

CRESCENTA VALLEY WATER DISTRICT

**2700 Foothill Boulevard
La Crescenta, California**

**Agenda for the
Special Meeting of the Board of Directors
of the Crescenta Valley Water District**

To be held on Tuesday, March 22, 2016 at 6:00 p.m.

Posted: March 18, 2016 at 3:00 pm

Call to Order and Determination of Quorum

Pledge of Allegiance

Adoption of Agenda

Action Calendar

The public shall have an opportunity to comment on any action item as each item is considered by the Board prior to action being taken. This opportunity is non-transferable and speakers are limited to one two (2) minute comment.

1. **Water and Wastewater Cost of Service Study, Project M-958** – Discussion of alternative water rate structures as part of the Water and Wastewater Cost of Service Study.

Board Members Request for Future Agenda Items

Adjournment

CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

Action Item No. 1
March 22, 2016

To: Honorable President and Members of the Board of Directors
From: David S. Gould, P.E. – District Engineer
Subject: Water and Wastewater Rate Study, Project M-958

ACTION ITEM:

Water and Wastewater Cost of Service Study, Project M-958 – Discussion of alternative water rate structures as part of the Water and Wastewater Cost of Service Study

BACKGROUND:

CVWD's staff is working with Raftelis Financial Consultants (RFC) on the preparation of a new water and wastewater cost of service study. RFC was directed to evaluate water rate structure alternatives including a tiered rate structure, a tiered rate structure based on allotment of groundwater and imported water, and a water budget based tiered rate structure. RFC was also directed to evaluate the wastewater rate structure alternatives including the existing fixed fee wastewater rate structure and a fixed fee rate structure with a variable rate component.

- October 8, 2015 - Staff held a kick-off meeting with RFC to discuss the parameters of the study and outline the data needs from CVWD. Key issues discussed were community participation, fixed/variable revenue recovery, conservation incentives versus revenue impact, variable wastewater charges, allocation of lowest cost water, sensitivity about existing rates, and Proposition 218.

- November 3, 2015 - RFC gave a presentation on preparing a simplified "Water Budgets 101", which gave the Directors an understanding of a water budget based rate structure.

- November 18, 2015 - A public workshop was held which presented CVWD's operations, budget, reserve policy, the water and wastewater cost of service study, and alternative rate structures.

- January 19, 2016 - Staff discussed alternative water rate structures such as uniform rate, tier rate, and a water budget based rate. The Board asked staff to provide additional detailed information and a project schedule for further discussion.

- February 2, 2016 - Staff discussed the project schedule regarding the completion of the Cost of Service Study and preparing the FY 16/17 budget for approval by June 28, 2016.

- February 16, 2016 - Staff and RFC discussed the preliminary Financial Plan for the water and wastewater budgets including key assumptions, water production estimates, capital improvement projects, and other rate setting requirements. RFC also discussed CVWD's fixed costs vs variable costs relative to CVWD's service (fixed) charge. RFC discussed the water reserves policy with respect to including a capital improvement component. The Board agreed that CVWD's water reserves policy should not include a capital improvement component. RFC discussed the next steps toward finalizing the cost of service study which includes finalizing the financial plan, cost of service analysis, alternate water rate structures, and proposed water and wastewater rates. The Board directed staff to provide an updated project schedule which will include another public workshop, prepare the FY 16/17 water and wastewater budget for review, and to complete the study.

- March 1, 2016 - Staff reviewed the project schedule with the goal of completing the cost of service analysis by April 5, 2016 and approving the FY 16/17 budget by June 28, 2016. Staff recommended Special Board meetings on March 22, 2016 and April 26, 2016. Staff recommended a Public Workshop on April 5, 2016 to review the cost of service analysis and the alternate water rate structures. Staff also recommended at least four (4) Finance Committee meetings to review the water and wastewater budget and the Proposition 218 notice. The Board agreed to the project schedule and the additional meetings.

RFC presented the revised financial plan model and discussed how the model can be a useful tool in evaluating various scenarios and the impact on projected revenues, expenditures, debt, and other financial factors.

Staff stated that the FY 16/17 budget is being prepared using the current cash flow model and the new financial plan model concurrently. Staff will be presenting the preliminary FY 16/17 water and wastewater budget at the March 15, 2016 Finance Committee meeting for review and comments.

- March 15, 2016 – Staff presented a summary of the preliminary FY 2016-17 Water and Wastewater Budgets and options to mitigate water rate increases. Mitigation options presented included: deferment of capital improvements, use of additional grant funding, issuing debt, and inter-fund loans. The Board provided direction to review the capital improvement projects and update the preliminary water budget using an inter-fund loan from the MTBE reserve fund with the objective of reducing required annual rate increases within 6% to 7%. The Board also directed staff to include an action item on a future agenda for the Board to consider postponement of the previously approved sewer rate increase.

Staff introduced a presentation on the cost of service evaluation. RFC presented the concepts and parameters used in a cost of service evaluation. Cost of service parameters include revenue requirements which are allocated to functional areas (supply, treatment, distribution, etc.), cost components (base demand, capacity and peaking factors, customer classes, etc.). RFC also reviewed the analytical methodology used to allocate costs to customer classes in proportion to the demands those classes place on the system.

DISCUSSION:

RFC will make a presentation discussing alternative water rate structures and corresponding rates per the discussion at the last Board Meeting for:

- Uniform Water Rates
- Inclining 4-Tier Water Rates (Based on Use Characteristics, which is the existing rate structure)
- Inclining 4-Tier (Based on Water Supply)
- Water Budget Allocations

RFC will also provide examples of customer impacts for each alternative rate for a low user, average user, and a large user.

RFC will also continue with the Wastewater cost of service analysis and proposed Wastewater rate structures.

Staff will discuss the cost impacts to CVWD and staff relative to implementing each of the alternative water rate structures (see attached) which will be discussed above.

Staff also included an updated project schedule (see attached) which includes the starting time and dates for each meeting.

From this discussion, RFC will revise the cost of service analysis and the alternative water rate structures for the Public Workshop on April 5, 2016.

Prepared by:



David S. Gould, P.E.
District Engineer

Attachments:

Submitted by:



Thomas A. Love
General Manager

Table Water Budget WB - 1 Projected Water Customers - FY 16/17 - Preliminary

Water Meter Size	Recorded FY 2013-14	Recorded FY 2014-15	<i>Budget FY 2015-16</i>	<i>Projected FY 2015-16</i>	Budget FY 2016-17	Forecast FY 2017-18	Forecast FY 2018-19	Forecast FY 2019-20	Forecast FY 2020-21
3/4 inch	6,925	6,921	6,932	6,923	6,926	6,929	6,932	6,935	6,938
1 inch	810	814	815	815	818	821	824	827	830
1-1/2 inch	144	145	145	146	147	148	149	150	151
2 inch	64	64	64	64	65	66	67	68	69
3 inch	24	28	24	29	29	29	29	29	29
4 inch	2	2	2	2	2	2	2	2	2
6 inch	0	0	0	0	0	0	0	0	0
8 inch	0	0	0	0	0	0	0	0	0
10 inch	0	0	0	0	0	0	0	0	0
Total water services	7,969	7,974	7,982	7,979	7,987	7,995	8,003	8,011	8,019
Projected No. of Account Annual Increase	4	5	8	5	8	8	8	8	8
Projected Percent of Account Annual Increase	0.05%	0.06%	0.10%	0.06%	0.10%	0.10%	0.10%	0.10%	0.10%

