</u>								
1	Aeration Basin Diffusers			10,000			10,000	10,000
2	RAS Pumps Upgrade		30,000				30,000	30,000
3	Rotostrainer Drum Replacement			30,000			30,000	30,000
4	Effluent Pump Station Pump Replacements			100,000			100,000	100,000
5	Kubota Utility Vehicle for the Plant	16,000					16,000	16,000
6	OOPS Emergency Generator Replacement		220,000				220,000	220,000
7	Aqua-Aerobic CMD Filter Sock Replacements for Filters #1 & #2		25,000				25,000	25,000
8	Main Emergency Generator Control Panel & Auxiliary Power Up-Grade			80,000			80,000	80,000
9	Biofilter's Odor Scrubber Foul Air Fan Replacements	50,000					50,000	50,000
<b>Total Treatment (Sanitation) Equipment</b>		<b>66,000</b>	<b>275,000</b>	<b>220,000</b>	<b>0</b>	<b>0</b>	<b>561,000</b>	<b>561,000</b>
<u>Laboratory Equipment</u>								
1	Autoclave Replacement	15,000					15,000	15,000
2	Incubators	10,000					10,000	10,000
3	Ion Chromatography			45,000			45,000	45,000
4	Undercounter Glassware Washer		8,000				8,000	8,000
<b>Total Laboratory Equipment</b>		<b>25,000</b>	<b>8,000</b>	<b>45,000</b>	<b>0</b>	<b>0</b>	<b>78,000</b>	<b>78,000</b>
<u>Outside Treatment (SOCWA)</u>								
1	SOCWA Capital Budget	614,831	806,752	482,377	782,019	800,000	3,485,979	3,485,979
<b>Total Treatment (SOCWA)</b>		<b>614,831</b>	<b>806,752</b>	<b>482,377</b>	<b>782,019</b>	<b>800,000</b>	<b>3,485,979</b>	<b>3,485,979</b>

<u>Transmission &amp; Distribution Projects</u>									
1	AMI Implementation	200,000	200,000	200,000	200,000	200,000	1,000,000	1,000,000	
2	Moulton/El Toro Cathodic Protection Study	10,000					10,000	10,000	
3	Moulton/El Toro Cathodic Protection Repairs		50,000				50,000	50,000	
4	21" PCCP Valve Replacements and Pipeline Repair					150,000	150,000	150,000	
<i>Total Transmission &amp; Distribution (Water) Projects</i>		210,000	250,000	200,000	200,000	350,000	1,210,000	1,210,000	
<u>Collection Equipment</u>									
1	P332 Flexiprobe (Push Camera) Inspection System - PearPoint		20,000				20,000		20,000
2	P350 Flexiprobe (Mobile-Portable Camera) Inspection System - PearPoint			40,000			40,000		40,000
4	Spare Tractor & TV Camera-CUES		45,000				45,000		45,000
5	Lift Assembly for CCTV, Power, CPR	6,700					6,700		6,700
<i>Total Collection Equipment</i>		6,700	65,000	40,000	0	0	111,700	0	111,700
<u>Vehicles/Vehicle Equipment</u>									
1	Vehicle Replacement	50,000	75,000	100,000	100,000	50,000	375,000	187,500	187,500
2	Dump Truck (Unit 4)		140,000				140,000	70,000	70,000
3	Hydro Excavator				480,000		480,000	240,000	240,000
4	Warehouse Forklift				50,000		50,000	25,000	25,000
5	2001 F-450 Hydrant and Valve Truck (Unit 60)			70,000			70,000	70,000	
6	300-375KW Emergency Generator Trailer (Regulatory Compliance)	175,000					175,000	87,500	87,500
7	Vactor 2100 Combo Machine (Replace Unit 80)					500,000	500,000		500,000
8	Boom Truck (Diesel - Regulatory Compliance)					200,000	200,000	100,000	100,000
9	Forklift WRP (Diesel - Regulatory Compliance)			85,000			85,000		85,000
10	10-Wheel Dump Truck (Unit #50, Regulatory Compliance)					175,000	175,000	87,500	87,500
<i>Total Vehicles / Vehicle Equipment</i>		225,000	215,000	255,000	630,000	925,000	2,250,000	867,500	1,382,500
<u>Construction/Mechanical/Electical Equipment</u>									
1	Backhoe				145,000		145,000	72,500	72,500
2	Walk Behind Concrete Saw	25,500					25,500	12,750	12,750
<i>Total Construction Equipment</i>		25,500	0	0	145,000		170,500	85,250	85,250
<u>General Building Projects</u>									
1	Master Plan Update						0	0	0
2	Old Treatment Plant / Clear Well Demo	400,000					400,000	400,000	
3	Remove and Replace Damaged Insulation in Warehouse/Fleet Building	37,000					37,000	18,500	18,500
4	Main Office (Bob Hill) HVAC Replacement		17,000				17,000	8,500	8,500
5	WRP CL2 Room HVAC Replacement	14,000					14,000		14,000
6	Northline Lift Station HVAC Replacement	9,000					9,000		9,000
<i>Total General Building Projects</i>		460,000	17,000	0	0	0	477,000	427,000	50,000

<u>Office Equipment/Furniture</u>									
1	Network Upgrade - 10GB				100,000		100,000	50,000	50,000
2	Firewall Replacement			30,000			30,000	15,000	15,000
4	Exchange Server Replacement		20,000				20,000	10,000	10,000
5	Replace Servers				50,000		50,000	25,000	25,000
<b>Total Office Equipment / Furniture</b>		<b>0</b>	<b>20,000</b>	<b>30,000</b>	<b>150,000</b>	<b>0</b>	<b>200,000</b>	<b>100,000</b>	<b>100,000</b>
<u>Contingency</u>									
1	Contingency	125,024	30,718	14,948	3,996	15,815	190,501	95,251	95,251
2	Inflation @ 5%		71,000	92,000	81,000	80,000	324,000	162,000	162,000
<b>Total Contingency</b>		<b>125,024</b>	<b>101,718</b>	<b>106,948</b>	<b>84,996</b>	<b>95,815</b>	<b>514,501</b>	<b>257,251</b>	<b>257,251</b>

<b>Total Capital Budget</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>12,000,000</b>	<b>4,530,071</b>	<b>7,469,930</b>
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<b>Total Capital Projects</b>	<b>1,960,288</b>	<b>1,766,141</b>	<b>1,556,526</b>	<b>1,232,502</b>	<b>1,427,093</b>	<b>7,942,550</b>	<b>3,148,695</b>	<b>4,793,854</b>
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WATER	823,951	730,460	711,912	279,234	603,139	3,148,695
SEWER	1,136,337	1,035,682	844,614	953,268	823,954	4,793,854

<b>Total Capital Equipment</b>	<b>439,712</b>	<b>633,859</b>	<b>843,474</b>	<b>1,167,498</b>	<b>972,908</b>	<b>4,057,451</b>	<b>1,381,375</b>	<b>2,676,075</b>
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WATER	156,506	142,930	361,737	483,749	236,454	1,381,375
SEWER	283,206	490,930	481,737	683,749	736,454	2,676,075

<b>Total Capital Budget</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>2,400,000</b>	<b>12,000,000</b>	<b>4,530,071</b>	<b>7,469,930</b>
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WATER	980,457	873,389	1,073,649	762,983	839,593	4,530,071
SEWER	1,419,543	1,526,611	1,326,351	1,637,017	1,560,408	7,469,930

Inflation Basis = Total Capital less SOCWA less Contingency less

JRWSS

1,598,950	1,412,500	1,750,500	1,475,000	1,385,000
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Inflation @ 5%

\$70,625	\$91,901	\$81,309	\$80,166
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\$71,000	\$92,000	\$81,000	\$80,000
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Capital Less SOCWA

Water

Sewer

Total

**2018/19 CAPITAL REPLACEMENT & REFURBISHMENT PROGRAM**

**Projects**

**Equipment**

Source of Supply / Storage Projects

Pumping (Sanitation) Equipment

1	JRWSS Capital Budget	8,400
2	Baker WRP Replacement Fund	52,795
3	P-1 Impellers	36,000
<i>Total Source of Supply</i>		97,195

1	Delta Wall mount Gas detector	7,000
2	Aliso Creek Wall mount Gas detector	7,000
3	Aliso Creek Lift Station Wet Well Repairs/Recoating	15,000
<i>Total Pumping (Sanitation)</i>		29,000

Pumping (Water) Projects

Treatment (Sanitation) Equipment

4	Water Stations PLC Upgrade to Control Logix	25,000
5	Fence Repairs at Main P.R.	25,000
6	VFD Replacement and Bypass SoftStarter 200 HP	17,000
<i>Total Pumping (Water)</i>		67,000

4	Kubota Utility Vehicle for the Plant	16,000
5	Biofilter's Odor Scrubber Foul Air Fan Replacements	50,000
<i>Total Treatment (Sanitation)</i>		66,000

Pumping (Sanitation) Projects

Laboratory Equipment

7	Aliso Creek Lift Station Skid Pump and Piping	200,000
8	Sewer Stations PLC Upgrade to Control Logix	25,000
9	8-inch Trailer Mounted Emergency Pump	85,000
<i>Total Pumping (Sanitation)</i>		310,000

6	Autoclave Replacement	15,000
7	Incubators	10,000
<i>Total Laboratory Equipment</i>		25,000

Treatment (Sanitation) Projects

Collection Equipment

10	New Scum Station for Clarifiers #3 & #4	40,000
11	Reconstruct (West Side) Drainage Swale at the Holding Pond	68,250
12	Retrofit HST Blowers Intake Air Filters with Industra Filters	12,000
13	Replace Aeration Basins D.O. Probe and TSS Solids Probe Sensors	18,500
<i>Total Treatment (Sanitation)</i>		138,750

8	Lift Assembly for CCTV, Power, CPR	6,700
<i>Total Collection Equipment</i>		6,700

Outside Treatment (SOCWA)

Vehicles/Vehicle Equipment

14	SOCWA Capital Budget	614,831
<i>Total Treatment (SOCWA)</i>		614,831

9	Vehicle Replacement	50,000
10	300-375KW Emergency Generator Trailer (Regulatory Compliant)	175,000
<i>Total Vehicles / Vehicle Equipment</i>		225,000

Transmission & Distribution Projects

Construction/Mechanical/Electrical Equipment

15	AMR / AMI Implementation	200,000
16	Moulton/El Toro Cathodic Protection Study	10,000
<i>Total Mainline</i>		210,000

11	Walk Behind Concrete Saw	25,500
<i>Total Construction Equipment</i>		25,500

General Building Projects

Contingency

17	Old Treatment Plant / Clear Well Demo	400,000
18	Remove and Replace Damaged Insulation in Warehouse/Fleet Buil	37,000
19	WRP CL2 Room HVAC Replacement	14,000
20	Northline Lift Station HVAC Replacement	9,000
<i>Total General Building</i>		460,000

17	Contingency	62,512
<i>Total Contingency</i>		62,512

Contingency

26	Contingency	62,512
<i>Total Contingency</i>		62,512

**Total Capital Equipment** \$439,712

**Total Capital Projects** 1,960,288

**Total Capital Equipment** 439,712

**Total Capital Budget** 2,400,000

**Total Capital Projects** \$1,960,288

**LEGEND**

WATER
SEWER
BOTH



**WATER, SEWER AND RECYCLED WATER  
COST OF SERVICE STUDY  
REPORT**

# EL TORO WATER DISTRICT

## Water, Recycled Water, and Wastewater Rate Study

Final Report / April 16, 2018







April 16, 2018

Dennis P. Cafferty, P.E.  
Assistant General Manager / District Engineer  
El Toro Water District  
24251 Los Alisos Blvd.  
Lake Forest, CA 92630

**Subject:** Water, Recycled Water and Wastewater Rate Study Report

Dear Mr. Cafferty:

As part of the annual cost of service and rate update process, El Toro Water District (ETWD or District) engaged Raftelis Financial Consultants, Inc. to conduct a cost of service study for the development of its water, wastewater, and recycled water rates that comply with Proposition 218 and other legal requirements. As part of the Study, we reviewed the latest operating budget, including purchased water costs, referenced previously conducted cost of service analyses, and calculated the water, wastewater and recycled water rates for the District in fiscal year (FY) 2018-19. The updated rates, scheduled to be effective on July 1, 2018, reflect projected changes in net revenue requirements for each enterprise and projected water sales for FY 2018-19.

This *Water, Recycled Water and Wastewater Rate Study Report* summarizes the key findings and recommendations related to the development of the respective rates.

It has been a pleasure working with the District. We would like to thank you for your assistance during the course of the study. If we can be of further assistance, please call me at 626-583-1894 or Khanh Phan at 626-233-6762.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Sudhir Pardiwala'.

Sudhir Pardiwala  
Executive Vice President

A handwritten signature in black ink, appearing to read 'Khanh Phan'.

Khanh Phan  
Sr. Consultant

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# GLOSSARY

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AF	Acre foot / acre feet
AWWA	American Water Works Association
CCF	100 cubic feet = 748 gallons
CII	Commercial / Industrial / Institutional (i.e. Commercial and Public Authority)
COS	Cost of Service
DF	Drought Factor (see Section 4 for details)
EDU	Equivalent dwelling unit
ET <sub>0</sub>	reference Evapotranspiration (see Section 4 for details)
ETAF	ET Adjustment Factors (see Section 4 for details)
FY	Fiscal year
GPCD	Gallons per capita per day
IRR	Irrigation
IWB	Indoor Water Budget (see Section 4 for details)
M1 Manual	M1 Manual, Principles of Water Rates, Fees and Charges, Sixth Edition published by AWWA
MFR	Multi-Family Residential
MWD	Metropolitan Water District of Southern California
MWDOC	Municipal Water District of Orange County
O&M	Operations & Maintenance
OWB	Outdoor Water Budget (see Section 4 for details)
R&R	Replacement and Refurbishment
Raftelis	Raftelis Financial Consultants, Inc.
RW	Recycled Water
SFR	Single Family Residential
SQ FT	Square feet
TWB	Total Water Budget = Indoor Water Budget + Outdoor Water Budget

$V_{\text{indoor}} / V_{\text{outdoor}}$	Indoor Variance / Outdoor Variance (see Section 4 for details)
WB	Water Budget
WRP	Water Recycling Plant

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# 1. EXECUTIVE SUMMARY

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## 1.1 BACKGROUND OF THE STUDY

The District engaged Raftelis Financial Consultants, Inc. (Raftelis) to conduct the Water, Recycled Water (RW) and Wastewater Rate Study (Study) to develop rates for all three enterprises that are equitable and in compliance with Proposition 218. This *Water, Recycled Water and Wastewater Rate Study Report 2018* (Report) summarizes the key findings and recommendations related to the development of the respective rates.

The District's current water and wastewater rate structure consists of the following components to ensure that rates are charged equitably to all customers, provide adequate revenues to fund operating and capital costs, and are simple to administer and implement while continuing to promote water efficiency and conservation:

- Water
  - Monthly Service Charges by meter size to recover a portion of operating costs
  - Variable Rates: Tiered Residential Rates, and Uniform Commercial Rates, comprised of the following rate components:
    - Water Supply Rate to pay for purchased water supply costs
    - Delivery Rate to recover the remaining operating costs
    - Revenue Offset to provide a rate incentive and affordability for essential water use in Tier 1
    - Conservation and Recycled Water Program costs applied to inefficient and excessive water use to fund the District's conservation and supplemental water supply (i.e., Recycled Water expansion) programs
  - Capital Replacement and Refurbishment (R&R) Charges by meter size to pay for capital replacement and refurbishment of the existing water system
  - Monthly Service Charges for Fire Services to recover a portion of operating costs
- Wastewater (WW)
  - O&M Charges (by dwelling units for residential customers and by water usage for non-residential customers) by customer classes
  - Capital R&R Charges by meter size to pay for capital R&R of the existing wastewater system

## 1.2 PROPOSED WATER RATES

### 1.2.1 Monthly Service Charges

Table 1-1 shows the proposed monthly service charges for FY 2019, effective July 1, 2018.

**Table 1-1: FY 2019 Proposed Monthly Water Service Charges**

Meter Size	FY 2018 Rates	FY 2019 Rates	\$ Change	% Change
5/8-in	\$11.80	\$12.96	\$1.16	9.8%
3/4-in	\$15.82	\$17.37	\$1.55	9.8%
1-in	\$23.85	\$26.20	\$2.35	9.9%
1 1/2-in	\$43.92	\$48.25	\$4.33	9.9%
2-in	\$84.07	\$92.36	\$8.29	9.9%

## 1.2.2 Capital R&R Charges

The District will retain the current Capital R&R Charges.

**Table 1-2: FY 2019 Proposed Monthly Water Capital R&R Charges**

Meter Size	FY 2018 Rates	FY 2019 Rates	\$ Increase	% Increase
5/8-in	\$4.66	\$4.66	\$0.00	0%
3/4-in	\$4.66	\$4.66	\$0.00	0%
1-in	\$7.78	\$7.78	\$0.00	0%
1 1/2-in	\$18.91	\$18.91	\$0.00	0%
2-in	\$47.47	\$47.47	\$0.00	0%

## 1.2.3 Commodity Rates

The District has decided not to increase the Commodity Rates. Rather, it will fund the increase in the water supply costs with restricted reserves and retain the FY 2018 rates.

**Table 1-3: FY 2019 Proposed Water Commodity Rates**

Tier	FY 2018	FY 2019	\$ Increase	% Increase
Tier 1 - Essential Use	\$2.52	\$2.52	\$0.00	0%
Tier 2 - Efficient Use	\$2.91	\$2.91	\$0.00	0%
Tier 3 - Inefficient Use	\$6.08	\$6.08	\$0.00	0%
Tier 4 - Excessive Use	\$7.82	\$7.82	\$0.00	0%
Uniform - Commercial Use	\$2.89	\$2.89	\$0.00	0%

## 1.3 PROPOSED WASTEWATER RATES

### 1.3.1 Service Charges

There is little change in the relative distribution of costs in the Wastewater Enterprise, therefore the rates will be updated to account for any necessary adjustments to meet the revenue requirements projected for FY 2019. The revenue adjustment will be applied uniformly to the rates for all Wastewater classes.

Table 1-4 provides the proposed rates for FY 2019 with a comparison to the FY 2018 rates. Note that, due to rounding, the percent increase for each class varies slightly from the overall increase of 2.83 percent.

**Table 1-4: FY 2019 Proposed Wastewater Service Charges**

Customer Class	FY 2018 Rates	FY 2019 Rates	\$ Increase	% Increase
Residential Unrestricted	\$23.63 / EDU	\$24.30 / EDU	\$0.67	2.84%
Multi-Family Restricted	\$18.74 / EDU	\$19.28 / EDU	\$0.54	2.88%
Multi-Family Unrestricted	\$22.28 / EDU	\$22.92 / EDU	\$0.64	2.87%
Animal Kennel/Hospital	\$3.88 / ccf	\$3.99 / ccf	\$0.11	2.84%
Car Wash	\$3.86 / ccf	\$3.97 / ccf	\$0.11	2.85%
Department/Retail Store	\$3.88 / ccf	\$3.99 / ccf	\$0.11	2.84%
Dry Cleaners	\$3.40 / ccf	\$3.50 / ccf	\$0.10	2.94%
Golf Course/Camp/Park	\$3.39 / ccf	\$3.49 / ccf	\$0.10	2.95%
Health Spa	\$3.87 / ccf	\$3.98 / ccf	\$0.11	2.84%
Hospital/Convalescent Home	\$3.40 / ccf	\$3.50 / ccf	\$0.10	2.94%
Hotel	\$5.87 / ccf	\$6.04 / ccf	\$0.17	2.90%
Market	\$7.70 / ccf	\$7.92 / ccf	\$0.22	2.86%
Mortuary	\$7.67 / ccf	\$7.89 / ccf	\$0.22	2.87%
Nursery/Greenhouse	\$3.44 / ccf	\$3.54 / ccf	\$0.10	2.91%
Professional/Financial Office	\$3.88 / ccf	\$3.99 / ccf	\$0.11	2.84%
Public Institution	\$3.82 / ccf	\$3.93 / ccf	\$0.11	2.88%
Repair/Service Station	\$3.87 / ccf	\$3.98 / ccf	\$0.11	2.84%
Restaurant	\$3.66 / ccf	\$3.77 / ccf	\$0.11	3.01%
Schools	\$4.01 / ccf	\$4.13 / ccf	\$0.12	2.99%
Theater	\$3.88 / ccf	\$3.99 / ccf	\$0.11	2.84%
Warehouse/Storage	\$3.07 / ccf	\$3.16 / ccf	\$0.09	2.93%
Basic Commercial	\$3.40 / ccf	\$3.50 / ccf	\$0.10	2.94%



### 1.3.2 Capital R&R Charges

The Wastewater Enterprise will also retain its current Capital R&R Charges with no proposed increase.

**Table 1-5: FY 2019 Proposed Monthly Wastewater Capital R&R Charges**

Customer Classes	Current Capital R&R Charges	FY 2019 Capital R&R Charges	\$ Increase	% Increase
<b>Residential</b>				
Residential Unrestricted	\$4.93 / EDU	\$4.93 / EDU	\$0.00	0.0%
Multi-Family Restricted	\$3.91 / EDU	\$3.91 / EDU	\$0.00	0.0%
Multi-Family Unrestricted	\$4.65 / EDU	\$4.65 / EDU	\$0.00	0.0%
<b>Non-Residential</b>				
5/8"	\$4.34 / month	\$4.34 / month	\$0.00	0.0%
3/4"	\$7.34 / month	\$7.34 / month	\$0.00	0.0%
1"	\$13.55 / month	\$13.55 / month	\$0.00	0.0%
1 1/2"	\$24.07 / month	\$24.07 / month	\$0.00	0.0%
2"	\$70.96 / month	\$70.96 / month	\$0.00	0.0%
<b>Public Authority</b>				
1"	\$4.93 / month	\$4.93 / month	\$0.00	0.0%
1 1/2"	\$24.65 / month	\$24.65 / month	\$0.00	0.0%
2"	\$39.71 / month	\$39.71 / month	\$0.00	0.0%

### 1.4 PROPOSED RECYCLED WATER RATES

With the completion of the Recycled Water Expansion Project, all RW customers (existing and converted customers) are now supplied with higher quality tertiary RW, and are subject to the corresponding rates that support the annual cost of providing tertiary RW. The existing RW rate is \$2.62/ccf, which is approximately 90 percent of the Tier 2 potable water rate. There is no proposed increase in the RW rate for FY 2019. All RW customers connected to the new recycled water distribution system will be assessed Monthly Service Charges (Table 1-6) and Capital R&R Charges (Table 1-7), the same as potable meters to recover the customer service, meter service, a portion of capacity and other RW related fixed costs and to pay for capital R&R of the expanded RW system.

**Table 1-6: FY 2019 Proposed Monthly Recycled Water Service Charges**

Meter Size	FY 2018 Rates	FY 2019 Rates	\$ Change	% Change
5/8-in	\$11.80	\$12.96	\$1.16	9.8%
3/4-in	\$15.82	\$17.37	\$1.55	9.8%
1-in	\$23.85	\$26.20	\$2.35	9.9%
1 1/2-in	\$43.92	\$48.25	\$4.33	9.9%
2-in	\$84.07	\$92.36	\$8.29	9.9%

**Table 1-7: FY 2019 Proposed Monthly Recycled Water Capital R&R Charges**

Meter Size	FY 2018 Rates	FY 2019 Rates	\$ Increase	% Increase
5/8-in	\$4.66	\$4.66	\$0.00	0%
3/4-in	\$4.66	\$4.66	\$0.00	0%
1-in	\$7.78	\$7.78	\$0.00	0%
1 1/2-in	\$18.91	\$18.91	\$0.00	0%
2-in	\$47.47	\$47.47	\$0.00	0%

## 1.5 PROPOSED FIRE SERVICE CHARGES

The District proposes to increase the Monthly Fire Service Charges by 9.9%, increasing revenue by \$10,000. As shown in Table 1-8, all Fire Service customers pay \$7.67 a month. With the rate increase, all Fire Service customers will pay \$8.43 a month.

