

VICTORVILLE WATER DISTRICT  
WATER RATE STUDY  
Financial Plan and Reserve Projections

Financial Plan & Reserve Summary  
Financial Plan Alternative #1

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

TABLE 1  
FINANCIAL PLAN AND SUMMARY OF REVENUE REQUIREMENTS

RATE REVENUE REQUIREMENTS SUMMARY	Budget								
	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24
<b>Sources of Water Funds</b>									
<i>Water Rate Revenue Under Prevailing Rates (1):</i>									
Water Sales Revenue (2)	\$ 10,010,800	\$ 10,070,865	\$ 10,131,290	\$ 10,192,078	\$ 10,253,230	\$ 10,253,230	\$ 10,253,230	\$ 10,253,230	\$ 10,253,230
Readiness to Serve Revenue (2)	8,004,000	8,052,024	8,100,336	8,148,938	8,197,832	8,197,832	8,197,832	8,197,832	8,197,832
Other, Non-Rate Revenues (3)	3,067,770	1,586,500	1,618,200	1,650,500	1,683,500	1,717,100	1,751,300	1,786,500	1,822,400
Interest Earnings (in Operating & Capital Reserves) (4)	35,000	99,037	88,351	98,101	110,318	147,558	180,734	178,510	182,787
<b>Total Sources of Funds</b>	<b>\$ 21,117,570</b>	<b>\$ 19,808,425</b>	<b>\$ 19,938,177</b>	<b>\$ 20,089,617</b>	<b>\$ 20,244,880</b>	<b>\$ 20,315,720</b>	<b>\$ 20,383,096</b>	<b>\$ 20,416,072</b>	<b>\$ 20,456,249</b>
<b>Uses of Water Funds</b>									
<i>Operating Expenses (1):</i>									
Water Purchases	\$ 5,141,200	\$ 1,130,900	\$ 1,212,557	\$ 1,300,378	\$ 1,394,838	\$ 1,496,446	\$ 1,605,753	\$ 1,723,350	\$ 1,849,875
Makeup Obligation	308,300	151,500	163,620	176,710	190,846	206,114	222,603	240,411	259,644
Production Power	1,867,900	1,965,031	2,067,212	2,174,707	2,287,792	2,406,757	2,531,909	2,663,568	2,802,074
Supply Services	2,323,024	2,451,220	2,504,836	2,559,906	2,616,493	2,674,663	2,734,487	2,796,040	2,859,405
SCADA Services	302,934	320,237	327,065	334,066	341,245	348,611	356,170	363,931	371,902
Quality Services	476,898	491,750	501,915	512,311	522,945	533,823	544,954	556,345	568,006
Field Services	2,258,813	2,396,724	2,451,118	2,507,117	2,564,799	2,624,243	2,685,539	2,748,779	2,814,064
Engineering Services	904,513	971,022	991,347	1,012,156	1,033,463	1,055,287	1,077,645	1,100,557	1,124,044
Environmental Programs	402,360	430,632	439,619	448,813	458,221	467,848	477,704	487,793	498,126
Customer Services	2,000,441	2,124,402	2,166,140	2,208,732	2,252,196	2,296,008	2,340,728	2,386,374	2,432,967
Meter Services	2,997,122	3,123,990	3,210,788	3,300,246	2,267,443	1,458,988	1,496,176	1,534,620	1,574,385
Administrative Services	3,496,249	3,615,481	3,690,837	3,767,880	3,846,656	3,927,212	4,009,595	4,093,856	4,180,047
Capital Purchases	-	-	-	-	-	-	-	-	-
Subtotal: Operating Expenses	\$ 22,479,754	\$ 19,172,890	\$ 19,727,054	\$ 20,303,022	\$ 19,776,937	\$ 19,496,001	\$ 20,083,262	\$ 20,695,626	\$ 21,334,538
<i>Other Expenditures:</i>									
Existing Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
New Debt Service	-	-	-	-	-	-	-	-	-
Rate-Funded Capital Expenses	-	-	1,738,314	3,691,634	3,923,491	7,455,846	9,265,480	7,666,542	4,378,708
Subtotal: Other Expenditures	\$ -	\$ -	\$ 1,738,314	\$ 3,691,634	\$ 3,923,491	\$ 7,455,846	\$ 9,265,480	\$ 7,666,542	\$ 4,378,708
<b>Total Uses of Water Funds</b>	<b>\$ 22,479,754</b>	<b>\$ 19,172,890</b>	<b>\$ 21,465,368</b>	<b>\$ 23,994,655</b>	<b>\$ 23,700,427</b>	<b>\$ 26,951,847</b>	<b>\$ 29,348,742</b>	<b>\$ 28,362,167</b>	<b>\$ 25,713,246</b>
plus: Revenue from Rate Increases (5)	-	1,223,295	2,544,337	3,970,395	5,509,274	7,126,597	7,638,150	8,159,934	8,692,154
<b>Annual Surplus/(Deficit)</b>	<b>\$ (1,362,184)</b>	<b>\$ 1,858,831</b>	<b>\$ 1,017,147</b>	<b>\$ 65,357</b>	<b>\$ 2,053,727</b>	<b>\$ 490,469</b>	<b>\$ (1,327,496)</b>	<b>\$ 213,839</b>	<b>\$ 3,435,157</b>
<b>Net Revenue Req. (Total Uses less Non-Rate Revenue)</b>	<b>\$ 19,376,984</b>	<b>\$ 17,487,353</b>	<b>\$ 19,758,817</b>	<b>\$ 22,246,054</b>	<b>\$ 21,906,609</b>	<b>\$ 25,087,190</b>	<b>\$ 27,416,708</b>	<b>\$ 26,397,157</b>	<b>\$ 23,708,059</b>
<b>Total Rate Revenue After Rate Increases</b>	<b>\$ 18,014,800</b>	<b>\$ 19,346,184</b>	<b>\$ 20,775,964</b>	<b>\$ 22,311,411</b>	<b>\$ 23,960,336</b>	<b>\$ 25,577,659</b>	<b>\$ 26,089,212</b>	<b>\$ 26,610,996</b>	<b>\$ 27,143,216</b>
<b>Projected Annual Rate Revenue Increase</b>	<b>0.00%</b>	<b>6.75%</b>	<b>6.75%</b>	<b>6.75%</b>	<b>6.75%</b>	<b>6.75%</b>	<b>2.00%</b>	<b>2.00%</b>	<b>2.00%</b>
<i>Cumulative Increase from Annual Revenue Increases</i>	0.00%	6.75%	13.96%	21.65%	29.86%	38.62%	41.40%	44.22%	47.11%
<i>Debt Coverage After Rate Increase (6)</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Reduction in Rate Revenue Due to Water Conservation (7)</b>		<b>-13%</b>							

- Revenue and expenses for FY 2014/15 and FY 2015/16 were provided by District Staff on 9/8/2015. Revenue and expenses for FY 2016/17 through FY 2023/24 were provided by District Staff on 5/18/2015.
- Per District Staff, FY 2014/15 revenue includes the 4% rate increase implemented for FY 2014/15.
- Includes revenue of \$1,512,270 in FY 2015/16 for the sale of property, the Administration Building for Victorville Water District.  
(source: Memorandum 11/17/2015 Subject Close of Escrow - 17185 Yuma Road, File: SRDA-315111712020)
- Interest income is per the District's budget for FY 2014/15 - 2015/16, and calculated here for all future years.
- Assumes new rates are implemented July 1, 2016 and subsequent increase are effecting each following July 1st.
- Debt coverage after rate increase is shown as "N/A" because outstanding debt is not funded by water rate revenue.
- Assumes the District will achieve a 19% reduction in water use in 2015/16 to meet the 28% Conservation target. The District's Financial Statements indicate a 9% reduction in water use occurred in 2014/15. Total reduction in rate revenue was 4% in FY 2014/15, and 13% is planned for FY 2015/16.

TABLE 2  
RESERVE FUND SUMMARY, UN-RESTRICTED RESERVES

SUMMARY OF CASH ACTIVITY GENERAL WATER FUND RESERVES	Budget								
	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24
<b>Total Beginning Cash (1)</b>	<b>\$ 39,526,413</b>								
<b>Un-Restricted Reserves:</b>									
<b>Operating Reserve</b>									
Beginning Reserve Balance (2)	\$ 6,000,000	\$ 3,637,816	\$ 4,496,647	\$ 4,513,793	\$ 3,579,150	\$ 4,632,877	\$ 4,874,000	\$ 3,546,504	\$ 3,760,342
Plus: Net Cash Flow (After Rate Increases)	(1,362,184)	1,858,831	1,017,147	65,357	2,053,727	490,469	(1,327,496)	213,839	3,435,157
Plus: Transfer of Debt Reserve Surplus	-	-	-	-	-	-	-	-	-
Less: Transfer Out to OPEB Reserve Fund	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	-	-	-	-
Less: Transfer Out to Capital Replacement Reserve	-	-	-	-	-	(249,346)	-	-	(1,861,499)
<b>Ending Operating Reserve Balance</b>	<b>\$ 3,637,816</b>	<b>\$ 4,496,647</b>	<b>\$ 4,513,793</b>	<b>\$ 3,579,150</b>	<b>\$ 4,632,877</b>	<b>\$ 4,874,000</b>	<b>\$ 3,546,504</b>	<b>\$ 3,760,342</b>	<b>\$ 5,334,000</b>
<b>Target Ending Balance (90-days of O&amp;M)</b>	<b>\$ 5,620,000</b>	<b>\$ 4,793,000</b>	<b>\$ 4,932,000</b>	<b>\$ 5,076,000</b>	<b>\$ 4,944,000</b>	<b>\$ 4,874,000</b>	<b>\$ 5,021,000</b>	<b>\$ 5,174,000</b>	<b>\$ 5,334,000</b>
<b>Capital Rehabilitation &amp; Replacement Reserve</b>									
Beginning Reserve Balance (2)	\$ 22,653,280	\$ 16,169,485	\$ 7,283,528	\$ 5,296,300	\$ 5,246,300	\$ 5,204,300	\$ 5,453,646	\$ 5,379,000	\$ 5,379,000
Plus: Grant Proceeds	-	-	-	-	-	-	-	-	-
Plus: Transfer of Operating Reserve Surplus	-	-	-	-	-	249,346	-	-	1,861,499
Less: Use of Reserves for Capital Projects	(6,483,795)	(8,885,957)	(1,987,228)	(50,000)	(42,000)	-	(74,646)	-	-
<b>Ending Capital Rehab &amp; Replacement Reserve Balance</b>	<b>\$ 16,169,485</b>	<b>\$ 7,283,528</b>	<b>\$ 5,296,300</b>	<b>\$ 5,246,300</b>	<b>\$ 5,204,300</b>	<b>\$ 5,453,646</b>	<b>\$ 5,379,000</b>	<b>\$ 5,379,000</b>	<b>\$ 7,240,499</b>
<b>Target Ending Balance (3% of Assets) (3)</b>	<b>\$ 5,247,100</b>	<b>\$ 5,348,300</b>	<b>\$ 5,296,300</b>	<b>\$ 5,246,300</b>	<b>\$ 5,204,300</b>	<b>\$ 5,265,100</b>	<b>\$ 5,379,000</b>	<b>\$ 5,440,700</b>	<b>\$ 5,404,900</b>
<b>Ending Balance - Excludes Restricted Reserves</b>	<b>\$ 19,807,301</b>	<b>\$ 11,780,175</b>	<b>\$ 9,810,093</b>	<b>\$ 8,825,450</b>	<b>\$ 9,837,177</b>	<b>\$ 10,327,646</b>	<b>\$ 8,925,504</b>	<b>\$ 9,139,342</b>	<b>\$ 12,574,499</b>
<b>Minimum Target Ending Balance - Excludes Restricted Reser</b>	<b>\$ 10,867,100</b>	<b>\$ 10,141,300</b>	<b>\$ 10,228,300</b>	<b>\$ 10,322,300</b>	<b>\$ 10,148,300</b>	<b>\$ 10,139,100</b>	<b>\$ 10,400,000</b>	<b>\$ 10,614,700</b>	<b>\$ 10,738,900</b>
<b>Ending Surplus/(Deficit) Compared to Reserve Targets</b>	<b>\$ 8,940,201</b>	<b>\$ 1,638,875</b>	<b>\$ (418,207)</b>	<b>\$ (1,496,850)</b>	<b>\$ (311,123)</b>	<b>\$ 188,546</b>	<b>\$ (1,474,496)</b>	<b>\$ (1,475,358)</b>	<b>\$ 1,835,599</b>
<b>Annual Interest Earnings Rate (4)</b>	<b>0.25%</b>	<b>0.50%</b>	<b>0.75%</b>	<b>1.00%</b>	<b>1.25%</b>	<b>1.50%</b>	<b>1.75%</b>	<b>2.00%</b>	<b>2.00%</b>

- (1) Total beginning cash balances for FY 2014/15 and 2015/16 were provided by District Staff on 2/8/2016 (File: *Water cash balance 1-8-16.xlsx*).
- (2) For purposes of this analysis, Unrestricted Cash (from file: *Water cash balance 1-8-16.xlsx*), net of Funds with Fiscal Agents is split between the Operating and Capital Reserves.
- (3) The Capital Rehabilitation & Replacement Reserve target is set to 3% of net assets. This is based on a net capital asset value of \$176.6 million, per District Staff, 8/3/2015 and the addition of planned assets in the District's CIP.
- (4) Historical interest earning rates were referenced on the CA Treasurer's Office website for funds invested in LAIF. Future years earnings were conservatively estimated through 2021 and phase into the historical 10 year average interest earnin