Table Water Budget - WB-2 Water Production and Costs - FY 16/17 - Preliminary

Description	Recorded FY 2013-14	Recorded FY 2014-15	Budget FY 2015-16	Projected FY 2015-16	Budget FY 2016-17	Forecast FY 2017-18	Forecast FY 2018-19	Forecast FY 2019-20	Forecast FY 2020-21
Well Production (Verdugo Basin)	2,372	2,146	2,190	1,820	1,950	2,100	2,220	2,400	2,620
Well Production (GWP)	0	0	410	195	555	555	600	600	600
Foothill MWD Purchases ⁽⁴⁾	2,410	1,875	1,245	1,600	1,195	1,145	1,080	1,000	880
Total Production ⁽¹⁾⁽²⁾	4,782	4,021	3,845	3,615	3,700	3,800	3,900	4,000	4,100
Shrinkage (percent) ⁽³⁾	8%	8%	8%	8%	8%	8%	8%	8%	8%
Less Shrinkage (ac-ft)	383	322	308	289	296	304	312	320	328
Total billable consumption (sales)	4,399	3,699	3,537	3,326	3,404	3,496	3,588	3,680	3,772
FMWD Purchased Water	2,410	1,875	1,245	1,600	1,195	1,145	1,080	1,000	880
FMWD Unit Charge (\$/ac-ft)	\$ 1,308	\$ 1,461	\$ 1,681	\$ 1,553	\$ 1,756	\$ 1,841	\$ 1,959	\$ 2,098	\$ 2,305
FMWD Cost	\$ 3,151,636	\$ 2,742,335	\$2,093,000	\$2,484,674	\$2,098,800	\$2,107,400	\$2,116,000	\$2,097,600	\$2,028,000
Cost Increase/Decrease from FMWD Unit Charge	\$ (104)	\$ 153	\$ 220	\$ 92	\$ 203	\$ 84	\$ 119	\$ 138	\$ 207
Percent FMWD Cost Increase/Decrease	-7.38%	11.72%	15.04%	6.29%	13.10%	4.79%	6.45%	7.06%	9.87%
Well Production (GWP)			410	195	555	555	600	600	600
GWP Unit Charge (\$/ac-ft)			\$ 403	\$ 403	\$ 416	\$ 432	\$ 439	\$ 456	\$ 473
GWP Cost			\$165,230	\$78,585	\$230,880	\$239,760	\$263,400	\$273,600	\$283,800

Notes:

1. All quantities are in acre-feet (ac-ft).
2. Projected Total Production for FY 16/17 at 3,700 ac-ft due to Governor's order to reduce demand to Oct. 2016
3. Shrinkage (water loss) anticipated to be 8% as part of the continuation of the water meter replacement program
4. FMWD Cost based on FMWD's Preliminary Budget for FY 16/17

Water Budget Table WB-3 Sources of Water Funds - FY 16/17 - Preliminary

Description	Recorded FY 2013-14	Recorded FY 2014-15	Budget FY 2015-16	Projected FY 2015-16	Budget FY 2016-17	Forecast FY 2017-18	Forecast FY 2018-19	Forecast FY 2019-20	Forecast FY 2020-21
Sources of Funds - Variable Sources									
Water Sales - Consumers	\$ 7,463,415	\$ 6,594,471	\$ 6,868,000	\$ 6,058,000	\$ 7,075,000	\$ 7,745,000	\$ 8,475,000	\$ 9,231,000	\$ 9,831,000
<i>Water Sales - CVWD</i>	\$ 4,843,462	\$ 4,162,173	\$ 6,868,000	\$ 6,058,000	\$ 7,075,000	\$ 7,745,000	\$ 8,475,000	\$ 9,231,000	\$ 9,831,000
<i>Water Sale - FMWD</i>	\$ 2,619,953	\$ 2,432,299	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Earned - Water	\$ 125,914	\$ 91,782	\$ 100,000	\$ 100,000	\$ 106,000	\$ 100,000	\$ 92,000	\$ 89,000	\$ 91,000
Gain/Loss on Sale of Investments	\$ 47,243	\$ 94,125	\$ -	\$ 40,000	\$ 56,000	\$ 52,000	\$ 49,000	\$ 48,000	\$ 49,000
Fair Value Adjustment	\$ 202,439	\$ (122,475)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Earned - MTBE Reserve Fund	\$ 46,780	\$ 103,498	\$ 125,000	\$ 110,000	\$ 77,000	\$ 79,000	\$ 81,000	\$ 83,000	\$ 85,000
Subtotal variable sources	\$ 7,885,791	\$ 6,761,401	\$ 7,093,000	\$ 6,308,000	\$ 7,314,000	\$ 7,976,000	\$ 8,697,000	\$ 9,451,000	\$ 10,056,000
Sources of Funds - Stable Sources									
Water Sales - Service Charge	\$ 1,731,323	\$ 1,828,481	\$ 1,938,000	\$ 1,936,000	\$ 2,354,000	\$ 2,512,000	\$ 2,683,000	\$ 2,854,000	\$ 2,970,000
Fire Service Meter Charge	\$ 31,667	\$ 33,300	\$ 34,000	\$ 33,000	\$ 39,000	\$ 42,000	\$ 45,000	\$ 48,000	\$ 50,000
Late Fees/Fire Hydrant Flow/Backflow Tests	\$ 70,271	\$ 71,455	\$ 70,000	\$ 77,000	\$ 80,000	\$ 83,000	\$ 86,000	\$ 89,000	\$ 92,000
Other Income - Water	\$ -	\$ -	\$ 7,000	\$ 3,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Rental Property Income	\$ 21,573	\$ 22,200	\$ 22,500	\$ 23,000	\$ 23,000	\$ 23,000	\$ 23,000	\$ 26,000	\$ 26,000
Subtotal - Stable Sources	\$ 1,854,834	\$ 1,955,436	\$ 2,071,500	\$ 2,072,000	\$ 2,501,000	\$ 2,665,000	\$ 2,842,000	\$ 3,022,000	\$ 3,143,000
Sources of Funds - CIP Sources									
Water Systems Connect Fee	\$ 62,660	\$ 40,212	\$ 39,800	\$ 33,000	\$ 45,000	\$ 50,000	\$ 55,000	\$ 60,000	\$ 60,000
Meter Installation/Hydrant Charges	\$ 24,883	\$ 148,150	\$ 50,000	\$ 30,000	\$ 30,000	\$ 60,000	\$ 70,000	\$ 80,000	\$ 90,000
Grant Revenue	\$ 78,772	\$ 49,273	\$ 1,400,000	\$ 698,025	\$ 1,150,250	\$ 620,475	\$ 285,300	\$ 250,000	\$ 250,000
Gain/Loss on Sale of Assets	\$ 4,360	\$ 664	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Earned - COP Bonds (not included in subtotal or total)	\$ 223	\$ 162	\$ 200	\$ 200	\$ 200	\$ -	\$ -	\$ -	\$ -
Subtotal CIP Sources	\$ 170,898	\$ 238,461	\$ 1,490,000	\$ 761,225	\$ 1,225,450	\$ 730,475	\$ 410,300	\$ 390,000	\$ 400,000
TOTAL SOURCE OF FUNDS	\$ 9,911,523	\$ 8,955,298	\$ 10,654,500	\$ 9,141,225	\$ 11,040,450	\$ 11,371,475	\$ 11,949,300	\$ 12,863,000	\$ 13,599,000

Water Budget Table WB-4 - Summary of Water O & M Expenses - FY 16/17 - Preliminary