**Table 1-8: Proposed Monthly Fire Service Charges**

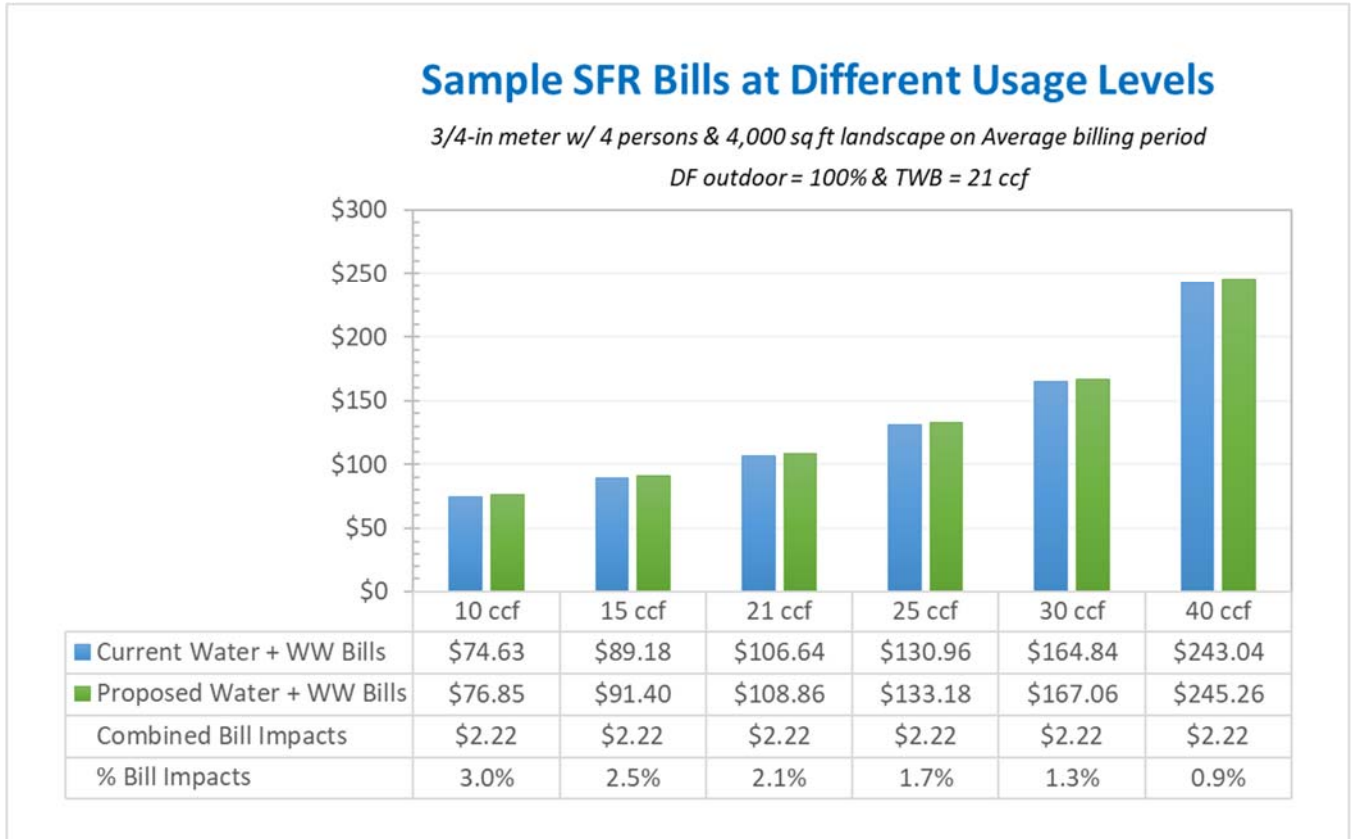
Meter Size	Quantity	Current Rate	Annual Revenue	Proposed Rate	Annual Revenue
4"	26	\$7.67	\$9,572	\$8.43	\$10,521
6"	89	\$7.67	\$49,149	\$8.43	\$54,019
8"	52	\$7.67	\$38,289	\$8.43	\$42,083
10"	4	\$7.67	\$3,682	\$8.43	\$4,046
<b>171</b>			<b>\$100,692</b>		<b>\$110,669</b>

## 1.6 CUSTOMER IMPACT ANALYSIS

Figure 9-1 shows a breakdown of water and wastewater bills at various water usage levels for a single family residential user with 4 occupants and 4,000 sq. ft. landscape area serviced by a 3/4-in meter. The combined water and wastewater bill increase would be \$2.22 per month, resulting from increases in water and

wastewater monthly fixed service charges. Note that the impacts for recycled water are not shown because residential users do not purchase recycled water.

**Figure 1-1: SFR Total Monthly Bill at Different Usage Levels**



## 2. INTRODUCTION

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### 2.1 DISTRICT BACKGROUND

The El Toro Water District (District), located within the southern portion of Orange County, was formed in 1960 under provisions of California Water District Law, Division 13 of the Water Code of the State of California, commencing with Section 34000, for the purposes of providing water and wastewater services to the service area. The District is governed by a publicly elected Board of Directors. The District is nearly built out and encompasses the entirety of the City of Laguna Woods and portions of four other cities: Lake Forest, Aliso Viejo, Laguna Hills, and Mission Viejo.

The District provides water, wastewater, and recycled water services to a population of approximately 48,500 in a service area of approximately 8.5 square miles. Constructed in phases since 1960, the District's water system is relatively modern. It contains 6 reservoirs with a combined capacity of 287 million gallons, over 180 miles of water lines, and 8 booster pump stations with 12 pressure zones to deliver water to approximately 9,800 metered water accounts. The District also participated in a five-agency collaboration to fund and construct a local water treatment plant (Baker Water Treatment Plant) located in the City of Lake Forest to improve water treatment and water supply reliability for ETWD's customers and South Orange County. The Baker Water Treatment Plant (Baker WTP) allows the participating agencies to purchase untreated water from MWDOC at a lower cost than the treated water, reducing the financial burden on the District's customers.

The District's wastewater system is comprised of 114 miles of collection system pipeline, 3,200 manholes, and 11 pump stations which pump to the District's treatment plant with a rated capacity of 6 million gallons per day. Much of the District's effluent is reused through RW sales. The District completed its Water Recycling Plant (WRP) upgrades to produce higher quality tertiary RW in FY 2015. To make RW available to more customers, the District increased its RW distribution system by adding 19 miles of RW distribution pipeline. The Phase I distribution expansion enabled RW sales to 210 additional irrigation accounts. The conversion of the 210 accounts to RW was completed in June 2016. The District is currently constructing a Phase II RW Project that will add 5 miles of RW distribution pipeline and 65 recycled water meters. The Phase II Project has increased FY 2019 RW estimated sales to 1,485 AF.

### 2.2 STUDY BACKGROUND AND OBJECTIVES

As part the annual cost of service and rate update process, the District engaged Raftelis to conduct the Water, Recycled Water (RW) and Wastewater Rate Study (Study) to develop rates for all three enterprises that are equitable and in compliance with Proposition 218.

The major objectives of the study include the following:

1. Determine the revenue requirements from water, wastewater, and recycled water rates for FY 2019 to meet operating and capital expenses
2. Update the water rates to meet the District's goals and objectives, including defensibility, affordability for essential use and promoting efficiency and conservation
3. Update the recycled water rates
4. Update the wastewater rates
5. Conduct customer impact analyses for the proposed water, recycled water, and wastewater rates

This *2018 Water, Recycled Water, and Wastewater Rate Study Report* (Report) summarizes the key findings and recommendations related to the development of the respective rates.

## 2.3 LEGAL FRAMEWORK AND RATE SETTING METHODOLOGY

This section of the report describes the legal framework that was considered in the development of the rates to ensure that the calculated cost of service rates provided a fair and equitable allocation of costs to the different customer classes.

### 2.3.1 Constitutional Mandates and Statutory Authority

Article XIII D, Section 6 (Proposition 218) and Article X, Section 2 of the California Constitution govern the principles applicable to this Rate Study. This Rate Study equitably implements and harmonizes these constitutional mandates in concert with the authority and principles set forth in Water Code Section 370 et seq. which governs Allocation-Based Conservation Water Pricing (commonly referred to as “Water Budget Rate Structure”).

This Rate Study provides for a water budget four tier Rate Structure designed to implement, in a reasonable manner, the constitutional mandates and statutory authority and principles referenced above.

### 2.3.2 California Constitution – Article X, Section 2

Article X, Section 2 of the California Constitution (established in 1976) provides as follows:

*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.*

As such, public agencies are constitutionally mandated to maximize the beneficial use of water, prevent waste, and encourage conservation which this Rate Study achieves.

### 2.3.3 California Constitution – Article XIII D, Section 6 (Proposition 218)

Proposition 218 reflected in the California Constitution as Article XIII D, was enacted in 1996 to ensure that rates and fees were reasonable and proportional to the cost of providing service. The principal requirements for fairness of the fees, as they relate to public water and wastewater service are as follows:

1. Water and wastewater rates shall not exceed the funds required to provide the service
2. Revenues derived by the charge shall not be used for any other purpose other than that for which the charge was imposed
3. The amount of the charge imposed upon any parcel shall not exceed the proportional cost of service attributable to the parcel
4. No charge may be imposed for a service unless that service is actually used or immediately available to the owner of property

The rates developed in this Rate Study use a methodology to establish an equitable system of fixed and variable charges that recover the cost of providing service and fairly apportion costs to each customer as required by Proposition 218.

### **2.3.4 Statutory Authority – Government Code Section 370 et seq. (Allocation-Based Conservation Water Pricing)**

In 2000, the California Legislature (AB 2882), consistent with the above-referenced constitutional provisions, adopted a body of law entitled “Allocation-Based Conservation Water Pricing” (Water Code Section 370 et seq.)

Water Code Section 370 provides in part as follows:

*The Legislature hereby finds and declares all of the following:*

- (a) The use of allocation-based conservation water pricing by public entities that sell and distribute water is one effective means by which waste or unreasonable use of water can be prevented and water can be saved in the interest of the people and for the public welfare, within the contemplation of Section 2 of Article X of the California Constitution.*
- (b) It is in the best interest of the people of California to encourage public entities to voluntarily use allocation-based conservation water pricing, tailored to local needs and conditions, as a means of increasing efficient uses of water, and further discouraging wasteful or unreasonable use of water under both normal and dry-year hydrologic conditions.*

Water Code Section 372 provides as follows:

- (a) A public entity may employ allocation-based conservation water pricing that meets all of the following criteria:
  - (1) Billing is based on metered water use.*
  - (2) A basic use allocation is established for each customer account that provides a reasonable amount of water for the customer’s needs and property characteristics. Factors used to determine the basic use allocation may include, but are not limited to the number of occupants, the type or classification of use, the size of lot or irrigated area, and the local climate data for the billing period. Nothing in this chapter prohibits a customer of the public entity from challenging whether the basic use allocation established for that customer’s account is reasonable under the circumstances. Nothing in this chapter is intended to permit public entities to limit the use of property through the establishment of a basic use allocation.*
  - (3) A basic charge is imposed for all water used within the customer’s basic use allocation, except that at the option of the public entity, a lower rate may be applied to any portion of the basic use allocation that the public entity has determined to represent superior or more than reasonable conservation efforts.**

*(4) A conservation charge shall be imposed on all increments of water use in excess of the basic use allocation. The increments may be fixed or may be determined on a percentage or any other basis, without limitation on the number of increments, or any requirement that the increments or conservation charges be sized, or ascend uniformly, or in a specified relationship. The volumetric prices for the lowest through the highest priced increments shall be established in an ascending relationship that is economically structured to encourage conservation and reduce the inefficient use of water, consistent with Section 2 of Article X of the California Constitution.*

*(b) ---*

*(1) Except as specified in subdivision (a), the design of an allocation-based conservation pricing rate structure shall be determined in the discretion of the public entity.*

*(2) The public entity may impose meter charges or other fixed charges to recover fixed costs of water service in addition to the allocation-based conservation pricing rate structure.*

*(c) A public entity may use one or more allocation-based conservation water pricing structures for any class of municipal or other service that the public entity provides.*

As noted in the referenced statutes, “Allocation-Based Conservation Water Pricing Rate Structure” is a form of increasing block rates where the amount of water within the first block or blocks is based on the estimated, efficient water needs of the individual customer. Water-budget rates differ from other metered water rate designs in two key ways. First, the blocks are established based on water budgets that represent varying levels of each customer’s efficient water use. Second, water-budget rates require the public agency to set specific standards for what is, and what is not, considered efficient water use for an individual customer.

This Rate Study in conjunction with ETWD’s findings and determinations for individual customers establishes a standard for efficient usage and then establishes a budget for each individual customer. That defines how much water is considered efficient. Customers with usage above this efficient usage budget pay a higher rate for their “inefficient” or “wasteful” usage in accordance with Section 372 of the Water Code.

This Rate Study conforms to the principles set forth in the enabling statutes for Water Budget Rate Structures.

### **2.3.5 Tiered Rates**

“Inclining” Block-Rate Structures, (which are synonymous with “Increasing Block-Rate Structures”) when properly designed and differentiated by customer class as this Rate Study does, allow a water agency to send consistent price incentives for conservation to customers. For this reason, the heightened interest in water conservation, “Increasing Block-Rates” have been increasingly favored, especially in relatively water-scarce regions, such as Southern California.



### **2.3.6 Proportionality – Proposition 218’s Requirement That Fees Be Proportionate to the Cost of Service for Each Parcel**

There is a fair amount of ambiguity in the way that Proposition 218 was drafted – none more so than the issue of “proportionality.” It has taken a succession of court rulings over several years to clarify the substantive requirement of Proposition 218.

The recent Appellate case of *Griffith v. Pajaro Valley Water Management Agency* (2013) California Court of Appeal, Sixth District has provided much guidance on several important Proposition 218 issues, including the issue of proportionality. In *Pajaro*, the Appellate Court held in part as follows:

1. That Pajaro’s costs of using supplemental water along the coast to prevent salt water intrusion benefited all of Pajaro’s customers, including inland customers, using the groundwater basins.
2. That proportionality is not measured on an individual parcel basis, but instead is measured collectively, considering all customer classes. As such, the Appellate Court in *Pajaro* confirmed the common practice of grouping customers into classes with comparable service costs and setting rates by class rather than parcel by parcel met the Prop 218 requirement that fees be proportionate to the cost of providing service to each parcel.

Under Item 1 noted above, water utilities can reasonably justify that the addition of recycled water to the water resource mix, frees up water for potable uses and therefore all customers should share in the costs of recycled water so that recycled water can be put to beneficial use as required by Article X, Section 2. This clarification by the appellate court allows agencies to harmonize the mandates of Proposition 218 and Article X, Section 2.

Under Item 2 noted above, utilities can develop rates by customer class and meet the requirements of Proposition 218, as opposed to the strict interpretation which would require cost proportionality for each parcel receiving service. This was another major clarification of Proposition 218 since cost proportionality for individual parcels is almost impossible to achieve in the strict sense.

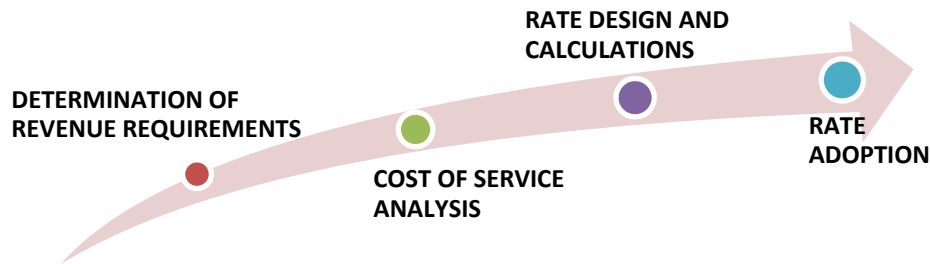
The *Pajaro* case rulings provided for the harmonizing of the proportionality requirements of Prop 218 with the efficient use and conservation requirements of Article X, Section 2 by accepting that the supplemental costs of water used by one group of customers should be shared by all users, based on the concept that all users receive benefit from the overall water resources. In the District’s case, recycled water adds a water resource that provides benefit by freeing up potable water for inefficient users and therefore the costs of recycled water can be shared by all inefficient potable water users. Due to non-essential usage’s demand on the system, the District allocates the cost of funding recycled water system development to Tiers 3 and 4 residential/irrigation usage as well as to commercial use at a proportional rate based on the assumption that 10 percent of CII water use is non-essential. See Section 6.2.1.2 for further detail.

## **2.4 COST-BASED RATE SETTING METHODOLOGY**

As stated in the Manual M1, the methodology put forth by the AWWA Rates and Charges Subcommittee is consistent with the Proposition 218 requirement that “the costs of water rates and charges should be recovered from classes of customers in proportion to the cost of serving those customers.” To develop utility rates that comply with Proposition 218 and industry standards while meeting other emerging goals and objectives of the utility, there are four major steps:



**Figure 2-1: Cost-Based Rate Setting Methodology**



- 1. DETERMINATION OF REVENUE REQUIREMENT:** The rate-making process starts with the determination of future revenue requirements to sufficiently fund the utility's operation and maintenance (O&M), capital replacement and refurbishment (R&R), capital improvement and perpetuation of the system and to ensure preservation of the utility's financial integrity. The basic revenue requirements of a utility include O&M expenses, debt service payments, contributions to specified reserves and the cost of capital expenditures that are not debt financed.
- 2. COST OF SERVICE ANALYSIS:** The annual costs of providing water services (cost of service), determined in the financial plan development, should be allocated among the customers commensurate with their service requirements. In this step, costs are identified and allocated to cost causation components and distributed to respective customer classes according to the industry standards provided in the Manual M1 published by AWWA.
- 3. RATE DESIGN and CALCULATIONS:** Rates do more than simply recover costs. Within the legal framework and industry standards, properly designed rates should support and optimize a blend of various utility objectives, such as conservation, affordability for essential needs, revenue stability, etc. and should work as a public information tool in communicating these objectives to customers.
- 4. RATE ADOPTION:** In the last step of the rate-making process, to comply with the Proposition 218 requirements, the results of the analyses are documented in a Study Report that clearly identifies the nexus between costs and rates to help educate the public about the proposed changes, the rationale and justifications behind the changes and their anticipated financial impacts in layman's terms. At least 45 days after sending out the public notices, at a public hearing, the agency shall consider all written protests against the proposed rates. If there is no majority protest, the agency can officially adopt the new rates.

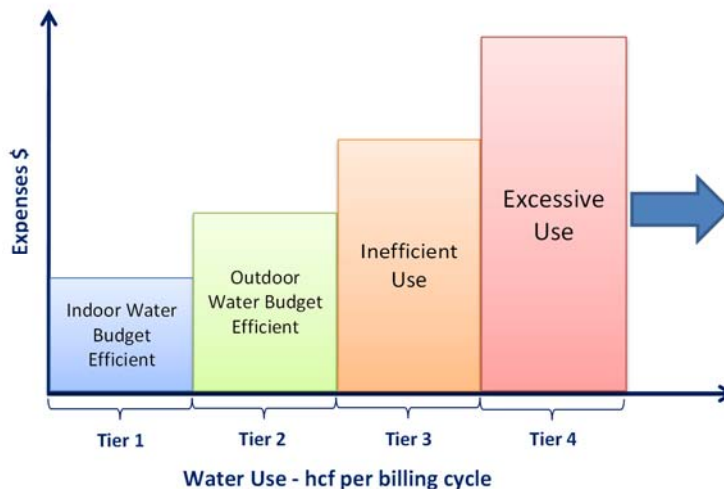
# 3. WATER BUDGET AND TIER DEFINITIONS

Since July 1, 2010, the District has implemented a water budget rate structure to incentivize conservation and efficient water use. The description of the allocations to individual customers and the development of water budgets is described here for completeness of this report.

## 3.1 WATER BUDGET DEFINITIONS

The American Water Works Association Journal defines water budget as “the quantity of water required for an efficient level of water use by that customer” (Source: American Water Works Association Journal, May 2008, Volume 100, Number 5). Therefore, each customer has their own allocation or water budget as shown in the following figures. Figure 3-1 shows an example of how the tier breaks are set for water budget customers. Tier 1 is defined by the allotment for indoor use and Tier 2 is defined by the allotment for outdoor use. Tier 3 is set to a percentage of the total water budget (or Tiers 1 and 2) combined. Any use beyond Tier 3 is considered excessive and falls into Tier 4.

Figure 3-1: Water Budget Tiers



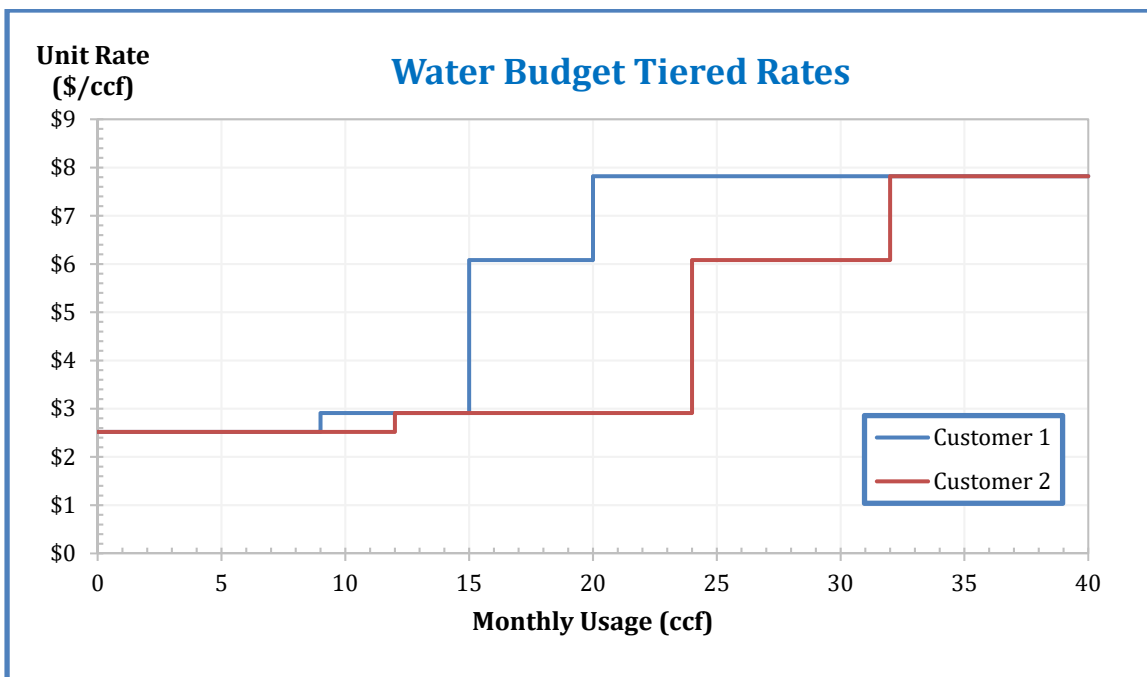
It is worth noting that water budget rate structures are customized for each customer, which results in different tier breaks for different customers. For example, as illustrated by Figure 3-2<sup>1</sup>, which examines the usage of two customers of a hypothetical water utility. The first 9 units consumed by Customer 1 is charged at Tier 1 rate, whereas Customer 2 has 12 units at Tier 1 rate (\$2.52/ccf) for indoor use. The next 6 units (10 – 15 units) consumed by Customer 1 is reserved for outdoor use, which is charged at Tier 2 rate (\$2.91/ccf), and any usage exceeding 20 units<sup>2</sup> will be deemed excessive and charged at the Tier 4 Rate (\$7.82/ccf). Similarly, for Customer 2, Tier 2 spans from 13-24 units, and usage exceeding 32 units will be charged at Tier 4 Rate

<sup>1</sup> For illustrative purposes only, not actual rates of the District

<sup>2</sup> Tier 3 = 30% of Total Water Budget (TWB) whereas TWB = Indoor WB + Outdoor WB

(\$7.82/ccf). Customer 2, with larger indoor and outdoor water budget (or allotment), represents a residential customer with larger family and bigger irrigated landscape area than Customer 1.

**Figure 3-2: Customized Water Budget Tiers<sup>3</sup>**



Similar to the Water Budget Rate Study in 2010, the District’s water budget allocations and tiered rate structure are designed for residential and irrigation accounts only; all other customer types will retain the current uniform rate structure.

### 3.2 INDOOR WATER BUDGET

The indoor water budget (IWB) is determined by a customer’s household size and a standard consumption per person. The proposed IWB formula is as follows:

$$IWB = \frac{GPCD * Household Size * Dwelling Units * Days of Service * DF_{indoor}}{748} + V_{indoor}$$

where

- GPCD – Gallons per capita per day.
  - SB x7-7<sup>4</sup>, Section 10608 of the Water Code, established the provisional standard for indoor residential water use at 55 gallons per capita per day.

<sup>3</sup> For illustrative purposes only, not actual rates of the District

<sup>4</sup> The language from SB x7-7 setting the 55 GPCD performance standard: (2) The per capita daily water use that is estimated using the sum of the following performance standards: (A) For indoor residential water use, 55 gallons per capita daily water use as a provisional standard.