TABLE 3  
RESERVE FUND SUMMARY, RESTRICTED RESERVES

SUMMARY OF CASH ACTIVITY, continued RESTRICTED WATER FUND RESERVES	Budget								
	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24
<b>Restricted Reserves:</b>									
<b>Connection Fee &amp; Alternate Water Source Reserve</b>									
Beginning Reserve Balance (1)	\$ 5,227,435	\$ 5,915,504	\$ 6,624,131	\$ 7,356,936	\$ 8,117,729	\$ 8,910,547	\$ 9,735,551	\$ 10,597,270	\$ 11,500,562
Plus: Interest Earnings	13,069	29,578	49,681	73,569	101,472	133,658	170,372	211,945	230,011
Plus: Capacity Fee Revenue	675,000	679,050	683,124	687,223	691,346	691,346	691,346	691,346	691,346
Less: Use of Reserves for Capital Projects	-	-	-	-	-	-	-	-	-
<b>Ending Connection Fee Fund Balance</b>	<b>\$ 5,915,504</b>	<b>\$ 6,624,131</b>	<b>\$ 7,356,936</b>	<b>\$ 8,117,729</b>	<b>\$ 8,910,547</b>	<b>\$ 9,735,551</b>	<b>\$ 10,597,270</b>	<b>\$ 11,500,562</b>	<b>\$ 12,421,919</b>
<b>Target Ending Balance</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Debt Reserve</b>									
Beginning Reserve Balance (2)	\$ 1,949,500	\$ 1,954,374	\$ 1,964,146	\$ 1,978,877	\$ 1,998,665	\$ 2,023,649	\$ 2,054,004	\$ 2,089,949	\$ 2,131,748
Plus: Reserve Funding from New Debt Obligations	-	-	-	-	-	-	-	-	-
Plus: Interest Earnings	4,874	9,772	14,731	19,789	24,983	30,355	35,945	41,799	42,635
Less: Transfer of Surplus to Operating Reserve	-	-	-	-	-	-	-	-	-
<b>Ending Debt Reserve Balance</b>	<b>\$ 1,954,374</b>	<b>\$ 1,964,146</b>	<b>\$ 1,978,877</b>	<b>\$ 1,998,665</b>	<b>\$ 2,023,649</b>	<b>\$ 2,054,004</b>	<b>\$ 2,089,949</b>	<b>\$ 2,131,748</b>	<b>\$ 2,174,383</b>
<b>Target Ending Balance</b>	<b>\$ 1,000,680</b>	<b>\$ 999,945</b>	<b>\$ 999,945</b>	<b>\$ 999,945</b>	<b>\$ 996,570</b>	<b>\$ 996,570</b>	<b>\$ 995,778</b>	<b>\$ 993,763</b>	<b>\$ 991,886</b>
<b>Reserve for Debt Service (Early Debt Payoff)</b>									
Beginning Reserve Balance (3)	\$ 3,696,198	\$ 3,705,438	\$ 3,723,966	\$ 3,751,895	\$ 3,789,414	\$ 3,836,782	\$ 3,894,334	\$ 3,962,485	\$ 4,041,734
Plus: Reserve Funding from New Debt Obligations	-	-	-	-	-	-	-	-	-
Plus: Interest Earnings	9,240	18,527	27,930	37,519	47,368	57,552	68,151	79,250	80,835
Less: Transfer of Surplus to Operating Reserve	-	-	-	-	-	-	-	-	-
<b>Ending Reserve for Debt Service Balance</b>	<b>\$ 3,705,438</b>	<b>\$ 3,723,966</b>	<b>\$ 3,751,895</b>	<b>\$ 3,789,414</b>	<b>\$ 3,836,782</b>	<b>\$ 3,894,334</b>	<b>\$ 3,962,485</b>	<b>\$ 4,041,734</b>	<b>\$ 4,122,569</b>
<b>Target Ending Balance</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>OPEB Reserve Fund</b>									
Beginning Reserve Balance (4)	\$ -	\$ 1,000,000	\$ 2,005,000	\$ 3,020,038	\$ 4,050,238	\$ 5,100,866	\$ 5,177,379	\$ 5,267,983	\$ 5,373,343
Plus: Annual Contributions	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	-	-	-	-
Plus: Interest Earnings	-	5,000	15,038	30,200	50,628	76,513	90,604	105,360	107,467
Less: Use of Reserve	-	-	-	-	-	-	-	-	-
<b>Ending OPEB Reserve Balance</b>	<b>\$ 1,000,000</b>	<b>\$ 2,005,000</b>	<b>\$ 3,020,038</b>	<b>\$ 4,050,238</b>	<b>\$ 5,100,866</b>	<b>\$ 5,177,379</b>	<b>\$ 5,267,983</b>	<b>\$ 5,373,343</b>	<b>\$ 5,480,809</b>
<b>Target Ending Balance (5)</b>	<b>\$ 4,766,000</b>	<b>\$ 4,766,000</b>	<b>\$ 4,766,000</b>	<b>\$ 4,766,000</b>	<b>\$ 4,766,000</b>	<b>\$ 4,766,000</b>	<b>\$ 4,766,000</b>	<b>\$ 4,766,000</b>	<b>\$ 4,766,000</b>
<b>Ending Balance - Restricted Reserves</b>	<b>\$ 12,575,316</b>	<b>\$ 14,317,242</b>	<b>\$ 16,107,746</b>	<b>\$ 17,956,047</b>	<b>\$ 19,871,844</b>	<b>\$ 20,861,268</b>	<b>\$ 21,917,686</b>	<b>\$ 23,047,386</b>	<b>\$ 24,199,680</b>
<b>Minimum Target Ending Balance - Restricted Reserves</b>	<b>\$ 5,766,680</b>	<b>\$ 5,765,945</b>	<b>\$ 5,765,945</b>	<b>\$ 5,765,945</b>	<b>\$ 5,762,570</b>	<b>\$ 5,762,570</b>	<b>\$ 5,761,778</b>	<b>\$ 5,759,763</b>	<b>\$ 5,757,886</b>
<b>Ending Surplus/(Deficit) Compared to Reserve Targets</b>	<b>\$ 6,808,636</b>	<b>\$ 8,551,297</b>	<b>\$ 10,341,801</b>	<b>\$ 12,190,102</b>	<b>\$ 14,109,274</b>	<b>\$ 15,098,698</b>	<b>\$ 16,155,909</b>	<b>\$ 17,287,624</b>	<b>\$ 18,441,794</b>
<b>Annual Interest Earnings Rate (6)</b>	<b>0.25%</b>	<b>0.50%</b>	<b>0.75%</b>	<b>1.00%</b>	<b>1.25%</b>	<b>1.50%</b>	<b>1.75%</b>	<b>2.00%</b>	<b>2.00%</b>

(1) The beginning cash balance is the 2015 actual balance in the Connection Fee Fund, from the source file: Water cash balance 1-8-16.xlsx.

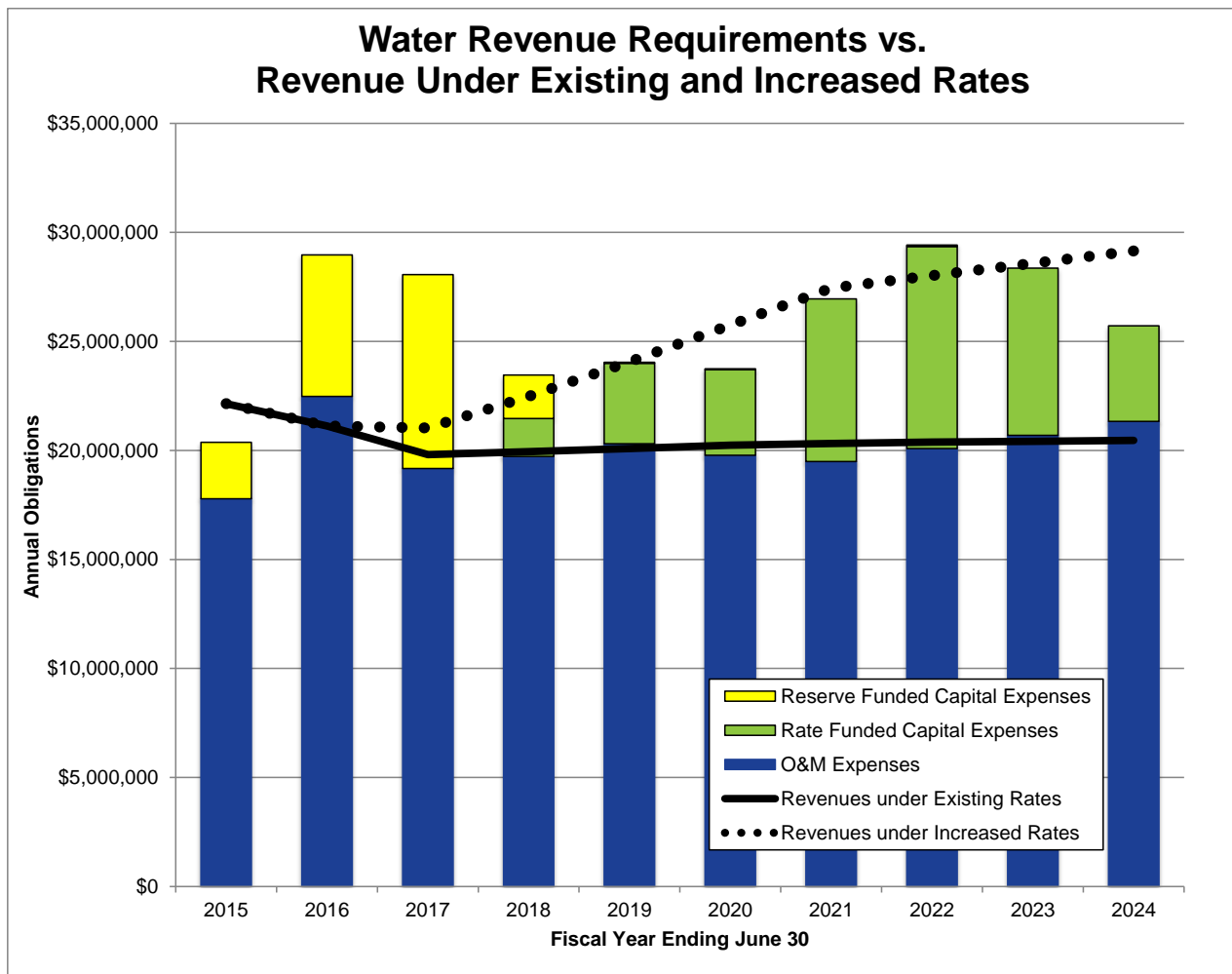
(2) Beginning debt reserve balance is the "Fund with Fiscal Agents", per cash balances as of 1/8/2016.

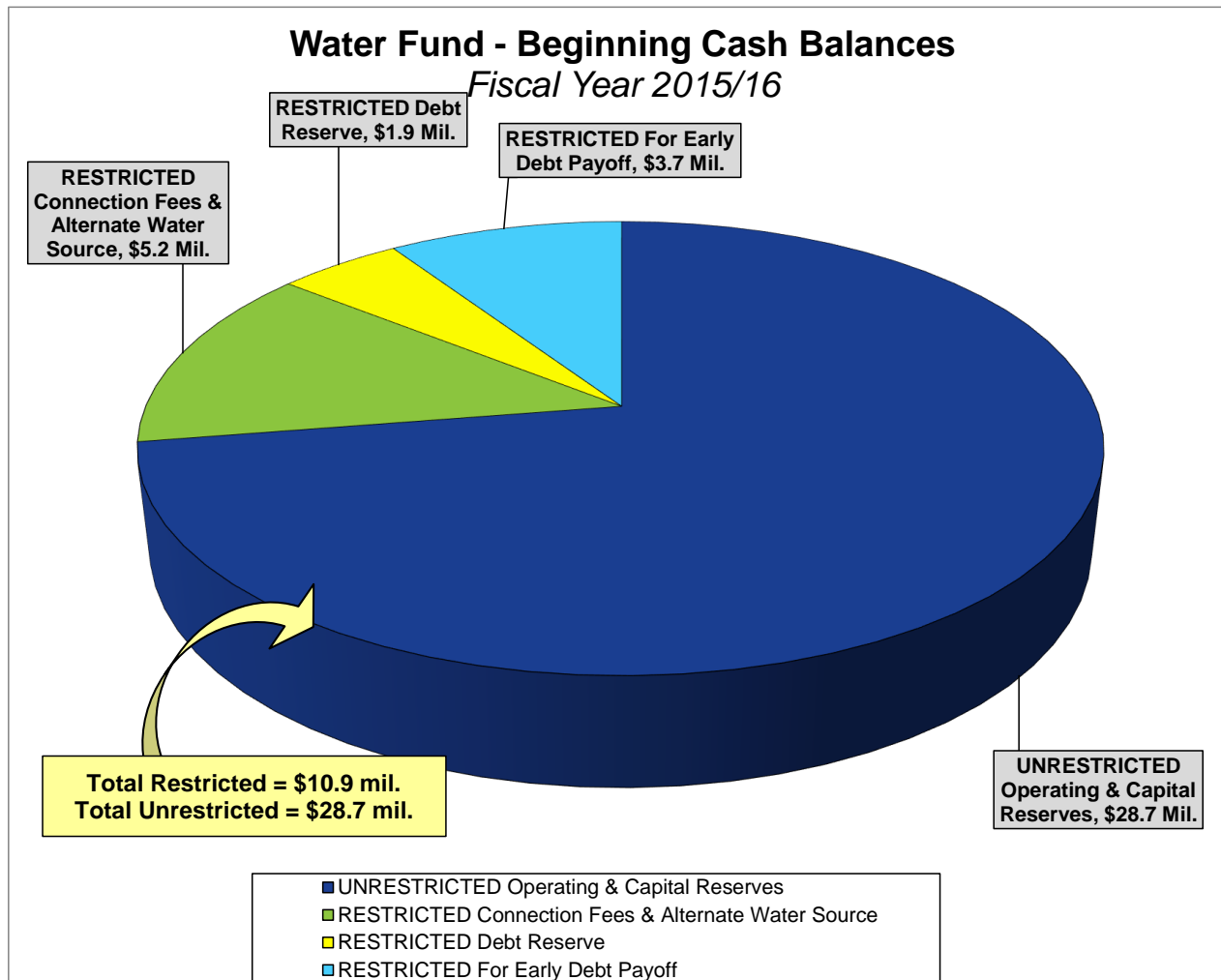
(3) Beginning Reserve for Debt Service balance is the "Reserved for Debt Service", per cash balances as of 1/8/2016. These funds will tentatively be used to pay off the 1998 COP's early.

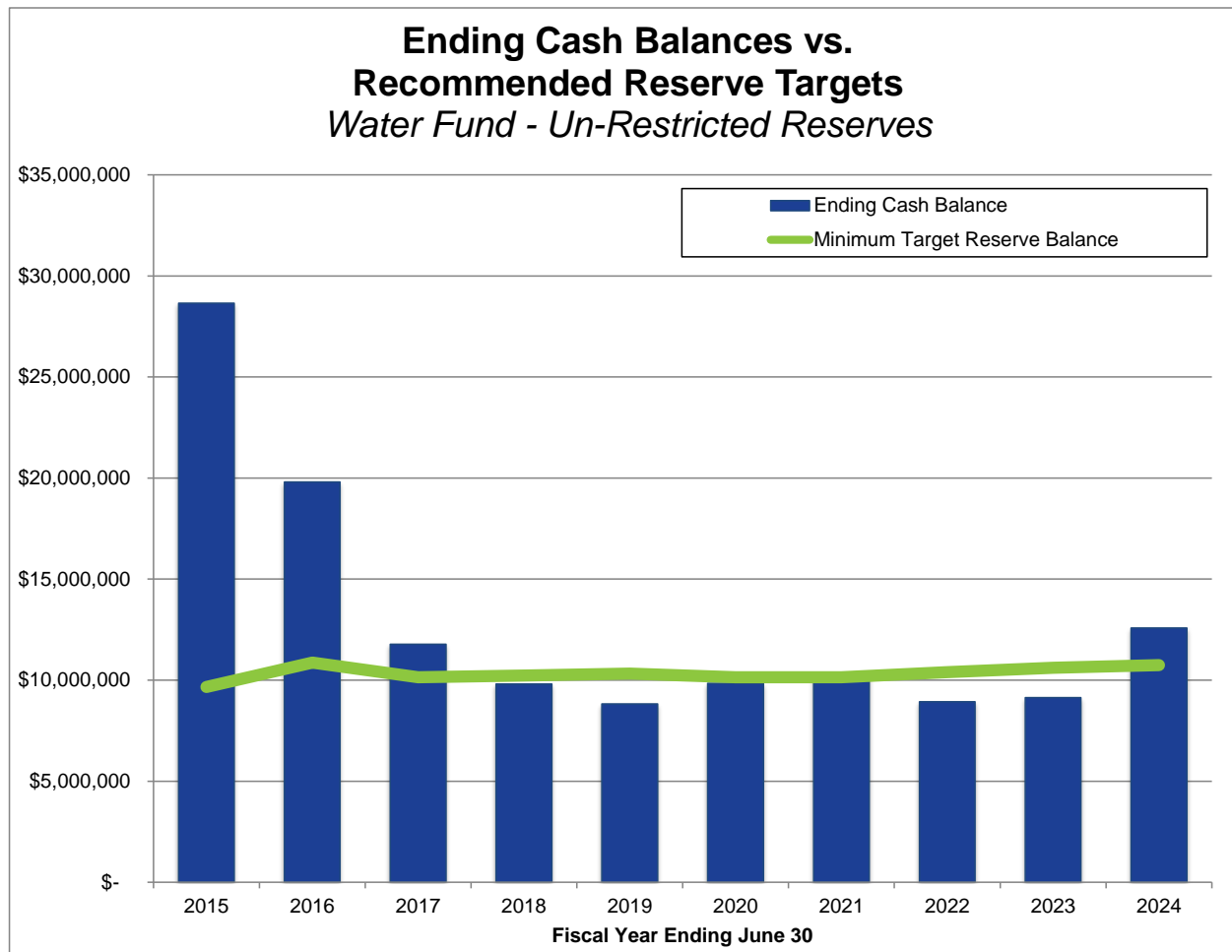
(4) Total beginning OPEB reserve cash balance is per source file: Water cash balance 1-8-16.xlsx.