Description	Recorded FY 2013-14	Recorded FY 2014-15	Budget FY 2015-16	Projected FY 2015-16	Budget FY 2016-17	Forecast FY 2017-18	Forecast FY 2018-19	Forecast FY 2019-20	Forecast FY 2020-21
COMPENSATION AND BENEFITS									
Director Fees	\$ 8,370	\$ 9,225	\$ 8,000	\$ 10,800	\$ 9,000	\$ 9,000	\$ 9,000	\$ 9,000	\$ 9,000
Compensation									
Officer Salaries	\$ 144,628	\$ 150,010	\$ 164,500	\$ 159,600	\$ 168,000	\$ 171,000	\$ 172,000	\$ 174,000	\$ 176,000
Administrative Services Labor	\$ 312,017	\$ 332,408	\$ 360,000	\$ 344,200	\$ 361,000	\$ 371,000	\$ 376,000	\$ 382,000	\$ 385,000
Administrative Services Labor - OT	\$ 6,127	\$ 3,209	\$ 3,000	\$ 3,300	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000
Engineering Department Labor	\$ 301,033	\$ 291,255	\$ 436,000	\$ 290,000	\$ 291,000	\$ 301,000	\$ 308,000	\$ 313,000	\$ 317,000
Engineering Department Labor-OT	\$ 2,164	\$ 2,627	\$ 2,000	\$ 4,300	\$ 4,000	\$ 4,000	\$ 4,000	\$ 5,000	\$ 5,000
Plant - Office Labor	\$ 219,552	\$ 202,521	\$ 236,000	\$ 158,800	\$ 218,000	\$ 223,000	\$ 225,000	\$ 228,000	\$ 243,000
Plant - Office Labor-OT	\$ 466	\$ 352	\$ 400	\$ 400	\$ -	\$ -	\$ -	\$ -	\$ -
System Operators Labor	\$ 295,911	\$ 274,129	\$ 324,000	\$ 277,000	\$ 293,000	\$ 301,000	\$ 304,000	\$ 307,000	\$ 310,000
System Operators Labor-OT	\$ 24,712	\$ 24,973	\$ 27,000	\$ 21,900	\$ 22,000	\$ 22,000	\$ 22,000	\$ 23,000	\$ 23,000
Utility Workers Labor	\$ 294,955	\$ 325,943	\$ 372,000	\$ 334,000	\$ 339,000	\$ 356,000	\$ 364,000	\$ 374,000	\$ 398,000
Utility Workers Labor-OT	\$ 42,065	\$ 51,582	\$ 45,000	\$ 50,600	\$ 51,000	\$ 51,000	\$ 52,000	\$ 53,000	\$ 54,000
Standby Pay	\$ 42,002	\$ 41,038	\$ 41,000	\$ 43,300	\$ 43,000	\$ 44,000	\$ 44,000	\$ 45,000	\$ 46,000
Auto Allowance	\$ 8,700	\$ 9,075	\$ 10,000	\$ 10,200	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Labor Transfer to Capital	\$ (128,358)	\$ (154,281)	\$ (150,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Compensation Total	\$ 1,702,702	\$ 1,564,066	\$ 1,878,900	\$ 1,708,400	\$ 1,812,000	\$ 1,866,000	\$ 1,893,000	\$ 1,926,000	\$ 1,979,000
Sick and Vacation - Office	\$ 67,986	\$ 133,363	\$ 107,000	\$ 99,800	\$ 110,000	\$ 112,000	\$ 113,000	\$ 115,000	\$ 116,000
Sick and Vacation - Plant	\$ 45,324	\$ 88,909	\$ 71,000	\$ 66,500	\$ 73,000	\$ 74,000	\$ 76,000	\$ 77,000	\$ 77,000
Taxes - Payroll (Total Employees)	\$ 126,904	\$ 130,866	\$ 136,000	\$ 132,700	\$ 137,000	\$ 139,000	\$ 141,000	\$ 143,000	\$ 145,000
PERS Retirement (Total Employees)	\$ 264,073	\$ 274,681	\$ 291,000	\$ 271,400	\$ 311,000	\$ 342,000	\$ 367,000	\$ 392,000	\$ 404,000
Workers' Compensation - Office	\$ 14,131	\$ 13,221	\$ 16,000	\$ 19,800	\$ 20,000	\$ 18,000	\$ 16,000	\$ 13,000	\$ 13,000
Workers' Compensation - Plant	\$ 58,439	\$ 56,460	\$ 74,000	\$ 80,300	\$ 89,000	\$ 82,000	\$ 71,000	\$ 57,000	\$ 58,000
Health and Dental and Vision - Office	\$ 124,616	\$ 136,220	\$ 137,000	\$ 130,700	\$ 128,000	\$ 131,000	\$ 133,000	\$ 136,000	\$ 138,000
Life & Disability Insurance - Office & Plant	\$ 8,374	\$ 9,497	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 11,000	\$ 12,000
Health and Dental and Vision - Plant	\$ 132,108	\$ 140,649	\$ 152,000	\$ 136,300	\$ 140,000	\$ 142,000	\$ 145,000	\$ 148,000	\$ 150,000
Self Insurance	\$ 11,286	\$ 9,301	\$ 13,000	\$ 6,600	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000
Retiree - Health Care Expense	\$ 86,345	\$ 74,635	\$ 79,000	\$ 72,100	\$ 74,000	\$ 75,000	\$ 77,000	\$ 78,000	\$ 80,000
Benefits Total	\$ 939,586	\$ 1,067,802	\$ 1,086,000	\$ 1,026,200	\$ 1,105,000	\$ 1,138,000	\$ 1,162,000	\$ 1,183,000	\$ 1,206,000
TOTAL COMPENSATION AND BENEFITS	\$ 2,642,288	\$ 2,631,868	\$ 2,964,900	\$ 2,734,600	\$ 2,917,000	\$ 3,004,000	\$ 3,055,000	\$ 3,109,000	\$ 3,185,000

Water Budget Table WB-4 - Summary of Water O & M Expenses - FY 16/17 - Preliminary