- Household Size – Number of residents per dwelling unit. The 2010 census lists the average household size at 2.91 persons, which includes single and multi-family housing. Typically, single family household size is greater than 3 persons and multi-family household size is less than 3.0 persons. The District policy is to provide adequate water for the health and sanitation needs and minimize customer complaints and requests for variances. The default values for household size are set as follows based on customer characteristics.
  - Single Family: Household Size = 4 persons
  - Apartment: Household Size = 2 persons
  - Multi-Family:
    - Restricted: Household Size = 2 persons (senior citizen housing typically 1 to 2 residents per dwelling unit)
    - Unrestricted: Household Size = 3 persons
- Dwelling units – Number of dwelling units served by the meter or account
- Days of Service. The number of days of service varies with each billing cycle for each customer. The actual number of days of service will be applied to calculate the indoor water budget for each billing cycle.
- $DF_{\text{indoor}}$  – Indoor drought factor. The percentage of indoor water budget allotted during drought conditions. The drought factor is subject to the approval of the District’s Board of Directors. The indoor drought factor is currently set at 100 percent.
- $V_{\text{indoor}}$  – Indoor variance. The additional water allotment to be granted for extenuating circumstances is subject to District’s approval or verification as outlined in the District’s variance program. Variances can be requested by submitting a “Variance/Adjustment Request Form” found on the District’s website.
- 748 is the conversion unit from gallons to billing unit of hundred cubic feet (ccf).

### 3.3 OUTDOOR WATER BUDGET

The outdoor water budget (OWB) is determined by three main variables: irrigable landscape area, weather data and evapotranspiration (ET) Adjustment Factor. The irrigable landscape area, measured as square footage of landscape surface on a customer’s property, is estimated using the Orange County Assessors’ parcel data - lot size, building size and number of floors - where the actual irrigable landscape area data is not available. The weather data is based on the reference Evapotranspiration ( $ET_0$ ), which is the amount of water loss to the atmosphere over a given time period under local atmospheric conditions.  $ET_0$  is the amount of water (in inches of water) needed for a hypothetical reference crop to maintain its health and appearance. The ET Adjustment Factor (ETAF) is a coefficient that adjusts  $ET_0$  values based on plant factor and irrigation system efficiency. The updated California Department of Water Resources’ Model Water Efficient Landscape Ordinance (Landscape Ordinance) provides the following ETAF for different landscapes:

- Existing landscape (Functional):  $ETAF_{\text{Existing}} = 80\%$
- New development / redevelopment landscape (Functional):  $ETAF_{\text{New}} = 70\%$
- Special landscape (Recreational):  $ETAF_{\text{Recreational}} = 100\%$

The formula to calculate outdoor water budget is as follows:

$$OWB = \left( \frac{\text{Landscape Area} * ET_0 * ETAF}{1200} + V_{\text{outdoor}} \right) * DF_{\text{outdoor}}$$

where

- $ET_0$  is measured in inches of water during the billing period based on daily data acquired from the California Irrigation Management Information System (CIMIS) Station 75, which is the closest station to the District’s service area.
- ETAF (% of  $ET_0$ ) is defined using the updated Landscape Ordinance as shown above.
- Landscape Area (or Irrigable Landscape Area) (in square feet) is the measured irrigable landscape area served by a customer’s meter.
  - Where the measured irrigable landscape area is not available, the landscape area will be estimated by the following formula using the Orange County Assessors’ parcel data.
    - $$\text{Landscape Area (sq ft)} = 70\% * \left( \text{Lot Size} - \frac{\text{Building Size}}{\text{Number of Floors}} \right)$$
  - For accounts dedicated for domestic use only, such as multi-family units, 25 square feet of irrigable landscape area is provided for each dwelling unit for patio plants.
- $DF_{\text{outdoor}}$  – Outdoor drought factor. The percentage of outdoor water budget allotted during drought conditions. The drought factor is subject to the approval of the District’s Board of Directors.
- $V_{\text{outdoor}}$  – Outdoor variance. The additional water allotment to be granted for extenuating circumstances is subject to District’s approval or verification as outlined in the variance program. Outdoor variance is subject to outdoor drought factor.
- 1,200 is the conversion unit from inch\* $ft^2$  to billing unit of hundred cubic feet (ccf).

### 3.4 WATER BUDGET ALLOCATIONS BY CUSTOMER TYPE

The table below summarizes the water budget allocation by customer type. Both Single Family and Multi-Family (restricted and unrestricted) customers will receive an indoor and outdoor water budget. Irrigation accounts will only receive an outdoor budget. Commercial and Public Authority (CII) customers will continue with the current uniform water rate structure.

**Table 3-1: FY 2019 Water Budget Allocations by Customer Type**

Customer Type	Water Budget Allocations	Default Values
Single Family	IWB + OWB	Household Size = 4 persons; GPCD = 55 ETAF <sub>New</sub> = 70%; ETAF <sub>Existing</sub> = 80%; DF <sub>outdoor</sub> = 100%
Multi-Family – Restricted	IWB + OWB	Household Size = 2 persons; GPCD = 55 ETAF <sub>New</sub> = 70%; ETAF <sub>Existing</sub> = 80%; DF <sub>outdoor</sub> = 100%
Multi- Family – Unrestricted	IWB + OWB	Household Size = 3 persons; GPCD = 55 ETAF <sub>New</sub> = 70%; ETAF <sub>Existing</sub> = 80%; DF <sub>outdoor</sub> = 100%
Irrigation – Functional*	OWB	ETAF <sub>New</sub> = 70%; ETAF <sub>Existing</sub> = 80%; DF <sub>outdoor</sub> = 100%
Irrigation – Recreational**	OWB	ETAF <sub>Recreational</sub> = 100%; DF <sub>outdoor</sub> = 100%

*\*Irrigation – Functional: landscape that is ornamental in nature*

*\*\*Irrigation – Recreational: landscape that is used mostly for recreational purposes (schools, parks, golf courses, etc...)*

### 3.5 TIER DEFINITIONS

Based on the information in Table 3-1, the tier definitions are developed as shown in Table 3-2 below. The main difference between Single Family/Multi-Family and Irrigation accounts is that Irrigation accounts do not have a Tier 1 allotment which is reserved for indoor use. All three customer types have their Tier 3 allotment defined as 30 percent of their respective total water budget (TWB) and usage exceeding 130% TWB falls in Tier 4.

**Table 3-2: Tier Definitions by Customer Types**

Tiers	Single Family	Multi-Family	Irrigation
Tier 1 – Indoor Use	100% IWB	100% IWB	N/A
Tier 2 – Outdoor Use	100% OWB	100% OWB	100% OWB
Tier 3 – Inefficient Use	100% to 130% TWB	100% to 130% TWB	100% to 130% OWB
Tier 4 – Excessive Use	Above Tier 3	Above Tier 3	Above Tier 3

**TWB = Total Water Budget = IWB + OWB**

The tier definitions are tailored to the unique consumption patterns of the District’s customers and subject to the District’s policy decisions. The tier definitions are based on Raftelis usage and impact analysis and numerous policy discussions with the Board. The first priority for water use is essential indoor water use for health, safety, and sanitary purposes. Based on the Board’s direction, indoor water use is eligible for revenue offsets from site leases and property tax revenues. Maintaining a healthy landscape at efficient water use is non-essential, yet important; thus, efficient outdoor water use is required to pay the Tier 2 rate. The total water budget is the sum of the indoor and outdoor water budgets.

Tier 3 was designed to account for inefficient use and/or customers with non-climate appropriate landscapes. Tier 3 is set to thirty percent (30%) of the total water budget and was determined based on the 2009 analysis which indicated that a customer with high water use plants would require 30% more water than an identical customer with climate-appropriate plants. Any use beyond Tier 3 is considered excessive and falls into Tier 4. Tiers 3 and 4 allow individuals to use additional water above their total water budget while providing a signal to each customer on their inefficient and excessive water usage. Tier 3 provides usage up to 30 percent of the total water budget and usage exceeding 130% TWB is considered to be excessive.

Any usage above an efficient level is subject to higher charges to fund conservation programs and any other supplemental water supply program. The current water supply is reserved for efficient water use within the District for indoor, outdoor, and commercial use. The higher Tier 3 rate serves as a signal for conservation and efficient use, whereas excessive use in Tier 4 incurs the highest marginal costs of providing service.

The Commercial class will continue to be billed at a uniform rate; however, this rate will encompass domestic use and inefficient use. Based on SB x7-7 (i.e. Water Conservation Act of 2009), which requires commercial users to cut back by 10 percent, we define indoor and efficient outdoor (or process) use at 90 percent of total use and the remaining 10 percent use as inefficient. Additionally, indoor use is defined as 90 percent of the

efficient use ( $90\% \times 90\% = 81\%$ ) and the remainder is defined as efficient outdoor use ( $10\% \times 90\% = 9\%$ ). The uniform rate charged to commercial customers will then be a blend of the usage defined here.

## 4. PASS-THROUGH WATER SUPPLY COSTS

The District purchases water from the Municipal Water District of Orange County (MWDOC), a member agency of Metropolitan Water District of Southern California (MWD). MWD rates are scheduled to increase in January 2019. The MWD rate increases, along with MWDOC's other costs, will be included in the blended rates charged to the District. As shown in Table 4-1, total combined water supply costs from the MWDOC purchased water and the Baker Treatment Plan costs are partially offset by capital charge revenue funding shown in Line 6. Dividing the total costs by the projected water sales (Line 8) results in the unit rate shown in Line 9. See Appendix 1 for detailed breakdown of water supply costs. Table 4-2 and Table 4-3 show that projected water supply rates remain at the current supply rate.

**Table 4-1: Water Supply Revenue Requirements**

Line #	Revenue Requirements	Budget FY 2019
1	MWDOC Fixed Costs	\$0.706M
2	MWDOC Variable Costs	\$4.268M
3	Baker Raw Water Cost	\$2.394M
4	Baker O&M Annual Cost	\$0.643M
5	Plus Baker Capital Cost (Debt Service)	\$0.684M
6	Less Capital Charge Revenue Funding	-\$0.600M
<b>7</b>	<b>Total Water Supply Costs</b>	<b>\$8.095M</b>
8	Projected Water Sales	3,136,321 ccf
<b>9</b>	<b>Water Supply Unit Rate (Line 7/Line 8)</b>	<b>\$2.58 /ccf</b>

**Table 4-2: Current and Projected Water Supply Unit Rate**

Fiscal Year (FY)	Water Supply Unit Rate \$ / hundred cubic feet (ccf)
FY 2018	\$2.58 / ccf
FY 2019	\$2.58 / ccf
Increase / Change	\$0.00 / ccf



**Table 4-3: Water Supply Cost Component of the Water Rates (\$/ccf)**

<b>Tiers</b>	<b>Descriptions</b>	<b>Current FY 2018</b>	<b>Proposed FY 2019</b>
<b>Tier 1 – Indoor Use</b>	MWDOC + Baker Blended	\$2.58	\$2.58
<b>Tier 2 – Outdoor Use</b>	MWDOC + Baker Blended	\$2.58	\$2.58
<b>Tier 3 – Inefficient Use</b>	MWDOC + Baker Blended	\$2.58	\$2.58
<b>Tier 4 – Excessive Use</b>	MWDOC + Baker Blended	\$2.58	\$2.58
<b>Uniform – CII Use</b>	MWDOC + Baker Blended	\$2.58	\$2.58

# 5. WATER REVENUE REQUIREMENTS AND PROPOSED RATES

## 5.1 REVENUE REQUIREMENTS

Table 5-1 shows the derivation of the revenue requirement of the water rates. Total expenses for the water enterprise are shown in Line 1. Next, other supplementary revenues are subtracted from the expenses, serving as an offset of these costs. For the District, this is encompassed in the Non-Operating Revenues totaled in Line 2. These revenues include cell-site leases, property taxes, investment revenues, and others. The District began making annual debt payments totaling \$0.684M annually for its contribution to the Baker Treatment Plant’s construction. This Debt Service (Line 3) is added to the O&M expenses. Next, the District will use reserves to offset some of the operating expenses and reduce the revenue required from rates for FY 2019 (Line 4). The District will continue to fund Recycled Water Restricted Reserve and the Conservation Program using FY 2018 rates. The total revenue required from rates, excluding Fire Service, is shown in Line 5.

Details of the figures presented in Table 5-1 can be found in Appendix 3, in the Cash Flow Analysis for the Water Funds. The Cash Flow Analysis is part of the Financial Plan developed by District staff to determine the long-term financial needs of the District. Raftelis based its determination of the revenue requirements and cost of service for FY 2019 on the Financial Plan developed by District Staff.

**Table 5-1: Water Operating Revenue Requirements from Rates<sup>5</sup>**

Line #	Water Operating Revenue Requirements	FY 2019 Budgeted	Notes
1	Total Water O&M Expenses	\$13.273M	
2	Less (-) Non-Operating Revenues	-\$1.811M	Appendix 3
3	Plus (+) Debt Service	\$0.684M	Appendix 3
4	Plus (+) Operating Reserve Funding	-\$0.481M	Appendix 3
<b>5</b>	<b>Total Rev Req from Rates, excluding Fire SC<sup>6</sup></b>	<b>\$11.665M</b>	

The District separately charges customers for the cost of capital repair and replacement (R&R) for the water and recycled water systems via a fixed charge. Table 5-2 provides the calculation of the Capital R&R revenue requirement from rates. The District has chosen to offset a portion of the total capital costs through restricted reserve funding in order to not increase the revenue required from rates in FY 2019.

<sup>5</sup> May include some rounding errors

<sup>6</sup> Total Revenue Requirement does not include restricted reserve funding of Recycled Water and Conservation.

**Table 5-2: Water Capital Revenue Requirements**

Line #	Water Capital Revenue Requirements	Water
1	Water Capital Expenditures	\$785,000
2	Plus (+) Baker Capital Funding	\$600,000
3	Less (-) Restricted Reserve Funding	(\$100,000)
4	Total Water Capital R&R Revenue Requirement	\$1,285,000
5	Current Water Capital R&R Revenues	\$1,285,000
6	<b>% Rate Increase</b>	<b>0%</b>

## 5.2 COST OF SERVICE ANALYSIS

To allocate costs appropriately to the different usage classes and determine the cost of service rates, revenue requirements are allocated to the following cost causation categories<sup>7</sup> consistent with the Base Extra Capacity methodology of the American Water Works Association (AWWA) *M1 Manual, Principles of Water Rates, Fees, and Charges* (M1 Manual):

1. Water supply costs: Imported water supply costs, allocated to all users in proportion to their usage.
2. Base fixed costs: fixed costs associated with operating and maintaining water system to deliver water to meet average demand, including customer service, meter service, administration, and other base fixed costs.
3. Peaking costs: fixed costs associated with operating and maintaining water system to deliver water to meet peak demand.
4. RW Funding: The use of RW for non-potable needs releases potable supply for inefficient and excessive use. RW is the least expensive supplemental source of water available to the District and creates supply for potable needs. The revenues collected under this category will be collected in restricted reserves to assist the RW fund to pay for debt services used to finance the RW expansion project completed in FY 2015 as well as the Phase II RW expansion currently under construction and proposed to be in service in FY 2019.
5. Conservation: Program cost to promote water conservation.
6. Revenue Offsets: Property taxes and cell tower lease revenues to provide incentive for indoor/domestic use.

The cost causation categories above are then assigned to each rate component:

### Fixed Rate Components (i.e. Monthly Service Charges)

- To recover customer service, meter service, administration and other base fixed costs and a portion of the peaking costs.

### Commodity Rate Components

<sup>7</sup> See Appendix 6 for details about cost allocations

- Water supply: to recover imported water supply costs.
- Delivery / Peaking: to recover remaining peaking costs associated with operating and maintaining water system to deliver water to meet peak demand. These costs are allocated based on the peaking characteristics of each class of use.
- Recycled Water (RW): to generate supplemental funding sources to pay for RW expansion projects.
- Conservation: to recover the conservation program cost, allocated to inefficient and excessive users, to help encourage water conservation.
- Revenue offsets: A portion of the property taxes and cell tower lease revenues to provide incentive for indoor/domestic use.

**Capital R&R Charges:**

- Funds for the capital replacement and refurbishment of the existing water and RW system.

Table 5-3 below summarizes the unrestricted revenue requirement for each cost category. The Total Cost of Service (Line 7) is divided among the various cost components (Lines 1-6). The District Board directs District staff to provide a revenue offset for essential use provided by non-rate revenues (Line 5). The revenue requirements for water supply, base fixed, and peaking were determined using COS allocation methods recommended by the AWWA. Details of how the revenue requirements for these three cost causation categories were determined can be found in Appendix 6.

**Table 5-3: Unrestricted Revenue Requirements by Cost Categories**

Line #	Revenue Requirements	FY 2019	Monthly Service Charges	Unrestricted Water Commodity Rates	Water Capital R&R
1	Water Supply	\$8,095,230		\$8,095,230	
2	Billing & CS	\$475,182	\$475,182		
3	Base Fixed	\$2,104,354	\$2,104,354		
4	Peaking	\$1,395,669	\$669,669	\$726,000	
5	Rev Offset	(\$405,682)		(\$405,682)	
6	Capital R&R	\$1,285,000			\$1,285,000
<b>7</b>	<b>Net Revenue Requirement</b>	<b>\$12,949,753</b>	<b>\$3,249,205</b>	<b>\$8,415,548</b>	<b>\$1,285,000</b>

The total revenue requirement for each cost causation category is then assigned to a rate component. For example, it is appropriate that the entirety of the water supply revenue requirement is assigned to the water supply rate component. The Revenue Offset is assigned entirely to the water supply component.

The AWWA M1 Manual describes a cost of service approach to setting water rates which results in the 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 monthly service 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 on each bill.

Utilities invest in and continue to maintain facilities to provide capacity to meet all levels of desired consumption including the peak demand plus fire protection, and these costs also must be recovered regardless of the amount of water used during a given period. Thus, capacity or peaking costs along with base costs are generally considered as fixed water system costs. Ideally an agency could recover 100% of the fixed costs in the fixed charges, therefore providing revenue stability; however, this approach foregoes affordability for essential use and heavily impacts small users. To balance between affordability and revenue stability, a portion of the base costs and peaking costs are recovered in the fixed charges along with the customer-related costs and meter-related costs. Revenue requirements for the District’s fixed monthly service charges include 100 percent of base fixed costs, inclusive of billing and customer service costs and other fixed costs to meet average demand, and a portion of the peaking costs. The remaining peaking costs are recovered in the delivery rate component of the commodity rates.

The rate structure remains unchanged and consists of the monthly fixed service and the volumetric commodity rates which are determined as follows (Table 5-2):

- The monthly service charge includes customer service, fixed base costs and a portion of the peaking costs (shown in Table 5-4 and Table 5-5).
- The volumetric water commodity rates include water supply (to recover total purchased water costs from MWDOC and Baker Water Treatment Plant water costs), delivery/peaking (to recover the District’s remaining peaking costs), RW funding, conservation, and revenue offsets components.

**Table 5-4: Cost Categories and Water Rate Structure**

Cost Components	Service Charges	Tier 1 Essential Use	Tier 2 Efficient Use	Tier 3 Inefficient Use	Tier 4 Excessive Use	Commercial Use
<b>Billing &amp; Customer Service</b>	x					
<b>Meters</b>	x					
<b>Fixed Base Costs</b>	x					
<b>Delivery Peaking Costs</b>	x	x	xx	xxx	xxx	x
<b>Water Supply</b>		x	x	x	x	x
<b>RW Program Funding</b>				xx	xxx	x
<b>Conservation</b>				x	x	x
<b>Rev Offset</b>		x				x

Extra capacity costs representing the demand placed on the system are related to the capacity of the meters. The capacity of the meters is determined by comparing the hydraulic capacity of the meters to the smallest meter in the system which is assigned a capacity of one. Thus, a 1-inch meter that can continuously deliver 50 gallons per minute (“gpm”) is considered to have a capacity of 2.5 when compared to the 5/8-inch meter which can deliver 20 gpm. Because of the unique characteristics of the District’s service area, the maximum of the hydraulic capacity or the actual usage characteristics were used to determine the capacity of the meters. For example, a 2-inch meter, on the average, used 10 times the water of the 5/8-inch meter. The meter capacity

ratios representing the maximum of the hydraulic ratio or the actual usage is used to calculate the equivalent meter units to recover the meters & capacity costs (based on ETWD Cost of Service Study Report for Water, Wastewater and Recycled Water prepared in April 2009).

**Table 5-5: Proposed Monthly Service Charges Calculations**

Meter Size	Water Accounts A	Bills / year B = A x 12	Meter Capacity Ratios C	EMUs <sup>8</sup> D = B x C
5/8"	2,384	28,608	1.00	28,608
3/4"	4,856	58,272	1.50	87,408
1"	444	5,328	2.50	13,320
1 1/2"	683	8,196	5.00	40,980
2"	1,201	14,412	10.00	144,120
<b>Total</b>	<b>9,568</b>	<b>114,816 Bills</b>		<b>314,436 EMUs</b>

	Billing & Customer Service	Meters & Capacity
Revenue Requirements <i>(Table 5-3)</i>	\$475,182	\$2,774,023
Units of Service <i>(Table 5-5)</i>	114,816 bills / yr	314,436 EMUs / yr
<b>Unit Cost of Service</b>	<b>\$4.14</b>	<b>\$8.82</b>

Meter Size	Billing & CS A	Meters & Capacity B <sup>9</sup>	Proposed FY 2019 C = A + B	Current FY 2018 D	\$ Change E = C - D	% Change F = E / D
5/8"	\$4.14	\$8.82	<b>\$12.96</b>	\$11.80	\$1.16	9.8%
3/4"	\$4.14	\$13.23	<b>\$17.37</b>	\$15.82	\$1.55	9.8%
1"	\$4.14	\$22.06	<b>\$26.20</b>	\$23.85	\$2.35	9.8%
1 1/2"	\$4.14	\$44.11	<b>\$48.25</b>	\$43.92	\$4.33	9.8%
2"	\$4.14	\$88.22	<b>\$92.36</b>	\$84.07	\$8.29	9.8%

<sup>8</sup> EMUs = equivalent meter units

<sup>9</sup> \$8.82 x Meter Capacity Ratio for each meter size

## 5.3 PROPOSED RATES

As discussed above, the District has determined that it will not increase its Capital R&R charges in FY 2019. In addition, the District has also chosen to offset any increases in water supply costs with restricted reserve funds. As a result, the District will not be increasing either the Capital R&R Charges or the Commodity Rates in FY 2019.

### 5.3.1 Monthly Service Charges

Based on the revenue requirements as shown in Table 5-3 and the Monthly Service Charge calculations in Table 5-5, the proposed Monthly Service Charges for FY 2019 are shown below.

**Table 5-6: Proposed Monthly Water Service Charges**

Meter Size	Billing & CS (A)	Meters & Capacity (B)	Proposed FY 2018 (C = A+B)	Current FY 2017 (D)	\$ Change (E = C - D)	% Change (F = E/D)	Water Accounts (G)
5/8"	\$4.14	\$8.82	\$12.96	\$11.80	\$1.16	9.8%	2,384
3/4"	\$4.14	\$13.23	\$17.37	\$15.82	\$1.55	9.8%	4,856
1"	\$4.14	\$22.06	\$26.20	\$23.85	\$2.35	9.8%	444
1 1/2"	\$4.14	\$44.11	\$48.25	\$43.92	\$4.33	9.8%	683
2"	\$4.14	\$88.22	\$92.36	\$84.07	\$8.29	9.8%	1,201
<b>Projected Revenues<sup>10</sup></b>	<b>\$475,338</b>	<b>\$2,773,749</b>	<b>\$3,249,087</b>	<b>\$2,958,095</b>	<b>\$290,992</b>	<b>9.8%</b>	<b>9,568</b>

### 5.3.2 Capital R&R Charges

As discussed above, the District will retain the current Capital R&R Charges.

**Table 5-7: Proposed Monthly Water Capital R&R Charges**

Meter Size	Current FY 2018	Proposed FY 2019	Water Accounts	RW Accts	Water + RW Accounts
5/8"	\$4.66	<b>\$4.66</b>	2,384	0	2,384
3/4"	\$4.66	<b>\$4.66</b>	4,856	0	4,856
1"	\$7.78	<b>\$7.78</b>	444	0	444
1 1/2"	\$18.91	<b>\$18.91</b>	683	10	693
2"	\$47.47	<b>\$47.47</b>	1,201	200	1,401
<b>Projected Revenues</b>			<b>\$1,285,437</b>	<b>\$116,197</b>	<b>\$1,401,634</b>

<sup>10</sup> Projected Revenues = Σ (Service Charges x # of Accounts for each meter size) x 12 bills/year

### 5.3.3 Commodity Rates

The District has decided to retain the current commodity rates by using funds from restricted reserves to offset increases in supply costs.