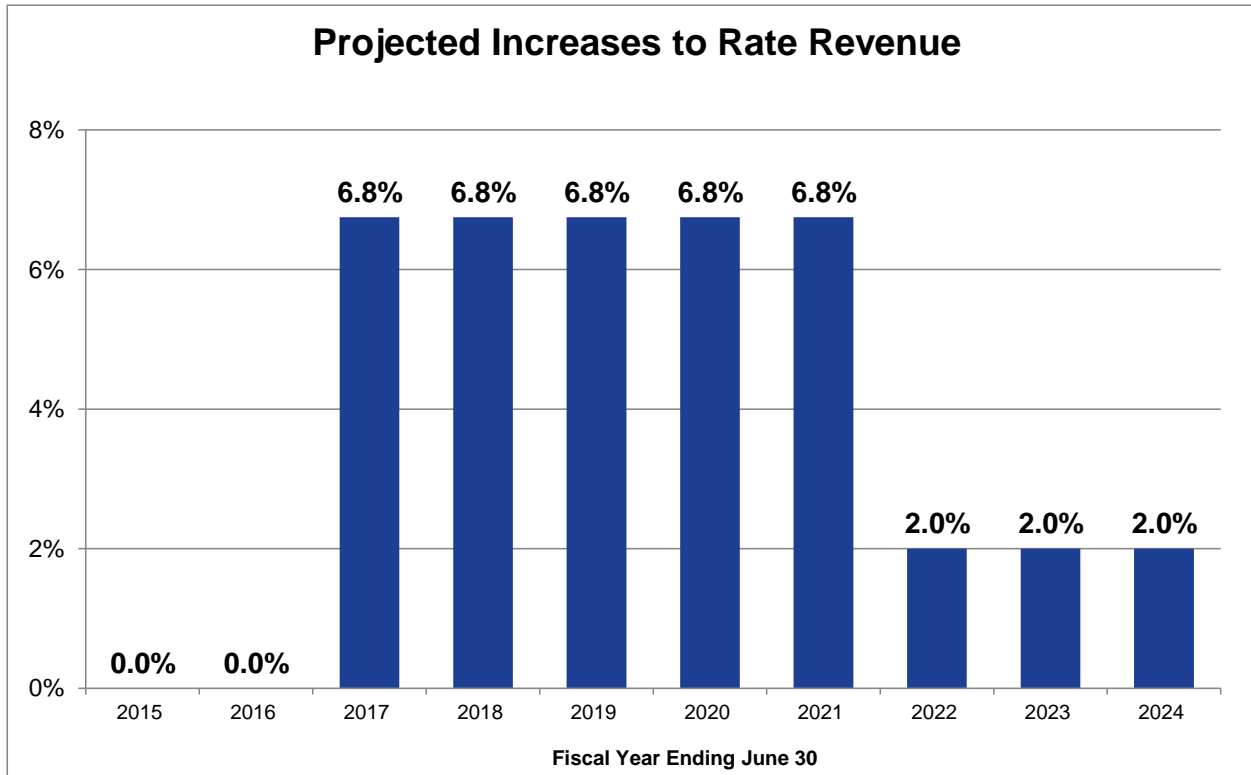
(5) The target ending balance for the OPEB reserve is set to the funding target of \$4.76 million, per Finance Department Staff.

(6) Historical interest earning rates were referenced on the CA Treasurer's Office website for funds invested in LAIF. Future years earnings were conservatively estimated through 2021 and phase into the historical 10 year average interest earnings rate.









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Operating Revenue and Expenses  
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EXHIBIT 1  
Financial Plan Alternative #1

REVENUE FORECAST (1,2)

ORG.	OBJECT	DESCRIPTION	CPI	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Water Sales Revenue:</b>													
4100010	44830	Water Sales-Residential (3)	1	\$ 9,740,661	\$ 7,897,500	\$ 7,944,885	\$ 7,992,554	\$ 8,040,510	\$ 8,088,753	\$ 8,088,753	\$ 8,088,753	\$ 8,088,753	\$ 8,088,753
4100010	44840	Water Sales-Other (3)	1	\$ 771,476	\$ 699,000	\$ 703,194	\$ 707,413	\$ 711,658	\$ 715,928	\$ 715,928	\$ 715,928	\$ 715,928	\$ 715,928
4100010	44850	Water Sales-Business (3)	1	\$ 1,864,886	\$ 1,414,300	\$ 1,422,786	\$ 1,431,323	\$ 1,439,910	\$ 1,448,550	\$ 1,448,550	\$ 1,448,550	\$ 1,448,550	\$ 1,448,550
<b>Readiness to Serve Revenue:</b>													
4100010	44860	Water Service Availability (3)	1	\$ 8,227,759	\$ 7,934,000	\$ 7,981,604	\$ 8,029,494	\$ 8,077,671	\$ 8,126,137	\$ 8,126,137	\$ 8,126,137	\$ 8,126,137	\$ 8,126,137
4100010	44880	Fire Service availability	1	\$ 67,740	\$ 70,000	\$ 70,420	\$ 70,843	\$ 71,268	\$ 71,695	\$ 71,695	\$ 71,695	\$ 71,695	\$ 71,695
<b>Other Revenue:</b>													
4100010	41280	Water Permit	1	\$ 17,802	\$ 20,400	\$ 20,800	\$ 21,200	\$ 21,600	\$ 22,000	\$ 22,400	\$ 22,800	\$ 23,300	\$ 23,800
4100010	42150	Penalty/Late Fees	1	\$ 324,690	\$ 341,700	\$ 348,500	\$ 355,500	\$ 362,600	\$ 369,900	\$ 377,300	\$ 384,800	\$ 392,500	\$ 400,400
4100010	44300	Plan Check Fees	1	\$ 9,955	\$ 25,500	\$ 26,000	\$ 26,500	\$ 27,000	\$ 27,500	\$ 28,100	\$ 28,700	\$ 29,300	\$ 29,900
4100010	44890	Water Service Fees	1	\$ 472,548	\$ 612,000	\$ 624,200	\$ 636,700	\$ 649,400	\$ 662,400	\$ 675,600	\$ 689,100	\$ 702,900	\$ 717,000
4100010	44900	Meter Installation Fees	1	\$ 47,663	\$ 56,100	\$ 57,200	\$ 58,300	\$ 59,500	\$ 60,700	\$ 61,900	\$ 63,100	\$ 64,400	\$ 65,700
4100010	44910	Service Call Fees	1	\$ 354,335	\$ 408,000	\$ 416,200	\$ 424,500	\$ 433,000	\$ 441,700	\$ 450,500	\$ 459,500	\$ 468,700	\$ 478,100
4100010	44940	Standby Fees	1	\$ 92,625	\$ 91,800	\$ 93,600	\$ 95,500	\$ 97,400	\$ 99,300	\$ 101,300	\$ 103,300	\$ 105,400	\$ 107,500
4100010	47230	Reimb-Other (4)	1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100020	44920	Connection Fees	1	\$ 406,753	\$ 500,000	\$ 503,000	\$ 506,018	\$ 509,054	\$ 512,108	\$ 512,108	\$ 512,108	\$ 512,108	\$ 512,108
4100020	44930	WATER SOURCE FEES	1	\$ 145,948	\$ 175,000	\$ 176,050	\$ 177,106	\$ 178,169	\$ 179,238	\$ 179,238	\$ 179,238	\$ 179,238	\$ 179,238
4100020	47100	PASS THROUGH (5)	1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100020	47400	MISCELLANEOUS REVENUE		\$ 83,995	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100020	45110	INTEREST INCOME (6)	See FP	\$ 57,707	\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100010	45100	INTEREST INCOME (6)	See FP	\$ 10,041	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
--	--	Revenue from Property Sale (7)	14	\$ -	\$ 1,512,270	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>TOTAL: REVENUE</b>					<b>\$ 22,696,585</b>	<b>\$ 21,792,570</b>	<b>\$ 20,388,439</b>	<b>\$ 20,532,950</b>	<b>\$ 20,678,739</b>	<b>\$ 20,825,908</b>	<b>\$ 20,859,508</b>	<b>\$ 20,893,708</b>	<b>\$ 20,928,908</b>

0.81	Adj. Factor for Volumetric Rate Revenue Reduction
-13%	Overall Reduction in Rate Revenue from 2015 to 2016 Due to 28% Conservation Mandate

REVENUE SUMMARY:

<b>RATE REVENUE:</b>													
WATER SALES RATE REVENUE (Variable Charges)		\$ 12,377,024	\$ 10,010,800	\$ 10,070,865	\$ 10,131,290	\$ 10,192,078	\$ 10,253,230	\$ 10,253,230	\$ 10,253,230	\$ 10,253,230	\$ 10,253,230	\$ 10,253,230	\$ 10,253,230
READINESS TO SERVE (Fixed Charges)		\$ 8,295,499	\$ 8,004,000	\$ 8,052,024	\$ 8,100,336	\$ 8,148,938	\$ 8,197,832	\$ 8,197,832	\$ 8,197,832	\$ 8,197,832	\$ 8,197,832	\$ 8,197,832	\$ 8,197,832
<b>OTHER REVENUE:</b>													
CONNECTION & ALTERNATE WATER SOURCE FEES		\$ 552,701	\$ 675,000	\$ 679,050	\$ 683,124	\$ 687,223	\$ 691,346	\$ 691,346	\$ 691,346	\$ 691,346	\$ 691,346	\$ 691,346	\$ 691,346
INTEREST INCOME		\$ 67,748	\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ALL OTHER OPERATING REVENUE		\$ 1,403,613	\$ 3,067,770	\$ 1,586,500	\$ 1,618,200	\$ 1,650,500	\$ 1,683,500	\$ 1,717,100	\$ 1,751,300	\$ 1,786,500	\$ 1,822,400	\$ 1,822,400	\$ 1,822,400
<b>TOTAL REVENUE</b>		<b>\$ 22,696,585</b>	<b>\$ 21,792,570</b>	<b>\$ 20,388,439</b>	<b>\$ 20,532,950</b>	<b>\$ 20,678,739</b>	<b>\$ 20,825,908</b>	<b>\$ 20,859,508</b>	<b>\$ 20,893,708</b>	<b>\$ 20,928,908</b>	<b>\$ 20,928,908</b>	<b>\$ 20,964,808</b>	



VICTORVILLE WATER DISTRICT  
WATER RATE STUDY  
Operating Revenue and Expenses  
Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

EXHIBIT 1  
Financial Plan Alternative #1

OPERATING EXPENSE FORECAST (1,2):

ORG.	OBJECT	DESCRIPTION	CPI	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>WATER PURCHASES</b>													
4100500	53030	Purchased Water (8,12)	7	\$ 516,414	\$ 996,600	\$ 283,300	\$ 301,715	\$ 321,326	\$ 342,212	\$ 364,456	\$ 388,146	\$ 413,375	\$ 440,244
4100500	53040	Groundwater Assessment (9,12)	10	\$ 105,075	\$ 105,900	\$ 76,100	\$ 77,622	\$ 79,174	\$ 80,758	\$ 82,373	\$ 84,021	\$ 85,701	\$ 87,415
4100500	53050	Groundwater Replenishment (10,12)	8	\$ 2,872,137	\$ 4,038,700	\$ 771,500	\$ 833,220	\$ 899,878	\$ 971,868	\$ 1,049,617	\$ 1,133,587	\$ 1,224,274	\$ 1,322,215
<b>SUBTOTAL: WATER PURCHASES</b>				<b>\$ 3,493,626</b>	<b>\$ 5,141,200</b>	<b>\$ 1,130,900</b>	<b>\$ 1,212,557</b>	<b>\$ 1,300,378</b>	<b>\$ 1,394,838</b>	<b>\$ 1,496,446</b>	<b>\$ 1,605,753</b>	<b>\$ 1,723,350</b>	<b>\$ 1,849,875</b>
<b>MAKEUP OBLIGATION</b>													
4100500	53060	Makeup Obligation (11,12)	9	\$ 285,400	\$ 308,300	\$ 151,500	\$ 163,620	\$ 176,710	\$ 190,846	\$ 206,114	\$ 222,603	\$ 240,411	\$ 259,644
<b>SUBTOTAL: MAKEUP OBLIGATION</b>				<b>\$ 285,400</b>	<b>\$ 308,300</b>	<b>\$ 151,500</b>	<b>\$ 163,620</b>	<b>\$ 176,710</b>	<b>\$ 190,846</b>	<b>\$ 206,114</b>	<b>\$ 222,603</b>	<b>\$ 240,411</b>	<b>\$ 259,644</b>
<b>PRODUCTION POWER</b>													
4100500	52050	Utilities-Production Power (12)	6	\$ 2,099,569	\$ 1,867,900	\$ 1,965,031	\$ 2,067,212	\$ 2,174,707	\$ 2,287,792	\$ 2,406,757	\$ 2,531,909	\$ 2,663,568	\$ 2,802,074
<b>SUBTOTAL: PRODUCTION POWER</b>				<b>\$ 2,099,569</b>	<b>\$ 1,867,900</b>	<b>\$ 1,965,031</b>	<b>\$ 2,067,212</b>	<b>\$ 2,174,707</b>	<b>\$ 2,287,792</b>	<b>\$ 2,406,757</b>	<b>\$ 2,531,909</b>	<b>\$ 2,663,568</b>	<b>\$ 2,802,074</b>
<b>SUPPLY SERVICES</b>													
4100500	51100	Full Time Wages	3	\$ 748,971	\$ 944,603	\$ 1,039,063	\$ 1,059,845	\$ 1,081,041	\$ 1,102,662	\$ 1,124,716	\$ 1,147,210	\$ 1,170,154	\$ 1,193,557
4100500	51110	Overtime Wages	4	\$ 48,806	\$ 78,028	\$ 79,589	\$ 81,180	\$ 82,804	\$ 84,460	\$ 86,149	\$ 87,872	\$ 89,630	\$ 91,422
4100500	51200	Fringe Benefits	4	\$ 319,941	\$ 366,306	\$ 373,632	\$ 381,105	\$ 388,727	\$ 396,501	\$ 404,431	\$ 412,520	\$ 420,770	\$ 429,186
4100500	51300	Payroll Taxes	3	\$ 11,148	\$ 24,087	\$ 26,496	\$ 27,026	\$ 27,566	\$ 28,117	\$ 28,680	\$ 29,253	\$ 29,838	\$ 30,435
4100500	52060	Telephone	2	\$ 8,117	\$ 11,000	\$ 11,220	\$ 11,444	\$ 11,673	\$ 11,907	\$ 12,145	\$ 12,388	\$ 12,636	\$ 12,888
4100500	52110	Supplies	2	\$ 9,599	\$ 16,300	\$ 16,626	\$ 16,959	\$ 17,298	\$ 17,644	\$ 17,997	\$ 18,356	\$ 18,724	\$ 19,098
4100500	52140	Training & Education	2	\$ 5,794	\$ 7,700	\$ 7,854	\$ 8,011	\$ 8,171	\$ 8,335	\$ 8,501	\$ 8,671	\$ 8,845	\$ 9,022
4100500	52201	Fuel	5	\$ 41,927	\$ 52,000	\$ 56,680	\$ 61,781	\$ 67,342	\$ 73,402	\$ 80,008	\$ 87,209	\$ 95,058	\$ 103,613
4100500	52230	Vehicle Expense	12	\$ 47,318	\$ 30,000	\$ 31,200	\$ 32,448	\$ 33,746	\$ 35,096	\$ 36,500	\$ 37,960	\$ 39,478	\$ 41,057
4100500	52240	Furniture & Small Tools <\$5000	2	\$ 7,367	\$ 10,000	\$ 10,200	\$ 10,404	\$ 10,612	\$ 10,824	\$ 11,041	\$ 11,262	\$ 11,487	\$ 11,717
4100500	52260	Computer Related Equip <\$5000	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100500	52300	Contract Services	2	\$ 193,220	\$ 600,000	\$ 612,000	\$ 624,240	\$ 636,725	\$ 649,459	\$ 662,448	\$ 675,697	\$ 689,211	\$ 702,996
4100500	52420	Grounds Maintenance	2	\$ 52,569	\$ 53,000	\$ 54,060	\$ 55,141	\$ 56,244	\$ 57,369	\$ 58,516	\$ 59,687	\$ 60,880	\$ 62,098
4100500	52440	Infrastructure Repairs	2	\$ 56,708	\$ 130,000	\$ 132,600	\$ 135,252	\$ 137,957	\$ 140,716	\$ 143,531	\$ 146,401	\$ 149,329	\$ 152,316
<b>SUBTOTAL: SUPPLY SERVICES</b>				<b>\$ 1,551,484</b>	<b>\$ 2,323,024</b>	<b>\$ 2,451,220</b>	<b>\$ 2,504,836</b>	<b>\$ 2,559,906</b>	<b>\$ 2,616,493</b>	<b>\$ 2,674,663</b>	<b>\$ 2,734,487</b>	<b>\$ 2,796,040</b>	<b>\$ 2,859,405</b>
<b>SCADA SERVICES</b>													
4100505	51100	Full Time Wages	3	\$ 68,731	\$ 132,310	\$ 145,541	\$ 148,452	\$ 151,421	\$ 154,449	\$ 157,538	\$ 160,689	\$ 163,903	\$ 167,181
4100505	51110	Overtime Wages	4	\$ 5,509	\$ 2,125	\$ 2,168	\$ 2,211	\$ 2,255	\$ 2,300	\$ 2,346	\$ 2,393	\$ 2,441	\$ 2,490
4100505	51200	Fringe Benefits	4	\$ 22,393	\$ 40,125	\$ 40,928	\$ 41,746	\$ 42,581	\$ 43,433	\$ 44,301	\$ 45,187	\$ 46,091	\$ 47,013
4100505	51220	Retiree Expense	4	\$ (507)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100505	51300	Payroll Taxes	3	\$ 1,129	\$ 3,374	\$ 3,711	\$ 3,786	\$ 3,861	\$ 3,939	\$ 4,017	\$ 4,098	\$ 4,180	\$ 4,263
4100505	52060	Telephone	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100505	52110	Supplies	2	\$ 3,677	\$ 3,000	\$ 3,060	\$ 3,121	\$ 3,184	\$ 3,247	\$ 3,312	\$ 3,378	\$ 3,446	\$ 3,515
4100505	52130	Subs, Publications & Memberships	2	\$ 13,000	\$ 18,500	\$ 18,870	\$ 19,247	\$ 19,632	\$ 20,025	\$ 20,425	\$ 20,834	\$ 21,251	\$ 21,676
4100505	52140	Training & Education	2	\$ 3,929	\$ 6,000	\$ 6,120	\$ 6,242	\$ 6,367	\$ 6,495	\$ 6,624	\$ 6,757	\$ 6,892	\$ 7,030
4100505	52201	Fuel	5	\$ 2,563	\$ 5,000	\$ 5,450	\$ 5,941	\$ 6,475	\$ 7,058	\$ 7,693	\$ 8,386	\$ 9,140	\$ 9,963
4100505	52230	Vehicle Expense	12	\$ 35	\$ 2,000	\$ 2,080	\$ 2,163	\$ 2,250	\$ 2,340	\$ 2,433	\$ 2,531	\$ 2,632	\$ 2,737
4100505	52240	Furniture & Small Tools <\$5000	2	\$ 11,147	\$ 15,000	\$ 15,300	\$ 15,606	\$ 15,918	\$ 16,236	\$ 16,561	\$ 16,892	\$ 17,230	\$ 17,575
4100505	52300	Contract Services	2	\$ 14,966	\$ 6,000	\$ 6,120	\$ 6,242	\$ 6,367	\$ 6,495	\$ 6,624	\$ 6,757	\$ 6,892	\$ 7,030
4100505	52440	Infrastructure Repairs	2	\$ 76,252	\$ 69,500	\$ 70,890	\$ 72,308	\$ 73,754	\$ 75,229	\$ 76,734	\$ 78,268	\$ 79,834	\$ 81,430
<b>SUBTOTAL: SCADA SERVICES</b>				<b>\$ 222,823</b>	<b>\$ 302,934</b>	<b>\$ 320,237</b>	<b>\$ 327,065</b>	<b>\$ 334,066</b>	<b>\$ 341,245</b>	<b>\$ 348,611</b>	<b>\$ 356,170</b>	<b>\$ 363,931</b>	<b>\$ 371,902</b>