Description	Recorded FY 2013-14	Recorded FY 2014-15	Budget FY 2015-16	Projected FY 2015-16	Budget FY 2016-17	Forecast FY 2017-18	Forecast FY 2018-19	Forecast FY 2019-20	Forecast FY 2020-21
PLANT - WATER OPERATION									
Taxes - Property	\$ 12,030	\$ 12,302	\$ 12,800	\$ 12,800	\$ 13,300	\$ 13,800	\$ 14,300	\$ 14,800	\$ 15,300
Glenwood - Plant Maintenance	\$ 10,417	\$ 35,332	\$ 25,000	\$ 25,000	\$ 26,000	\$ 26,000	\$ 26,000	\$ 26,000	\$ 27,000
Glenwood - Landscape	\$ 4,716	\$ 5,460	\$ 7,500	\$ 5,900	\$ 7,500	\$ 8,000	\$ 8,500	\$ 9,000	\$ 9,500
Office Supplies & Misc Expenses - Plant	\$ 8,880	\$ 9,369	\$ 6,000	\$ 6,000	\$ 7,000	\$ 7,500	\$ 8,000	\$ 8,000	\$ 8,000
Glenwood - Utilities	\$ 16,329	\$ 17,368	\$ 14,000	\$ 14,000	\$ 16,000	\$ 17,000	\$ 18,000	\$ 19,000	\$ 20,000
Glenwood - Enterprise Communications - Move to Office	\$ 37,923	\$ 42,352	\$ -	\$ -	\$ -	<i>combined 01-01-5225</i>			
Glenwood - Wireless Voice & Data Communications	\$ 8,159	\$ 10,135	\$ -	\$ -	\$ -	<i>combined 01-01-5226</i>			
Training - Plant	\$ 7,010	\$ 6,307	\$ 7,000	\$ 7,000	\$ 7,500	\$ 8,000	\$ 8,500	\$ 9,000	\$ 9,200
Education Reimbursement/Certifications	\$ 5,675	\$ 3,707	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 5,000	\$ 5,000	\$ 5,000
Glenwood - Safety and Security System	\$ 25,889	\$ 16,888	\$ 17,000	\$ 17,000	\$ 17,500	\$ 18,000	\$ 18,500	\$ 19,000	\$ 19,500
Glenwood - Uniforms	\$ 9,700	\$ 9,865	\$ 8,500	\$ 8,500	\$ 9,000	\$ 9,500	\$ 10,000	\$ 10,500	\$ 11,000
Permit & Assessment Fees	\$ 1,198	\$ 1,230	\$ 1,500	\$ 1,500	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
Tools and Equipment Maintenance	\$ 12,008	\$ 14,961	\$ 20,000	\$ 14,500	\$ 16,000	\$ 17,000	\$ 18,000	\$ 19,000	\$ 20,000
Nitrate Plant Maintenance	\$ 39,189	\$ 49,440	\$ 80,000	\$ 70,000	\$ 85,000	\$ 90,000	\$ 95,000	\$ 99,000	\$ 103,000
SCADA - Telemetry & Signal	\$ 8,241	\$ 7,687	\$ 13,500	\$ 6,000	\$ 15,000	\$ 16,500	\$ 17,500	\$ 18,500	\$ 19,500
SCADA Hardware	\$ 2,861	\$ 11,182	\$ 6,000	\$ 3,500	\$ 9,000	\$ 10,500	\$ 11,500	\$ 12,500	\$ 13,500
SCADA Software	\$ 204	\$ -	\$ 12,000	\$ 12,000	\$ 13,000	\$ 14,000	\$ 15,000	\$ 16,000	\$ 17,000
SCADA - Communications	\$ 1,593	\$ 1,431	\$ 3,500	\$ 2,500	\$ 2,500	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,500
Lab & Sampling	\$ 52,308	\$ 93,575	\$ 65,000	\$ 55,000	\$ 67,000	\$ 69,000	\$ 71,000	\$ 73,000	\$ 75,000
Chlorine & Treatment	\$ 61,361	\$ 72,859	\$ 75,000	\$ 77,000	\$ 77,000	\$ 79,000	\$ 81,000	\$ 83,000	\$ 85,000
TOTAL PLANT WATER OPERATION	\$ 325,691	\$ 421,450	\$ 415,500	\$ 342,200	\$ 394,300	\$ 413,800	\$ 431,800	\$ 447,300	\$ 464,000
DISTRIBUTION SYSTEM EXPENSES									
Backflow Expense	\$ 389	\$ 331	\$ 250	\$ 250	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500
Pipelines - Maintenance	\$ 18,930	\$ 55,643	\$ 50,000	\$ 40,000	\$ 51,000	\$ 52,000	\$ 53,000	\$ 54,000	\$ 55,000
Pipelines - Paving	\$ 12,908	\$ 19,030	\$ 17,000	\$ 19,000	\$ 20,000	\$ 21,000	\$ 22,000	\$ 23,000	\$ 24,000
Pipelines - Fire Hydrant & Fire Service Repair/Replace	\$ 547	\$ 9,939	\$ 12,000	\$ 15,500	\$ 13,000	\$ 14,000	\$ 15,000	\$ 16,000	\$ 17,000
Pipelines - Leak Detection/Leak Repair	\$ 330	\$ 550	\$ 3,000	\$ 3,200	\$ 25,000	\$ 5,000	\$ 25,000	\$ 5,000	\$ 6,000
Pipelines - Trench Plate Rentals	\$ 1,229	\$ 4,373	\$ 1,500	\$ 3,400	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,000
Pipelines - Water Sampling Stations	\$ 669	\$ 1,252	\$ 500	\$ 250	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500
Pipelines - Valves	\$ -	\$ -	\$ 3,000	\$ 3,400	\$ 4,000	\$ 5,000	\$ 6,000	\$ 7,000	\$ 8,000
Reservoir - Maintenance	\$ 30,917	\$ 73,564	\$ 80,000	\$ 60,000	\$ 83,000	\$ 86,000	\$ 89,000	\$ 92,000	\$ 95,000
Reservoir - Landscape	\$ 19,855	\$ 14,752	\$ 22,000	\$ 22,000	\$ 23,000	\$ 24,000	\$ 25,000	\$ 26,000	\$ 27,000
Meters - Maintenance	\$ 328,235	\$ 265,372	\$ 275,000	\$ 250,000	\$ 250,000	\$ 215,000	\$ 216,000	\$ 217,000	\$ 150,000
Meters - Paving	\$ 337,413	\$ 186,142	\$ 275,000	\$ 290,000	\$ 250,000	\$ 250,000	\$ 255,000	\$ 260,000	\$ 150,000
Meters - Repair/Replacement/Upgrade	\$ 4,948	\$ 4,823	\$ 15,000	\$ 5,000	\$ 16,000	\$ 16,000	\$ 17,000	\$ 18,000	\$ 19,000
Meters - Lateral Leaks	\$ 90,443	\$ 58,875	\$ 150,000	\$ 80,000	\$ 150,000	\$ 75,000	\$ 76,000	\$ 77,000	\$ 78,000
Meters - Trench Plate Rentals	\$ 6,475	\$ 3,420	\$ 2,000	\$ 500	\$ 2,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
Meters - D-jobs	\$ 9,710	\$ 101,219	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 9,000	\$ 9,000	\$ 10,000
Wells - Maintenance	\$ 27,331	\$ 54,389	\$ 32,000	\$ 20,000	\$ 33,000	\$ 34,000	\$ 37,000	\$ 40,000	\$ 43,000
Wells - Landscape	\$ 7,581	\$ 3,360	\$ 3,500	\$ 3,500	\$ 4,000	\$ 4,500	\$ 5,000	\$ 5,500	\$ 6,000
Wells - Rent	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300
Booster Pump - Maintenance	\$ 58,700	\$ 18,453	\$ 60,000	\$ 75,000	\$ 65,000	\$ 70,000	\$ 75,000	\$ 80,000	\$ 82,000
Emergency Generators	\$ 11,712	\$ 21,348	\$ 22,000	\$ 12,000	\$ 22,500	\$ 23,000	\$ 23,500	\$ 24,000	\$ 24,500
Auto/Truck - Maintenance	\$ 76,727	\$ 72,212	\$ 50,000	\$ 60,000	\$ 55,000	\$ 57,000	\$ 59,000	\$ 61,000	\$ 62,000
Auto/Truck - Gas	\$ 25,875	\$ 21,008	\$ 17,500	\$ 17,500	\$ 20,000	\$ 20,500	\$ 21,000	\$ 21,500	\$ 22,000
Auto/Truck - Diesel	\$ 17,042	\$ 18,566	\$ 17,500	\$ 16,500	\$ 18,000	\$ 18,500	\$ 19,000	\$ 19,500	\$ 20,000
TOTAL DISTRIBUTION SYSTEM EXPENSES	\$ 1,112,362	\$ 1,008,921	\$ 1,117,050	\$ 1,005,300	\$ 1,116,300	\$ 1,003,300	\$ 1,052,300	\$ 1,060,300	\$ 902,800

Water Budget Table WB-4 - Summary of Water O & M Expenses - FY 16/17 - Preliminary