**Table 5-8: FY 2019 Proposed Water Commodity Rates**

Tier	FY 2018	FY 2019	\$ Change	% Change
Tier 1 - Essential Use	\$2.52	\$2.52	\$0.0	0.0%
Tier 2 - Efficient Use	\$2.91	\$2.91	\$0.0	0.0%
Tier 3 - Inefficient Use	\$6.08	\$6.08	\$0.0	0.0%
Tier 4 - Excessive Use	\$7.82	\$7.82	\$0.0	0.0%
Uniform - Commercial Use	\$2.89	\$2.89	\$0.0	0.0%



# 6. WASTEWATER REVENUE REQUIREMENTS AND PROPOSED RATES

## 6.1 MONTHLY SERVICE CHARGES

Raftelis reviewed the relative amounts of the revenue requirements of the wastewater enterprise provided by the District, which are not significantly different from those of the prior year. As a result, we will retain the current cost of service allocations and propose across the board revenue adjustments to meet the revenue requirements for FY 2019. Table 6-1 shows the calculation of the Wastewater O&M revenue requirement from rates. The Wastewater O&M expenses (Line 1) will be partially offset by non-operating revenues (Line 2). The District also continues to have a debt obligation (Line 3) due entirely to the Northline Lift Station. The resulting revenue requirement for FY 2019 is shown in Line 5 and compared to the projected FY 2019 revenues from current rates in Line 6. The projected revenue from current rates was provided in the Wastewater Enterprise’s cash flow statement. The revenue adjustment required to meet the Enterprise’s O&M obligations is 2.83% shown in Line 8.

**Table 6-1: Wastewater O&M Revenue Requirements from Rates**

Line #	Wastewater Operating Revenue Requirements	Budget FY 2019	Notes
1	Total WW O&M Expenses	<b>\$7,940,557</b>	Appendix 2
2	Less (-) Non-Operating Revenues	(\$399,119)	Appendix 5
3	Plus (+) Debt Service	\$258,146	Appendix 5
4	Plus (+) Operating Reserve Funding	\$416	Appendix 5
<b>5</b>	<b>Total Revenue Requirement from WW Rates</b>	<b>\$7,800,000</b>	
6	Current WW Service Revenues	\$7,585,000	Appendix 5
7	Required Revenue Increase	\$215,000	Appendix 5
<b>8</b>	<b>Overall WW Rate Increase</b>	<b>2.83%</b>	

Table 6-2 provides the proposed rates for FY 2019 with a comparison to the FY 2018 rates. Note that, due to rounding, the percent increase for each class varies slightly from the overall increase of 2.83 percent.

**Table 6-2: FY 2019 Proposed Wastewater Service Charges**

Customer Class	FY 2018 Rates	FY 2019 Rates	\$ Increase	% Increase
Residential Unrestricted	\$23.63 / EDU	\$24.30 / EDU	\$0.67	2.84%
Multi-Family Restricted	\$18.74 / EDU	\$19.28 / EDU	\$0.54	2.88%
Multi-Family Unrestricted	\$22.28 / EDU	\$22.92 / EDU	\$0.64	2.87%
Animal Kennel/Hospital	\$3.88 / ccf	\$3.99 / ccf	\$0.11	2.84%
Car Wash	\$3.86 / ccf	\$3.97 / ccf	\$0.11	2.85%
Department/Retail Store	\$3.88 / ccf	\$3.99 / ccf	\$0.11	2.84%
Dry Cleaners	\$3.40 / ccf	\$3.50 / ccf	\$0.10	2.94%
Golf Course/Camp/Park	\$3.39 / ccf	\$3.49 / ccf	\$0.10	2.95%
Health Spa	\$3.87 / ccf	\$3.98 / ccf	\$0.11	2.84%
Hospital/Convalescent Home	\$3.40 / ccf	\$3.50 / ccf	\$0.10	2.94%
Hotel	\$5.87 / ccf	\$6.04 / ccf	\$0.17	2.90%
Market	\$7.70 / ccf	\$7.92 / ccf	\$0.22	2.86%
Mortuary	\$7.67 / ccf	\$7.89 / ccf	\$0.22	2.87%
Nursery/Greenhouse	\$3.44 / ccf	\$3.54 / ccf	\$0.10	2.91%
Professional/Financial Office	\$3.88 / ccf	\$3.99 / ccf	\$0.11	2.84%
Public Institution	\$3.82 / ccf	\$3.93 / ccf	\$0.11	2.88%
Repair/Service Station	\$3.87 / ccf	\$3.98 / ccf	\$0.11	2.84%
Restaurant	\$3.66 / ccf	\$3.77 / ccf	\$0.11	3.01%
Schools	\$4.01 / ccf	\$4.13 / ccf	\$0.12	2.99%
Theater	\$3.88 / ccf	\$3.99 / ccf	\$0.11	2.84%
Warehouse/Storage	\$3.07 / ccf	\$3.16 / ccf	\$0.09	2.93%
Basic Commercial	\$3.40 / ccf	\$3.50 / ccf	\$0.10	2.94%

## 6.2 CAPITAL R&R CHARGES

The Wastewater Enterprise also charges a separate Capital R&R Charge. As shown in Table 6-3, there is no increase in revenue requirements for WW Capital R&R charges. The proposed Capital R&R Charges are shown in Table 6-4.

**Table 6-3: Wastewater Capital R&R Revenue Requirements**

Wastewater Revenue Requirement from Rates	Budget FY 2019 <i>(Appendix 5)</i>
Total Capital Expenditures	\$1,615,000
Current Wastewater Capital R&R Revenues	\$1,615,000
<b>Overall Capital R&amp;R Rate Increase</b>	<b>0%</b>

**Table 6-4: FY 2019 Proposed Monthly Wastewater Capital R&R Charges**

Customer Classes	Current Capital R&R Charges	FY 2019 Capital R&R Charges	\$ Increase	% Increase
<b>Residential</b>				
Residential Unrestricted	\$4.93 / EDU	\$4.93 / EDU	\$0.00	0.0%
Multi-Family Restricted	\$3.91 / EDU	\$3.91 / EDU	\$0.00	0.0%
Multi-Family Unrestricted	\$4.65 / EDU	\$4.65 / EDU	\$0.00	0.0%
<b>Non-Residential</b>				
5/8"	\$4.34 / month	\$4.34 / month	\$0.00	0.0%
3/4"	\$7.34 / month	\$7.34 / month	\$0.00	0.0%
1"	\$13.55 / month	\$13.55 / month	\$0.00	0.0%
1 1/2"	\$24.07 / month	\$24.07 / month	\$0.00	0.0%
2"	\$70.96 / month	\$70.96 / month	\$0.00	0.0%
<b>Public Authority</b>				
1"	\$4.93 / month	\$4.93 / month	\$0.00	0.0%
1 1/2"	\$24.65 / month	\$24.65 / month	\$0.00	0.0%
2"	\$39.71 / month	\$39.71 / month	\$0.00	0.0%

# 7. RECYCLED WATER REVENUE REQUIREMENTS AND PROPOSED RATES

## 7.1 RECYCLED WATER SYSTEM

Prior to the completion of the Recycled Water Expansion Project, the District had only one recycled water (RW) customer who purchased secondary treated disinfected recycled water - Laguna Woods Village Golf Course, operated by the Golden Rain Foundation (GRF). There was neither a monthly service charge nor a capital R&R charge for this RW customer since all services were provided based on the terms of the service contract. With the completion of the RW expansion project, all RW customers (existing and converted customers) are now supplied with higher quality tertiary RW and all RW customers are subject to the corresponding rates that support the annual cost of providing tertiary RW.

In FY 2015, the District completed the expansion of its recycled water system, including water recycling plant (WRP) upgrades to tertiary treatment and RW distribution system pipeline expansion. The RW expansion capital cost, was financed by the following sources: State Revolving Fund (SRF) Loan, grants, and from the restricted reserve (revenues from Tier 3 and Tier 4 potable usage dedicated to recycled water expansion). The District is currently constructing a Phase II RW Project that will add 5 miles of RW distribution pipeline and 65 recycled water meters. The Phase II RW expansion capital cost is financed by an SRF Loan and from the restricted reserve.

## 7.2 PROJECTED RECYCLED WATER SALES

The District currently serves 210 Recycled Water accounts. The projected RW sales for FY 2018 are estimated at 1,275AF. With the Phase II Project coming online, including the addition of 65 new RW meters, the District projects an increase of 210 AF or 16.5% in consumption for FY 2019.

**Table 7-1: Recycled Water Sales**

	RW Sales	
	ccf	AF
FY 2018 Estimated Actual Sales	555,390	1,275
FY 2019 Budgeted Sales	646,866	1,485
Increase	91,476	210
% Increase	16.5%	

## 7.3 REVENUE REQUIREMENT AND PROPOSED RATES

In FY 2015, the District began separating Recycled Water costs into an independent RW Enterprise Fund. Table 7-2 summarizes the RW revenue requirements from rates for FY 2019. RW O&M expenses and supply

(Line 3) will be partially offset by non-operating revenues (Line 4). The RW Fund’s debt service payment (Line 6) will be partially covered by Restricted Reserve Funding (Line 5). The remaining revenue requirement to be recovered from rates is shown in Line 7. The line items shown below are further detailed in Appendix 4 – Cash Flow Analysis for RW Funds, developed by District Staff and provided to Raftelis for the cost of service analysis.

**Table 7-2: Recycled Water Revenue Requirement from Rates**

Line #	Revenue Requirement	FY 2019	Notes
1	Treatment Tertiary Recycled Water	\$256,950	Appendix 2
2	Other RW O&M	\$862,159	Appendix 2
<b>3</b>	<b>Revenue Requirement for RW</b>	<b>\$1,119,109</b>	
4	Less (-) Non-Operating Revenues	(\$358,598)	Appendix 4
5	Less (-) Restricted Reserve Funding	(\$443,469)	Appendix 4
6	Plus (+) Debt Service	\$1,602,958	Appendix 4
<b>7</b>	<b>Total Revenue Requirement from Rates</b>	<b>\$1,920,000</b>	

All RW customers connected to the recycled water distribution system will be assessed the same Monthly Service Charges (Table 7-3) and Capital R&R Charges (Table 7-4) as potable customers to recover the customer service, meter service, a portion of capacity and other RW related fixed costs and to pay for capital R&R of expanded RW system. After the completion of the RW expansion in FY 2015, all RW customers (existing and converting customers) are now supplied with higher quality tertiary RW, and are subject to the corresponding rates that support the annual projected cost of providing tertiary RW.

**Table 7-3: FY 2019 Proposed Monthly Recycled Water Service Charges**

Meter Size	FY 2018 Rates A	FY 2019 Rates B	# of RW Accounts C
5/8-in	\$11.80	\$12.96	0
3/4-in	\$15.82	\$17.37	0
1-in	\$23.85	\$26.20	0
1 1/2-in	\$43.92	\$48.25	10
2-in	\$84.07	\$92.36	200
<b>Projected RW Revenues (Column A or B x Column C)</b>	<b>\$207,038</b>	<b>\$227,454</b>	<b>210 Accounts</b>

**Table 7-4: FY 2019 Proposed Monthly Recycled Water Capital R&R Charges**

Meter Size	FY 2018 Rates	FY 2019 Rates	\$ Increase	% Increase
5/8-in	\$4.66	\$4.66	\$0.00	0%
3/4-in	\$4.66	\$4.66	\$0.00	0%
1-in	\$7.78	\$7.78	\$0.00	0%
1 1/2-in	\$18.91	\$18.91	\$0.00	0%
2-in	\$47.47	\$47.47	\$0.00	0%

Table 7-5 derives the revenue required from the Recycled Water Commodity Rate (Line 3) by subtracting the Monthly Service Charge Revenue (Line 2) from the Total Revenue Requirements (Line 1). The unit RW commodity rate is calculated using the net revenue requirements from RW commodity rates (Line 3) divided by projected RW sales (Line 4). The RW commodity rate for FY 2019 is unchanged at \$2.62 / ccf or \$1,141 / AF, which is approximately 90% of Tier 2 Potable Water Commodity Rate for FY 2019 and provides an economic incentive for irrigation customers to convert to RW.

**Table 7-5: Recycled Water Commodity Rate Calculation**

Line #		FY 2019
1	Total Revenue Requirement from RW Rates	\$1,920,000
2	Less (-) Monthly Service Charge	(\$227,454)
<b>3</b>	<b>Net Commodity Rate Revenue Requirements</b>	<b>\$1,692,546</b>
4	Projected RW Sales	646,866 ccf
<b>5</b>	<b>Unit RW Commodity Rate (\$/ccf)</b>	<b>\$2.62 /ccf</b>
6	Unit RW Commodity Rate (\$/AF)	\$1,141/AF
7	Percent of Tier 2 Potable Water Rate	90%

## 8. FIRE SERVICE

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### 8.1 PROPOSED FIRE SERVICE CHARGES

The District proposes to increase the Monthly Fire Service Charges by 9.9%, increasing revenue by \$10,000. As shown in Table 8-1, all Fire Service customers pay \$7.67 a month. With the rate increase, all Fire Service customers will pay \$8.43 a month.

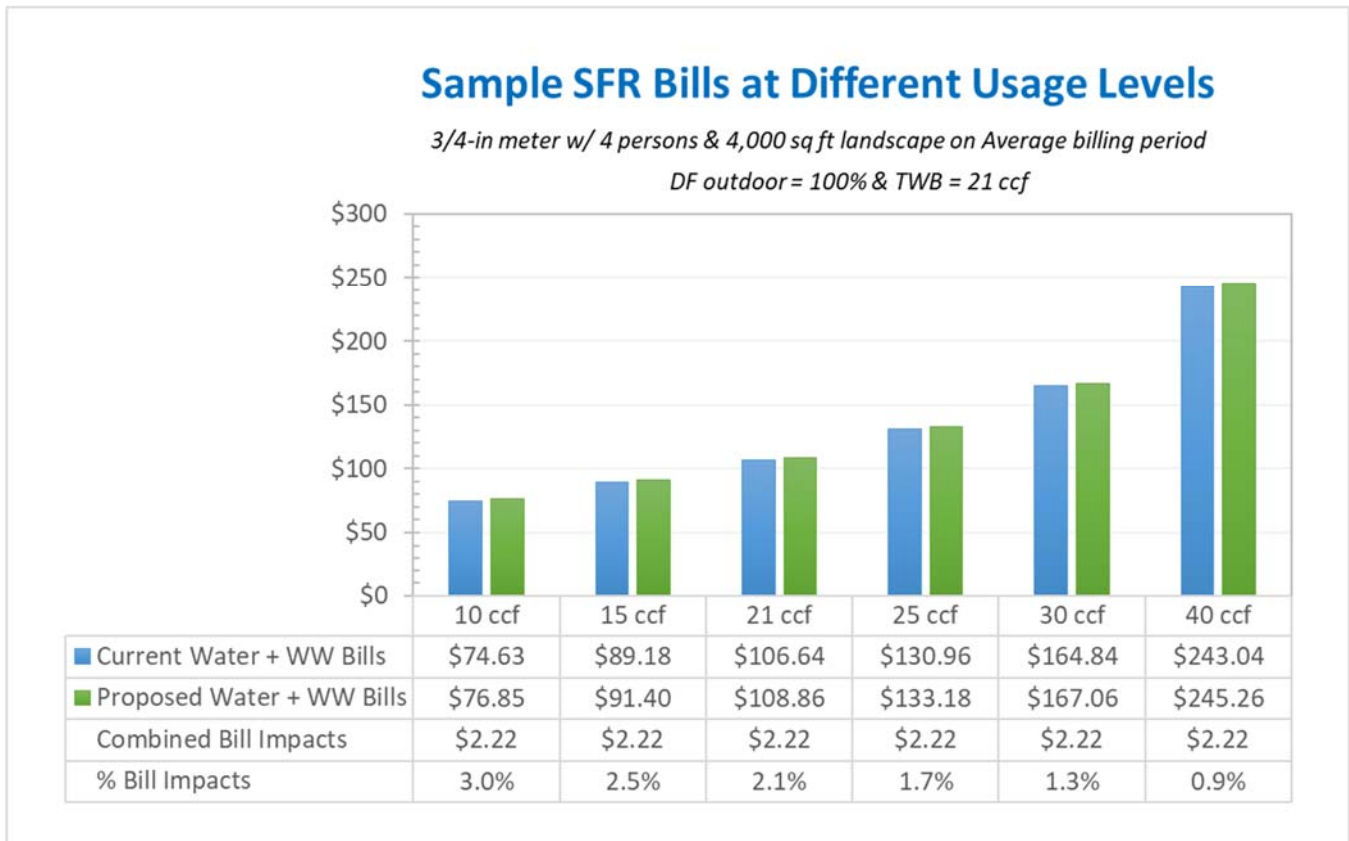
**Table 8-1: Proposed Monthly Fire Service Charges**

Meter Size	Quantity	Current Rate	Annual Revenue	Proposed Rate	Annual Revenue
4"	26	\$7.67	\$9,572	\$8.43	\$10,521
6"	89	\$7.67	\$49,149	\$8.43	\$54,019
8"	52	\$7.67	\$38,289	\$8.43	\$42,083
10"	4	\$7.67	\$3,682	\$8.43	\$4,046
	<b>171</b>		<b>\$100,692</b>		<b>\$110,669</b>

# 9. CUSTOMER IMPACT ANALYSIS

Figure 9-1 shows a breakdown of water and wastewater bills at various water usage levels for a single family residential user with 4 occupants and 4,000 sq. ft. landscape area serviced by a 3/4-in meter. The combined water and wastewater bill increase would be \$2.22 per month, resulting from increases in water and wastewater monthly fixed service charges. Note that the impacts for recycled water are not shown because residential users do not use recycled water.

**Figure 9-1: SFR Total Monthly Bill at Different Usage Levels**







# 10. APPENDICES

## 10.1 APPENDIX 1 – PASS-THROUGH WATER SUPPLY COST

Source: Budget Data.Raftelis.xls sent by District 4/3/18

EL TORO WATER DISTRICT							
2018/19 PURCHASED WATER BUDGET							
		2017/18 Budget		2017/18 Projected Actual		2018/19 Budget	
		Jul 2017	Jan 2018	Jul 2017	Jan 2018	Jul 2018	Jan 2019
1	Total Period Demand (AF)	3,930	3,370	4,290	3,700	4,000	3,500
2	Total Annual Demand (AF)		7,300		7,990		7,500
3	Total Water Sales (AF)		7,000		7,690		7,200
4	MWD Period Demand (AF)	2,301	1,741	2,661	2,071	2,321	1,821
5	MWD Annual Demand (AF)		4,042		4,732		4,142
6	<b>MWD Untreated Commodity Rates</b>						
7	System Access Rate	289.00	299.00	289.00	299.00	299.00	326.00
8	System Power Rate	124.00	132.00	124.00	132.00	132.00	127.00
9	Water Stewardship Rate	52.00	55.00	52.00	55.00	55.00	69.00
10	MWD Tier 1 Rate	201.00	209.00	201.00	209.00	209.00	209.00
11	<b>Subtotal Untreated Full Service</b>	<b>666.00</b>	<b>695.00</b>	<b>666.00</b>	<b>695.00</b>	<b>695.00</b>	<b>731.00</b>
12	Treatment Surcharge	313.00	320.00	313.00	320.00	320.00	319.00
13	<b>Total Treated Full Service Rate</b>	<b>979.00</b>	<b>1,015.00</b>	<b>979.00</b>	<b>1,015.00</b>	<b>1,015.00</b>	<b>1,050.00</b>
14	<b>Total Treated Full Service Annual Cost</b>	<b>2,252,752</b>	<b>1,767,190</b>	<b>2,605,119</b>	<b>2,102,065</b>	<b>2,355,815</b>	<b>1,912,050</b>
15	<b>MWD Fixed Charges</b>						
16	Capacity Reservation Charge	66,323	72,126	66,323	72,126	72,126	71,297
17	Readiness To Serve Charge	220,164	228,318	220,164	228,318	228,318	216,902
18	<b>Total MWD Fixed Charges</b>		<b>586,931</b>		<b>586,931</b>		<b>588,643</b>
19	<b>Total MWD Cost</b>		<b>4,606,873</b>		<b>5,294,115</b>		<b>4,856,508</b>
20	<b>Total MWD Unit Cost (\$/AF)</b>		<b>1,140</b>		<b>1,119</b>		<b>1,173</b>
21	<b>MWDOC Connection Rate (\$/meter)</b>	<b>11.25</b>		<b>11.90</b>		<b>12.25</b>	
22	ETWD Meters	9,562		9,562		9,562	
23	<b>MWDOC Connection Charge (\$)</b>		<b>107,573</b>		<b>113,788</b>		<b>117,135</b>
24	<b>Baker Water Treatment Plant</b>						
25	Period Demand (AF)	1,629	1,629	1,629	1,629	1,679	1,679
26	Annual Demand (AF)		3,258		3,258		3,358
27	<b>Baker Raw Water Cost</b>	<b>1,084,864</b>	<b>1,132,103</b>	<b>1,084,914</b>	<b>1,132,155</b>	<b>1,166,905</b>	<b>1,227,349</b>
28	Baker O&M Unit Cost (per AF)	218	218	175	175	182	182
29	SAC Surcharge	8	8	8	8	8.38	8.38
30	SCP Surcharge	1	1	1	1	1.12	1.12
31	<b>Baker O&amp;M Annual Cost</b>	<b>371,672</b>	<b>371,672</b>	<b>300,616</b>	<b>300,616</b>	<b>321,536</b>	<b>321,536</b>
32	Baker Capital Cost (Debt Service)	342,131	342,131	342,131	342,131	342,131	342,131
33	<b>Total Period Baker Water Treatment Plant Cost</b>	<b>1,798,667</b>	<b>1,845,906</b>	<b>1,727,661</b>	<b>1,774,902</b>	<b>1,830,572</b>	<b>1,891,016</b>
34	<b>Total Annual Baker Water Treatment Plant Cost</b>		<b>3,644,574</b>		<b>3,502,562</b>		<b>3,721,587</b>
35	<b>Baker Water Treatment Plant Unit Cost(\$/AF)</b>		<b>1,119</b>		<b>1,075</b>		<b>1,108</b>
36	<b>Capital Charge Revenue Funding</b>		<b>(500,000)</b>		<b>(500,000)</b>		<b>(600,000)</b>
37	<b>Total Baker Water Treatment Plant Cost</b>		<b>3,144,574</b>		<b>3,002,562</b>		<b>3,121,587</b>
38	<b>Total Purchased Water Cost</b>						
39	MWD		4,606,873		5,294,115		4,856,508
40	MWDOC		107,573		113,788		117,135
41	Baker		3,144,574		3,002,562		3,121,587
42	<b>Total Purchased Water Cost</b>		<b>7,859,019</b>		<b>8,410,465</b>		<b>8,095,230</b>
43	<b>Total Expense (Less Baker Debt Service)</b>		<b>7,674,757</b>		<b>8,226,203</b>		<b>8,010,968</b>
44	Percent Increase Budget to Budget per Unit						0.26%
45	<b>Overall Imported Water Effective Rate</b>						
46	Fiscal Year Cost per Acre Foot Purchased		<b>1,077</b>		<b>1,053</b>		<b>1,079</b>
47	Fiscal Year Cost per CCF Purchased		<b>2.47</b>		<b>2.42</b>		<b>2.48</b>
48	Fiscal Year Rate per CCF Sold		<b>2.58</b>		<b>2.51</b>		<b>2.58</b>