VICTORVILLE WATER DISTRICT  
WATER RATE STUDY  
Operating Revenue and Expenses  
Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

EXHIBIT 1  
Financial Plan Alternative #1

OPERATING EXPENSE FORECAST, continued (1,2):

ORG.	OBJECT	DESCRIPTION	CPI	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>QUALITY SERVICES</b>													
4100515	51100	Full Time Wages	3	\$ 57,235	\$ 61,059	\$ 67,165	\$ 68,508	\$ 69,878	\$ 71,276	\$ 72,701	\$ 74,155	\$ 75,639	\$ 77,151
4100515	51110	Overtime Wages	4	\$ 604	\$ 6,542	\$ 6,673	\$ 6,806	\$ 6,942	\$ 7,081	\$ 7,223	\$ 7,367	\$ 7,515	\$ 7,665
4100515	51200	Fringe Benefits	4	\$ 25,191	\$ 23,740	\$ 24,215	\$ 24,699	\$ 25,193	\$ 25,697	\$ 26,211	\$ 26,735	\$ 27,270	\$ 27,815
4100515	51300	Payroll Taxes	3	\$ 730	\$ 1,557	\$ 1,713	\$ 1,747	\$ 1,782	\$ 1,818	\$ 1,854	\$ 1,891	\$ 1,929	\$ 1,967
4100515	52060	Telephone	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100515	52110	Supplies (12)	2	\$ 111,161	\$ 144,000	\$ 146,880	\$ 149,818	\$ 152,814	\$ 155,870	\$ 158,988	\$ 162,167	\$ 165,411	\$ 168,719
4100515	52140	Training & Education	2	\$ 589	\$ 500	\$ 510	\$ 520	\$ 531	\$ 541	\$ 552	\$ 563	\$ 574	\$ 586
4100515	52201	Fuel	5	\$ 2,626	\$ 3,700	\$ 4,033	\$ 4,396	\$ 4,792	\$ 5,223	\$ 5,693	\$ 6,205	\$ 6,764	\$ 7,372
4100515	52230	Vehicle Expense	12	\$ 2,574	\$ 2,300	\$ 2,392	\$ 2,488	\$ 2,587	\$ 2,691	\$ 2,798	\$ 2,910	\$ 3,027	\$ 3,148
4100515	52240	Furniture & Small Tools <\$5000	2	\$ 417	\$ 500	\$ 510	\$ 520	\$ 531	\$ 541	\$ 552	\$ 563	\$ 574	\$ 586
4100515	52300	Contract Services	2	\$ 72,497	\$ 191,000	\$ 194,820	\$ 198,716	\$ 202,691	\$ 206,745	\$ 210,879	\$ 215,097	\$ 219,399	\$ 223,787
4100515	52360	Federal, State & Local Fees	2	\$ 29,263	\$ 22,000	\$ 22,440	\$ 22,889	\$ 23,347	\$ 23,814	\$ 24,290	\$ 24,776	\$ 25,271	\$ 25,777
4100515	52440	Infrastructure Repairs	2	\$ 27,898	\$ 20,000	\$ 20,400	\$ 20,808	\$ 21,224	\$ 21,649	\$ 22,082	\$ 22,523	\$ 22,974	\$ 23,433
<b>SUBTOTAL: QUALITY SERVICES</b>				<b>\$ 330,785</b>	<b>\$ 476,898</b>	<b>\$ 491,750</b>	<b>\$ 501,915</b>	<b>\$ 512,311</b>	<b>\$ 522,945</b>	<b>\$ 533,823</b>	<b>\$ 544,954</b>	<b>\$ 556,345</b>	<b>\$ 568,006</b>
<b>FIELD SERVICES</b>													
4100535	51100	Full Time Wages	3	\$ 917,826	\$ 1,057,448	\$ 1,163,193	\$ 1,186,457	\$ 1,210,186	\$ 1,234,390	\$ 1,259,077	\$ 1,284,259	\$ 1,309,944	\$ 1,336,143
4100535	51110	Overtime Wages	4	\$ 91,512	\$ 94,543	\$ 96,434	\$ 98,363	\$ 100,330	\$ 102,336	\$ 104,383	\$ 106,471	\$ 108,600	\$ 110,772
4100535	51120	Part Time Wages	4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100535	51200	Fringe Benefits	4	\$ 427,170	\$ 434,457	\$ 443,146	\$ 452,009	\$ 461,049	\$ 470,270	\$ 479,676	\$ 489,269	\$ 499,055	\$ 509,036
4100535	51300	Payroll Taxes	3	\$ 14,168	\$ 26,965	\$ 29,662	\$ 30,255	\$ 30,860	\$ 31,477	\$ 32,107	\$ 32,749	\$ 33,404	\$ 34,072
4100535	52060	Telephone	2	\$ 2,358	\$ 6,300	\$ 6,426	\$ 6,555	\$ 6,686	\$ 6,819	\$ 6,956	\$ 7,095	\$ 7,237	\$ 7,381
4100535	52110	Supplies	2	\$ 12,265	\$ 16,000	\$ 16,320	\$ 16,646	\$ 16,979	\$ 17,319	\$ 17,665	\$ 18,019	\$ 18,379	\$ 18,747
4100535	52140	Training & Education	2	\$ 4,378	\$ 4,000	\$ 4,080	\$ 4,162	\$ 4,245	\$ 4,330	\$ 4,416	\$ 4,505	\$ 4,595	\$ 4,687
4100535	52201	Fuel	5	\$ 51,325	\$ 68,000	\$ 74,120	\$ 80,791	\$ 88,062	\$ 95,988	\$ 104,626	\$ 114,043	\$ 124,307	\$ 135,494
4100535	52220	Equipment	2	\$ 45,311	\$ 56,000	\$ 57,120	\$ 58,262	\$ 59,428	\$ 60,616	\$ 61,829	\$ 63,065	\$ 64,326	\$ 65,613
4100535	52230	Vehicle Expense	12	\$ 25,750	\$ 61,100	\$ 63,544	\$ 66,086	\$ 68,729	\$ 71,478	\$ 74,337	\$ 77,311	\$ 80,403	\$ 83,620
4100535	52240	Furniture & Small Tools <\$5000	2	\$ 8,824	\$ 25,000	\$ 25,500	\$ 26,010	\$ 26,530	\$ 27,061	\$ 27,602	\$ 28,154	\$ 28,717	\$ 29,291
4100535	52260	Computer Related Equip < \$5000	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100535	52300	Contract Services	2	\$ 7,774	\$ 14,000	\$ 14,280	\$ 14,566	\$ 14,857	\$ 15,154	\$ 15,457	\$ 15,766	\$ 16,082	\$ 16,403
4100535	52440	Infrastructure Repairs	2	\$ 390,570	\$ 395,000	\$ 402,900	\$ 410,958	\$ 419,177	\$ 427,561	\$ 436,112	\$ 444,834	\$ 453,731	\$ 462,805
<b>SUBTOTAL: FIELD SERVICES</b>				<b>\$ 1,999,231</b>	<b>\$ 2,258,813</b>	<b>\$ 2,396,724</b>	<b>\$ 2,451,118</b>	<b>\$ 2,507,117</b>	<b>\$ 2,564,799</b>	<b>\$ 2,624,243</b>	<b>\$ 2,685,539</b>	<b>\$ 2,748,779</b>	<b>\$ 2,814,064</b>
<b>ENGINEERING SERVICES</b>													
4104500	51100	Full Time Wages	3	\$ 507,121	\$ 580,003	\$ 638,003	\$ 650,763	\$ 663,779	\$ 677,054	\$ 690,595	\$ 704,407	\$ 718,495	\$ 732,865
4104500	51110	Overtime Wages	4	\$ -	\$ 22,807	\$ 23,263	\$ 23,728	\$ 24,203	\$ 24,687	\$ 25,181	\$ 25,684	\$ 26,198	\$ 26,722
4104500	51200	Fringe Benefits	4	\$ 197,005	\$ 181,913	\$ 185,551	\$ 189,262	\$ 193,048	\$ 196,908	\$ 200,847	\$ 204,864	\$ 208,961	\$ 213,140
4104500	51300	Payroll Taxes	3	\$ 7,026	\$ 14,790	\$ 16,269	\$ 16,594	\$ 16,926	\$ 17,265	\$ 17,610	\$ 17,962	\$ 18,322	\$ 18,688
4104500	52110	Supplies	2	\$ 6,234	\$ 6,000	\$ 6,120	\$ 6,242	\$ 6,367	\$ 6,495	\$ 6,624	\$ 6,757	\$ 6,892	\$ 7,030
4104500	52140	Training & Education	2	\$ 430	\$ 1,000	\$ 1,020	\$ 1,040	\$ 1,061	\$ 1,082	\$ 1,104	\$ 1,126	\$ 1,149	\$ 1,172
4104500	52201	Fuel	5	\$ 2,837	\$ 10,500	\$ 11,445	\$ 12,475	\$ 13,598	\$ 14,822	\$ 16,156	\$ 17,610	\$ 19,194	\$ 20,922
4104500	52230	Vehicle Expense	12	\$ 565	\$ 5,000	\$ 5,200	\$ 5,408	\$ 5,624	\$ 5,849	\$ 6,083	\$ 6,327	\$ 6,580	\$ 6,843
4104500	52240	Furniture & Small Tools <\$5000	2	\$ 448	\$ 500	\$ 510	\$ 520	\$ 531	\$ 541	\$ 552	\$ 563	\$ 574	\$ 586
4104500	52300	Contract Services	2	\$ 29,138	\$ 72,000	\$ 73,440	\$ 74,909	\$ 76,407	\$ 77,935	\$ 79,494	\$ 81,084	\$ 82,705	\$ 84,359
4104500	52440	Infrastructure Repairs	2	\$ -	\$ 10,000	\$ 10,200	\$ 10,404	\$ 10,612	\$ 10,824	\$ 11,041	\$ 11,262	\$ 11,487	\$ 11,717
<b>SUBTOTAL: ENGINEERING SERVICES</b>				<b>\$ 750,804</b>	<b>\$ 904,513</b>	<b>\$ 971,022</b>	<b>\$ 991,347</b>	<b>\$ 1,012,156</b>	<b>\$ 1,033,463</b>	<b>\$ 1,055,287</b>	<b>\$ 1,077,645</b>	<b>\$ 1,100,557</b>	<b>\$ 1,124,044</b>

VICTORVILLE WATER DISTRICT  
WATER RATE STUDY  
Operating Revenue and Expenses  
Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

EXHIBIT 1  
Financial Plan Alternative #1

OPERATING EXPENSE FORECAST, continued (1,2):