Description	Recorded FY 2013-14	Recorded FY 2014-15	Budget FY 2015-16	Projected FY 2015-16	Budget FY 2016-17	Forecast FY 2017-18	Forecast FY 2018-19	Forecast FY 2019-20	Forecast FY 2020-21
GENERAL AND ADMINISTRATIVE EXPENSES									
General Liability Insurance	\$ 46,256	\$ 44,131	\$ 53,000	\$ 53,000	\$ 56,000	\$ 59,000	\$ 62,000	\$ 65,000	\$ 68,000
Accounting - Audit	\$ 15,079	\$ 11,515	\$ 13,000	\$ 13,000	\$ 13,000	\$ 14,500	\$ 15,000	\$ 15,500	\$ 16,000
Legal Consulting Fees	\$ 42,935	\$ 85,614	\$ 45,000	\$ 51,000	\$ 47,000	\$ 49,000	\$ 51,000	\$ 53,000	\$ 55,000
Administrative Consultants	\$ 34,711	\$ 73,932	\$ 120,000	\$ 90,000	\$ 130,000	\$ 130,000	\$ 130,000	\$ 130,000	\$ 100,000
Election Expense	\$ 36,751	\$ -	\$ 40,000	\$ -	\$ -	\$ 45,000	\$ -	\$ 45,000	\$ -
Office Maintenance	\$ 10,135	\$ 9,652	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 13,000	\$ 14,000	\$ 15,000
Landscape Maintenance - Office	\$ 5,129	\$ 6,631	\$ 7,500	\$ 6,500	\$ 7,500	\$ 8,000	\$ 8,500	\$ 9,000	\$ 9,500
Office Supplies & Misc Expenses - Office	\$ 5,459	\$ 5,041	\$ 5,500	\$ 5,500	\$ 5,500	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,500
Computer Hardware	\$ 21,660	\$ 24,719	\$ 27,000	\$ 27,000	\$ 25,000	\$ 26,000	\$ 27,000	\$ 28,000	\$ 29,000
Computer Software	\$ 18,067	\$ 27,965	\$ -	\$ -	\$ -	<i>Combined with Computer Software, Maint. Lic</i>			
Computer Software, Maintenance, Licenses	\$ 17,551	\$ 19,353	\$ 60,000	\$ 45,000	\$ 50,000	\$ 50,000	\$ 51,000	\$ 52,000	\$ 53,000
Utilities - Office	\$ 17,698	\$ 19,978	\$ 20,000	\$ 23,000	\$ 21,000	\$ 21,500	\$ 22,000	\$ 22,500	\$ 23,000
Enterprise Voice Communications	\$ 24,475	\$ 25,463	\$ 12,750	\$ 37,000	\$ 43,800	\$ 44,800	\$ 45,800	\$ 46,800	\$ 47,800
Data Communications - Fiber Lines/Internet	\$ -	\$ -	\$ 48,750	\$ 47,000	\$ 49,000	\$ 50,000	\$ 51,000	\$ 52,000	\$ 53,000
Wireless Voice & Data Communications-cell	\$ 15,078	\$ 5,670	\$ 29,500	\$ 12,500	\$ 14,000	\$ 15,000	\$ 15,500	\$ 16,000	\$ 16,500
Printing, Postage, Stationery, Copier Maint.	\$ 41,638	\$ 43,423	\$ 37,000	\$ 35,000	\$ 37,500	\$ 38,000	\$ 38,500	\$ 39,500	\$ 40,500
Uncollectible Accounts-Water	\$ 9,190	\$ 9,312	\$ 3,000	\$ 4,400	\$ 3,500	\$ 3,500	\$ 4,000	\$ 4,000	\$ 4,500
Water System Fees (DHS, RWQCB, LAFCO, Misc)	\$ 47,454	\$ 46,503	\$ 60,000	\$ 46,000	\$ 50,000	\$ 51,000	\$ 52,000	\$ 53,000	\$ 54,000
Engineering Department	\$ 10,511	\$ 10,660	\$ 9,900	\$ 10,800	\$ 11,000	\$ 12,000	\$ 13,000	\$ 14,000	\$ 15,000
Water Conservation	\$ 31,208	\$ 22,848	\$ 45,000	\$ 26,000	\$ 40,000	\$ 41,000	\$ 42,000	\$ 43,000	\$ 44,000
<i>Pipeline/Advertising - Water Conservation</i>	\$ -	\$ 1,309	\$ 5,000	\$ 2,000	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500
<i>Turf Rebates - Water Conservation</i>	\$ 51,061	\$ 109,470	\$ 35,000	\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Device Rebates - Water Conservation</i>	\$ 50	\$ 3,775	\$ 5,000	\$ 3,500	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
<i>Community Outreach</i>	\$ -	\$ 534	\$ 12,000	\$ 9,200	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 15,000
Training - Office	\$ 5,931	\$ 3,271	\$ 3,000	\$ 2,900	\$ 3,500	\$ 4,000	\$ 4,500	\$ 5,000	\$ 5,500
Conferences and Seminars - Office	\$ 10,260	\$ 7,518	\$ 10,000	\$ 8,000	\$ 9,000	\$ 10,000	\$ 11,000	\$ 12,000	\$ 13,000
Board of Directors - Conferences and Seminars	\$ 3,216	\$ 2,265	\$ 2,300	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,200	\$ 5,400	\$ 5,600
Misc Administration - Office	\$ 2,598	\$ 5,292	\$ 5,000	\$ 4,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 6,000	\$ 7,000
Board of Directors - Misc Administration	\$ 1,286	\$ 1,758	\$ 2,000	\$ 1,500	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
Membership Renewals/Subscriptions	\$ 23,501	\$ 22,893	\$ 26,000	\$ 22,000	\$ 23,000	\$ 24,000	\$ 25,000	\$ 26,000	\$ 27,000
Bank Charges	\$ 12,818	\$ 14,971	\$ 15,500	\$ 16,500	\$ 18,000	\$ 18,500	\$ 19,000	\$ 19,500	\$ 20,000
Rental Property	\$ -	\$ 2,314	\$ 3,100	\$ 3,100	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500
TOTAL GENERAL AND ADMINISTRATIVE EXPENSES	\$ 561,706	\$ 667,780	\$ 735,600	\$ 657,400	\$ 709,300	\$ 772,800	\$ 747,000	\$ 812,200	\$ 761,400
<i>Emergency Operations</i>	\$ -	\$ -	\$ 2,000	\$ 1,000	\$ 2,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000
FIRE & DEBRIS RECOVERY	\$ -	\$ -	\$ 2,000	\$ 1,000	\$ 2,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000
TOTAL EXPENSE	\$ 4,642,047	\$ 4,730,019	\$ 5,235,050	\$ 4,740,500	\$ 5,138,900	\$ 5,196,900	\$ 5,289,100	\$ 5,431,800	\$ 5,316,200
Total O & M Expense (w/o Labor & Benefits)	\$ 1,999,759	\$ 2,098,151	\$ 2,270,150	\$ 2,005,900	\$ 2,221,900	\$ 2,192,900	\$ 2,234,100	\$ 2,322,800	\$ 2,131,200

Water Budget Table WB-5 Water - Purchase Water & Power - FY 16/17 - Preliminary

Description	Recorded FY 2013-14	Recorded FY 2014-15	Budget FY 2015-16	Projected FY 2015-16	Budget FY 2016-17	Forecast FY 2017-18	Forecast FY 2018-19	Forecast FY 2019-20	Forecast FY 2020-21
Purchased Water - FWMD (ac-ft)	2,410	1,875	1,900	1,600	1,195	1,145	1,080	1,000	880
Projected FMWD Cost	\$ 3,150,800	\$ 2,741,033	\$ 2,732,149	\$ 2,484,674	\$ 2,098,800	\$ 2,107,400	\$ 2,116,000	\$ 2,097,600	\$ 2,028,000
Purchased Water - GWP (ac-ft)	0	0	410	195	555	555	600	600	600
Projected GWP Cost	\$ -	\$ -	\$ 165,230	\$ 78,585	\$ 230,880	\$ 239,760	\$ 263,400	\$ 273,600	\$ 283,800
Purchased Power Cost	\$ 672,908	\$ 682,044	\$ 678,000	\$ 634,200	\$ 695,000	\$ 716,000	\$ 737,000	\$ 759,000	\$ 778,000
SCE	\$ 301,975	\$ 296,387	\$ 294,000	\$ 255,400	\$ 265,000	\$ 272,950	\$ 281,139	\$ 289,573	\$ 296,812
Glendale	\$ 380,074	\$ 388,734	\$ 389,000	\$ 379,000	\$ 430,000	\$ 442,900	\$ 456,187	\$ 469,873	\$ 481,619
Constellation Credit	\$ (9,141)	\$ (3,077)	\$ (5,000)	\$ (200)	\$ (500)	\$ -	\$ -	\$ -	\$ -
% Increase/Decrease - Import Water Cost	41.1%	-13.0%	-0.3%	-9.4%	-15.5%	0.4%	0.4%	-0.9%	-3.3%
% Increase/Decrease - Power Cost	4.5%	1.4%	-0.6%	-7.0%	9.6%	3.0%	3.0%	3.0%	2.5%
Power cost/ac-ft	\$141	\$170	\$176	\$175	\$188	\$188	\$189	\$190	\$190

Water Budget Table WB - 6 Water Capital Outlay & Equipment - FY 16/17 - Preliminary

Description	Recorded FY 2013-14	Recorded FY 2014-15	Budget FY 2015-16	Projected FY 2015-16	Budget FY 2016-17	Forecast FY 2017-18	Forecast FY 2018-19	Forecast FY 2019-20	Forecast FY 2020-21
Spring Brook Software - Fixed Assets					\$ 11,250				
Spring Brook Software - Payroll Module						\$ 18,750			
Spring Brook Software - Work Order Module							\$ 26,250		
Spring Brook Software - Project Management Module								\$ 15,000	
Spring Brook Software - Extend Budget Module									\$ 15,000
Software (Document/Billing Process Design)	\$ 1,528								
Upgrade SCADA Equipment (SCADA 1A & 1B)	\$ 29,255								
Upgrade Computer Hardware & Security	\$ 14,952		\$ 52,000	\$ 20,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 20,000
Main Office - Seismic Upgrades					\$ 15,000				
Main Office - Upgrades			\$ 10,000	\$ -	\$ 20,000	\$ 20,000	\$ 20,000	\$ 15,000	\$ 15,000
Misc.			\$ 3,000	\$ 2,000	\$ 3,750	\$ 6,250	\$ 4,750	\$ 5,000	\$ 5,000
CO Total	\$ 45,735	\$ -	\$ 65,000	\$ 22,000	\$ 80,000	\$ 75,000	\$ 81,000	\$ 65,000	\$ 55,000
Capital - Equipment									
Water Quality - 5 Chlorine Analyzers	\$ 32,497								
Pipe Tool		\$ 7,721							
Vehicle Replacement - Unit 5	\$ 44,533								
Vehicle Replacement - Unit 7	\$ 25,661								
Vehicle Replacement - Unit 12	\$ 23,245								
Vehicle Replacement - Unit 46		\$ 90,546							
Vehicle Replacement - Unit 47		\$ 51,975							
Vehicle Replacement - Unit 1					\$ 30,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000
CE Total	\$ 125,936	\$ 150,242	\$ -	\$ -	\$ 30,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000
CO & CE - Total	\$ 171,671	\$ 150,242	\$ 65,000	\$ 22,000	\$ 110,000	\$ 150,000	\$ 156,000	\$ 140,000	\$ 130,000