## 10.2 APPENDIX 2 – O&M EXPENSES ALLOCATIONS TO WATER, RECYCLED WATER AND WASTEWATER FUNDS

Source: Budget Data.Raftelis.xls sent by District 4/3/18

	2018/19 Budget	Water	Sewer	Recycled Water	Total
Source of Supply	8,148,467	8,148,467			8,148,467
Pumping Water	247,971	247,971			247,971
Treatment Water	49,641	49,641			49,641
Transmission & Distribution Water	515,692	515,692			515,692
Customer Accounts	0	0			0
Outside Treatment Sewer	919,750		919,750		919,750
Pumping Sewer	369,848		369,848		369,848
Treatment Sewer	762,678		762,678		762,678
Treatment Tertiary Recycled Water	256,950			256,950	256,950
Transmission & Distribution Sewer	284,250		284,250		284,250
T&D Recycled Water	0			0	0
Operations Support	222,111	88,844	115,498	17,769	222,111
Operations Support Power	10,800	4,320	5,616	864	10,800
Fleet	237,885	95,154	123,700	19,031	237,885
Operations Indirect Costs	109,900	43,960	57,148	8,792	109,900
Administration	219,950	87,980	114,374	17,596	219,950
Admin Power	39,900	15,960	20,748	3,192	39,900
Administration Indirect Costs	1,648,600	659,440	857,272	131,888	1,648,600
Depreciation & Amortization	4,306,850	1,722,740	2,239,562	344,548	4,306,850
Interest Expense	769,061	289,290	80,367	399,403	769,061
<b>Total</b>	<b>19,120,304</b>	<b>11,969,460</b>	<b>5,950,811</b>	<b>1,200,033</b>	<b>19,120,304</b>
Other O&M					
Purchased Water	8,010,968	8,010,968			8,010,968
SOCWA	906,250		906,250		906,250
Fuel & Power	1,077,450	211,780	719,170	\$146,500	1,077,450
Operations Indirect Costs	109,900	43,960	57,148	8,792	109,900
Administration	219,950	87,980	114,374	17,596	219,950
Administration Indirect Costs	1,648,600	659,440	857,272	131,888	1,648,600
Depreciation & Amortization	4,306,850	1,722,740	2,239,562	344,548	4,306,850
Interest Expense	769,061	289,290	80,367	399,403	769,061
<b>Total Other O&amp;M</b>	<b>2,071,275</b>	<b>943,301</b>	<b>976,668</b>	<b>151,306</b>	<b>2,071,275</b>
<b>Labor</b>	<b>8,287,837</b>	<b>3,315,135</b>	<b>4,309,675</b>	<b>663,027</b>	<b>8,287,837</b>
<b>Total Expense</b>	<b>27,408,141</b>	<b>15,284,594</b>	<b>10,260,487</b>	<b>1,863,060</b>	<b>27,408,141</b>
Less Depreciation & Interest	<b>22,332,230</b>	<b>13,272,564</b>	<b>7,940,557</b>	<b>1,119,109</b>	<b>22,332,230</b>

## 10.3 APPENDIX 3 – CASH FLOW ANALYSIS FOR WATER FUND

**Source:** Budget Data.Raftelis.xls sent by District 4/3/18

WATER CASH FLOW												Budget Year
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2019
												2018-19
<b>BEGINNING RESERVE BALANCE</b>	<b>6,512,021</b>	<b>6,319,497</b>	<b>5,838,457</b>	<b>5,409,089</b>	<b>5,135,890</b>	<b>5,032,033</b>	<b>5,037,679</b>	<b>5,053,182</b>	<b>5,062,475</b>	<b>5,069,640</b>	<b>5,080,918</b>	<b>6,319,497</b>
<b>OPERATIONS &amp; MAINTENANCE CASH FLOW</b>												
<b>O&amp;M REVENUES</b>												
Revenue from 17/18 Commodity Rates (Unrestricted)	9,053,283	8,421,658	8,421,658	8,421,658	8,421,658	8,421,658	8,421,658	8,421,658	8,421,658	8,421,658	8,421,658	8,421,658
Revenue from 17/18 Fixed Meter Rates	2,925,000	2,958,095	2,910,000	2,910,000	2,910,000	2,910,000	2,910,000	2,910,000	2,910,000	2,910,000	2,910,000	2,958,095
Revenue from 17/18 Fire / Flooding Meters	110,000	121,000	132,979	146,239	160,446	172,759	182,230	191,702	201,173	211,592	222,579	121,000
<b>Additional Service Revenue Required</b>												
<b>Year</b>	<b>Rate Action</b>											
2018-19	MWD Pass Through	0	0	0	0	0	0	0	0	0	0	0
2018-19	Tier 1 Offset Increase	0	0	0	0	0	0	0	0	0	0	0
2018-19	COS Rate Increase	285,000	285,000	285,000	285,000	285,000	285,000	285,000	285,000	285,000	285,000	285,000
2019-20	MWD Pass Through		219,542	219,542	219,542	219,542	219,542	219,542	219,542	219,542	219,542	0
2019-20	COS Rate Increase		315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	0
2020-21	MWD Pass Through			250,906	250,906	250,906	250,906	250,906	250,906	250,906	250,906	0
2020-21	COS Rate Increase			350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	0
2021-22	MWD Pass Through				282,269	282,269	282,269	282,269	282,269	282,269	282,269	0
2021-22	COS Rate Increase				375,000	375,000	375,000	375,000	375,000	375,000	375,000	0
2022-23	MWD Pass Through					313,632	313,632	313,632	313,632	313,632	313,632	0
2022-23	COS Rate Increase					325,000	325,000	325,000	325,000	325,000	325,000	0
2023-24	MWD Pass Through						282,269	282,269	282,269	282,269	282,269	0
2023-24	COS Rate Increase						250,000	250,000	250,000	250,000	250,000	0
2024-25	MWD Pass Through							282,269	282,269	282,269	282,269	0
2024-25	COS Rate Increase							250,000	250,000	250,000	250,000	0
2025-26	MWD Pass Through								282,269	282,269	282,269	0
2025-26	COS Rate Increase								250,000	250,000	250,000	0
2026-27	MWD Pass Through									282,269	282,269	0
2026-27	COS Rate Increase									275,000	275,000	0
2027-28	MWD Pass Through										282,269	0
2027-28	COS Rate Increase										290,000	0
<b>Total Unrestricted Water Service Rate Revenue</b>	<b>12,088,283</b>	<b>11,785,753</b>	<b>12,284,179</b>	<b>12,898,345</b>	<b>13,569,821</b>	<b>14,220,766</b>	<b>14,762,506</b>	<b>15,304,247</b>	<b>15,845,987</b>	<b>16,413,675</b>	<b>16,996,931</b>	<b>11,785,753</b>
<b>Other Sources of Cash</b>												
Restricted Reserves Funding of Conservation Program	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Capital Charge Funding of Baker Debt Service	500,000	600,000	625,000	625,000	600,000	550,000	525,000	500,000	500,000	500,000	500,000	600,000
Property Taxes - General Fund Revenue	308,048	330,342	340,687	351,509	362,523	373,647	384,888	396,240	407,765	419,436	431,223	330,342
Property Taxes (Funds Tier 1 Offset)	221,191	189,691	185,391	181,005	176,531	171,968	167,314	162,566	157,724	152,784	147,746	189,691
Miscellaneous Revenue	50,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
Other Income (Site Leases)	183,500	215,000	219,300	223,686	228,160	232,723	237,377	242,125	246,967	251,907	256,945	215,000
Other Income (R-6 Partners)	123,400	122,000	124,440	126,929	129,467	132,057	134,698	137,392	140,140	142,942	145,801	122,000
Investment Income	77,000	58,000	29,192	27,045	25,679	25,160	25,188	25,266	25,312	25,348	25,405	58,000
<b>Subtotal Other Sources of Cash</b>	<b>1,563,139</b>	<b>1,690,033</b>	<b>1,699,010</b>	<b>1,710,174</b>	<b>1,697,361</b>	<b>1,660,555</b>	<b>1,649,465</b>	<b>1,638,588</b>	<b>1,652,908</b>	<b>1,667,418</b>	<b>1,682,120</b>	<b>1,690,033</b>
<b>TOTAL O&amp;M REVENUES (Unrestricted)</b>	<b>13,651,422</b>	<b>13,475,786</b>	<b>13,983,189</b>	<b>14,608,519</b>	<b>15,267,182</b>	<b>15,881,321</b>	<b>16,411,972</b>	<b>16,942,835</b>	<b>17,498,895</b>	<b>18,081,093</b>	<b>18,679,051</b>	<b>13,475,786</b>
<b>O&amp;M REVENUE REQUIREMENTS</b>												
Total O & M Expense	13,159,684	13,272,564	13,728,296	14,197,456	14,686,777	15,191,413	15,712,207	16,249,280	16,807,469	17,385,553	17,981,822	13,272,564
<b>Debt Service</b>												
Baker Water Treatment Plant	684,262	684,262	684,262	684,262	684,262	684,262	684,262	684,262	684,262	684,262	684,262	684,262
<b>Subtotal Debt Service</b>	<b>684,262</b>	<b>684,262</b>	<b>684,262</b>	<b>684,262</b>	<b>684,262</b>	<b>684,262</b>	<b>684,262</b>	<b>684,262</b>	<b>684,262</b>	<b>684,262</b>	<b>684,262</b>	<b>684,262</b>
<b>TOTAL O&amp;M REVENUE REQUIREMENTS</b>	<b>13,843,946</b>	<b>13,956,826</b>	<b>14,412,558</b>	<b>14,881,718</b>	<b>15,371,039</b>	<b>15,875,675</b>	<b>16,396,469</b>	<b>16,933,542</b>	<b>17,491,731</b>	<b>18,069,815</b>	<b>18,666,084</b>	<b>13,956,826</b>
<b>ANNUAL O&amp;M SURPLUS (DEFICIT)</b>	<b>(192,524)</b>	<b>(481,040)</b>	<b>(429,368)</b>	<b>(273,199)</b>	<b>(103,857)</b>	<b>5,646</b>	<b>15,502</b>	<b>9,294</b>	<b>7,164</b>	<b>11,278</b>	<b>12,967</b>	<b>(481,040)</b>

WATER CASH FLOW												Budget Year	
												2019	
												2018-19	
CAPITAL REPLACEMENT & REFURBISHMENT PROGRAM													
CAPITAL EXPENDITURES													
Capital Replacement & Refurbishment Program	785,000	785,000	785,000	785,000	785,000	785,000	785,000	785,000	785,000	785,000	785,000	785,000	785,000
Baker Pipeline Capacity Purchase						110,000	110,000	110,000	110,000	110,000	110,000	110,000	0
Baker Water Treatment Plant							110,000	110,000	110,000	110,000	110,000	110,000	0
Baker Water Treatment Plant Construction Period Interest													0
Capital Charge Funding of Baker Debt Service	500,000	600,000	625,000	625,000	600,000	550,000	525,000	500,000	500,000	500,000	500,000	500,000	600,000
<b>TOTAL CAPITAL EXPENDITURES</b>	<b>1,285,000</b>	<b>1,385,000</b>	<b>1,410,000</b>	<b>1,410,000</b>	<b>1,385,000</b>	<b>1,445,000</b>	<b>1,530,000</b>	<b>1,505,000</b>	<b>1,505,000</b>	<b>1,505,000</b>	<b>1,505,000</b>	<b>1,505,000</b>	<b>1,385,000</b>
CAPITAL PROGRAM REVENUE													
Revenue from Existing Capital Charge	785,000	785,000	785,000	785,000	785,000	785,000	785,000	785,000	785,000	785,000	785,000	785,000	785,000
Capital Charge Funding of Baker Debt Service	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
Restricted Reserve Funding		100,000	125,000	125,000	100,000	50,000	25,000	0	0	0	0	0	100,000
Capital Charge Revenue Increase						110,000	110,000	110,000	110,000	110,000	110,000	110,000	0
Capital Charge Revenue Increase							110,000	110,000	110,000	110,000	110,000	110,000	0
<b>Subtotal Capital Charge Revenue</b>	<b>1,285,000</b>	<b>1,385,000</b>	<b>1,410,000</b>	<b>1,410,000</b>	<b>1,385,000</b>	<b>1,445,000</b>	<b>1,530,000</b>	<b>1,505,000</b>	<b>1,505,000</b>	<b>1,505,000</b>	<b>1,505,000</b>	<b>1,505,000</b>	<b>1,385,000</b>
Loan Proceeds - Baker													
Loan Proceeds - Recycled Water Project- SRF													
Capital Reserves													
<b>TOTAL CAPITAL REVENUE</b>	<b>1,285,000</b>	<b>1,385,000</b>	<b>1,410,000</b>	<b>1,410,000</b>	<b>1,385,000</b>	<b>1,445,000</b>	<b>1,530,000</b>	<b>1,505,000</b>	<b>1,505,000</b>	<b>1,505,000</b>	<b>1,505,000</b>	<b>1,505,000</b>	<b>1,385,000</b>
<b>ANNUAL CAPITAL SURPLUS (DEFICIT)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
TOTAL CASH FLOW													
<b>TRANSFER FROM RECYCLED WATER</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL ANNUAL RESERVE IMPACT</b>	<b>(192,524)</b>	<b>(481,040)</b>	<b>(429,368)</b>	<b>(273,199)</b>	<b>(103,857)</b>	<b>5,646</b>	<b>15,502</b>	<b>9,294</b>	<b>7,164</b>	<b>11,278</b>	<b>12,967</b>	<b>(481,040)</b>	
<b>ENDING RESERVE BALANCE</b>	<b>6,319,497</b>	<b>5,838,457</b>	<b>5,409,089</b>	<b>5,135,890</b>	<b>5,032,033</b>	<b>5,037,679</b>	<b>5,053,182</b>	<b>5,062,475</b>	<b>5,069,640</b>	<b>5,080,918</b>	<b>5,093,884</b>	<b>5,838,457</b>	

# 10.4 APPENDIX 4 – CASH FLOW ANALYSIS FOR RECYCLED WATER FUND

Source: Budget Data.Raftelis.xls sent by District 4/3/18

RECYCLED WATER CASH FLOW												Budget Year
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2019
												2018-19
<b>BEGINNING RESERVE BALANCE</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>OPERATIONS &amp; MAINTENANCE CASH FLOW</b>												
<b>O&amp;M REVENUES</b>												
Revenue from 1718 Commodity Rates	1,510,000	1,695,000	1,850,342	1,898,672	1,960,810	2,022,948	2,078,182	2,133,416	2,188,650	2,243,885	2,299,119	1,695,000
Revenue from 1718 Fixed Meter Rates	205,000	205,000	264,000	264,000	264,000	264,000	264,000	264,000	264,000	264,000	264,000	205,000
<b>Additional Service Revenue Required</b>												
<b>Year</b>	<b>Rate Action</b>											0
2018-19	COS Rate Increase											20,000
2019-20	COS Rate Increase											0
2020-21	COS Rate Increase											0
2021-22	COS Rate Increase											0
2022-23	COS Rate Increase											0
2023-24	COS Rate Increase											0
2024-25	COS Rate Increase											0
2025-26	COS Rate Increase											0
2026-27	COS Rate Increase											0
2027-28	COS Rate Increase											0
<b>Total Recycled Water Service Rate Revenue</b>	<b>1,715,000</b>	<b>1,920,000</b>	<b>2,156,342</b>	<b>2,235,672</b>	<b>2,330,810</b>	<b>2,420,948</b>	<b>2,498,182</b>	<b>2,575,416</b>	<b>2,652,650</b>	<b>2,731,885</b>	<b>2,811,119</b>	<b>1,920,000</b>
<b>Other Sources of Cash</b>												
Restricted Reserves Funding of Debt Service	509,779	312,469	540,211	510,230	466,737	420,644	379,971	361,937	346,679	332,330	321,029	312,469
Recycled Water Meter Capital Charge Funding of Debt	115,000	131,000	147,000	147,000	147,000	157,000	177,000	177,000	177,000	177,000	177,000	131,000
MWD LRP Rebate	250,000	314,750	362,250	362,250	362,250	362,250	362,250	362,250	362,250	362,250	362,250	314,750
Property Taxes	41,350	43,848	45,355	46,278	47,215	48,178	49,166	50,181	51,214	52,271	53,356	43,848
Restricted Reserve - SRF Loan												0
<b>Subtotal Other Sources of Cash</b>	<b>916,128</b>	<b>802,067</b>	<b>1,094,815</b>	<b>1,065,758</b>	<b>1,023,203</b>	<b>988,072</b>	<b>968,387</b>	<b>951,367</b>	<b>937,143</b>	<b>923,851</b>	<b>913,635</b>	<b>802,067</b>
<b>TOTAL O&amp;M REVENUES</b>	<b>2,631,128</b>	<b>2,722,067</b>	<b>3,251,157</b>	<b>3,301,429</b>	<b>3,354,013</b>	<b>3,409,020</b>	<b>3,466,569</b>	<b>3,526,784</b>	<b>3,589,794</b>	<b>3,655,736</b>	<b>3,724,753</b>	<b>2,722,067</b>
<b>O&amp;M REVENUE REQUIREMENTS</b>												
Total O & M Expense	1,028,170	1,119,109	1,183,551	1,233,823	1,286,407	1,341,414	1,398,963	1,459,178	1,522,188	1,588,130	1,657,148	1,119,109
<b>Debt Service</b>												
Recycled Water SRF Loan - Phase I	1,602,958	1,602,958	1,602,958	1,602,958	1,602,958	1,602,958	1,602,958	1,602,958	1,602,958	1,602,958	1,602,958	1,602,958
Recycled Water SRF Loan - Phase II			464,648	464,648	464,648	464,648	464,648	464,648	464,648	464,648	464,648	0
<b>Subtotal Debt Service</b>	<b>1,602,958</b>	<b>1,602,958</b>	<b>2,067,606</b>	<b>2,067,606</b>	<b>2,067,606</b>	<b>2,067,606</b>	<b>2,067,606</b>	<b>2,067,606</b>	<b>2,067,606</b>	<b>2,067,606</b>	<b>2,067,606</b>	<b>1,602,958</b>
<b>TOTAL O&amp;M REVENUE REQUIREMENTS</b>	<b>2,631,128</b>	<b>2,722,067</b>	<b>3,251,157</b>	<b>3,301,429</b>	<b>3,354,013</b>	<b>3,409,020</b>	<b>3,466,569</b>	<b>3,526,784</b>	<b>3,589,794</b>	<b>3,655,736</b>	<b>3,724,753</b>	<b>2,722,067</b>
<b>ANNUAL O&amp;M SURPLUS (DEFICIT)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

RECYCLED WATER CASH FLOW												Budget Year 2019
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2018-19
<b>CAPITAL REPLACEMENT &amp; REFURBISHMENT PROGRAM</b>												0
<b>CAPITAL EXPENDITURES</b>												0
Capital Replacement & Refurbishment Program												0
Recycled Water Expansion Project												0
Recycled Water Meter Capital Charge Funding of Debt	115,000	131,000	147,000	147,000	147,000	157,000	177,000	177,000	177,000	177,000	177,000	131,000
<b>TOTAL CAPITAL EXPENDITURES</b>	<b>115,000</b>	<b>131,000</b>	<b>147,000</b>	<b>147,000</b>	<b>147,000</b>	<b>157,000</b>	<b>177,000</b>	<b>177,000</b>	<b>177,000</b>	<b>177,000</b>	<b>177,000</b>	<b>131,000</b>
<b>CAPITAL PROGRAM REVENUE</b>												
Revenue from Existing Capital Charge	115,000	131,000	147,000	147,000	147,000	157,000	177,000	177,000	177,000	177,000	177,000	131,000
<b>Subtotal Capital Charge Revenue</b>	<b>115,000</b>	<b>131,000</b>	<b>147,000</b>	<b>147,000</b>	<b>147,000</b>	<b>157,000</b>	<b>177,000</b>	<b>177,000</b>	<b>177,000</b>	<b>177,000</b>	<b>177,000</b>	<b>131,000</b>
Recycled Water Project Grant	0											
Restricted Reserves Funding of Recycled Water Project	0	0										
Loan Proceeds - Recycled Water Project- SRF	0											
Capital Reserves												0
<b>TOTAL CAPITAL REVENUE</b>	<b>115,000</b>	<b>131,000</b>	<b>147,000</b>	<b>147,000</b>	<b>147,000</b>	<b>157,000</b>	<b>177,000</b>	<b>177,000</b>	<b>177,000</b>	<b>177,000</b>	<b>177,000</b>	<b>131,000</b>
<b>ANNUAL CAPITAL SURPLUS (DEFICIT)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TRANSFER TO WATER COST CENTER</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TRANSFER TO SEWER COST CENTER</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>TOTAL CASH FLOW</b>											
<b>TOTAL ANNUAL RESERVE IMPACT</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>ENDING RESERVE BALANCE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>



# 10.5 APPENDIX 5 – CASH FLOW ANALYSIS FOR WASTEWATER FUND

Source: Budget Data.Raftelis.xls sent by District 4/3/18

SEWER CASH FLOW												Budget Year
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2019
												2018-19
<b>BEGINNING RESERVE BALANCE</b>	6,512,021	6,679,021	6,679,438	6,678,118	6,679,656	6,684,071	6,685,744	6,683,273	6,684,470	6,686,305	6,684,894	6,679,021
<b>OPERATIONS &amp; MAINTENANCE CASH FLOW</b>												
<b>O&amp;M REVENUES</b>												
Revenue from 17/18 Service Rates	7,585,000	7,585,000	7,585,000	7,585,000	7,585,000	7,585,000	7,585,000	7,585,000	7,585,000	7,585,000	7,585,000	7,585,000
<b>Additional Service Revenue Required</b>												0
<b>Year</b>	<b>Rate Action</b>											
2018-19	COS Rate Increase	215,000	215,000	215,000	215,000	215,000	215,000	215,000	215,000	215,000	215,000	215,000
2019-20	COS Rate Increase		360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	0
2020-21	COS Rate Increase			335,000	335,000	335,000	335,000	335,000	335,000	335,000	335,000	0
2021-22	COS Rate Increase				350,000	350,000	350,000	350,000	350,000	350,000	350,000	0
2022-23	COS Rate Increase					360,000	360,000	360,000	360,000	360,000	360,000	0
2023-24	COS Rate Increase						375,000	375,000	375,000	375,000	375,000	0
2024-25	COS Rate Increase							400,000	400,000	400,000	400,000	0
2025-26	COS Rate Increase								415,000	415,000	415,000	0
2026-27	COS Rate Increase									430,000	430,000	0
2027-28	COS Rate Increase										485,000	0
<b>Total Wastewater Service Rate Revenue</b>	<b>7,585,000</b>	<b>7,800,000</b>	<b>8,160,000</b>	<b>8,495,000</b>	<b>8,845,000</b>	<b>9,205,000</b>	<b>9,580,000</b>	<b>9,980,000</b>	<b>10,395,000</b>	<b>10,825,000</b>	<b>11,310,000</b>	<b>7,800,000</b>
<b>Other Sources of Cash</b>												
Release SRF Restricted Reserve												0
Restricted Reserve Funding of WRP SRF Debt Service												0
Property Taxes	304,411	311,119	316,692	322,655	328,699	334,899	341,256	347,777	354,412	361,190	368,141	311,119
MNWD Payment for RW Service to Golf Course	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000
Capital Facilities Fee	0	0	0	0	0	0	0	0	0	0	0	0
Investment Income	94,000	77,000	33,397	33,391	33,398	33,420	33,429	33,416	33,422	33,432	0	77,000
<b>Subtotal Other Sources of Cash</b>	<b>409,411</b>	<b>399,119</b>	<b>361,090</b>	<b>367,045</b>	<b>373,097</b>	<b>379,320</b>	<b>385,685</b>	<b>392,193</b>	<b>398,834</b>	<b>405,621</b>	<b>379,141</b>	<b>399,119</b>
<b>TOTAL O&amp;M REVENUES</b>	<b>7,994,411</b>	<b>8,199,119</b>	<b>8,521,090</b>	<b>8,862,045</b>	<b>9,218,097</b>	<b>9,584,320</b>	<b>9,965,685</b>	<b>10,372,193</b>	<b>10,793,834</b>	<b>11,230,621</b>	<b>11,689,141</b>	<b>8,199,119</b>
<b>O&amp;M REVENUE REQUIREMENTS</b>												
Total O & M Expense	7,569,265	7,940,557	8,264,263	8,602,362	8,955,536	9,324,501	9,710,010	10,112,851	10,533,853	10,973,886	11,433,865	7,940,557
<b>Debt Service</b>												
State Revolving Fund Loan												0
Northline Lift Station	258,146	258,146	258,146	258,146	258,146	258,146	258,146	258,146	258,146	258,146	258,146	258,146
<b>Subtotal Debt Service</b>	<b>258,146</b>	<b>258,146</b>	<b>258,146</b>	<b>258,146</b>	<b>258,146</b>	<b>258,146</b>	<b>258,146</b>	<b>258,146</b>	<b>258,146</b>	<b>258,146</b>	<b>258,146</b>	<b>258,146</b>
<b>TOTAL O&amp;M REVENUE REQUIREMENTS</b>	<b>7,827,411</b>	<b>8,198,703</b>	<b>8,522,409</b>	<b>8,860,508</b>	<b>9,213,682</b>	<b>9,582,647</b>	<b>9,968,155</b>	<b>10,370,996</b>	<b>10,791,999</b>	<b>11,232,032</b>	<b>11,692,011</b>	<b>8,198,703</b>
<b>ANNUAL O&amp;M SURPLUS (DEFICIT)</b>	<b>167,000</b>	<b>416</b>	<b>(1,319)</b>	<b>1,538</b>	<b>4,415</b>	<b>1,673</b>	<b>(2,471)</b>	<b>1,197</b>	<b>1,836</b>	<b>(1,411)</b>	<b>(2,870)</b>	<b>416</b>

SEWER CASH FLOW												Budget Year
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2019
												2018-19
<b>CAPITAL REPLACEMENT &amp; REFURBISHMENT PROGRAM</b>												
<b>CAPITAL EXPENDITURES</b>												
Capital Replacement & Refurbishment Program	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000
						140,000	140,000	140,000	140,000	140,000	140,000	0
							140,000	140,000	140,000	140,000	140,000	0
<b>TOTAL CAPITAL EXPENDITURES</b>	<b>1,615,000</b>	<b>1,615,000</b>	<b>1,615,000</b>	<b>1,615,000</b>	<b>1,615,000</b>	<b>1,755,000</b>	<b>1,895,000</b>	<b>1,895,000</b>	<b>1,895,000</b>	<b>1,895,000</b>	<b>1,895,000</b>	<b>1,615,000</b>
<b>CAPITAL PROGRAM REVENUE</b>												
Revenue from Existing Capital Charge	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000
Capital Charge Revenue Increase						140,000	140,000	140,000	140,000	140,000	140,000	0
Capital Charge Revenue Increase							140,000	140,000	140,000	140,000	140,000	0
<b>Subtotal Capital Charge Revenue</b>	<b>1,615,000</b>	<b>1,615,000</b>	<b>1,615,000</b>	<b>1,615,000</b>	<b>1,615,000</b>	<b>1,755,000</b>	<b>1,895,000</b>	<b>1,895,000</b>	<b>1,895,000</b>	<b>1,895,000</b>	<b>1,895,000</b>	<b>1,615,000</b>
Loan Proceeds - Northline												
Capital Reserves												
<b>TOTAL CAPITAL REVENUE</b>	<b>1,615,000</b>	<b>1,615,000</b>	<b>1,615,000</b>	<b>1,615,000</b>	<b>1,615,000</b>	<b>1,755,000</b>	<b>1,895,000</b>	<b>1,895,000</b>	<b>1,895,000</b>	<b>1,895,000</b>	<b>1,895,000</b>	<b>1,615,000</b>
<b>ANNUAL CAPITAL SURPLUS (DEFICIT)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL CASH FLOW</b>												
<b>TRANSFER FROM RECYCLED WATER</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL ANNUAL RESERVE IMPACT</b>	<b>167,000</b>	<b>416</b>	<b>(1,319)</b>	<b>1,538</b>	<b>4,415</b>	<b>1,673</b>	<b>(2,471)</b>	<b>1,197</b>	<b>1,836</b>	<b>(1,411)</b>	<b>(2,870)</b>	<b>416</b>
<b>ENDING RESERVE ANALYSIS</b>	<b>6,679,021</b>	<b>6,679,438</b>	<b>6,678,118</b>	<b>6,679,656</b>	<b>6,684,071</b>	<b>6,685,744</b>	<b>6,683,273</b>	<b>6,684,470</b>	<b>6,686,305</b>	<b>6,684,894</b>	<b>6,682,025</b>	<b>6,679,438</b>

## 10.6 APPENDIX 6 – DETAILED WATER COST OF SERVICE ANALYSIS

	Peaking Factors	Base Cost Allocation	Peaking Cost Allocation
Max Day	2.00 x Average Demand	50.0%	50.0%
Max Hour	3.00 x Average Demand	33.3%	66.7%
Average Demand		41.7%	58.3%

The appropriate allocation factors between base and extra capacity vary with system design. The water utility is comprised of various facilities, each designed and operated to fulfill a given function. To provide adequate service to its customers at all times, the utility must be capable of providing the total water demand as well as peak demand.