ORG.	OBJECT	DESCRIPTION	CPI	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>ENVIRONMENTAL PROGRAMS</b>													
4100525	51100	Full Time Wages	3	\$ 196,635	\$ 242,283	\$ 266,511	\$ 271,842	\$ 277,278	\$ 282,824	\$ 288,480	\$ 294,250	\$ 300,135	\$ 306,138
4100525	51110	Overtime Wages	4	\$ -	\$ 3,827	\$ 3,904	\$ 3,982	\$ 4,061	\$ 4,142	\$ 4,225	\$ 4,310	\$ 4,396	\$ 4,484
4100525	51200	Fringe Benefits	4	\$ 78,793	\$ 84,697	\$ 86,391	\$ 88,119	\$ 89,881	\$ 91,679	\$ 93,512	\$ 95,383	\$ 97,290	\$ 99,236
4100525	51300	Payroll Taxes	3	\$ 5,929	\$ 6,178	\$ 6,796	\$ 6,932	\$ 7,070	\$ 7,212	\$ 7,356	\$ 7,503	\$ 7,653	\$ 7,806
4100525	52010	Utilities-Electricity	6	\$ 2,025	\$ 2,225	\$ 2,341	\$ 2,462	\$ 2,590	\$ 2,725	\$ 2,867	\$ 3,016	\$ 3,173	\$ 3,338
4100525	52020	Utilities-Water Usage	13	\$ 122	\$ 135	\$ 143	\$ 152	\$ 161	\$ 170	\$ 181	\$ 192	\$ 203	\$ 215
4100525	52030	Utilities-Natural Gas	13	\$ 149	\$ 195	\$ 207	\$ 219	\$ 232	\$ 246	\$ 261	\$ 277	\$ 293	\$ 311
4100525	52060	Telephone	2	\$ 362	\$ 400	\$ 408	\$ 416	\$ 424	\$ 433	\$ 442	\$ 450	\$ 459	\$ 469
4100525	52110	Supplies	2	\$ 7,142	\$ 4,600	\$ 4,692	\$ 4,786	\$ 4,882	\$ 4,979	\$ 5,079	\$ 5,180	\$ 5,284	\$ 5,390
4100525	52140	Training & Education	2	\$ 130	\$ 1,200	\$ 1,224	\$ 1,248	\$ 1,273	\$ 1,299	\$ 1,325	\$ 1,351	\$ 1,378	\$ 1,406
4100525	52160	Conservation Programs	2	\$ 44,714	\$ 43,670	\$ 44,543	\$ 45,434	\$ 46,343	\$ 47,270	\$ 48,215	\$ 49,180	\$ 50,163	\$ 51,166
4100525	52201	Fuel	5	\$ 2,906	\$ 3,000	\$ 3,270	\$ 3,564	\$ 3,885	\$ 4,235	\$ 4,616	\$ 5,031	\$ 5,484	\$ 5,978
4100525	52230	Vehicle Expense	12	\$ 875	\$ 2,700	\$ 2,808	\$ 2,920	\$ 3,037	\$ 3,159	\$ 3,285	\$ 3,416	\$ 3,553	\$ 3,695
4100525	52240	Furniture & Small Tools <\$5000	2	\$ 177	\$ 500	\$ 510	\$ 520	\$ 531	\$ 541	\$ 552	\$ 563	\$ 574	\$ 586
4100525	52260	Computer Related Equip < \$5000	2	\$ 1,862	\$ 3,600	\$ 3,672	\$ 3,745	\$ 3,820	\$ 3,897	\$ 3,975	\$ 4,054	\$ 4,135	\$ 4,218
4100525	52300	Contract Services	2	\$ 4,720	\$ 3,150	\$ 3,213	\$ 3,277	\$ 3,343	\$ 3,410	\$ 3,478	\$ 3,547	\$ 3,618	\$ 3,691
<b>SUBTOTAL: ENVIRONMENTAL PROGRAMS</b>				<b>\$ 346,541</b>	<b>\$ 402,360</b>	<b>\$ 430,632</b>	<b>\$ 439,619</b>	<b>\$ 448,813</b>	<b>\$ 458,221</b>	<b>\$ 467,848</b>	<b>\$ 477,704</b>	<b>\$ 487,793</b>	<b>\$ 498,126</b>
<b>CUSTOMER SERVICES</b>													
4100545	51100	Full Time Wages	3	\$ 1,004,243	\$ 1,032,661	\$ 1,135,927	\$ 1,158,646	\$ 1,181,819	\$ 1,205,455	\$ 1,229,564	\$ 1,254,155	\$ 1,279,238	\$ 1,304,823
4100545	51110	Overtime Wages	4	\$ 7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100545	51120	Part Time Wages	4	\$ 906	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100545	51200	Fringe Benefits	4	\$ 467,287	\$ 355,952	\$ 363,071	\$ 370,332	\$ 377,739	\$ 385,294	\$ 393,000	\$ 400,860	\$ 408,877	\$ 417,054
4100545	51300	Payroll Taxes	3	\$ 18,550	\$ 26,333	\$ 28,966	\$ 29,546	\$ 30,137	\$ 30,739	\$ 31,354	\$ 31,981	\$ 32,621	\$ 33,273
4100545	52010	Utilities-Electricity	6	\$ 11,244	\$ 12,326	\$ 12,967	\$ 13,641	\$ 14,351	\$ 15,097	\$ 15,882	\$ 16,708	\$ 17,576	\$ 18,490
4100545	52020	Utilities-Water Usage	13	\$ 672	\$ 746	\$ 791	\$ 838	\$ 888	\$ 942	\$ 998	\$ 1,058	\$ 1,122	\$ 1,189
4100545	52030	Utilities-Natural Gas	13	\$ 828	\$ 1,080	\$ 1,145	\$ 1,213	\$ 1,286	\$ 1,363	\$ 1,445	\$ 1,532	\$ 1,624	\$ 1,721
4100545	52060	Telephone	2	\$ 140	\$ 300	\$ 306	\$ 312	\$ 318	\$ 325	\$ 331	\$ 338	\$ 345	\$ 351
4100545	52110	Supplies	2	\$ 140,267	\$ 141,782	\$ 144,618	\$ 147,510	\$ 150,460	\$ 153,469	\$ 156,539	\$ 159,670	\$ 162,863	\$ 166,120
4100545	52140	Training & Education	2	\$ 1,243	\$ 7,788	\$ 7,944	\$ 8,103	\$ 8,265	\$ 8,430	\$ 8,599	\$ 8,771	\$ 8,946	\$ 9,125
4100545	52150	Travel & Meetings	2	\$ 134	\$ 5,250	\$ 5,355	\$ 5,462	\$ 5,571	\$ 5,683	\$ 5,796	\$ 5,912	\$ 6,031	\$ 6,151
4100545	52240	Furniture & Small Tools <\$5000	2	\$ -	\$ 2,400	\$ 2,448	\$ 2,497	\$ 2,547	\$ 2,598	\$ 2,650	\$ 2,703	\$ 2,757	\$ 2,812
4100545	52300	Contract Services	2	\$ 293,665	\$ 317,623	\$ 323,975	\$ 330,455	\$ 337,064	\$ 343,805	\$ 350,681	\$ 357,695	\$ 364,849	\$ 372,146
4100545	52350	Cust-Legal	2	\$ 56	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100545	52360	Federal, State & Local Fees	2	\$ 4,306	\$ 8,000	\$ 8,160	\$ 8,323	\$ 8,490	\$ 8,659	\$ 8,833	\$ 9,009	\$ 9,189	\$ 9,373
4100545	52410	Building Maintenance	2	\$ 288	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100545	54050	Uncollectable Write-Offs (12)	1	\$ 147,127	\$ 88,200	\$ 88,729	\$ 89,262	\$ 89,797	\$ 90,336	\$ 90,336	\$ 90,336	\$ 90,336	\$ 90,336
<b>SUBTOTAL: CUSTOMER SERVICES</b>				<b>\$ 2,090,964</b>	<b>\$ 2,000,441</b>	<b>\$ 2,124,402</b>	<b>\$ 2,166,140</b>	<b>\$ 2,208,732</b>	<b>\$ 2,252,196</b>	<b>\$ 2,296,008</b>	<b>\$ 2,340,728</b>	<b>\$ 2,386,374</b>	<b>\$ 2,432,967</b>

VICTORVILLE WATER DISTRICT

WATER RATE STUDY

Operating Revenue and Expenses

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

EXHIBIT 1

Financial Plan Alternative #1

OPERATING EXPENSE FORECAST, continued (1,2):

ORG.	OBJECT	DESCRIPTION	CPI	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>METER SERVICES</b>													
4100530	51100	Full Time Wages	3	\$ 476,502	\$ 530,087	\$ 583,096	\$ 594,758	\$ 606,653	\$ 618,786	\$ 631,162	\$ 643,785	\$ 656,660	\$ 669,794
4100530	51110	Overtime Wages	4	\$ 17,086	\$ 76,141	\$ 77,664	\$ 79,217	\$ 80,801	\$ 82,417	\$ 84,066	\$ 85,747	\$ 87,462	\$ 89,211
4100530	51120	Part Time Wages	4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100530	51200	Fringe Benefits	4	\$ 220,278	\$ 208,877	\$ 213,055	\$ 217,316	\$ 221,662	\$ 226,095	\$ 230,617	\$ 235,229	\$ 239,934	\$ 244,733
4100530	51300	Payroll Taxes	3	\$ 9,415	\$ 13,517	\$ 14,869	\$ 15,166	\$ 15,469	\$ 15,779	\$ 16,094	\$ 16,416	\$ 16,745	\$ 17,079
4100530	52060	Telephone	2	\$ 2,888	\$ 2,400	\$ 2,448	\$ 2,497	\$ 2,547	\$ 2,598	\$ 2,650	\$ 2,703	\$ 2,757	\$ 2,812
4100530	52110	Supplies	2	\$ 3,646	\$ 4,000	\$ 4,080	\$ 4,162	\$ 4,245	\$ 4,330	\$ 4,416	\$ 4,505	\$ 4,595	\$ 4,687
4100530	52140	Training & Education	2	\$ 505	\$ 2,000	\$ 2,040	\$ 2,081	\$ 2,122	\$ 2,165	\$ 2,208	\$ 2,252	\$ 2,297	\$ 2,343
4100530	52201	Fuel	5	\$ 37,106	\$ 41,100	\$ 44,799	\$ 48,831	\$ 53,226	\$ 58,016	\$ 63,237	\$ 68,929	\$ 75,132	\$ 81,894
4100530	52220	Equipment	2	\$ 4,906	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100530	52230	Vehicle Expense	12	\$ 21,530	\$ 28,000	\$ 29,120	\$ 30,285	\$ 31,496	\$ 32,756	\$ 34,066	\$ 35,429	\$ 36,846	\$ 38,320
4100530	52240	Furniture & Small Tools <\$5000	2	\$ 733	\$ 15,000	\$ 15,300	\$ 15,606	\$ 15,918	\$ 16,236	\$ 16,561	\$ 16,892	\$ 17,230	\$ 17,575
4100530	52300	Contract Services	2	\$ 6,937	\$ 10,000	\$ 10,200	\$ 10,404	\$ 10,612	\$ 10,824	\$ 11,041	\$ 11,262	\$ 11,487	\$ 11,717
4100530	52440	Infrastructure Repairs	2	\$ 33,200	\$ 35,000	\$ 35,700	\$ 36,414	\$ 37,142	\$ 37,885	\$ 38,643	\$ 39,416	\$ 40,204	\$ 41,008
4100530	52445	Meter Service Installations	2	\$ 8,364	\$ 31,000	\$ 31,620	\$ 32,252	\$ 32,897	\$ 33,555	\$ 34,227	\$ 34,911	\$ 35,609	\$ 36,321
4100530	52446	Meter Service Change outs	11	\$ 1,002,933	\$ 2,000,000	\$ 2,060,000	\$ 2,121,800	\$ 2,185,454	\$ 2,250,000	\$ 2,315,000	\$ 2,380,000	\$ 2,445,000	\$ 2,510,000
<b>SUBTOTAL: METER SERVICES</b>				\$ 1,846,028	\$ 2,997,122	\$ 3,123,990	\$ 3,210,788	\$ 3,300,246	\$ 3,390,700	\$ 3,481,166	\$ 3,572,641	\$ 3,664,126	\$ 3,755,611
<b>ADMINISTRATIVE SERVICES</b>													
4100030	51100	Full Time Wages	3	\$ 629,131	\$ 565,963	\$ 622,559	\$ 635,010	\$ 647,711	\$ 660,665	\$ 673,878	\$ 687,356	\$ 701,103	\$ 715,125
4100030	51110	Overtime Wages	4	\$ 173	\$ 145,192	\$ 148,096	\$ 151,058	\$ 154,079	\$ 157,160	\$ 160,304	\$ 163,510	\$ 166,780	\$ 170,116
4100030	51200	Fringe Benefits	4	\$ 224,467	\$ 162,533	\$ 165,784	\$ 169,099	\$ 172,481	\$ 175,931	\$ 179,450	\$ 183,039	\$ 186,699	\$ 190,433
4100030	51220	Retiree Health Care	4	\$ (63,235)	\$ 357,000	\$ 364,140	\$ 371,423	\$ 378,851	\$ 386,428	\$ 394,157	\$ 402,040	\$ 410,081	\$ 418,282
4100030	51300	Payroll Taxes	3	\$ 6,826	\$ 14,432	\$ 15,875	\$ 16,193	\$ 16,517	\$ 16,847	\$ 17,184	\$ 17,528	\$ 17,878	\$ 18,236
4100030	52010	Utilities-Electricity	6	\$ 39,915	\$ 48,300	\$ 50,812	\$ 53,454	\$ 56,233	\$ 59,158	\$ 62,234	\$ 65,470	\$ 68,874	\$ 72,456
4100030	52020	Utilities-Water Usage	13	\$ 10,043	\$ 10,100	\$ 10,706	\$ 11,348	\$ 12,029	\$ 12,751	\$ 13,516	\$ 14,327	\$ 15,187	\$ 16,098
4100030	52030	Utilities-Natural Gas	13	\$ 4,241	\$ 5,100	\$ 5,406	\$ 5,730	\$ 6,074	\$ 6,439	\$ 6,825	\$ 7,234	\$ 7,669	\$ 8,129
4100030	52040	Utilities-Sanitation	13	\$ 4,045	\$ 8,800	\$ 9,328	\$ 9,888	\$ 10,481	\$ 11,110	\$ 11,776	\$ 12,483	\$ 13,232	\$ 14,026
4100030	52060	Telephone	2	\$ 22,813	\$ 26,000	\$ 26,520	\$ 27,050	\$ 27,591	\$ 28,143	\$ 28,706	\$ 29,280	\$ 29,866	\$ 30,463
4100030	52110	Supplies	2	\$ 5,489	\$ 9,000	\$ 9,180	\$ 9,364	\$ 9,551	\$ 9,742	\$ 9,937	\$ 10,135	\$ 10,338	\$ 10,545
4100030	52130	Subs, Publications & Memberships	2	\$ 5,569	\$ 24,000	\$ 24,480	\$ 24,970	\$ 25,469	\$ 25,978	\$ 26,498	\$ 27,028	\$ 27,568	\$ 28,120
4100030	52140	Training & Education	2	\$ 5,768	\$ 3,000	\$ 3,060	\$ 3,121	\$ 3,184	\$ 3,247	\$ 3,312	\$ 3,378	\$ 3,446	\$ 3,515
4100030	52150	Travel & Meetings	2	\$ 1,089	\$ 500	\$ 510	\$ 520	\$ 531	\$ 541	\$ 552	\$ 563	\$ 574	\$ 586
4100030	52160	Marketing Promotions	2	\$ 30,079	\$ 62,500	\$ 63,750	\$ 65,025	\$ 66,326	\$ 67,652	\$ 69,005	\$ 70,385	\$ 71,793	\$ 73,229
4100030	52170	Legal Notices	2	\$ 2,029	\$ 3,000	\$ 3,060	\$ 3,121	\$ 3,184	\$ 3,247	\$ 3,312	\$ 3,378	\$ 3,446	\$ 3,515
4100030	52201	Fuel	5	\$ 6,108	\$ 5,000	\$ 5,450	\$ 5,941	\$ 6,475	\$ 7,058	\$ 7,693	\$ 8,386	\$ 9,140	\$ 9,963
4100030	52230	Vehicle Expense	12	\$ 1,121	\$ 1,000	\$ 1,040	\$ 1,082	\$ 1,125	\$ 1,170	\$ 1,217	\$ 1,265	\$ 1,316	\$ 1,369
4100030	52240	Furniture & Small Tools <\$5000	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4100030	52260	Computer Related Equip <\$5000	2	\$ 6,272	\$ 45,000	\$ 45,900	\$ 46,818	\$ 47,754	\$ 48,709	\$ 49,684	\$ 50,677	\$ 51,691	\$ 52,725
4100030	52300	Contract Services	2	\$ 140,862	\$ 112,500	\$ 114,750	\$ 117,045	\$ 119,386	\$ 121,774	\$ 124,209	\$ 126,693	\$ 129,227	\$ 131,812
4100030	52340	Insurance	2	\$ 217,773	\$ 235,000	\$ 239,700	\$ 244,494	\$ 249,384	\$ 254,372	\$ 259,459	\$ 264,648	\$ 269,941	\$ 275,340
4100030	52350	Legal	2	\$ 137,265	\$ 260,000	\$ 265,200	\$ 270,504	\$ 275,914	\$ 281,432	\$ 287,061	\$ 292,802	\$ 298,658	\$ 304,631
4100030	52360	Federal, State & Local Fees	2	\$ 25,828	\$ 37,000	\$ 37,740	\$ 38,495	\$ 39,265	\$ 40,050	\$ 40,851	\$ 41,668	\$ 42,501	\$ 43,351
4100030	52410	Building Maintenance	2	\$ 3,892	\$ 15,000	\$ 15,300	\$ 15,606	\$ 15,918	\$ 16,236	\$ 16,561	\$ 16,892	\$ 17,230	\$ 17,575
4100030	52450	Vandalism	2	\$ 9,167	\$ 10,000	\$ 10,200	\$ 10,404	\$ 10,612	\$ 10,824	\$ 11,041	\$ 11,262	\$ 11,487	\$ 11,717
4100030	54020	Cost Allocations Paid	2	\$ 1,292,857	\$ 1,312,129	\$ 1,338,372	\$ 1,365,139	\$ 1,392,442	\$ 1,420,291	\$ 1,448,696	\$ 1,477,670	\$ 1,507,224	\$ 1,537,368
4101515	52300	Contract Services (12)	2	\$ -	\$ 18,200	\$ 18,564	\$ 18,935	\$ 19,314	\$ 19,700	\$ 20,094	\$ 20,496	\$ 20,906	\$ 21,324
<b>SUBTOTAL: ADMINISTRATIVE SERVICES</b>				\$ 2,769,584	\$ 3,496,249	\$ 3,615,481	\$ 3,690,837	\$ 3,767,880	\$ 3,846,656	\$ 3,927,212	\$ 4,009,595	\$ 4,093,856	\$ 4,180,047
<b>CAPITAL PURCHASES</b>													
4100010	52460	Capital Purchases (13)	13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>SUBTOTAL: CAPITAL PURCHASES</b>				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>GRAND TOTAL: WATER OPERATING EXPENSES</b>				\$ 17,786,838	\$ 22,479,754	\$ 19,172,890	\$ 19,727,054	\$ 20,303,022	\$ 19,776,937	\$ 19,496,001	\$ 20,083,262	\$ 20,695,626	\$ 21,334,538