Water Budget Table WB -7 Water - Capital Improvement Projects - FY 16/17 - Preliminary

Description	Recorded FY 2013-14	Recorded FY 2014-15	Budget FY 2015-16	Projected FY 2015-16	Budget FY 2016-17	Forecast FY 2017-18	Forecast FY 2018-19	Forecast FY 2019-20	Forecast FY 2020-21
Water Supply	\$ 352,370	\$ 545,588	\$ 1,945,000	\$ 2,278,754	\$ 840,000	\$ 805,000	\$ 600,000	\$ 500,000	\$ 500,000
Water Storage	\$ 350,043	\$ 172,335	\$ -	\$ -	\$ 320,000	\$ 320,000	\$ 400,000	\$ 400,000	\$ 400,000
Water Distribution	\$ 641,526	\$ 1,143,405	\$ 880,000	\$ 812,852	\$ 1,365,000	\$ 1,395,000	\$ 1,245,000	\$ 1,350,000	\$ 1,550,000
Water Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ 75,000	\$ 75,000
Technology	\$ 21,847	\$ 25,524	\$ 315,000	\$ 56,000	\$ 200,000	\$ 205,000	\$ 430,000	\$ 350,000	\$ -
Public Safety/Emergency Response	\$ -	\$ 93,754	\$ 75,000	\$ -	\$ 75,000	\$ 75,000	\$ 75,000	\$ -	\$ -
Facilities & Planning	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 125,000	\$ 275,000
Total CIP	\$ 1,365,786	\$ 1,980,606	\$ 3,215,000	\$ 3,147,606	\$ 2,800,000	\$ 2,800,000	\$ 2,800,000	\$ 2,800,000	\$ 2,800,000

Water Budget Table WB - 8 Water Reserve Targets - FY 16/17 - Preliminary

Description	Recorded FY 2013-14	Recorded FY 2014-15	<i>Budget FY 2015-16</i>	<i>Projected FY 2015-16</i>	Budget FY 2016-17	Forecast FY 2017-18	Forecast FY 2018-19	Forecast FY 2019-20	Forecast FY 2020-21
Rate stabilization (a)	\$ 1,888,000	\$ 1,670,000	\$ 1,902,000	\$ 1,515,000	\$ 1,769,000	\$ 1,936,000	\$ 2,119,000	\$ 2,308,000	\$ 2,458,000
Emergency fund (b)	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000
<i>Labor & benefits</i>	\$ 2,642,288	\$ 2,631,868	\$ 2,961,000	\$ 2,734,600	\$ 2,917,000	\$ 3,004,000	\$ 3,055,000	\$ 3,109,000	\$ 3,185,000
<i>Power</i>	\$ 672,908	\$ 682,044	\$ 678,000	\$ 634,200	\$ 695,000	\$ 716,000	\$ 737,000	\$ 759,000	\$ 778,000
<i>Operating expenses</i>	\$ 1,999,759	\$ 2,098,151	\$ 2,306,800	\$ 2,005,900	\$ 2,221,900	\$ 2,192,900	\$ 2,234,100	\$ 2,322,800	\$ 2,131,200
<i>O & M Costs</i>	\$ 5,314,955	\$ 5,412,063	\$ 5,945,800	\$ 5,374,700	\$ 5,833,900	\$ 5,912,900	\$ 6,026,100	\$ 6,190,800	\$ 6,094,200
Working cash (c)	\$ 885,826	\$ 902,011	\$ 990,967	\$ 895,783	\$ 972,317	\$ 985,483	\$ 1,004,350	\$ 1,031,800	\$ 1,015,700
Total target cash reserves	\$ 3,524,000	\$ 3,322,000	\$ 3,643,000	\$ 3,161,000	\$ 3,491,000	\$ 3,671,000	\$ 3,873,000	\$ 4,090,000	\$ 4,224,000

Note:

- a. Rate stabilization reserves are based on 25 percent of total water commodity sales
- b. Emergency reserves equal \$750,000.
- c. Working cash is based on two months of O&M less purchased water

Water Budget Table WB - 8A MTBE Fund Reserve - FY 16/17 - Preliminary

Description	Recorded FY 2013-14	Recorded FY 2014-15	<i>Budget FY 2015-16</i>	<i>Projected FY 2015-16</i>	Budget FY 2016-17	Forecast FY 2017-18	Forecast FY 2018-19	Forecast FY 2019-20	Forecast FY 2020-21
MTBE - Income									
MTBE Settlement	\$ 6,845,647	\$ -	\$ -	\$ 6,320	\$ -	\$ -	\$ -	\$ -	\$ -
Repayment from CVWD General Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000
MTBE - Income from Sale of Investments	\$ 47,243	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Income	\$ 6,892,890	\$ -	\$ -	\$ 6,320	\$ -	\$ -	\$ -	\$ -	\$ 500,000
MTBE - Expense									
Transfer to CVWD General Fund	\$ -	\$ -	\$ 2,000,000	\$ 2,000,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -
Lab Expense	\$ 62,427	\$ 43,798	\$ 50,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 25,000
Labor Expense	\$ -	\$ -	\$ 12,000	\$ -	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 6,000
Administrative Consultant	\$ -	\$ -	\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ 75,000	\$ -
Total Expense	\$ 62,427	\$ 43,798	\$ 2,102,000	\$ 2,035,000	\$ 1,043,000	\$ 43,000	\$ 43,000	\$ 118,000	\$ 31,000
Increase (Decrease) to Fund	\$ 6,830,463	\$ (43,798)	\$ (2,102,000)	\$ (2,028,680)	\$ (1,043,000)	\$ (43,000)	\$ (43,000)	\$ (118,000)	\$ 469,000
MTBE Reserve Fund									
FY Begin Available MTBE Reserve Funds	\$ 2,049,556	\$ 8,880,019	\$ 8,836,221	\$ 8,836,221	\$ 6,807,541	\$ 5,764,541	\$ 5,721,541	\$ 5,678,541	\$ 5,560,541
FY End Available MTBE Reserve Funds	\$ 8,880,019	\$ 8,836,221	\$ 6,734,221	\$ 6,807,541	\$ 5,764,541	\$ 5,721,541	\$ 5,678,541	\$ 5,560,541	\$ 6,029,541

Note:

a. Interest Income based on 1% annual rate of return on investment

Water Budget Table WB-9 - Total Sources - FY 16/17 - Preliminary

	Recorded FY 2013-14	Recorded FY 2014-15	Budget FY 2015-16	Projected FY 2015-16	Budget FY 2016-17	Forecast FY 2017-18	Forecast FY 2018-19	Forecast FY 2019-20	Forecast FY 2020-21
REVENUE									
Service Readiness Charge Revenue	\$ 1,731,323	\$ 1,828,481	\$ 1,938,000	\$ 1,936,000	\$ 2,354,000	\$ 2,512,000	\$ 2,683,000	\$ 2,854,000	\$ 2,970,000
Metered sales of water (CVWD Costs)	\$ 4,843,462	\$ 4,162,173	\$ 6,868,000	\$ 6,058,000	\$ 7,075,000	\$ 7,745,000	\$ 8,475,000	\$ 9,231,000	\$ 9,831,000
Required metered sales of water (FMWD Costs)	\$ 2,619,953	\$ 2,432,299	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Income - Water Reserves	\$ 125,914	\$ 91,782	\$ 100,000	\$ 140,000	\$ 162,000	\$ 152,000	\$ 141,000	\$ 137,000	\$ 140,000
Interest Income - MTBE Reserves	\$ 46,780	\$ 103,000	\$ 125,000	\$ 110,000	\$ 77,000	\$ 79,000	\$ 81,000	\$ 83,000	\$ 85,000
Source of Funds - Other Sources	\$ 170,754	\$ 221,080	\$ 126,500	\$ 136,000	\$ 147,000	\$ 153,000	\$ 159,000	\$ 168,000	\$ 173,000
Sources of Funds - CIP Sources	\$ 170,898	\$ 238,461	\$ 1,490,000	\$ 761,225	\$ 1,225,450	\$ 730,475	\$ 410,300	\$ 390,000	\$ 400,000
Transfer from MTBE Fund			\$ 2,000,000	\$ 2,000,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -
TOTAL REVENUE	\$ 9,771,511	\$ 9,077,276	\$ 12,647,500	\$ 11,141,225	\$ 12,040,450	\$ 11,371,475	\$ 11,949,300	\$ 12,863,000	\$ 13,599,000
OPERATIONS & MAINTENANCE (O & M) EXPENSE									
Labor & Benefits	\$ 2,642,288	\$ 2,631,868	\$ 2,964,900	\$ 2,734,600	\$ 2,917,000	\$ 3,004,000	\$ 3,055,000	\$ 3,109,000	\$ 3,185,000
Purchased Water (FMWD)	\$ 3,151,636	\$ 2,741,033	\$ 2,093,000	\$ 2,485,000	\$ 2,099,000	\$ 2,107,000	\$ 2,116,000	\$ 2,098,000	\$ 2,028,000
Purchased Water (GWP)	\$ -	\$ -	\$ 185,000	\$ 78,585	\$ 231,000	\$ 240,000	\$ 263,000	\$ 274,000	\$ 284,000
Power	\$ 672,908	\$ 682,044	\$ 715,000	\$ 634,200	\$ 695,000	\$ 716,000	\$ 737,000	\$ 759,000	\$ 778,000
Operating expenses	\$ 1,999,759	\$ 2,098,151	\$ 2,270,150	\$ 2,005,900	\$ 2,221,900	\$ 2,192,900	\$ 2,234,100	\$ 2,322,800	\$ 2,131,200
Total O & M Expense	\$ 8,466,591	\$ 8,153,096	\$ 8,228,050	\$ 7,938,285	\$ 8,163,900	\$ 8,259,900	\$ 8,405,100	\$ 8,562,800	\$ 8,406,200
Debt Service (principal & interest)	\$ 612,400	\$ 612,454	\$ 614,000	\$ 614,000	\$ 614,000	\$ 614,000	\$ 614,000	\$ 614,000	\$ 615,000
Bond Covenant	1.85	1.12	4.77	3.98	4.32	3.98	3.98	3.98	3.98
Total O & M Expense + Debt Service	\$ 9,078,991	\$ 8,765,550	\$ 8,842,050	\$ 8,552,285	\$ 8,777,900	\$ 8,873,900	\$ 9,019,100	\$ 9,176,800	\$ 9,021,200
Cash Available for Capital - [Revenue - (Total O & M Expense + Debt Service)]	\$ 692,520	\$ 311,726	\$ 3,805,450	\$ 2,588,940	\$ 3,262,550	\$ 2,497,575	\$ 2,930,200	\$ 3,686,200	\$ 4,577,800
CAPITAL OUTLAY, LIABILITIES and CAPITAL PROJECTS									
Capital Outlay & Equipment	\$ 171,671	\$ 140,870	\$ 65,000	\$ 22,000	\$ 110,000	\$ 150,000	\$ 156,000	\$ 140,000	\$ 130,000
Re-Payment to MTBE Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000
Future Liability (OPEB)	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Capital Improvements (pay-as-you-go)	\$ 1,365,786	\$ 1,981,000	\$ 3,215,000	\$ 3,147,606	\$ 2,800,000	\$ 2,800,000	\$ 2,800,000	\$ 2,800,000	\$ 2,800,000
Total - Capital Outlay, CIP, CIP Fund & Future Liability	\$ 1,637,457	\$ 2,282,237	\$ 3,380,000	\$ 3,269,606	\$ 3,010,000	\$ 3,050,000	\$ 3,056,000	\$ 3,040,000	\$ 3,530,000
INCREASE (DECREASE) TO CASH	\$ (944,937)	\$ (1,970,512)	\$ 425,450	\$ (680,666)	\$ 252,550	\$ (552,425)	\$ (125,800)	\$ 646,200	\$ 1,047,800
FY begin available Water Reserves	\$ 6,457,073	\$ 5,512,136	\$ 4,057,756	\$ 4,057,756	\$ 3,377,090	\$ 3,629,641	\$ 3,077,216	\$ 2,951,417	\$ 3,597,617
FY End Water Reserves	\$ 5,512,136	\$ 4,057,756	\$ 4,483,206	\$ 3,377,090	\$ 3,629,641	\$ 3,077,216	\$ 2,951,417	\$ 3,597,617	\$ 4,645,417
TOTAL TARGET WATER CASH RESERVES	\$ 3,524,000	\$ 3,322,000	\$ 3,643,000	\$ 3,161,000	\$ 3,491,000	\$ 3,671,000	\$ 3,873,000	\$ 4,090,000	\$ 4,224,000
Above or (below) Target Reserves	\$ 1,988,136	\$ 735,756	\$ 840,206	\$ 216,090	\$ 138,641	\$ (593,784)	\$ (921,583)	\$ (492,383)	\$ 421,417
Effective date of water rates	7/1/13	7/1/14	7/1/15	7/1/15	7/1/16	7/1/17	7/1/18	7/1/19	7/1/20
Projected Rate Increase for Service Charge	5.6%	5.8%	5.7%	5.7%	7.0%	6.6%	6.6%	6.2%	3.9%
Service rates (\$/month for 3/4" meter)	\$ 17.10	\$ 15.30	\$ 18.10	\$ 18.10	\$ 19.40	\$ 20.70	\$ 22.10	\$ 23.50	\$ 24.40
Projected Rate Increase for Quantity Charge	5.6%	5.8%	5.7%	5.7%	7.0%	6.6%	6.6%	6.2%	3.9%
Quantity Charge: (\$/kgal)	\$ 5.33	\$ 5.64	\$ 5.96	\$ 5.96	\$ 6.38	\$ 6.80	\$ 7.25	\$ 7.70	\$ 8.00

Crescenta Valley Water District

Analysis of Alternative Water Rate Structures

	Major Objective or Characterizations	Advantages	Disadvantages	Cost to CVWD Implement
Uniform Rate Structure	1. Uniform rate applies to all customer classifications	1. Is simple to understand and update 2. Provides some revenue stability (depending on fixed rate to variable rate revenue ratio) 3. Reflects usage and provides some incentive for conservation	1. Uniform rate may not provide strong incentive for conservation 2. Does not allocate higher cost of imported water to high use customers	1. Minor Revisions to CVWD Billing System 2. Revisions by CVWD Staff 3. No Cost for updates to Springbrook Software
Inclining Tiered Rate Structure	1. Tiered Rate applies to SFR & Irrigation classification 2. Uniform rate - MFR/Com/Inst/Sch classification 3. Promote water conservation for SFR	1. Encourages total/peak conservation through pricing 2. Rewards low volume users through a low Tier 1 rate and maintains affordability 3. Is relatively easy to understand and implement	1. Assumes high water users are inefficient water users 2. Causes fluctuation in cash flows from rate revenues throughout the year 3. Increases revenue volatility as additional tiers are introduced	1. Minor Revisions to CVWD Billing System 2. Revisions by CVWD Staff 3. No Cost for updates to Springbrook Software
Water Budget Rate Structure	1. Focus on efficiency and can take into account the following: a. Weather b. Customer specific irrigation area and characteristics c. Tiers change with weather 2. Rate Structure - Could be Implemented as part of FY 17/18 Budget, Will not implemented as part of FY 16/17 Budget	1. Provides water efficiency targets to individual customers 2. Addresses equity concerns for large families / lots 3. Addresses affordability for basic needs 4. Encourages efficient water use 5. Provides good revenue stability (with appropriate water use allocations)	1. Higher administrative costs 2. How is the efficiency threshold defined? 3. Billing system update required? 4. Proactive Public outreach 5. Requires increased staffing for customer service 6. Does not necessarily reward past or future conservation	1. Cost for CVWD to Implement Initial Cost Range - \$60,000 - \$95,000 Annual Cost Range - \$30,000 - \$40,000 2. Cost for updating Utility Billing software Cost Range - \$30,000 - \$50,000 - Springbrook Software Total Cost Range: Initial Cost - \$90,000 - \$145,000 Annual Cost - \$30,000 - \$40,000