Different facilities are designed to meet different peaking demands. These characteristics are used to allocate costs to functional cost components. Since all customers do not exert their maximum demand for water at the same time, water facilities are designed to meet coincidental demands for all customers.

Comparison of historical system coincidental maximum day and maximum hour demands to average day demands results in appropriate ratios for allocation of capital costs and operating expenses to base and extra capacity cost components. A maximum day to average day ratio of 2.0 is used based on demands experienced in the District's system. This indicates that 50 percent of the capacity of the facilities designed and operated for maximum day demand is needed for average or base use and 50 percent is used for maximum day extra capacity requirements.

Cost of service is allocated to functional cost components using either water system demand ratios developed above or direct assignment, such as billing costs. The separation of costs into functional components provides a means for distributing such costs to customers based on their respective responsibilities for each type of service.

O&M expenses are generally allocated to the functional cost components that best reflect the design parameter associated with that expense. For example, source of supply meets the average day requirements of the system; thus, related expenses are allocated to the base cost component. The treatment plant and transmission mains are designed to meet maximum day demands of the system and so related expenses are allocated to the base and maximum day cost components. In a similar manner, pump stations and distribution mains are designed to meet the maximum hour demands of the system so related expenses are allocated to the base, maximum day and maximum hour cost components. Customer accounts, general and administration, and operations support expenses are directly associated with the cost of billing customers and is allocated to the billing cost component.

Water Revenue Requirements	2018-19	Water Supply	Billing & CS	Meters	Water Revenue Requirement Components						
					Base Fixed	Peaking	RW	Conservation	Rev Offset	Capital R&R	
<b>O&amp;M Expenses (excl. Interest &amp; Depreciation)</b>											
Source of Supply	\$8,148,467	98.3%			1.7%						
Pumping Water	\$247,971				33.3%	66.7%					
Treatment Water	\$49,641				50.0%	50.0%					
Transmission & Distribution Water	\$515,692				50.0%	50.0%					
Customer Accounts	\$0				41.7%	58.3%					
Outside Treatment Sewer	\$0				100.0%						
Operations Support	\$88,844		17%		83.0%						
Operations Support Power	\$4,320		0%		100.0%						
Fleet	\$95,154				100.0%						
Operations Indirect Costs	\$43,960		0%		100.0%						
Administration	\$87,980		30%		70.0%						
Admin Power	\$15,960		30%		70.0%						
Administration Indirect Costs	\$659,440		30%		70.0%						
Labor	\$3,315,135		7.0%		64.4%	28.6%					
<b>Subtotal O&amp;M Expenses (excl. Interest &amp; Depreciation)</b>	<b>\$13,272,564</b>	<b>\$8,010,968</b>	<b>\$475,182</b>	<b>\$0</b>	<b>\$3,390,745</b>	<b>\$1,395,669</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Other Revenue Requirements</b>											
Debt Service	\$684,262	100.0%									
Unrestricted Capital R&R Funding	\$785,000										100.0%
Restricted Capital R&R Funding (Baker WTP)	\$600,000										100.0%
<b>Subtotal Other Revenue Requirements</b>	<b>\$2,069,262</b>	<b>\$684,262</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,385,000</b>
<b>Less Other Revenues</b>											
Fire Service Charges	(\$121,000)				100.0%	0.0%					
Restricted Reserves Funding of Conservation Program	(\$100,000)				100.0%	0.0%					
Capital Charge Funding of Baker Debt Service	(\$600,000)	100.0%				0.0%					
Restricted Reserve Funding	(\$100,000)										100.0%
Property Taxes - General Fund Revenue	(\$330,342)				99.7%	0.0%			0.3%		
Property Taxes (Funds Tier 1 Offset)	(\$189,691)								100.0%		
Miscellaneous Revenue	(\$75,000)				100.0%	0.0%					
Other Income (Site Leases)	(\$215,000)					0.0%			100.0%		
Other Income (R-6 Partners)	(\$122,000)				100.0%	0.0%					
Investment Income	(\$58,000)				100.0%	0.0%					
<b>Subtotal Other Revenues</b>	<b>(\$1,911,033)</b>	<b>(\$600,000)</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$805,351)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$405,682)</b>	<b>(\$100,000)</b>	
<b>Plus Operating Reserve Funding</b>	<b>(\$481,040)</b>				100%						
<b>Plus Capital Reserve Funding</b>	<b>\$0</b>										100%
<b>NET REV REQUIREMENTS FROM RATES, EXC. FIRE SC</b>	<b>\$12,949,753</b>	<b>\$8,095,230</b>	<b>\$475,182</b>	<b>\$0</b>	<b>\$2,104,354</b>	<b>\$1,395,669</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$405,682)</b>	<b>\$1,285,000</b>	

Water Revenue Requirements	Water Rate Components								
	2018-19	Billing & CS	Meters & Capacity	Water Supply	Peak Delivery	RW	Conservation	Rev Offset	Capital R&R
Water Supply	\$8,095,230			\$8,095,230					
Billing & CS	\$475,182	\$475,182							
Meters	\$0								
Base Fixed	\$2,104,354		\$2,104,354						
Peaking	\$1,395,669		\$669,669		\$726,000				
RW	\$0					\$0			
Conservation	\$0						\$0		
Rev Offset	(\$405,682)							(\$405,682)	
Capital R&R	\$1,285,000								\$1,285,000
<b>NET REVENUE REQUIREMENTS</b>	<b>\$12,949,753</b>	<b>\$475,182</b>	<b>\$2,774,023</b>	<b>\$8,095,230</b>	<b>\$726,000</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$405,682)</b>	<b>\$1,285,000</b>
<b>Rev from Current Rates</b>		<b>\$2,958,095</b>		<b>\$8,091,708</b>	<b>\$734,645</b>	<b>\$860,211</b>	<b>\$133,435</b>	<b>(\$404,691)</b>	<b>\$1,285,437</b>
Units of Service		114,816 bills	314,436 EMUs						
Unit Cost of Service		\$4.14	\$8.82						

# **PROPOSITION 218 NOTICE**



El Toro Water District

24251 Los Alisos Blvd.  
Lake Forest, CA 92630



# El Toro Water District

## NOTICE OF PUBLIC HEARING ON PROPOSED WATER, SEWER AND RECYCLED WATER RATE/CHARGE INCREASE

Notice is hereby given that the Board of Directors of the El Toro Water District (the "District") will conduct a public hearing on June 28, 2018 at 7:30 a.m. in the Boardroom of the District Headquarters at 24251 Los Alisos Blvd., Lake Forest, CA 92630 to consider adopting increases to certain rates and charges. The proposed increases are the result of detailed budget analysis and an independent professional Water, Sewer and Recycled Water Enterprise Cost of Service Study Report prepared to determine appropriateness of the amounts, and fair and equitable cost allocation among customer categories. The proposed increases impact the water, sewer and recycled water operations and maintenance charges.

The net impact of the proposed changes in the rates for residential and commercial/public authority customers will vary based upon the actual water consumption and, where applicable, property specific water budgets. (See "[Potable Water Budget Calculation](#)" section).

### BACKGROUND

While the District continually strives for cost reductions and efficient utilization of the public's assets entrusted to us, we still must align rates and charges with the costs to deliver services. These costs include 1) electricity for operations, 2) the cost to purchase and treat water, 3) compliance with regulations governing the distribution, collection and treatment of water, wastewater and recycled water, 4) the disposal of treated wastewater & bio-solids, 5) construction of capital infrastructure improvements needed to repair, replace and update aging water, sewer and recycled water systems and 6) ongoing maintenance of vital infrastructure. Each year the District's Board of Directors adopts an annual operating budget that goes into effect on July 1. Part of the budgeting process is to assess the adequacy of the District's rates and charges. Of utmost importance is the effort to minimize costs (and therefore rates and charges), while maintaining the integrity of the District's infrastructure and its financial stability. To assist the District in this endeavor, the District retains an independent outside Financial Consultant who specializes in Cost of Service analysis and rate setting.

### POTABLE WATER USAGE RATES

The District, given the lack of available groundwater supply, purchases 100% of its potable water (drinking water) supply to meet residential, potable irrigation, commercial/public authority and fire protection demands from its wholesale water provider, the Municipal Water District of Orange County (MWDOC). Wholesale imported water (Northern California and the Colorado River) costs from MWDOC are driven by continued investment in regional water treatment and delivery system infrastructure, increased water importation costs, securing higher cost water supplies and water storage arrangements due to Northern California Bay-Delta (Bay-Delta) regulatory exportation restrictions and increased funding to aggressively pursue near term and long term Bay-Delta solutions (The CA Water Fix and Eco Restoration Project) that will ensure a greater degree of future water supply reliability to Southern California and Orange County.

South Orange County receives the majority of its potable water from MWDOC via the Metropolitan Water District of Southern California's (MWD) Diemer Water Filtration Plant located in Yorba Linda. To diversify and improve water treatment reliability for South Orange County residences and businesses, the District and four other water agencies partnered to fund and construct the Baker Water Treatment Plant located in the City of Lake Forest. The plant provides increased water reliability by increasing local water treatment capability from multiple water supply sources, including imported untreated water from MWD and local surface water from Irvine Lake.

The cost of purchased water includes the amount paid by the District to MWDOC for wholesale imported water treated by Metropolitan Water District, the amount paid by the District to MWDOC for untreated imported water supplied to the Baker Water Treatment Plant and the amount paid to Irvine Ranch Water District for O&M costs associated with the treatment and delivery of water from the Baker Water Treatment Plant. The amount paid by the District for purchased water is the exact amount "passed through" to the District's customers in the form of a Potable Water Usage Charge. The indoor Tier I and Uniform Commercial Usage rates include an offsetting credit (funded by non-rate revenue) based on the 2018/19 Cost of Service Study, to recognize that the highest and best use of potable water is for indoor health, safety and sanitation purposes. Tiers III and IV rates are applied to usage exceeding the combined calculated Tier I indoor and Tier II outdoor efficient water budgets. Tiers III and IV rates include the actual costs to purchase and deliver water from the District's wholesale water provider plus charges to fund the District's Conservation and Recycled Water Development Program. While the District's cost of purchased water is increasing due to increased MWD, MWDOC and Baker Water Treatment Plant O & M costs, the District is proposing to utilize an existing restricted reserve fund to offset the need for a usage rate increase in the 2018/19 fiscal year. The usage rate for each tier will therefore remain unchanged.

*Customers may obtain a copy of the proposed 2018/19 fiscal year budget and the Cost of Service Rate Study at the District's Administrative Office and the District's website at [www.etwd.com](http://www.etwd.com). For assistance in determining the impact of the proposed rate increase on your monthly bill you may access a Water Budget Calculator on the District's website or call our Customer Service Representatives at (949) 837-0660.*

## PUBLIC HEARING AND PROTEST PROCEEDING

within the service area of El Toro Water District.

You are receiving this notice because you are the owner of record of one or more parcels of property located

## WHY AM I RECEIVING THIS NOTICE?

The Governing Board of the El Toro Water District will conduct a public hearing on June 28, 2018 at 7:30 a.m. in the Board Room of its Administrative Office located at 24251 Los Alisos Blvd., Lake Forest, CA 92630. The purpose of the hearing will be to consider adoption of the proposed Recycled Water Usage Rate Increase and a Water, Recycled Water and Sewer Operations and Maintenance Charge increase. Property (parcel) owners may comment and file a written protest (one vote per parcel owned) on the proposed increases. California law prohibits the District from increasing charges if a majority of the affected property (parcel) owners file a written protest opposing the proposed increases before the end of the public hearing. Written protests must be submitted to the District at P.O. Box 4000, Laguna Hills, CA 92654 or personally submitted on or before the end of the public hearing, which is scheduled for 7:30 a.m. on June 28, 2018. Each protest must identify the affected property and include the signature of a record property owner. Email protests will not be accepted. Oral protests at the public hearing will not qualify as a protest, unless accompanied by a written protest. The District's Board of Directors welcomes input from the public during the public hearing.



**PROPOSED MONTHLY TIERED WATER USAGE RATES**

Water Usage Charges	Current Rate \$/ccf*	Proposed Rate \$/ccf*
Tier I - Indoor Efficient	\$2.52	No Change
Tier II - Outdoor Efficient	\$2.91	No Change
Tier III - Inefficient	\$6.08	No Change
Tier IV - Excessive	\$7.82	No Change
Commercial, Institutional and Industrial (“CII”)	\$2.89	No Change

\* 1 Billing Unit or “ccf” = 748 gallons

**RECYCLED WATER USAGE RATES**

The uniform Recycled Water Usage Rate (\$2.62/ccf) will remain unchanged.

**WATER AND SEWER OPERATIONS AND MAINTENANCE CHARGE**

To responsibly maintain and preserve its water, sewer and recycled water infrastructure investment, meet stringent regulatory requirements and ensure a continuous high level of service to its customers, the District administers an ongoing operations and maintenance program. To minimize financial impacts to customers and, fairly and equitably allocate that cost, the District commissioned an independent Cost of Service Study Report. Coupled with prudent utilization of reserves the District proposes to increase the water, sewer and recycled water operations and maintenance charges to meet costs associated with operating and maintenance of the water, sewer and recycled water systems. The Water, Sewer and Recycled Water Enterprise Operations and Maintenance Charges increase will become effective with the first full billing period after July 1, 2018.

WATER / RECYCLED WATER			SEWER		
Meter Size	Current Charge	Proposed Charge	Commercial(3)	Current Charge	Proposed Charge
5/8"	\$11.80	\$12.96			
3/4"	\$15.82	\$17.37	Animal Kennel/Hospital	\$3.88	\$3.99
1"	\$23.85	\$26.20	Car Wash	\$3.86	\$3.97
1-1/2"	\$43.92	\$48.25	Department/Retail Store	\$3.88	\$3.99
2"	\$84.07	\$92.36	Dry Cleaner	\$3.40	\$3.50
Fire Service Connection (\$/Inch-Dia)	\$7.67	\$8.43	Golf Course/Camp/Park	\$3.39	\$3.49
			Health Spa	\$3.87	\$3.98
			Hospital/Convalescence Home	\$3.40	\$3.50
			Hotel	\$5.87	\$6.04
			Market	\$7.70	\$7.92
			Mortuary	\$7.67	\$7.89
			Nursery/Greenhouse	\$3.44	\$3.54
			Professional/Financial Office	\$3.88	\$3.99
			Public Institution	\$3.82	\$3.93
			Repair/Service Station	\$3.87	\$3.98
			Restaurant	\$3.66	\$3.77
			School	\$4.01	\$4.13
			Theater	\$3.88	\$3.99
			Warehouse/Storage	\$3.07	\$3.16
			Basic Commercial	\$3.40	\$3.50

SEWER Residential		
Meter Size	Current Charge	Proposed Charge
Single Family (1)	\$23.63	\$24.30
Multi-family Restricted (2)	\$18.74	\$19.28
Multi-family Unrestricted (2)	\$22.28	\$22.92

(1) charged per month  
 (2) charged per Equivalent Dwelling Unit per month  
 (3) per ccf of water used

**CAPITAL REPLACEMENT AND REFURBISHMENT CHARGE**

The District maintains over \$156 million worth of water, sewer and recycled water infrastructure. The District’s capital program, which reinvests, replaces and refurbishes the assets that are essential to the provision of water, sewer and recycled water services to the District’s customers is funded by the Capital Replacement and Refurbishment Charge. No change in the Capital Replacement and Refurbishment Charge is proposed in the 2018/19 fiscal year.

**POTABLE AND RECYCLED WATER CAPITAL REPLACEMENT AND REFURBISHMENT CHARGE**

Meter Size	Current Charge (\$/Month)	Proposed Charge (\$/Month)
5/8"	\$4.66	No Change
3/4"	\$4.66	No Change
1"	\$7.78	No Change
1-1/2"	\$18.91	No Change
2"	\$47.47	No Change

**SEWER CAPITAL REPLACEMENT AND REFURBISHMENT CHARGE**

User Category	Current Charge (\$/Month)	Proposed Charge (\$/Month)
Single Family Residential	\$4.93	No Change
Multi-Family Restricted	\$3.91	No Change
Multi-Family Unrestricted	\$4.65	No Change
<b>Commercial</b>		
5/8" Meter	\$4.34	No Change
3/4" Meter	\$7.34	No Change
1" Meter	\$13.55	No Change
1-1/2" Meter	\$24.07	No Change
2" Meter	\$70.96	No Change
<b>Public Authority</b>		
1" Meter	\$4.93	No Change
1-1/2" Meter	\$24.65	No Change
2" Meter	\$39.71	No Change

**POTABLE WATER BUDGET CALCULATION**

**RESIDENTIAL CUSTOMERS**

A per meter, customer specific water budget is calculated to meet the efficient demands of indoor domestic use as well as outdoor irrigation under normal operating and water supply conditions. Under Emergencies and Water Supply Shortage conditions indoor and/or outdoor water budgets maybe adjusted using the Drought Factor (“DF”) to reduce water budgets to further encourage conservation. A water budget is the sum of the indoor and outdoor water budgets.

The indoor water budget in hundred cubic feet (ccf<sup>1</sup>) is:

**55 gallons/person/day \* Number of people per household\* Days/billing cycle \* DF<sub>indoor</sub>/748**

- The indoor Drought Factor DF<sub>indoor</sub> which is set by the Board of Directors is currently set to 1 and the number of people per household is as follows:
  - Detached home (single family home): 4 people
  - Apartment: 2 people
  - Attached home - unrestricted (i.e. condominium or townhouse): 3 people
  - Attached home - restricted (i.e. condominium or townhouse with age restrictions): 2 people

**Customers may request a variance/adjustment to provide an equitable water budget for special circumstances such as, more people living in the home than the formula provides, medical needs, etc.**

The outdoor water budget allocation in ccf is: **(Weather data \* Landscape area \* ETAF/1200) \* DF<sub>outdoor</sub>**

- Where the weather data is measured by the reference EvapoTranspiration (ET<sub>o</sub>) data in inches of water per billing cycle. ET is the amount of water that is lost by plants through evaporation and transpiration, and needs to be replaced for the plants to remain healthy. ET<sub>o</sub> data is obtained from California Irrigation Management Information System (CIMIS) Station 75 established by State of California Department of Water Resources, Office of Water Use Efficiency;
- The landscape area for multi-family accounts including apartments, condominiums and mobile homes is 25 square feet of landscape per dwelling unit plus any dedicated landscape area associated with the account;
- The landscape area for single-family detached homes is calculated by taking the building area and dividing it by the number of floors and subtracting that from the parcel area. The result is then multiplied by 70 percent to obtain the landscape area as follows:  
Landscape area = (lot size - (building area /number of floors)) \* 70%
- ET Adjustment Factor (ETAF) is a coefficient that adjusts the EvapoTranspiration (ET<sub>o</sub>) values based on type of plants and irrigation system efficiency. Based on the updated Model Water Efficient Landscape Ordinance<sup>2</sup> developed by the California Department of Water Resources, any landscape installed prior to January 1, 2010 has an ETAF of 0.8 and new landscape is an ETAF of 0.7. New landscape is defined as new or re-developments.
- DF<sub>outdoor</sub> is the outdoor drought factor (set by the Board of Directors) currently set at 1. This factor is not necessarily the same as the DF for indoor;
- 1200 is the conversion factor from inches-water (weather data)\*square feet (landscape area) to ccf (outdoor water budget).

**Under normal water supply conditions and circumstances Customers may request a variance/adjustment to provide an equitable water budget for special circumstances such as, establishing new landscaping and changes in irrigation landscape area. Under Emergencies and Water Supply Shortage conditions, variances/adjustments may be limited.**

The indoor water budget, as determined above, will be billed at Tier I (“Indoor - Efficient”) rates. The outdoor water budget, as determined above, will be billed at Tier II (“Outdoor - Efficient”) rates. Water use in excess of the Tier I and II water budget would be deemed inefficient and/or excessive. Tier III (“Inefficient”) water use would be usage between 100% and 130% of the Tier I and II water budget (or Total Water Budget) and Tier IV (“Excessive”) usage would be consumption over 130% of Total Water Budget.

**POTABLE IRRIGATION CUSTOMERS**

Potable Irrigation customers fall into one of two categories: Recreational or Functional. Recreational irrigation customers are those whose landscape is used mostly for recreational purposes (i.e. parks, soccer fields, etc.) while Functional irrigation customers will be those whose landscape is ornamental in nature (greenbelts, medians, etc.).

The irrigation water budget for dedicated irrigation customers in ccf is calculated as follows:

**(Weather data \* Landscape area \* ETAF/1200) \* DF<sub>outdoor</sub>**, Where

- Weather data (ET<sub>o</sub>) as described in the section above,
- Landscape area is assumed to be the lesser of 100% of total parcel area or 100% of the measured landscape area served by each meter,
- ET adjustment factor (ETAF) is equal to 0.8 for Functional irrigation and 1 for Recreational irrigation customers based on the updated Model Water Efficient Landscape Ordinance, and
- DF<sub>outdoor</sub> is the outdoor drought factor (set by the Board of Directors) will be set at 1. This factor is not necessarily the same as the DF for indoor;

**Under normal circumstances Customers may request a variance/adjustment to provide an equitable water budget for special circumstances such as, establishing new landscaping and changes in irrigation landscape area. Under Emergencies and Water Supply Shortage conditions, variances/adjustments may be limited.**

All of an irrigation customer’s Water Budget will be at Tier II (“Outdoor - Efficient”). Water use in excess of the Tier II water budget would be deemed inefficient and/or excessive. Tier III (“Inefficient”) water usage would be between 100% and 130% of the Tier II budget and Tier IV (“Excessive”) usage would be consumption over 130%.