VICTORVILLE WATER DISTRICT  
WATER RATE STUDY  
Operating Revenue and Expenses  
Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

EXHIBIT 1  
Financial Plan Alternative #1

NON-CASH ITEMS, EXCLUDED FROM ABOVE:

ORG.	OBJECT	DESCRIPTION	CPI	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>DEPRECIATION</b>													
4100010	52460	Depreciation Expense	12	\$ 9,852,360	\$ 7,438,000	\$ 7,382,000	\$ 6,888,000	\$ 6,698,000	\$ 6,761,000	\$ 7,155,000	\$ 7,195,000	\$ 7,322,000	\$ 7,484,000
<b>SUBTOTAL: DEPRECIATION</b>				<b>\$ 9,852,360</b>	<b>\$ 7,438,000</b>	<b>\$ 7,382,000</b>	<b>\$ 6,888,000</b>	<b>\$ 6,698,000</b>	<b>\$ 6,761,000</b>	<b>\$ 7,155,000</b>	<b>\$ 7,195,000</b>	<b>\$ 7,322,000</b>	<b>\$ 7,484,000</b>

FORECASTING ASSUMPTIONS:

COST INFLATION FACTORS (14)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1 Customer Growth (15)	--	0.60%	0.60%	0.60%	0.60%	0.60%	0.00%	0.00%	0.00%	0.00%
2 General Cost Inflation (prior 5-year average)	--	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
3 Full Time Wages & Payroll Taxes Cost Inflation (16)	--	2.00%	10.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
4 All Other Labor Cost Inflation (prior 5-year average)	--	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
5 Fuel Cost Inflation (prior 5-year average)	--	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
6 Production Power / Electricity	--	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%
7 Purchased Water Cost Inflation (MWA forecast)	--	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%
8 Groundwater Replenishment Cost Inflation (MWA forecast)	--	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
9 Makeup Obligation Cost Inflation (MWA forecast)	--	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
10 Groundwater Assessment Cost Inflation (MWA forecast)	--	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
11 Meter Service Change Outs	--	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
12 Transportation Inflation	--	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
13 Natural Gas / Other Utilities	--	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
14 No Cost Inflation	--	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

- (1) Revenue and expenses for FY 2014/15 and FY 2015/16 were provided by District Staff on 9/8/2015 and updated 11/23/2015. (Source File: *Water cash balance 9-8-15.xlsx* and updated with *VWD Conservation Adjustments.xlsx*)
- (2) Revenue and expenses for FY 2016/17 were provided by District Staff on 5/18/2015 and updated 11/23/2015. (File: *VWD Rate Analysis 05-18-2015.xls*, and updated with *VWD Conservation Adjustments.xlsx*). Per District Staff, rate revenue excludes arsenic treatment charges.
- (3) Rate revenue projection in 2015/16 accounts for a loss in revenue due to anticipated conservation. Updated projections from staff email 11/23/15. It is assumed that the District will meet its 28% conservation target; therefore, an additional 19% reduction in water sales in 2016 would occur.
- (4) The one-time reimbursement from CalTrans for an I-15 widening project was zeroed out, per staff email 11/23/2015. Per District Staff, the offsetting capital cost is not included in this analysis.
- (5) Budgeted pass-through revenue from SCLA is zeroed out in this analysis because it should not be considered revenue for the utility, per Finance Department Staff. Original budget amounts are \$198,328 for 2015/16, and \$175,000 for 2016/17.
- (6) Interest income is per the District's budget for FY 2014/15 - 2015/16, and calculated in the Financial Plan for all future years.
- (7) One time sale of Administration Building for Victorville Water District. (source: Memorandum 11/17/2015 Subject Close of Escrow - 17185 Yuma Road, File: SRDA-31511712020)
- (8) Purchased Water cost is the cost Victorville Water District pays to the Mojave Water Agency for R<sup>3</sup> water, in order to pump water to Victorville; it's a pumping cost, similar to production power. The cost is \$125/AF and is variable based on the cost of power and changes each year.
- (9) Groundwater Assessment is the Mojave Water Agency's cost of testing the water, to ensure quality standards.
- (10) Groundwater Replenishment is the additional cost of groundwater, over the Free Production Allowance (FPA). Currently, Base Annual Production (BAP) is 25,952 AF, and FPA is 60% of BAP, or 15,572 AF.
- (11) Per District Staff, the Makeup Obligation is related to the annual flow down the Mojave River, which is very difficult to predict and is a cost of water similar to the replacement obligation. As the drought lengthens, the prospect of Makeup increases.
- (12) Updated per client email from 11/23/2015 to account for 28% conservation.
- (13) Budgeted Capital Purchases are included in Exhibit 2 of this model.
- (14) Cost inflation and customer growth factors from Technical Memo provided to staff 11/23/2015. (File: *VWD\_NBS Inflation Factors for Waster Study 11-23-15.pdf*)
- (15) Customer growth is estimated to be approximately 0.6% through 2020, per Planning Department Staff (email dated 10/7/2015).
- (16) Per Finance Department Staff, Full Time Wages and Payroll Taxes are projected to increase 10% in FY 2016/17, for going back to a 40-hour work week.

VICTORVILLE WATER DISTRICT  
WATER RATE STUDY  
Capital Improvement Plan Expenditures

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

CAPITAL FUNDING SUMMARY

CAPITAL FUNDING FORECAST	Estimate		Projected							
	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24
<b>Funding Sources:</b>										
Grants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Use of Capacity Fee Reserves	-	-	-	-	-	-	-	-	-	-
SRF Loan Funding	-	-	-	-	-	-	-	-	-	-
Use of New Revenue Bond Proceeds	-	-	-	-	-	-	-	-	-	-
Use of Capital Rehabilitation and Replacement Reserve	2,588,592	6,483,795	8,885,957	1,987,228	50,000	42,000	-	74,646	-	-
Rate Revenue	-	-	-	1,738,314	3,691,634	3,923,491	7,455,846	9,265,480	7,666,542	4,378,708
<b>Total Sources of Capital Funds</b>	<b>\$ 2,588,592</b>	<b>\$ 6,483,795</b>	<b>\$ 8,885,957</b>	<b>\$ 3,725,542</b>	<b>\$ 3,741,634</b>	<b>\$ 3,965,491</b>	<b>\$ 7,455,846</b>	<b>\$ 9,340,126</b>	<b>\$ 7,666,542</b>	<b>\$ 4,378,708</b>
<b>Uses of Capital Funds:</b>										
Total Project Costs	\$ 2,588,592	\$ 6,483,795	\$ 8,885,957	\$ 3,725,542	\$ 3,741,634	\$ 3,965,491	\$ 7,455,846	\$ 9,340,126	\$ 7,666,542	\$ 4,378,708
<b>Capital Funding Surplus (Deficiency)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>SRF Loan Funding</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>New Revenue Bond Proceeds</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

CAPITAL IMPROVEMENT PROGRAM

Capital Improvement Program Costs (1):

Project Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Backhoes	\$ -	\$ 120,000	\$ 372,000	\$ -	\$ -	\$ 130,000	\$ -	\$ -	\$ -	\$ -
Booster Pumping Stations	\$ 1,400	\$ 229,000	\$ 1,570,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demonstration Gardens/Low Water Use Conversions	\$ -	\$ 145,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facilities Improvements	\$ 586,137	\$ 209,000	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fiber Optic Upgrade	\$ -	\$ 85,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GIS Mapping	\$ 40,100	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Information Technology	\$ 14,325	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
IVR Telephone System Enhancements, Phase II	\$ 139,766	\$ 81,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Master Plan - Update	\$ 22,323	\$ -	\$ 225,000	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ -	\$ -
Meter Replacements	\$ 42,198	\$ 100,000	\$ 103,000	\$ 106,000	\$ 109,000	\$ 112,000	\$ 115,000	\$ 118,000	\$ 122,000	\$ 126,000
Percolation Pond Modifications	\$ 621,629	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ph Analyzer	\$ -	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Phone System Upgrade	\$ -	\$ 16,009	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Pipelines	\$ 397,327	\$ 2,798,086	\$ 4,939,100	\$ 3,110,400	\$ 2,704,800	\$ 3,007,200	\$ 5,371,200	\$ 6,933,600	\$ 5,940,000	\$ 2,942,400
PRV Stations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 300,000	\$ -	\$ -	\$ -
Pump to Waste	\$ 76,402	\$ 200,000	\$ 220,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Right of Way Relocations	\$ 42,397	\$ 1,185,000	\$ 129,000	\$ 133,000	\$ 137,000	\$ 141,000	\$ 145,000	\$ 149,000	\$ 153,000	\$ 158,000
SCADA - Replace PX	\$ -	\$ 12,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Instruments and Machines	\$ 17,290	\$ 14,500	\$ 140,000	\$ 34,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Truck/Vehicle/Equipment Replacement	\$ 587,298	\$ 556,700	\$ 535,800	\$ 142,000	\$ 494,200	\$ 161,300	\$ 486,000	\$ 515,000	\$ 70,000	\$ 290,000
Urban Water Management Plan Update	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -
Vulnerability Assessment Update	\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Well Re-equip	\$ -	\$ 450,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Work Order System	\$ -	\$ 207,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Unfunded Capital</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total: CIP Program Costs</b>	<b>\$ 2,588,592</b>	<b>\$ 6,483,795</b>	<b>\$ 8,633,900</b>	<b>\$ 3,525,400</b>	<b>\$ 3,445,000</b>	<b>\$ 3,551,500</b>	<b>\$ 6,467,200</b>	<b>\$ 7,865,600</b>	<b>\$ 6,285,000</b>	<b>\$ 3,516,400</b>



VICTORVILLE WATER DISTRICT  
WATER RATE STUDY  
Capital Improvement Plan Expenditures

EXHIBIT 2  
Financial Plan Alternative #1

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

Capital Improvement Program Costs (in Future-Year Dollars) (2):

Project Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Backhoes	\$ -	\$ 120,000	\$ 383,160	\$ -	\$ -	\$ 146,316	\$ -	\$ -	\$ -	\$ -
Booster Pumping Stations	\$ 1,400	\$ 229,000	\$ 1,617,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demonstration Gardens/Low Water Use Conversions	\$ -	\$ 145,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facilities Improvements	\$ 586,137	\$ 209,000	\$ 257,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fiber Optic Upgrade	\$ -	\$ 85,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GIS Mapping	\$ 40,100	\$ -	\$ 154,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Information Technology	\$ 14,325	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
IVR Telephone System Enhancements, Phase II	\$ 139,766	\$ 81,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Master Plan - Update	\$ 22,323	\$ -	\$ 231,750	\$ -	\$ -	\$ -	\$ -	\$ 179,108	\$ -	\$ -
Meter Replacements	\$ 42,198	\$ 100,000	\$ 103,000	\$ 106,000	\$ 109,000	\$ 112,000	\$ 115,000	\$ 118,000	\$ 122,000	\$ 126,000
Percolation Pond Modifications	\$ 621,629	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ph Analyzer	\$ -	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Phone System Upgrade	\$ -	\$ 16,009	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Pipelines	\$ 397,327	\$ 2,798,086	\$ 5,087,273	\$ 3,299,823	\$ 2,955,608	\$ 3,384,630	\$ 6,226,693	\$ 8,279,081	\$ 7,305,451	\$ 3,727,344
PRV Stations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 347,782	\$ -	\$ -	\$ -
Pump to Waste	\$ 76,402	\$ 200,000	\$ 226,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Right of Way Relocations	\$ 42,397	\$ 1,185,000	\$ 129,000	\$ 133,000	\$ 137,000	\$ 141,000	\$ 145,000	\$ 149,000	\$ 153,000	\$ 158,000
SCADA - Replace PX	\$ -	\$ 12,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Instruments and Machines	\$ 17,290	\$ 14,500	\$ 144,200	\$ 36,071	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Truck/Vehicle/Equipment Replacement	\$ 587,298	\$ 556,700	\$ 551,874	\$ 150,648	\$ 540,026	\$ 181,545	\$ 563,407	\$ 614,937	\$ 86,091	\$ 367,363
Urban Water Management Plan Update	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 57,964	\$ -	\$ -	\$ -
Vulnerability Assessment Update	\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Well Re-equip	\$ -	\$ 450,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Work Order System	\$ -	\$ 207,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Unfunded Capital	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total: Capital Improvement Program Costs (Future-Year Dollars)</b>	<b>\$ 2,588,592</b>	<b>\$ 6,483,795</b>	<b>\$ 8,885,957</b>	<b>\$ 3,725,542</b>	<b>\$ 3,741,634</b>	<b>\$ 3,965,491</b>	<b>\$ 7,455,846</b>	<b>\$ 9,340,126</b>	<b>\$ 7,666,542</b>	<b>\$ 4,378,708</b>

FORECASTING ASSUMPTIONS:

Economic Variables	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Annual Construction Cost Inflation, Per Engineering News Record (2)	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Cumulative Construction Cost Multiplier from 2015	1.00	1.00	1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.27

(1) Capital project costs for were provided by District Staff on February 8, 2016 (file: CIP with cost inflation edited.xlsx).

(2) Project costs are inflated by 3% per year, Engineering News Record estimates of construction cost inflation from 2016 values. The average change from 2005 to 2015 was used in this analysis.

Meter Replacement and Right of Way Relocation costs are not inflated, as the cost estimates include inflation, per District Staff 2/4/2016.