Information Need for Water Budget	Methodology	Costs to CVWD
Indoor Water Budget (IWB) Factors		
Household Size	1. Default Household size can be adjusted as part of calculating rate structure, however needs to be agreed upon before proceeding . 2. Household size can be based on 2010 Census and adjusted to 2017 estimate 3. CVWD can perform an informal survey and adjust household size. Time estimate to complete will be 3 - 6 months, plus staff time	<u>Costs range:</u> \$0 for a default household size \$5,000 for research, survey and staff time for initial set up
Gallons per Capita per Day (GPCD)	1. Based on 20% reduction by 2020 requirements OR 2. Based on 25% drought reduction requirements OR 3. Based on past average water usage for a certain period of time.	<u>Costs range:</u> \$0 for a default \$1,000 for staff time
Days of Service (per billing cycle)	Number of Days per billing cycle - Typically 60 days	<u>Costs range:</u> \$0 for a default
Indoor Drought Factor (DF_{indoor})	1. Based on an adjustment for each meter 2. Can be changed based on the drought condition	<u>Costs range:</u> \$0 for a default \$1,000 for staff time
Indoor Variance	<u>Appeal Process</u> 1. CVWD will have to prepare a procedure for adjustment and verification, if requested and results in additional staff time	<u>Costs range:</u> \$5,000 to create procedure process \$10,000 Annual Cost - Based on 70 appeals (or 1% of SFR accounts) for 2 -3 years and typical - 4 hrs for each appeal
$IWB = (Household\ Size * Dwelling\ Units * GPCD * Days\ of\ Service * DF_{indoor}) / 1000$		
Outdoor Water Budget (OWB) Factors		
Weather Data - CIMIS Historical (ET_o)	Based on historical weather data for the Crescenta Valley Use 25 years - default	<u>Costs range:</u> \$500 for research, survey and staff time for initial set up
Landscape Area based on Lot Size Data (Irrigated Area)	1. Need total lot size and building area size data from LA County Tax Roll OR 2. Landscape area determined by Parcel Specific Analysis from GIS 3. Need to determine a percentage breakdown from small, average and large lots	<u>Costs range:</u> \$500 annual cost for LA County database \$12,500 - Initial data inputting and quality control if use LA County OR \$40,000 - Initial data inputting and quality control if use GIS Parcel Specific Analysis
Evapotranspiration Adjustment Factor (ETAF)	Provided by National Weather Service	<u>Costs range:</u> \$500 for research, survey and staff time for initial set up
Outdoor Drought Factor (DF_{outdoor}) 1. Plant Factor 2. Irrigation Efficiency	1. Based on an adjustment for each meter 2. Can be changed based on the drought condition 3. Plant Factor - Based on type of plants and amount of water need for irrigation 4. Irrigation Efficiency - Based on how efficient irrigation system operates	<u>Costs range:</u> \$2,000 for research and staff time for initial set up \$15,000 staff time to field verify
Outdoor Variance	<u>Appeal Process</u> 1. CVWD will have to prepare a procedure for adjustment and verification, if requested and results in additional staff time	<u>Costs range:</u> \$5,000 to create procedure process \$10,000 Annual Cost - Based on 70 appeals (or 1% of SFR accounts) for 2 -3 years and typical - 4 hrs for each appeal
$OWB = (ET_o * Irrigated\ Area * ETAF * DF_{outdoor}) / 1000$		
$TWB = Total\ Water\ Budget = IWB + OWB$		
Total Cost to CVWD		Cost for CVWD to Implement Initial Cost Range - \$60,000 - \$95,000 Annual Cost Range - \$30,000 - \$40,000

Crescenta Valley Water District

Water and Wastewater Cost of Service and Budget Project Schedule

Task	Board Mtg. Date	Committee Meeting Date	Status	Person Responsible	Start Date	End Date	Comments
Update Water and Wastewater Budget for Financial Plan			Complete	CVWD	2/10/16	2/17/16	Sent to RFC - 2/17/16
Finalize Reserve Policy			Complete	CVWD/RFC	2/16/16	2/16/16	Board Mtg. - No Capital Reserve - Water Only
Budget Review - Water and Wastewater			Complete	CVWD	2/19/16	2/26/16	Review Expense, water production, CIP
Finalize Financial Plan - Water and Wastewater	3/1/16		Complete	RFC	2/16/16	2/26/16	Regular Board Meeting (Based on 2/16/16 Budget to RFC) Packet out by 2/26/16
Finance Committee - Budget Review - Water and Wastewater		3/8/16	Complete	CVWD/ Finance Committee	2/19/16	3/11/16	Review Assumptions & Goals Packet out by 3/7/16 Meeting notes for Board - 3/11/16
Preliminary Cost of Service Analyses - Water and Wastewater	3/15/16		Complete	CVWD/RFC	2/26/16	3/11/16	Regular Board Meeting Packet out by 3/11/16
AWWA Conference - 3/21/16 to 3/24/16							
Alternate Rate Structures -Water Only	3/22/2016 - 6pm		95%	CVWD/RFC	2/29/16	3/18/16	Special Board Meeting Packet out by 3/18/16 CVWD/RFC to review Scope of Work for Water Budget CVWD - Costs to do Water Budget RFC to prepare sample customer bills for each alternative
Finance Committee - Budget Review - Water and Wastewater		3/29/16	0%	CVWD/ Finance Committee	3/18/16	4/1/16	Review Preliminary Budget & Rate Increase Packet out by 3/28/16 Meeting Notes by 4/1/16
Public Workshop Review Budget, Cost of Service and Alternative Water Rate Structure	4/5/2016 - 6pm		0%	CVWD/RFC	3/11/16	4/1/16	Regular Board Meeting Packet out by 4/1/16 1. Budget Review 2. Rate Structure 3. Cost of Service
Finance Committee - Budget Review - Water and Wastewater		4/8/16	0%	CVWD/ Finance Committee	4/1/16	4/15/16	Review Final Budget & Rate Increase Packet out by 4/7/16 Meeting Notes by 4/15/16
Proposed water & wastewater rates Preliminary Prop. 218 Notice	4/19/2016 - 7pm		0%		4/1/16	4/15/16	Regular Board Meeting Packet out on 4/15/16
Finance Committee -Prop. 218 Approve Water and Wastewater		4/22/16	0%	CVWD/ Finance Committee	4/15/16	4/22/16	Final Review Prop. 218 Notice Packet out by 4/21/16 Meeting Notes by 4/22/16
Prop. 218 Notice - Approve Water and Wastewater	4/26/2016 - 6pm		0%	CVWD	4/15/16	4/22/16	Special Board Meeting Packet out by 4/22/16
Send Prop 218 Notice to Printer	4/27/16		0%	CVWD	4/22/16	4/27/16	8 working days for the printer to send out notice
No Board Meeting	5/3/16	NO MEETING					Regular Board Meeting
ACWA Conference - 5/2/16 to 5/5/16							
Send Prop 218 Notice - Send out	5/6/16		0%	CVWD/ Printer	4/27/16	5/6/16	45 day review period
Regular Board Meeting	5/20/2016 - 7pm		0%	CVWD			Regular Board Meeting
Regular Board Meeting	6/7/2016 - 7pm		0%	CVWD			Regular Board Meeting
Comments - Prop 218 Notice Due	6/20/16		0%	CVWD	5/6/16	6/20/16	Comments due on Monday, 6/20/16
Prop 218 - Public Hearing	6/21/2016 - 6pm		0%	CVWD	6/7/16	6/17/16	Regular Board Meeting Packet out by 6/17/16
Board Approve FY 16/17 Budget	6/28/2016 - 7pm		0%	CVWD	6/18/16	6/24/16	Special Board Meeting Packets out by 6/24/16