1. ccf (100 cubic feet) = 748 gallons 2. Also in *State of California Code of Regulations, Title 23, Section 490-495*



# BUDGET





*"District of Distinction"*  
Serving the Public –  
Respecting the Environment

# EL TORO WATER DISTRICT BUDGET 2018/2019

ETWD Water-Wise  
Demonstration Garden



EL TORO WATER DISTRICT  
BOARD OF DIRECTORS  
2018-2019

M. SCOTT GOLDMAN, PRESIDENT  
WILLIAM H. KAHN, VICE-PRESIDENT  
MARK MONIN, TREASURER  
FREDERICK J. ADJARIAN, DIRECTOR  
JOSE F. VERGARA, DIRECTOR

OFFICERS

ROBERT R. HILL, GENERAL MANAGER  
DENNIS P. CAFFERTY, ASSISTANT GENERAL MANAGER/DISTRICT ENGINEER

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**El Toro Reservoir**



**Budget Overview**

## **MISSION STATEMENT**

**The mission of the El Toro Water District is to plan and invest appropriately to provide its customers a safe, adequate and reliable supply of water, wastewater and recycled water service in an environmentally and economically responsible way.**

# **FINANCIAL OBJECTIVES**

**Fiscal 2018-19**

- ◆ Establish a revenue cash flow plan that is sufficient to fund the operating budget including the capital replacement & refurbishment program.
- ◆ Establish a reliable, stable and predictable rate adjustment strategy that minimizes impact to customers
- ◆ Maintain a minimum reserve level sufficient to fund legal, board mandated and working capital requirements.
- ◆ Employ cost containment and reduction strategies and practices as appropriate to cost effectively maintain reliable service levels.

# BUDGET ASSUMPTIONS

## FISCAL YEAR 2018-19

### Revenue:

- POTABLE WATER SALES is based on the purchase of 7,500 acre-feet (af) of water and delivery of 7,200 af to customers.
- POTABLE WATER USAGE CHARGE to cover purchasing water from Metropolitan Water District through Municipal Water District of Orange County and from the Baker Water Treatment Plant will be increased effective July 1, 2018 and is supported by an independently prepared Cost of Service Study Report.
- POTABLE WATER SERVICE CHARGE (Water System Operations & Maintenance “O&M”) will increase effective July 1, 2018 and is supported by an independently prepared Cost of Service Study Report.
- RECYCLED WATER SERVICE CHARGE (Recycled Water System Operations & Maintenance “O&M”) will increase effective July 1, 2018 and is supported by an independently prepared Cost of Study Report.
- RECYCLED WATER USAGE CHARGE will be increased effective July 1, 2018 and is supported by an independently prepared Cost of Service Study Report.
- NON-RATE REVENUE reflects shared maintenance of joint facilities with neighboring agencies, communication site leases and other miscellaneous revenues.
- PROPERTY TAX REVENUE represents the District’s share of the 1% general property taxes paid to the State.
- SEWER USAGE AND FIXED RATE the Sewer Usage and Fixed Rate will be increased effective July 1, 2018 and is supported by an independently prepared Cost of Service Study Report.
- INTEREST INCOME is expected to increase as a result of increase in the interest rate.
- CAPITAL REPLACEMENT & REFURBISHMENT WATER, SEWER & RECYCLED WATER CHARGES are designed to assist in covering the cost of water, sewer and recycled water capital R&R expenditures during the fiscal year. No changes to these charges for the 2018/19 fiscal year are contemplated.
- Rate increases will comply with all applicable state constitutional and statutory mandates.



# **BUDGET ASSUMPTIONS**

## **FISCAL YEAR 2018-19**

### Expenses:

- **PURCHASED WATER** costs are affected by the anticipated increase in potable water sales along with increased rates charged by Metropolitan Water District of Southern California and Municipal Water District of Orange County and increased O&M costs associated with the District's capacity in the Baker Water Treatment Plant.
- **ENERGY** (electrical power) costs have been increased based on expected system operations, capital improvements and rate information provided by Southern California Edison.
- **SOCWA OPERATIONS** costs for regional bio-solids and effluent treatment and disposal have decreased.
- **LABOR/BENEFITS COST** are projected to increase. The increase is driven by continued implementation of the District's Succession Plan, increases in medical premiums, the District's contributions to the employees 401(k) Retirement Savings Plan and administration of a Performance Based Merit Program. The proposed increases are partially offset by increased employee contributions to medical benefits.
- **OPERATING COSTS** exclusive of purchased water, labor and depreciation remain relatively flat compared to 2017/18.

# **BUDGET ASSUMPTIONS**

**FISCAL YEAR 2018-19**

## **CAPITAL REPLACEMENT & REFURBISHMENT PROGRAM:**

Five-Year Capital Replacement & Refurbishment Program

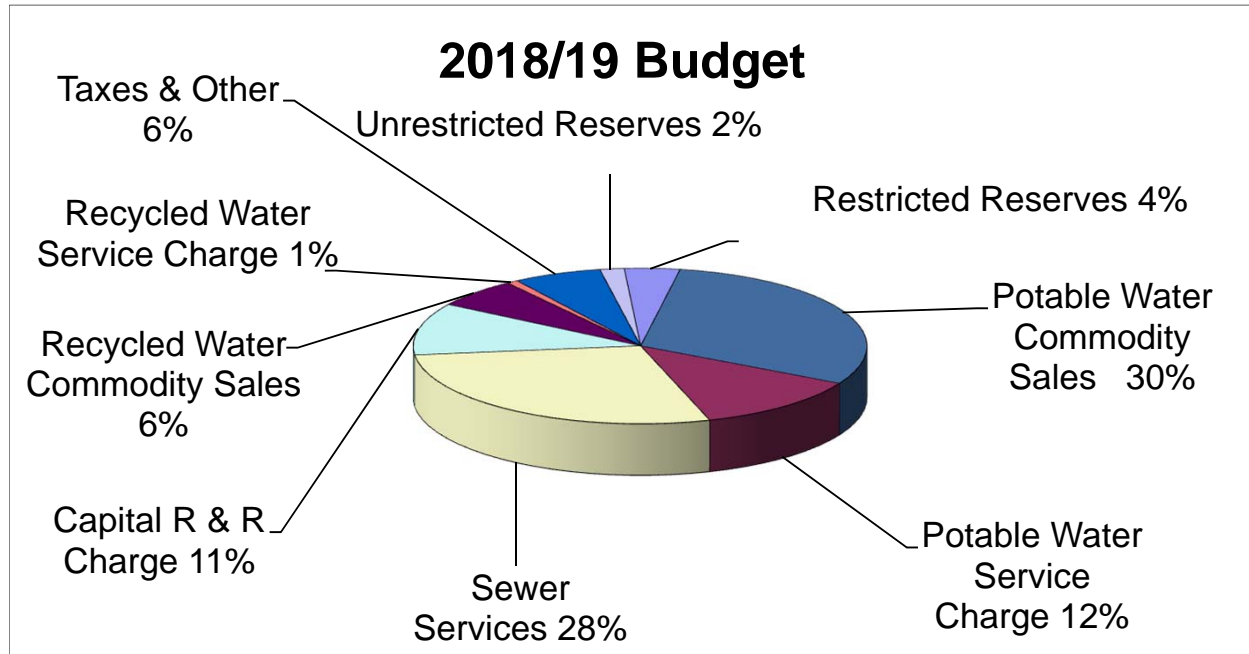
Staff continues to evaluate and update the on-going five-year Water, Sewer and Recycled Capital Replacement & Refurbishment Plan (CR&R) to preserve its water and sewer infrastructure investment, meet regulatory requirements and ensure a continuous high level of service. CR&R expenditures for fiscal year 2018/19 total \$2,400,000. The 2018/19 CR&R costs will be funded by revenue generated by the CR&R charge.

## **RESERVES:**

The District maintains three categories of reserves: (1) those legally required to be held as the result of contractual agreement (2) Board Mandated reserves (3) Board Restricted. Board Mandated reserves include (1) Capital Replacement & Refurbishment Program reserves for projects approved by the Board of Directors, (2) rate stabilization reserves, (3) operating reserves and (4) working capital. The current minimum reserve level for Board Mandated reserves, established by Board policy, is \$8.5 million. The District's fiscal year 2018-19 Budget includes a provision to utilize reserves to fund a portion of the five-year Capital Replacement & Refurbishment Plan.

# EL TORO WATER DISTRICT

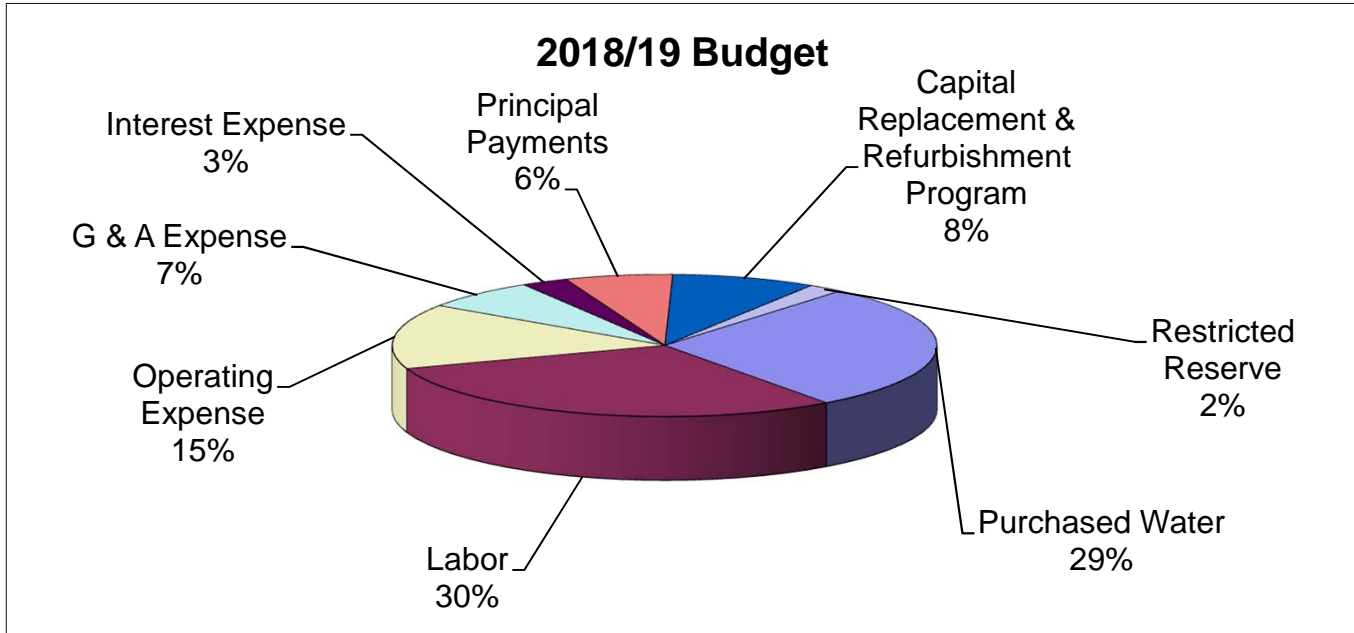
Where The Money Comes From



Potable Water Commodity Sales	\$8,421,658
Potable Water Service Charge	3,364,095
Other Operating Revenue	55,000
Sewer Services	7,800,000
Capital R & R Charge	3,015,000
Recycled Water Commodity Sales	1,695,000
Recycled Water Service Charge	225,000
Taxes & Other	1,692,750
Unrestricted Reserves	480,624
Restricted Reserves Recycled Water / Conservation	412,469
Restricted Reserves Baker Debt Service	100,000
Restricted Reserves	582,151
	<b>\$27,843,747</b>

# EL TORO WATER DISTRICT

## Where The Money Goes



Purchased Water	\$8,027,968
Labor	8,287,837
Operating Expense	4,107,975
G & A Expense	1,908,450
Interest Expense	769,061
Principal Payments	1,776,305
Capital Replacement & Refurbishment Program	2,384,000
Restricted Reserve	582,151
	<b>\$27,843,747</b>

# Waste Hauler



**Operations**

**EL TORO WATER DISTRICT  
ORGANIZATION CHART 2018 - 2019**

<b>Department</b>	<b>Positions</b>
<b><u>Administrative Services</u></b>	
General Manager	1
Asst GM / District Engineer	1
Human Resources Manager	1
Public Relations / EP Admin	1
Exec. Assistant to BOD & GM	1
Administrative Assistant	0
Office Assistant	1
Total	6
<b><u>Information Systems</u></b>	
Information Technology Manager	1
Total	1
<b><u>Accounting</u></b>	
Manager Finance / Controller	1
Accountant / Sr Accountant	2
Supervisor Accounting	1
Total	4
<b><u>Purchasing/Receiving</u></b>	
Purchasing Agent	1
Total	1
<b><u>Customer Service - Office</u></b>	
C.S / Billing Supervisor	1
C.S. Office Rep. II / Senior	2
Billing Clerk	1
Total	4
<b><u>Customer Service - Field</u></b>	
Crew Chief	1
C.S. Field Rep. III	1
C.S. Field Rep. I	2
Total	4
<b><u>Engineering</u></b>	
Project Engineer	1
Engineer Associate	1
Inspector	1
Recycled Water Coordinator	1
Total	4
<b><u>Electrical</u></b>	
Electrical Sys/SCADA Supv	1
Total	1

<b>Department</b>	<b>Positions</b>
<b><u>Operations</u></b>	
Operations Superintendent	1
Compliance Program Coordinator	1
Total	2
<b><u>Transmission &amp; Distribution Crew</u></b>	
Foreman	1
Crew Chief	1
Maintenance Worker III	2
Maintenance Worker II	1
Maintenance Worker I	4
Total	9
<b><u>Pumping Crew</u></b>	
Foreman	1
Crew Chief	1
Maintenance Worker III	5
Maintenance Worker II	1
Maintenance Worker I	1
Total	9
<b><u>Treatment Plant</u></b>	
Chief Plant Operator	1
Truck Driver	2
Waste Water Operator III	2
Waste Water Operator II	2
Operator In Training	1
Lab Supervisor	1
Lab Technician I	1
Total	10
<b><u>Collections &amp; Transmissions</u></b>	
Industrial Waste Inspector	1
Crew Chief	1
Coll. Maintenance Worker III	1
Coll. Maintenance Worker II	1
Coll. Maintenance Worker I	1
Total	5
<b><u>Automotive</u></b>	
Senior Mechanic	1
Total	1
<b><u>Total Positions</u></b>	<b><u>61</u></b>

# EL TORO WATER DISTRICT

## BUDGET COMPARISON - Income Statement

Fiscal Years Ending June 30

	Budget 2016/17	Budget 2017/18	Budget 2018/19
<b>Operating Revenue</b>			
Water	\$12,129,505	\$12,036,741	\$12,835,373
Sewer	7,450,000	7,565,000	7,800,000
Capital Facilities Charge	3,000,000	3,015,000	3,015,000
Tertiary	1,638,014	1,658,000	1,920,000
<b>Total Operating Revenue</b>	<b>24,217,519</b>	<b>24,274,741</b>	<b>25,570,373</b>
<b>Operating Expense</b>			
General Operating Expense	12,837,346	14,216,039	15,043,433
Water Enterprise Operating Expense	8,688,057	8,680,085	8,981,271
Sewer Enterprise Operating Expense	2,274,422	2,353,090	2,357,426
Recycled Water Operating Expense	189,250	190,300	256,950
<b>Total Operating Expense</b>	<b>23,989,075</b>	<b>25,439,514</b>	<b>26,639,080</b>
<b>Operating Income</b>	<b>228,444</b>	<b>(1,164,773)</b>	<b>(1,068,707)</b>
Non Operating Revenue	1,388,500	1,483,500	1,692,750
Non Operating Expense	(1,017,000)	(805,729)	(769,061)
<b>Total Non Operating</b>	<b>371,500</b>	<b>677,771</b>	<b>923,689</b>
<b>Excess of Operating Revenues and Cash Flows Over Expense</b>	<b>\$ 599,944</b>	<b>\$ (487,002)</b>	<b>\$ (145,018)</b>
Capital Improvement Program Expenditures		(2,400,000)	(2,384,000)
Depreciation & Amortization (Non-Cash)	2,906,850	4,006,850	4,306,850
Debt Service Principle Payments		(1,737,631)	(1,776,305)
Restricted Reserves used for Baker Debt Service			100,000
Restricted Reserves		(93,596)	(582,151)
<b>Total Deficit</b>		<b>(711,379)</b>	<b>(480,624)</b>

# EL TORO WATER DISTRICT

## BUDGET COMPARISON - General Operations Expenses

Fiscal Years Ending June 30

	<u>Budget 2016/17</u>	<u>Budget 2017/18</u>	<u>Budget 2018/19</u>
<b>General Operations Expense</b>			
Labor	\$7,495,905	\$7,902,953	\$8,287,837
Operations Support	225,011	280,111	302,411
Vehicle Maintenance	258,180	250,175	237,885
General & Administrative	1,951,400	1,775,950	1,908,450
Depreciation & Amortization	<u>2,906,850</u>	<u>4,006,850</u>	<u>4,306,850</u>
<b>Total General Operations Expense</b>	<b><u>\$12,837,346</u></b>	<b><u>\$14,216,039</u></b>	<b><u>\$15,043,433</u></b>



**EL TORO WATER DISTRICT**  
**LABOR / BENEFITS COMPARISON**  
**2018-19**

	<u>Budget 2016/17</u>	<u>Budget 2017/18</u>	<u>Budget 2018/19</u>	<u>Change</u>
Labor	\$5,385,234	\$5,663,492	\$5,893,903	\$230,411
Benefits	1,958,066	2,063,738	2,233,934	170,196
Workers Compensation and Unemployment Ins.	<u>152,605</u>	<u>175,723</u>	<u>160,000</u>	-15,723
	<u>\$7,495,905</u>	<u>\$7,902,953</u>	<u>\$8,287,837</u>	<u>\$384,884</u>
Benefits as % of Labor	26.12%	26.11%	26.95%	

# EL TORO WATER DISTRICT

## BUDGET COMPARISON - General & Administration

Fiscal Years Ending June 30

	<u>Budget 2016/17</u>	<u>Budget 2017/18</u>	<u>Budget 2018/19</u>
Insurance & Damages	\$400,000	\$405,200	\$470,650
Director's Fees	90,000	93,000	105,000
Meetings & Conventions	50,000	61,000	67,000
Legal Fees	150,000	150,000	150,000
Public Relations	290,000	242,700	225,700
General Plant Maintenance	23,000	16,500	11,500
Utilities, Building Security, Janitorial	88,200	91,700	85,000
Auditing Fee	30,000	30,000	30,000
Dues and Memberships	80,000	75,000	82,000
Voice and Data Communications	80,000	83,000	102,000
Publications and Subscriptions	3,000	3,000	3,000
Printing and Reproduction	21,000	21,000	21,000
Equipment Rental	12,000	12,000	12,000
Other Employee Costs	28,000	15,000	22,000
Bank and Paycheck Services	48,000	54,000	56,500
Bad Debts	25,000	20,000	20,000
Employee Events, Education, and Service Awards	16,700	12,850	18,400
Temporary Help	40,000	11,500	7,500
Computer Supplies	135,000	95,000	155,500
Office Supplies	21,500	26,500	26,500
Property Taxes	5,500	5,500	5,500
Elections/Other	30,000	0	30,000
Outside Contractors and Consultants	253,000	231,000	181,200
Postage	31,500	20,500	20,500
<b>Total General &amp; Administrative</b>	<b><u>\$1,951,400</u></b>	<b><u>\$1,775,950</u></b>	<b><u>\$1,908,450</u></b>
Depreciation & Amortization	<b><u>\$2,906,850</u></b>	<b><u>\$4,006,850</u></b>	<b><u>\$4,306,850</u></b>

# EL TORO WATER DISTRICT

## BUDGET COMPARISON - Water Enterprise Operating Expenses

Fiscal Years Ending June 30

	<u>Budget 2016/17</u>	<u>Budget 2017/18</u>	<u>Budget 2018/19</u>
<b>Water Enterprise Operations Expense</b>			
Source of Supply	\$115,449	\$132,349	\$134,999
Purchased Water	7,760,674	7,691,757	8,027,968
Pumping Expense	306,571	290,971	247,971
Treatment Expense	45,571	41,866	49,641
Trans. & Dist. Expense	459,792	523,142	520,692
Customer Accounts Expense	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Water Enterprise Operations Expense</b>	<b><u><u>\$8,688,057</u></u></b>	<b><u><u>\$8,680,085</u></u></b>	<b><u><u>\$8,981,271</u></u></b>

# EL TORO WATER DISTRICT

## BUDGET COMPARISON - Sewer Enterprise Operating Expenses

Fiscal Years Ending June 30

	<u>Budget 2016/17</u>	<u>Budget 2017/18</u>	<u>Budget 2018/19</u>
<b>Sewer Enterprise Operations Expense</b>			
SOCWA	\$904,376	\$974,100	\$906,250
Pumping Expense	339,548	377,832	369,848
Treatment Expense	725,598	699,658	793,578
Trans. & Dist. Expense	<u>304,900</u>	<u>301,500</u>	<u>287,750</u>
<b>Total Sewer Enterprise Operations Expense</b>	<b><u><u>\$2,274,422</u></u></b>	<b><u><u>\$2,353,090</u></u></b>	<b><u><u>\$2,357,426</u></u></b>

# EL TORO WATER DISTRICT

## BUDGET COMPARISON - Recycled Water Operating Expenses

Fiscal Years Ending June 30

	<u>Budget 2016/17</u>	<u>Budget 2017/18</u>	<u>Budget 2018/19</u>
<b>Recycled Water Operations Expense</b>			
Tertiary Treatment Expense	189,250	190,300	256,950
Trans. & Dist. Expense	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Recycled Water Operations Expense</b>	<b><u><u>\$189,250</u></u></b>	<b><u><u>\$190,300</u></u></b>	<b><u><u>\$256,950</u></u></b>

# EL TORO WATER DISTRICT

## BUDGET COMPARISON - Non-Operating Income & Expense

Fiscal Years Ending June 30

	<u>Budget 2016/17</u>	<u>Budget 2017/18</u>	<u>Budget 2018/19</u>
Tax Revenue	\$800,000	\$835,000	\$875,000
Interest Income	50,000	100,000	135,000
Other Revenue	<u>538,500</u>	<u>548,500</u>	<u>682,750</u>
<b>Total Non-Operating Revenue</b>	<b><u><u>\$1,388,500</u></u></b>	<b><u><u>\$1,483,500</u></u></b>	<b><u><u>\$1,692,750</u></u></b>
Interest Expense	<u>\$1,017,000</u>	<u>\$805,729</u>	<u>\$769,061</u>
<b>Total Non-Operating Expense</b>	<b><u><u>\$1,017,000</u></u></b>	<b><u><u>\$805,729</u></u></b>	<b><u><u>\$769,061</u></u></b>



A construction site for a recycled water expansion project. In the foreground, a worker in an orange shirt and hard hat carries a long, purple pipe. Another worker is visible in a trench. In the background, a Deere excavator and other workers are present. The site is surrounded by palm trees and greenery under a clear blue sky.