WATER RATE STUDY

Cost of Service Analysis

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

Classification of Expenses									
Budget Categories	Total Revenue Requirements	Commodity	Capacity	Customer	Fire Protection	Basis of Classification			
	FY 2016/17	(COM)	(CAP)	(CA)	(FP)	(COM)	(CAP)	(CA)	(FP)
<b>4100500 - WATER PURCHASES</b>									
Purchased Water	\$ 283,300	\$ 283,300	\$ -	\$ -	\$ -	100%	0%	0%	0%
Groundwater Assessment	\$ 76,100	\$ 76,100	\$ -	\$ -	\$ -	100%	0%	0%	0%
Groundwater Replenishment	\$ 771,500	\$ 771,500	\$ -	\$ -	\$ -	100%	0%	0%	0%
<b>SUBTOTAL: WATER PURCHASES</b>	<b>\$ 1,130,900</b>	<b>\$ 1,130,900</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>4100500 - MAKEUP OBLIGATION</b>									
Makeup Obligation	\$ 151,500	\$ 151,500	\$ -	\$ -	\$ -	100%	0%	0%	0%
<b>SUBTOTAL: MAKEUP OBLIGATION</b>	<b>\$ 151,500</b>	<b>\$ 151,500</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>4100500 - PRODUCTION POWER</b>									
Utilities-Production Power	\$ 1,965,031	\$ 1,965,031	\$ -	\$ -	\$ -	100%	0%	0%	0%
<b>SUBTOTAL: PRODUCTION POWER</b>	<b>\$ 1,965,031</b>	<b>\$ 1,965,031</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>4100500 - SUPPLY SERVICES</b>									
Full Time Wages	\$ 1,039,063	\$ -	\$ 1,018,674	\$ -	\$ 20,389	0%	98%	0%	2%
Overtime Wages	\$ 79,589	\$ -	\$ 78,027	\$ -	\$ 1,562	0%	98%	0%	2%
Fringe Benefits	\$ 373,632	\$ -	\$ 366,301	\$ -	\$ 7,332	0%	98%	0%	2%
Payroll Taxes	\$ 26,496	\$ -	\$ 25,976	\$ -	\$ 520	0%	98%	0%	2%
Telephone	\$ 11,220	\$ 5,502	\$ 5,498	\$ -	\$ 220	49%	49%	0%	2%
Supplies	\$ 16,626	\$ 8,153	\$ 8,147	\$ -	\$ 326	49%	49%	0%	2%
Training & Education	\$ 7,854	\$ -	\$ 7,700	\$ -	\$ 154	0%	98%	0%	2%
Fuel	\$ 56,680	\$ 27,795	\$ 27,773	\$ -	\$ 1,112	49%	49%	0%	2%
Vehicle Expense	\$ 31,200	\$ 15,300	\$ 15,288	\$ -	\$ 612	49%	49%	0%	2%
Furniture & Small Tools <\$5000	\$ 10,200	\$ 5,002	\$ 4,998	\$ -	\$ 200	49%	49%	0%	2%
Computer Related Equip <\$5000	\$ -	\$ -	\$ -	\$ -	\$ -	49%	49%	0%	2%
Contract Services	\$ 612,000	\$ 300,111	\$ 299,880	\$ -	\$ 12,009	49%	49%	0%	2%
Grounds Maintenance	\$ 54,060	\$ 26,510	\$ 26,489	\$ -	\$ 1,061	49%	49%	0%	2%
Infrastructure Repairs	\$ 132,600	\$ 65,024	\$ 64,974	\$ -	\$ 2,602	49%	49%	0%	2%
<b>SUBTOTAL: SUPPLY SERVICES</b>	<b>\$ 2,451,220</b>	<b>\$ 453,396</b>	<b>\$ 1,949,724</b>	<b>\$ -</b>	<b>\$ 48,099</b>	<b>18%</b>	<b>80%</b>	<b>0%</b>	<b>2%</b>
<b>4100505 - SCADA SERVICES</b>									
Full Time Wages	\$ 145,541	\$ -	\$ 144,066	\$ -	\$ 1,475	0%	99%	0%	1%
Overtime Wages	\$ 2,168	\$ -	\$ 2,146	\$ -	\$ 22	0%	99%	0%	1%
Fringe Benefits	\$ 40,928	\$ -	\$ 40,513	\$ -	\$ 415	0%	99%	0%	1%
Retiree Expense	\$ -	\$ -	\$ -	\$ -	\$ -	0%	99%	0%	1%
Payroll Taxes	\$ 3,711	\$ -	\$ 3,674	\$ -	\$ 38	0%	99%	0%	1%
Telephone	\$ -	\$ -	\$ -	\$ -	\$ -	0%	99%	0%	1%
Supplies	\$ 3,060	\$ -	\$ 3,029	\$ -	\$ 31	0%	99%	0%	1%
Subs, Publications & Memberships	\$ 18,870	\$ -	\$ 18,679	\$ -	\$ 191	0%	99%	0%	1%
Training & Education	\$ 6,120	\$ -	\$ 6,058	\$ -	\$ 62	0%	99%	0%	1%
Fuel	\$ 5,450	\$ -	\$ 5,395	\$ -	\$ 55	0%	99%	0%	1%
Vehicle Expense	\$ 2,080	\$ -	\$ 2,059	\$ -	\$ 21	0%	99%	0%	1%
Furniture & Small Tools <\$5000	\$ 15,300	\$ -	\$ 15,145	\$ -	\$ 155	0%	99%	0%	1%
Contract Services	\$ 6,120	\$ -	\$ 6,058	\$ -	\$ 62	0%	99%	0%	1%
Infrastructure Repairs	\$ 70,890	\$ -	\$ 70,172	\$ -	\$ 718	0%	99%	0%	1%
<b>SUBTOTAL: SCADA SERVICES</b>	<b>\$ 320,237</b>	<b>\$ -</b>	<b>\$ 316,993</b>	<b>\$ -</b>	<b>\$ 3,245</b>	<b>0%</b>	<b>99%</b>	<b>0%</b>	<b>1%</b>
<b>4100515 - QUALITY SERVICES (Treatment)</b>									
Full Time Wages	\$ 67,165	\$ -	\$ 65,847	\$ -	\$ 1,318	0%	98%	0%	2%
Overtime Wages	\$ 6,673	\$ -	\$ 6,542	\$ -	\$ 131	0%	98%	0%	2%
Fringe Benefits	\$ 24,215	\$ -	\$ 23,740	\$ -	\$ 475	0%	98%	0%	2%
Payroll Taxes	\$ 1,713	\$ -	\$ 1,679	\$ -	\$ 34	0%	98%	0%	2%
Telephone	\$ -	\$ -	\$ -	\$ -	\$ -	49%	49%	0%	2%
Supplies	\$ 146,880	\$ 143,998	\$ -	\$ -	\$ 2,882	98%	0%	0%	2%
Training & Education	\$ 510	\$ 250	\$ 250	\$ -	\$ 10	49%	49%	0%	2%
Fuel	\$ 4,033	\$ 1,978	\$ 1,976	\$ -	\$ 79	49%	49%	0%	2%
Vehicle Expense	\$ 2,392	\$ 1,173	\$ 1,172	\$ -	\$ 47	49%	49%	0%	2%
Furniture & Small Tools <\$5000	\$ 510	\$ 250	\$ 250	\$ -	\$ 10	49%	49%	0%	2%
Contract Services	\$ 194,820	\$ 190,997	\$ -	\$ -	\$ 3,823	98%	0%	0%	2%
Federal, State & Local Fees	\$ 22,440	\$ 11,004	\$ 10,996	\$ -	\$ 440	49%	49%	0%	2%
Infrastructure Repairs	\$ 20,400	\$ 10,004	\$ 9,996	\$ -	\$ 400	49%	49%	0%	2%
<b>SUBTOTAL: QUALITY SERVICES</b>	<b>\$ 491,750</b>	<b>\$ 359,654</b>	<b>\$ 122,447</b>	<b>\$ -</b>	<b>\$ 9,649</b>	<b>73%</b>	<b>25%</b>	<b>0%</b>	<b>2%</b>



Classification of Expenses									
Budget Categories	Total Revenue Requirements	Commodity	Capacity	Customer	Fire Protection	Basis of Classification			
	FY 2016/17	(COM)	(CAP)	(CA)	(FP)	(COM)	(CAP)	(CA)	(FP)
<b>4100535 - FIELD SERVICES</b>									
Full Time Wages	\$ 1,163,193	\$ -	\$ 1,104,879	\$ 46,528	\$ 11,786	0%	95%	4%	1%
Overtime Wages	\$ 96,434	\$ -	\$ 91,599	\$ 3,857	\$ 977	0%	95%	4%	1%
Part Time Wages	\$ -	\$ -	\$ -	\$ -	\$ -	0%	95%	4%	1%
Fringe Benefits	\$ 443,146	\$ -	\$ 420,930	\$ 17,726	\$ 4,490	0%	95%	4%	1%
Payroll Taxes	\$ 29,662	\$ -	\$ 28,174	\$ 1,186	\$ 301	0%	95%	4%	1%
Telephone	\$ 6,426	\$ -	\$ 6,104	\$ 257	\$ 65	0%	95%	4%	1%
Supplies	\$ 16,320	\$ -	\$ 15,502	\$ 653	\$ 165	0%	95%	4%	1%
Training & Education	\$ 4,080	\$ -	\$ 3,875	\$ 163	\$ 41	0%	95%	4%	1%
Fuel	\$ 74,120	\$ -	\$ 70,404	\$ 2,965	\$ 751	0%	95%	4%	1%
Equipment	\$ 57,120	\$ -	\$ 54,256	\$ 2,285	\$ 579	0%	95%	4%	1%
Vehicle Expense	\$ 63,544	\$ -	\$ 60,358	\$ 2,542	\$ 644	0%	95%	4%	1%
Furniture & Small Tools <\$5000	\$ 25,500	\$ -	\$ 24,222	\$ 1,020	\$ 258	0%	95%	4%	1%
Computer Related Equip <\$5000	\$ -	\$ -	\$ -	\$ -	\$ -	0%	95%	4%	1%
Contract Services	\$ 14,280	\$ -	\$ 13,564	\$ 571	\$ 145	0%	95%	4%	1%
Infrastructure Repairs	\$ 402,900	\$ -	\$ 382,702	\$ 16,116	\$ 4,082	0%	95%	4%	1%
<b>SUBTOTAL: FIELD SERVICES</b>	<b>\$ 2,396,724</b>	<b>\$ -</b>	<b>\$ 2,276,571</b>	<b>\$ 95,869</b>	<b>\$ 24,284</b>	<b>0%</b>	<b>95%</b>	<b>4%</b>	<b>1%</b>
<b>4104500 - ENGINEERING SERVICES</b>									
Full Time Wages	\$ 638,003	\$ -	\$ 599,964	\$ 25,520	\$ 12,519	0%	94%	4%	2%
Overtime Wages	\$ 23,263	\$ -	\$ 21,876	\$ 931	\$ 456	0%	94%	4%	2%
Fringe Benefits	\$ 185,551	\$ -	\$ 174,488	\$ 7,422	\$ 3,641	0%	94%	4%	2%
Payroll Taxes	\$ 16,269	\$ -	\$ 15,299	\$ 651	\$ 319	0%	94%	4%	2%
Supplies	\$ 6,120	\$ -	\$ 5,755	\$ 245	\$ 120	0%	94%	4%	2%
Training & Education	\$ 1,020	\$ -	\$ 959	\$ 41	\$ 20	0%	94%	4%	2%
Fuel	\$ 11,445	\$ -	\$ 10,763	\$ 458	\$ 225	0%	94%	4%	2%
Vehicle Expense	\$ 5,200	\$ -	\$ 4,890	\$ 208	\$ 102	0%	94%	4%	2%
Furniture & Small Tools <\$5000	\$ 510	\$ -	\$ 480	\$ 20	\$ 10	0%	94%	4%	2%
Contract Services	\$ 73,440	\$ -	\$ 69,061	\$ 2,938	\$ 1,441	0%	94%	4%	2%
Infrastructure Repairs	\$ 10,200	\$ -	\$ 9,592	\$ 408	\$ 200	0%	94%	4%	2%
<b>SUBTOTAL: ENGINEERING SERVICES</b>	<b>\$ 971,022</b>	<b>\$ -</b>	<b>\$ 913,127</b>	<b>\$ 38,841</b>	<b>\$ 19,054</b>	<b>0%</b>	<b>94%</b>	<b>4%</b>	<b>2%</b>
<b>4100525 - ENVIRONMENTAL PROGRAMS</b>									
Full Time Wages	\$ 266,511	\$ -	\$ 250,621	\$ 10,660	\$ 5,230	0%	94%	4%	2%
Overtime Wages	\$ 3,904	\$ -	\$ 3,671	\$ 156	\$ 77	0%	94%	4%	2%
Fringe Benefits	\$ 86,391	\$ -	\$ 81,240	\$ 3,456	\$ 1,695	0%	94%	4%	2%
Payroll Taxes	\$ 6,796	\$ -	\$ 6,391	\$ 272	\$ 133	0%	94%	4%	2%
Utilities-Electricity	\$ 2,341	\$ -	\$ 2,201	\$ 94	\$ 46	0%	94%	4%	2%
Utilities-Water Usage	\$ 143	\$ -	\$ 135	\$ 6	\$ 3	0%	94%	4%	2%
Utilities-Natural Gas	\$ 207	\$ -	\$ 194	\$ 8	\$ 4	0%	94%	4%	2%
Telephone	\$ 408	\$ -	\$ 384	\$ 16	\$ 8	0%	94%	4%	2%
Supplies	\$ 4,692	\$ -	\$ 4,412	\$ 188	\$ 92	0%	94%	4%	2%
Training & Education	\$ 1,224	\$ -	\$ 1,151	\$ 49	\$ 24	0%	94%	4%	2%
Conservation Programs	\$ 44,543	\$ -	\$ 41,888	\$ 1,782	\$ 874	0%	94%	4%	2%
Fuel	\$ 3,270	\$ -	\$ 3,075	\$ 131	\$ 64	0%	94%	4%	2%
Vehicle Expense	\$ 2,808	\$ -	\$ 2,641	\$ 112	\$ 55	0%	94%	4%	2%
Furniture & Small Tools <\$5000	\$ 510	\$ -	\$ 480	\$ 20	\$ 10	0%	94%	4%	2%
Computer Related Equip <\$5000	\$ 3,672	\$ -	\$ 3,453	\$ 147	\$ 72	0%	94%	4%	2%
Contract Services	\$ 3,213	\$ -	\$ 3,021	\$ 129	\$ 63	0%	94%	4%	2%
<b>SUBTOTAL: ENVIRONMENTAL PROGRAMS</b>	<b>\$ 430,632</b>	<b>\$ -</b>	<b>\$ 404,957</b>	<b>\$ 17,225</b>	<b>\$ 8,450</b>	<b>0%</b>	<b>94%</b>	<b>4%</b>	<b>2%</b>

Classification of Expenses									
Budget Categories	Total Revenue Requirements	Commodity	Capacity	Customer	Fire Protection	Basis of Classification			
	FY 2016/17	(COM)	(CAP)	(CA)	(FP)	(COM)	(CAP)	(CA)	(FP)
<b>4100545 - CUSTOMER SERVICES</b>									
Full Time Wages	\$ 1,135,927	\$ -	\$ -	\$ 1,124,417	\$ 11,510	0%	0%	99%	1%
Overtime Wages	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	99%	1%
Part Time Wages	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	99%	1%
Fringe Benefits	\$ 363,071	\$ -	\$ -	\$ 359,392	\$ 3,679	0%	0%	99%	1%
Payroll Taxes	\$ 28,966	\$ -	\$ -	\$ 28,673	\$ 293	0%	0%	99%	1%
Utilities-Electricity	\$ 12,967	\$ -	\$ -	\$ 12,836	\$ 131	0%	0%	99%	1%
Utilities-Water Usage	\$ 791	\$ -	\$ -	\$ 783	\$ 8	0%	0%	99%	1%
Utilities-Natural Gas	\$ 1,145	\$ -	\$ -	\$ 1,133	\$ 12	0%	0%	99%	1%
Telephone	\$ 306	\$ -	\$ -	\$ 303	\$ 3	0%	0%	99%	1%
Supplies	\$ 144,618	\$ -	\$ -	\$ 143,152	\$ 1,465	0%	0%	99%	1%
Training & Education	\$ 7,944	\$ -	\$ -	\$ 7,863	\$ 80	0%	0%	99%	1%
Travel & Meetings	\$ 5,355	\$ -	\$ -	\$ 5,301	\$ 54	0%	0%	99%	1%
Furniture & Small Tools <\$500	\$ 2,448	\$ -	\$ -	\$ 2,423	\$ 25	0%	0%	99%	1%
Contract Services	\$ 323,975	\$ -	\$ -	\$ 320,693	\$ 3,283	0%	0%	99%	1%
Cust-Legal	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	99%	1%
Federal, State & Local Fees	\$ 8,160	\$ -	\$ -	\$ 8,077	\$ 83	0%	0%	99%	1%
Building Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	99%	1%
Uncollectable Write-Offs	\$ 88,729	\$ -	\$ -	\$ 87,830	\$ 899	0%	0%	99%	1%
<b>SUBTOTAL: CUSTOMER SERVICES</b>	<b>\$ 2,124,402</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,102,877</b>	<b>\$ 21,525</b>	<b>0%</b>	<b>0%</b>	<b>99%</b>	<b>1%</b>
<b>4100530 - METER SERVICES</b>									
Full Time Wages	\$ 583,096	\$ -	\$ 288,594	\$ 288,594	\$ 5,908	0%	49%	49%	1%
Overtime Wages	\$ 77,664	\$ -	\$ 38,438	\$ 38,438	\$ 787	0%	49%	49%	1%
Part Time Wages	\$ -	\$ -	\$ -	\$ -	\$ -	0%	49%	49%	1%
Fringe Benefits	\$ 213,055	\$ -	\$ 105,448	\$ 105,448	\$ 2,159	0%	49%	49%	1%
Payroll Taxes	\$ 14,869	\$ -	\$ 7,359	\$ 7,359	\$ 151	0%	49%	49%	1%
Telephone	\$ 2,448	\$ -	\$ 1,212	\$ 1,212	\$ 25	0%	49%	49%	1%
Supplies	\$ 4,080	\$ -	\$ 2,019	\$ 2,019	\$ 41	0%	49%	49%	1%
Training & Education	\$ 2,040	\$ -	\$ 1,010	\$ 1,010	\$ 21	0%	49%	49%	1%
Fuel	\$ 44,799	\$ -	\$ 22,173	\$ 22,173	\$ 454	0%	49%	49%	1%
Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	0%	49%	49%	1%
Vehicle Expense	\$ 29,120	\$ -	\$ 14,412	\$ 14,412	\$ 295	0%	49%	49%	1%
Furniture & Small Tools <\$500	\$ 15,300	\$ -	\$ 7,572	\$ 7,572	\$ 155	0%	49%	49%	1%
Contract Services	\$ 10,200	\$ -	\$ 5,048	\$ 5,048	\$ 103	0%	49%	49%	1%
Infrastructure Repairs	\$ 35,700	\$ -	\$ 17,669	\$ 17,669	\$ 362	0%	49%	49%	1%
Meter Service Installations	\$ 31,620	\$ -	\$ 15,650	\$ 15,650	\$ 320	0%	49%	49%	1%
Meter Service Change outs	\$ 2,060,000	\$ -	\$ 2,039,127	\$ -	\$ 20,873	0%	99%	0%	1%
<b>SUBTOTAL: METER SERVICES</b>	<b>\$ 3,123,990</b>	<b>\$ -</b>	<b>\$ 2,565,732</b>	<b>\$ 526,605</b>	<b>\$ 31,653</b>	<b>0%</b>	<b>82%</b>	<b>17%</b>	<b>1%</b>