**Recycled Water Expansion  
Project Construction**

**5 – Year Capital Facilities  
Replacement & Refurbishment Program**



**EL TORO WATER DISTRICT  
FIVE YEAR CAPITAL IMPROVEMENT PLAN  
F.Y. 2018/19 - 2022/2023**

ITEM #	DESCRIPTION	2018/19	2019/20	2020/21	2021/22	2022/23	TOTAL	WATER	SEWER
<i>Source of Supply / Storage Projects</i>									
1	R-2 Reservoir Interior Recoating (E/C)		262,500				262,500	262,500	
2	R-2 Reservoir Exterior Recoating (E/C)		80,000				80,000	80,000	
3	JRWSS Capital Budget	8,400	26,235	7,380	5,190	66,390	113,595	113,595	
4	Baker WTP Replacement Fund	52,795	52,795	52,795	52,795	52,795	263,975	263,975	
5	P-1 Impellers	36,000					36,000	36,000	
6	R-6 Chlorine & Ammonia Chemical Feed Pump Replacement					110,000	110,000	110,000	
	<i>Total Source of Supply / Storage Projects</i>	97,195	421,530	60,175	57,985	229,185	866,070	866,070	0
<i>Pumping (Water) Projects</i>									
1	P-3 New MCC with TS, Nema 3R Main & Generator Installation and Pump Replacements			400,000			400,000	400,000	
2	Water Stations PLC Upgrade to Control Logix	25,000	25,000	25,000			75,000	75,000	
3	Fence Repairs at Main P.R.	25,000					25,000	25,000	
4	VFD Replacement and Bypass SoftStarter 200 HP	17,000					17,000	17,000	
	<i>Total Pumping (Water) Projects</i>	67,000	25,000	425,000	0	0	517,000	517,000	0
<i>Pumping (Water) Equipment</i>									
1	Cherry Booster Station Pump Replacement			100,000			100,000	100,000	
2	Shenandoah Booster Station Pump Replacement			100,000			100,000	100,000	
	<i>Total Pumping (Water) Equipment</i>	0	0	200,000	0	0	200,000	200,000	0
<i>Pumping (Sanitation) Projects</i>									
1	Aliso Creek Lift Station Skid Pump and Piping	200,000					200,000		200,000
2	Sewer Stations PLC Upgrade to Control Logix	25,000	25,000	25,000			75,000		75,000
3	4920 Siphon Stabilization			150,000			150,000		150,000
4	8-inch Trailer Mounted Emergency Pump	85,000					85,000		85,000
	<i>Total Pumping (Sanitation) Projects</i>	310,000	25,000	175,000	0	0	510,000	0	510,000
<i>Pumping (Sanitation) Equipment</i>									
1	Aliso Creek Emergency Generator 350 KW (Unit 215)				200,000		200,000		200,000
2	Delta Wall mount Gas detector	7,000					7,000		7,000
3	Aliso Creek Wall mount Gas detector	7,000					7,000		7,000
4	Aliso Creek Lift Station Wet Well Repairs/Recoating	15,000					15,000		15,000
	<i>Total Pumping (Sanitation) Equipment</i>	29,000	0	0	200,000	0	229,000	0	229,000



**EL TORO WATER DISTRICT  
FIVE YEAR CAPITAL IMPROVEMENT PLAN  
F.Y. 2018/19 - 2022/2023**

ITEM #	DESCRIPTION	2018/19	2019/20	2020/21	2021/22	2022/23	TOTAL	WATER	SEWER
<i>Treatment (Sanitation) Projects</i>									
1	WRP Main Electrical Power Breaker Upgrade			35,000			35,000		35,000
2	Grit Chamber Rehab/Re-Coating			85,000			85,000		85,000
3	New Scum Station for Clarifiers #3 & #4	40,000					40,000		40,000
4	Secondary Clarifier # 1 Component Replacement		150,000				150,000		150,000
5	Secondary Clarifier # 4 Component Replacement				150,000		150,000		150,000
6	New MCC S-D Electrical Cabinet & Breakers (DAF Unit #1)			30,000			30,000		30,000
7	Reconstruct (West Side) Drainage Swayle at the Holding Pond	68,250					68,250		68,250
8	HACH (WIMS) Maint. Job Cal Database Management Software System			10,500			10,500		10,500
9	Retrofit HST Blowers Intake Air Filters with Industra Filters	12,000					12,000		12,000
10	Headworks CB, Remove Eff PS old MCC, Install WAC Level Inst.		20,000				20,000		20,000
11	Replace Aeration Basins D.O. Probe and TSS Solids Probe Sensors	18,500					18,500		18,500
<i>Total Treatment (Sanitation) Projects</i>		138,750	170,000	160,500	150,000	0	619,250	0	619,250
<i>Treatment (Sanitation) Equipment</i>									
1	Aeration Basin Diffusers			10,000			10,000		10,000
2	RAS Pumps Upgrade		30,000				30,000		30,000
3	Rotostrainer Drum Replacement			30,000			30,000		30,000
4	Effluent Pump Station Pump Replacements			100,000			100,000		100,000
5	Kubota Utility Vehicle for the Plant	16,000					16,000		16,000
6	OOPS Emergency Generator Replacement		220,000				220,000		220,000
7	Aqua-Aerobic CMD Filter Sock Replacements for Filters #1 & #2		25,000				25,000		25,000
8	Main Emergency Generator Control Panel & Auxiliary Power Up-Grade			80,000			80,000		80,000
9	Biofilter's Odor Scrubber Foul Air Fan Replacements	50,000					50,000		50,000
<i>Total Treatment (Sanitation) Equipment</i>		66,000	275,000	220,000	0	0	561,000	0	561,000
<i>Laboratory Equipment</i>									
1	Autoclave Replacement	15,000					15,000		15,000
2	Incubators	10,000					10,000		10,000
3	Ion Chromatography			45,000			45,000		45,000
4	Undercounter Glassware Washer		8,000				8,000		8,000
<i>Total Laboratory Equipment</i>		25,000	8,000	45,000	0	0	78,000	0	78,000
<i>Outside Treatment (SOCWA)</i>									
1	SOCWA Capital Budget	614,831	806,752	482,377	782,019	800,000	3,485,979		3,485,979
<i>Total Treatment (SOCWA)</i>		614,831	806,752	482,377	782,019	800,000	3,485,979	0	3,485,979

**EL TORO WATER DISTRICT  
FIVE YEAR CAPITAL IMPROVEMENT PLAN  
F.Y. 2018/19 - 2022/2023**

ITEM #	DESCRIPTION	2018/19	2019/20	2020/21	2021/22	2022/23	TOTAL	WATER	SEWER
<i>Transmission &amp; Distribution Projects</i>									
1	AMI Implementation	200,000	200,000	200,000	200,000	200,000	1,000,000	1,000,000	
2	Moulton/El Toro Cathodic Protection Study	10,000					10,000	10,000	
3	Moulton/El Toro Cathodic Protection Repairs		50,000				50,000	50,000	
4	21" PCCP Valve Replacements and Pipeline Repair					150,000	150,000	150,000	
<i>Total Transmission &amp; Distribution (Water) Projects</i>		210,000	250,000	200,000	200,000	350,000	1,210,000	1,210,000	
<i>Collection Equipment</i>									
1	P332 Flexiprobe (Push Camera) Inspection System - PearPoint		20,000				20,000		20,000
2	P350 Flexiprobe (Mobile-Portable Camera) Inspection System - PearPoint			40,000			40,000		40,000
4	Spare Tractor & TV Camera-CUES		45,000				45,000		45,000
5	Lift Assembly for CCTV, Power, CPR	6,700					6,700		6,700
<i>Total Collection Equipment</i>		6,700	65,000	40,000	0	0	111,700	0	111,700
<i>Vehicles/Vehicle Equipment</i>									
1	Vehicle Replacement	50,000	75,000	100,000	100,000	50,000	375,000	187,500	187,500
2	Dump Truck (Unit 4)		140,000				140,000	70,000	70,000
3	Hydro Excavator				480,000		480,000	240,000	240,000
4	Warehouse Forklift				50,000		50,000	25,000	25,000
5	2001 F-450 Hydrant and Valve Truck (Unit 60)			70,000			70,000	70,000	
6	300-375KW Emergency Generator Trailer (Regulatory Compliance)	175,000					175,000	87,500	87,500
7	Vactor 2100 Combo Machine (Replace Unit 80)					500,000	500,000		500,000
8	Boom Truck (Diesel - Regulatory Compliance)					200,000	200,000	100,000	100,000
9	Forklift WRP (Diesel - Regulatory Compliance)			85,000			85,000		85,000
10	10-Wheel Dump Truck (Unit #50, Regulatory Compliance)					175,000	175,000	87,500	87,500
<i>Total Vehicles / Vehicle Equipment</i>		225,000	215,000	255,000	630,000	925,000	2,250,000	867,500	1,382,500
<i>Construction/Mechanical/Electical Equipment</i>									
1	Backhoe				145,000		145,000	72,500	72,500
2	Walk Behind Concrete Saw	25,500					25,500	12,750	12,750
<i>Total Construction Equipment</i>		25,500	0	0	145,000		170,500	85,250	85,250
<i>General Building Projects</i>									
1	Master Plan Update						0	0	0
2	Old Treatment Plant / Clear Well Demo	400,000					400,000	400,000	
3	Remove and Replace Damaged Insulation in Warehouse/Fleet Building	37,000					37,000	18,500	18,500
4	Main Office (Bob Hill) HVAC Replacement		17,000				17,000	8,500	8,500
5	WRP CL2 Room HVAC Replacement	14,000					14,000		14,000
6	Northline Lift Station HVAC Replacement	9,000					9,000		9,000
<i>Total General Building Projects</i>		460,000	17,000	0	0	0	477,000	427,000	50,000

**EL TORO WATER DISTRICT  
FIVE YEAR CAPITAL IMPROVEMENT PLAN  
F.Y. 2018/19 - 2022/2023**

ITEM #	DESCRIPTION	2018/19	2019/20	2020/21	2021/22	2022/23	TOTAL	WATER	SEWER
<i>Office Equipment/Furniture</i>									
1	Network Upgrade - 10GB				100,000		100,000	50,000	50,000
2	Firewall Replacement			30,000			30,000	15,000	15,000
4	Exchange Server Replacement		20,000				20,000	10,000	10,000
5	Replace Servers				50,000		50,000	25,000	25,000
<i>Total Office Equipment / Furniture</i>		0	20,000	30,000	150,000	0	200,000	100,000	100,000
<i>Contingency</i>									
1	Contingency	125,024	30,718	14,948	3,996	15,815	190,501	95,251	95,251
2	Inflation @ 5%		71,000	92,000	81,000	80,000	324,000	162,000	162,000
<i>Total Contingency</i>		125,024	101,718	106,948	84,996	95,815	514,501	257,251	257,251
<i>Total Capital Budget</i>		2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	12,000,000	4,530,071	7,469,930
<i>Total Capital Projects</i>		1,960,288	1,766,141	1,556,526	1,232,502	1,427,093	7,942,550	3,148,695	4,793,854
<i>WATER</i>		823,951	730,460	711,912	279,234	603,139	3,148,695		
<i>SEWER</i>		1,136,337	1,035,682	844,614	953,268	823,954	4,793,854		
<i>Total Capital Equipment</i>		439,712	633,859	843,474	1,167,498	972,908	4,057,451	1,381,375	2,676,075
<i>WATER</i>		156,506	142,930	361,737	483,749	236,454	1,381,375		
<i>SEWER</i>		283,206	490,930	481,737	683,749	736,454	2,676,075		
<i>Total Capital Budget</i>		2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	12,000,000	4,530,071	7,469,930
<i>WATER</i>		980,457	873,389	1,073,649	762,983	839,593	4,530,071		
<i>SEWER</i>		1,419,543	1,526,611	1,326,351	1,637,017	1,560,408	7,469,930		

Inflation Basis = Total Capital less SOCWA less Contingency less  
JRWSS

1,598,950    1,412,500    1,750,500    1,475,000    1,385,000

Inflation @ 5%

\$70,625    \$91,901    \$81,309    \$80,166

\$71,000    \$92,000    \$81,000    \$80,000

Capital Less SOCWA

Water

Sewer

Total

# Backhoe Equipment



**2018/2019 Capital Facility  
Replacement and Refurbishment Program**



**2018/19 CAPITAL REPLACEMENT & REFURBISHMENT PROGRAM**

**Projects**

**Equipment**

Source of Supply / Storage Projects

Pumping (Sanitation) Equipment

1	JRWSS Capital Budget	8,400
2	Baker WTP Replacement Fund	52,795
3	P-1 Impellers	36,000
<i>Total Source of Supply</i>		97,195

1	Delta Wall mount Gas detector	7,000
2	Aliso Creek Wall mount Gas detector	7,000
3	Aliso Creek Lift Station Wet Well Repairs/Recoating	15,000
<i>Total Pumping (Sanitation)</i>		29,000

Pumping (Water) Projects

Treatment (Sanitation) Equipment

4	Water Stations PLC Upgrade to Control Logix	25,000
5	Fence Repairs at Main P.R.	25,000
6	VFD Replacement and Bypass SoftStarter 200 HP	17,000
<i>Total Pumping (Water)</i>		67,000

4	Kubota Utility Vehicle for the Plant	16,000
5	Biofilter's Odor Scrubber Foul Air Fan Replacements	50,000
<i>Total Treatment (Sanitation)</i>		66,000

Pumping (Sanitation) Projects

Laboratory Equipment

7	Aliso Creek Lift Station Skid Pump and Piping	200,000
8	Sewer Stations PLC Upgrade to Control Logix	25,000
9	8-inch Trailer Mounted Emergency Pump	85,000
<i>Total Pumping (Sanitation)</i>		310,000

6	Autoclave Replacement	15,000
7	Incubators	10,000
<i>Total Laboratory Equipment</i>		25,000

Treatment (Sanitation) Projects

Collection Equipment

10	New Scum Station for Clarifiers #3 & #4	40,000
11	Reconstruct (West Side) Drainage Swayle at the Holding Pond	68,250
12	Retrofit HST Blowers Intake Air Filters with Industra Filters	12,000
13	Replace Aeration Basins D.O. Probe and TSS Solids Probe Sensors	18,500
<i>Total Treatment (Sanitation)</i>		138,750

8	Lift Assembly for CCTV, Power, CPR	6,700
<i>Total Collection Equipment</i>		6,700

Vehicles/Vehicle Equipment

Outside Treatment (SOCWA)

14	SOCWA Capital Budget	614,831
<i>Total Treatment (SOCWA)</i>		614,831

9	Vehicle Replacement	50,000
10	300-375KW Emergency Generator Trailer (Regulatory Compliant)	175,000
<i>Total Vehicles / Vehicle Equipment</i>		225,000

Construction/Mechanical/Electical Equipment

Transmission & Distribution Projects

15	AMR / AMI Implementation	200,000
16	Moulton/EI Toro Cathodic Protection Study	10,000
<i>Total Mainline</i>		210,000

11	Walk Behind Concrete Saw	25,500
<i>Total Construction Equipment</i>		25,500

Contingency

General Building Projects

17	Old Treatment Plant / Clear Well Demo	400,000
18	Remove and Replace Damaged Insulation in Warehouse/Fleet Buil	37,000
19	WRP CL2 Room HVAC Replacement	14,000
20	Northline Lift Station HVAC Replacement	9,000
<i>Total General Building</i>		460,000

17	Contingency	62,512
<i>Total Contingency</i>		62,512

26	Contingency	62,512
<i>Total Contingency</i>		62,512

**Total Capital Equipment** \$439,712

**Total Capital Projects** 1,960,288

**Total Capital Equipment** 439,712

**Total Capital Budget** 2,400,000

**Total Capital Projects** \$1,960,288

**LEGEND**

WATER
SEWER
BOTH

A photograph of a recycled water pump station. The scene features several large, purple-painted industrial pipes and pumps. The pipes are arranged in a row, with large flanges and bolts. In the background, there are three vertical pumps with grey cylindrical tops and purple bases. To the left, a covered walkway with a metal roof and concrete pillars is visible. The ground is a light-colored concrete. The sky is overcast.

## Recycled Water Pump Station

**2018/2019  
Capital Facility Project  
Descriptions > \$50,000**



**PROJECT TITLE: BAKER WTP REPLACEMENT FUND**



**CAPITAL PLAN CLASSIFICATION:**

**SOURCE OF SUPPLY / STORAGE PROJECTS (PROJECT #2)**

**PROJECT BASIS:**

Reliability

**DESCRIPTION:**

The Baker WTP Project Agreement established a Replacement Fund to provide for ongoing capital replacements of the Baker WTP equipment. The District pays a proportionate share of the Replacement Fund based on its owned capacity in the Baker Water Treatment Plant.

**PROJECT BUDGET:**

\$52,795

**BASIS OF COST ESTIMATE:**

Staff Estimate based a Baker WTP Budget.

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**PROJECT TITLE: ALISO CREEK LIFT STATION SKID PUMP & PIPING**



**CAPITAL PLAN CLASSIFICATION:**

PUMPING (SANITATION) PROJECTS  
(PROJECT #7)

**LOCATION:**

ALISO CREEK LIFT STATION

**PROJECT BASIS:**

Sewer Pumping Reliability; Environmental Protection

**DESCRIPTION:**

The Aliso Creek Lift Station is one of the District’s two largest sewer lift stations. The amount of flow at Aliso Creek, especially at peak hour flows, provides little response time in the event of a failure. It takes significant time to mobilize and connect the District’s emergency pumping equipment. The proposed project will install a backup pump at the site that will allow more immediate restoration of pumping in the event of a failure of the primary pumping systems. The proposed project will mitigate the risk of a sewer spill at a station that is immediately adjacent to Aliso Creek.

**PROJECT BUDGET:**

\$200,000

**BASIS OF COST ESTIMATE:**

Staff estimate based on vendor quote.

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**PROJECT TITLE: 8-INCH TRAILER MOUNTED EMERGENCY PUMP**



**CAPITAL PLAN CLASSIFICATION:**

PUMPING (SANITATION) PROJECTS  
(PROJECT #9)

**LOCATION:**

SYSTEM WIDE

**PROJECT BASIS:**

Sewer Pumping Reliability; Environmental Protection

**DESCRIPTION:**

The El Toro Water District operates a portable emergency diesel driven emergency pump to provide backup at sewer lift stations in the event of a power outage or failure of the pumping facilities. The emergency pump allows staff an opportunity to continue the pumping operation while the pump station failure or power outage is resolved. The ability to use the emergency pump helps reduce the potential for sewer spills. Due to a recent South Coast Air Quality Management District regulation, the District's existing portable emergency pump is no longer in compliance with existing regulations. Staff is proposing to purchase one new portable emergency pump that complies with current regulations and restores the District's emergency pumping capability.

**PROJECT BUDGET:**

\$ 85,000

**BASIS OF COST ESTIMATE:**

Staff Estimate based vendor quote.

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**PROJECT TITLE: RECONSTRUCT HOLDING POND DRAINAGE SWAYLE**



**CAPITAL PLAN CLASSIFICATION:**

TREATMENT (SANITATION) PROJECTS  
(PROJECT #11)

**LOCATION:**

WRP Holding Pond

**PROJECT BASIS:**

Reliability; Environmental Protection

**DESCRIPTION:**

The existing concrete drainage swayle on the west side of the WRP Holding Pond has suffered significant deterioration and cracking due to its age. The damaged swayle as well as the vegetation growing through the cracks impedes the proper flow of stormwater that the swayle is designed to convey.

The proposed project will reconstruct the swayle along with a small wall/curb to prevent stormwater from running into the Holding Pond.

**PROJECT BUDGET:**

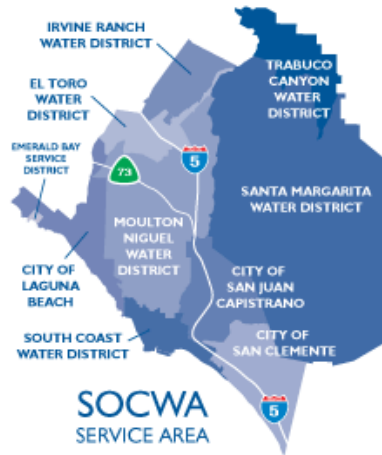
\$ 68,250

**BASIS OF COST ESTIMATE:**

Staff Estimate.

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**PROJECT TITLE: SOCWA**



**CAPITAL PLAN CLASSIFICATION:**

OUTSIDE TREATMENT - SOCWA (PROJECT #14)

**LOCATION:**

SOCWA

**PROJECT BASIS:**

End of Useful Life; Reliability; Environmental Protection; Regulatory Compliance

**DESCRIPTION:**

The District’s share of the South Orange County Wastewater Authority capital budget is based on capacity ownership in the various Project Committees. SOCWA collects funding to support the capital improvements on a cash flow basis. The funds collected are intended to support actual costs rather than project budgets.

**PROJECT BUDGET:**

\$ 614,831

**BASIS OF COST ESTIMATE:**

SOCWA Budget

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**PROJECT TITLE: AMR / AMI IMPLEMENTATION**



**CAPITAL PLAN CLASSIFICATION:**

TRANSMISSION & DISTRIBUTION PROJECTS (PROJECT #15)

**LOCATION:**

SYSTEM WIDE

**PROJECT BASIS:**

Efficiency, Revenue Stability, Customer Service, Planning

**DESCRIPTION:**

Advanced Metering Infrastructure (AMI) systems consist of small, low-power radio transmitters connected to individual water meters that send readings to a network of receivers throughout the system on a daily basis. AMI systems allow remote monitoring of billing meters and have the potential to reduce operating costs for meter reading and billing, and improve customer service. The direct benefits to the District and its customers could include:

- Highly accurate data collection which decreases the possibility of incorrect meter readings.
- Timely information on water usage and cost that allows staff to provide better customer service and plan necessary improvements in efficiency and performance.
- Timely identification of water leaks which reduces water waste and increased water bills due to leaks.
- Multiple meter reads daily, instead of once every month.
- Quicker and more efficient customer service.
- Online access to the Water Customer Portal so customers can monitor and manage their water usage.

The current project budget assumes a phased implementation of an AMI system over multiple years.

**PROJECT BUDGET:**

\$200,000

**BASIS OF COST ESTIMATE:**

Annual Budget Assuming Phased Implementation



**PROJECT TITLE: OLD TREATMENT PLANT / CLEAR WELL DEMO**



**CAPITAL PLAN CLASSIFICATION:**

GENERAL BUILDING PROJECTS  
(PROJECT #17)

**PROJECT BASIS:**

Reliability; Efficiency; Environmental Protection; Planning

**DESCRIPTION:**

Prior to the installation of the floating cover on the R-6 Reservoir the District operated a Treatment Plant. When the floating cover was installed in the mid-eighties the Treatment Plant was taken out of service. The structure of the metal building that housed the treatment facilities continues to deteriorate. It is an eyesore for the surrounding residential community and a potential liability as the structure ages and begins to fail. The District has been considering demolition of the old structure for quite some time. The continued deterioration of the building and potential liability have raised the priority of the project.

Staff is concurrently evaluating options for the site including the potential construction of a storage facility for existing District material and equipment.

**PROJECT BUDGET:**

\$400,000

**BASIS OF COST ESTIMATE:**

Staff estimate

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**PROJECT TITLE: EMERGENCY GENERATOR REPLACEMENT**



**CAPITAL PLAN CLASSIFICATION:** VEHICLES / VEHICLE EQUIPMENT (EQUIPMENT #10)

**PROJECT BASIS:** Regulatory Compliance; Reliability

**DESCRIPTION:** The El Toro Water District utilizes portable emergency generators to provide backup power to water and wastewater pumping facilities in the event of a power outage or electrical system failure. Several, but not all, of the District’s water and sewer pumping facilities have stationary emergency generators. The portable emergency generators provide assurance that the District can continue to provide water and wastewater pumping during unplanned, or emergency power outages. Due to a recent South Coast Air Quality Management District regulation, the Districts existing portable emergency generators are non-compliant. Staff is proposing to purchase one 470kVA, Tier 4 Final, portable emergency generator that will have the ability to run any of the water and/or wastewater pumping facilities in full operation. Purchasing this emergency generator will mitigate the District’s vulnerability during any unplanned power outage.

**PROJECT BUDGET:** \$175,000

**BASIS OF COST ESTIMATE:** The cost estimate was by provided by a local generator manufacturer’s representative.

**APPROVED 2018/19**

**BUDGET / 218 / HEARING**

**SCHEDULE**

# BUDGET SCHEDULE

FY 2018/2019

<b>DESCRIPTION</b>	<b>DATE</b>	<b>DAY</b>
<b>Board Budget Committee #1</b>	<b>3/23/2018</b>	<b>Fri</b>
<b>Board Budget Committee #2</b>	<b>4/12/2018</b>	<b>Thurs</b>
<b>Board Budget Workshop</b>	<b>4/19/2018</b>	<b>Thurs</b>
<b>E, F &amp; I Budget Update</b>	<b>4/24/2018</b>	<b>Tues</b>
<b>Distribute Prop 218 Notice</b>	<b>5/7/2018</b>	<b>Mon</b>
<b>CAG</b>	<b>5/10/2018</b>	<b>Thurs</b>
<b>Publish Public Hearing Notice - Newspaper</b>	<b>6/4/2018</b>	<b>Mon</b>
<b>E, F &amp; I Budget Update</b>	<b>6/26/2018</b>	<b>Tues</b>
<b>Conduct Public Hearing - Regular Board Meeting</b>	<b>6/28/2018</b>	<b>Thurs</b>
<b>Implement Board Action</b>	<b>7/2/2018</b>	<b>Mon</b>

**Note: Board Budget Committee #1, 2, and workshop are at 7:30 am**