WATER RATE STUDY

Cost of Service Analysis

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

Classification of Expenses									
Budget Categories	Total Revenue Requirements	Commodity	Capacity	Customer	Fire Protection	Basis of Classification			
	FY 2016/17	(COM)	(CAP)	(CA)	(FP)	(COM)	(CAP)	(CA)	(FP)
<b>4100030 - ADMINISTRATIVE SERVICES</b>									
Full Time Wages	\$ 622,559	\$ -	\$ 585,441	\$ 24,902	\$ 12,216	0%	94%	4%	2%
Overtime Wages	\$ 148,096	\$ -	\$ 139,266	\$ 5,924	\$ 2,906	0%	94%	4%	2%
Fringe Benefits	\$ 165,784	\$ -	\$ 155,899	\$ 6,631	\$ 3,253	0%	94%	4%	2%
Retiree Health Care	\$ 364,140	\$ -	\$ 342,429	\$ 14,566	\$ 7,145	0%	94%	4%	2%
Payroll Taxes	\$ 15,875	\$ -	\$ 14,929	\$ 635	\$ 312	0%	94%	4%	2%
Utilities-Electricity	\$ 50,812	\$ -	\$ 47,782	\$ 2,032	\$ 997	0%	94%	4%	2%
Utilities-Water Usage	\$ 10,706	\$ -	\$ 10,068	\$ 428	\$ 210	0%	94%	4%	2%
Utilities-Natural Gas	\$ 5,406	\$ -	\$ 5,084	\$ 216	\$ 106	0%	94%	4%	2%
Utilities-Sanitation	\$ 9,328	\$ -	\$ 8,772	\$ 373	\$ 183	0%	94%	4%	2%
Telephone	\$ 26,520	\$ -	\$ 24,939	\$ 1,061	\$ 520	0%	94%	4%	2%
Supplies	\$ 9,180	\$ -	\$ 8,633	\$ 367	\$ 180	0%	94%	4%	2%
Subs, Publications & Memberships	\$ 24,480	\$ -	\$ 23,020	\$ 979	\$ 480	0%	94%	4%	2%
Training & Education	\$ 3,060	\$ -	\$ 2,878	\$ 122	\$ 60	0%	94%	4%	2%
Travel & Meetings	\$ 510	\$ -	\$ 480	\$ 20	\$ 10	0%	94%	4%	2%
Marketing Promotions	\$ 63,750	\$ -	\$ 59,949	\$ 2,550	\$ 1,251	0%	94%	4%	2%
Legal Notices	\$ 3,060	\$ -	\$ 2,878	\$ 122	\$ 60	0%	94%	4%	2%
Fuel	\$ 5,450	\$ -	\$ 5,125	\$ 218	\$ 107	0%	94%	4%	2%
Vehicle Expense	\$ 1,040	\$ -	\$ 978	\$ 42	\$ 20	0%	94%	4%	2%
Furniture & Small Tools <\$5000	\$ -	\$ -	\$ -	\$ -	\$ -	0%	94%	4%	2%
Computer Related Equip <\$5000	\$ 45,900	\$ -	\$ 43,163	\$ 1,836	\$ 901	0%	94%	4%	2%
Contract Services	\$ 114,750	\$ -	\$ 107,908	\$ 4,590	\$ 2,252	0%	94%	4%	2%
Insurance	\$ 239,700	\$ -	\$ 225,408	\$ 9,588	\$ 4,704	0%	94%	4%	2%
Legal	\$ 265,200	\$ -	\$ 249,388	\$ 10,608	\$ 5,204	0%	94%	4%	2%
Federal, State & Local Fees	\$ 37,740	\$ -	\$ 35,490	\$ 1,510	\$ 741	0%	94%	4%	2%
Building Maintenance	\$ 15,300	\$ -	\$ 14,388	\$ 612	\$ 300	0%	94%	4%	2%
Vandalism	\$ 10,200	\$ -	\$ 9,592	\$ 408	\$ 200	0%	94%	4%	2%
Cost Allocations Paid	\$ 1,338,372	\$ -	\$ 1,258,574	\$ 53,535	\$ 26,262	0%	94%	4%	2%
Contract Services	\$ 18,564	\$ -	\$ 17,457	\$ 743	\$ 364	0%	94%	4%	2%
<b>SUBTOTAL: ADMINISTRATIVE SERVICES</b>	<b>\$ 3,615,481</b>	<b>\$ -</b>	<b>\$ 3,399,917</b>	<b>\$ 144,619</b>	<b>\$ 70,945</b>	<b>0%</b>	<b>94%</b>	<b>4%</b>	<b>2%</b>
<b>4100010 - CAPITAL PURCHASES</b>									
Capital Purchases	\$ -	\$ -	\$ -	\$ -	\$ -	0%	100%	0%	0%
<b>SUBTOTAL: CAPITAL PURCHASES</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>TOTAL OPERATING EXPENSES</b>	<b>\$ 19,172,890</b>	<b>\$ 4,060,481</b>	<b>\$ 11,949,468</b>	<b>\$ 2,926,036</b>	<b>\$ 236,905</b>	<b>21%</b>	<b>62%</b>	<b>15%</b>	<b>1%</b>

VICTORVILLE WATER DISTRICT

WATER RATE STUDY

Cost of Service Analysis

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

Financial Plan Alternative #1

Classification of Expenses, continued									
Budget Categories	Total Revenue Requirements	Commodity	Capacity	Customer	Fire Protection	Basis of Classification			
	FY 2016/17	(COM)	(CAP)	(CA)	(FP)	(COM)	(CAP)	(CA)	(FP)
<b>Debt Service Payments</b>									
Outstanding Debt	\$ -	\$ -	\$ -	\$ -	\$ -	0%	100%	0%	0%
New Debt Issue - SRF Loan	\$ -	\$ -	\$ -	\$ -	\$ -	0%	100%	0%	0%
New Debt Issue - Revenue Bond	\$ -	\$ -	\$ -	\$ -	\$ -	0%	100%	0%	0%
<b>Total Debt Service Payments</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>Capital Expenditures</b>									
Rate Funded Capital Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	0%	98%	0%	2%
<b>TOTAL REVENUE REQUIREMENTS</b>	<b>\$ 19,172,890</b>	<b>\$ 4,060,481</b>	<b>\$ 11,949,468</b>	<b>\$ 2,926,036</b>	<b>\$ 236,905</b>	<b>21%</b>	<b>62%</b>	<b>15%</b>	<b>1%</b>
<b>Less: Non-Rate Revenues</b>									
Water Permit	\$ (20,800)	\$ -	\$ -	\$ (20,543)	\$ (257)	0%	0%	99%	1%
Penalty/Late Fees	\$ (348,500)	\$ -	\$ -	\$ (344,194)	\$ (4,306)	0%	0%	99%	1%
Plan Check Fees	\$ (26,000)	\$ -	\$ -	\$ (25,679)	\$ (321)	0%	0%	99%	1%
Water Service Fees	\$ (624,200)	\$ -	\$ -	\$ (616,487)	\$ (7,713)	0%	0%	99%	1%
Meter Installation Fees	\$ (57,200)	\$ -	\$ -	\$ (56,493)	\$ (707)	0%	0%	99%	1%
Service Call Fees	\$ (416,200)	\$ -	\$ -	\$ (411,057)	\$ (5,143)	0%	0%	99%	1%
Standby Fees	\$ (93,600)	\$ -	\$ -	\$ (92,443)	\$ (1,157)	0%	0%	99%	1%
Reimb-Other (4)	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	0%	0%
Connection Fees	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	0%	0%
WATER SOURCE FEES	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	0%	0%
PASS THROUGH (5)	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	0%	0%
MISCELLANEOUS REVENUE	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	0%	0%
INTEREST INCOME (6)	\$ (99,037)	\$ (20,974)	\$ (61,724)	\$ (15,114)	\$ (1,224)	21%	62%	15%	1%
INTEREST INCOME (6)	\$ -	\$ -	\$ -	\$ -	\$ -	21%	62%	15%	1%
Revenue from Property Sale (7)	\$ -	\$ -	\$ -	\$ -	\$ -	21%	62%	15%	1%
<b>NET REVENUE REQUIREMENTS</b>	<b>\$ 17,487,353</b>	<b>\$ 4,039,506</b>	<b>\$ 11,887,744</b>	<b>\$ 1,344,025</b>	<b>\$ 216,078</b>				
<b>Allocation of Revenue Requirements</b>	<b>100.0%</b>	<b>23.1%</b>	<b>68.0%</b>	<b>7.7%</b>	<b>1.2%</b>				

Net Revenue Req't. Check from Financial Plan \$ 17,487,353

Classification of Expenses, continued					
Adjustments to Classification of Expenses					
Adjustment to Current Rate Level:	Total	(COM)	(CAP)	(CA)	(FP)
FY 2016/17 Target Rate Rev. After Rate Increases	\$19,346,184				
Projected Rate Revenue at Current Rates	\$18,122,889				
FY 2016/17 Projected Rate Increase	6.8%				
<b>Adjusted Net Revenue Req'ts</b>	<b>\$ 19,346,184</b>	<b>\$ 4,468,889</b>	<b>\$ 13,151,360</b>	<b>\$ 1,486,889</b>	<b>\$ 239,047</b>
<i>Percent of Revenue</i>		<i>23.1%</i>	<i>68.0%</i>	<i>7.7%</i>	<i>1.2%</i>

VICTORVILLE WATER DISTRICT  
WATER RATE STUDY

Financial Plan Alternative #1

Water Cost of Service Analysis

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

Development of the BASE CAPACITY Allocation Factor				
Customer Class	FY 2013/14 Volume (hcf) <sup>1</sup>	% Adjustment for Conservation <sup>2</sup>	Estimated Volume Adjusted for Conservation	Percent of Total Volume
<i>Treated Water:</i>				
Single Family Residential	5,920,728	28%	4,262,924	65.1%
Multi-Family Residential	828,615	28%	596,603	9.1%
Commercial	964,394	28%	694,364	10.6%
Irrigation	97,773	28%	70,397	1.1%
Municipal Irrigation	441,482	28%	317,867	4.9%
Fire	-	28%	-	0.0%
Other	841,648	28%	605,987	9.3%
<b>Total: Recurring Consumption</b>	<b>9,094,640</b>	<b>--</b>	<b>6,548,141</b>	<b>100%</b>
<i>Other Non-Recurring Consumption</i>				
Commercial Flow Meter	51,619	28%	37,166	0.6%
Municipal Flow Meter	3,414	28%	2,458	0.0%
Intertie	134,101	28%	96,553	1.4%
<b>Total Non-Recurring Consumption</b>	<b>189,134</b>	<b>--</b>	<b>136,176</b>	<b>2.0%</b>

1. Consumption data is based on the City of Victorville's FY 2013/14 customer data. File: VWD14 Revenue Model Meter.xls.

2. Assumes the District will meet the 28% conservation mandate from the State of CA, as noted in the draft usage analysis released 4/28/2015 by the State Water Resources Control Board.

**Commodity Related Costs:** These costs are associated with the total consumption (flow) of water over a specified period of time (e.g. annual).

Development of the CAPACITY (MAX MONTH) Allocation Factors				
Customer Class	Average Monthly Use (hcf)	Peak Monthly Use <sup>1</sup> (hcf)	Peak Month Factor	Max Month Capacity Factor
<i>Treated Water:</i>				
Single Family Residential	493,394	725,081	1.47	64.0%
Multi-Family Residential	69,051	94,792	1.37	8.4%
Commercial	80,366	114,114	1.42	10.1%
Irrigation	8,148	15,123	1.86	1.3%
Municipal Irrigation	36,790	74,758	2.03	6.6%
Fire	0	0	0.00	0.0%
Other	70,137	109,836	1.57	9.7%
<b>Total: Recurring Consumption</b>	<b>757,887</b>	<b>1,133,704</b>	<b>1.50</b>	<b>100%</b>
<i>Other Non-Recurring Consumption</i>				
Commercial Flow Meter	4,302	9,240	2.15	0.7%
Municipal Flow Meter	285	616	2.17	0.0%
Intertie	11,175	129,962	11.63	10.2%
<b>Total Non-Recurring Consumption</b>	<b>15,761</b>	<b>139,818</b>	<b>8.87</b>	<b>11.0%</b>

1. Based on peak monthly data (peak day data not available).

**Capacity Related Costs:** Costs associated with the maximum demand required at one point in time or the maximum size of facilities required to meet this demand.

VICTORVILLE WATER DISTRICT

Financial Plan Alternative #1

WATER RATE STUDY

Water Cost of Service Analysis

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

Development of the Customer Allocation Factor		
Customer Class	Number of Meters <sup>1</sup>	Percent of Total
<i>Treated Water:</i>		
Single Family Residential	32,862	93.53%
Multi-Family Residential	596	1.70%
Commercial	781	2.22%
Irrigation	58	0.17%
Municipal Irrigation	200	0.57%
Fire	356	1.01%
Other <sup>2</sup>	282	0.80%
<b>Total: Recurring Consumption</b>	<b>35,135</b>	<b>100.00%</b>
<i>Other Non-Recurring Consumption</i>		
Commercial Flow Meter	36	0.10%
Municipal Flow Meter	19	0.05%
Intertie	3	0.01%
<b>Total: Non-Recurring Meters</b>	<b>58</b>	<b>0.16%</b>

1. Number of meters is based on the number of customers billed a fixed and/or variable charge in June 2014, except for intertie customers. File: VWD14 Revenue Model Meter.xls.
2. Other customers consists primarily of governmental customers (the City, special districts, other agencies) and churches.

**Customer Related Costs** : Costs associated with having a customer on the water system. These costs vary with the addition or deletion of customers on the system. Examples: Meter-reading, Postage and billing.

Development of the Water Production Allocation Factor - Step 1			
Current Water Production Estimates <sup>1</sup>	Amount (AF)	Amount (ccf)	Amt./User/ Month (hcf)
Free Production Allowance <sup>2</sup>	15,572	6,783,163	16.06
Total Production <sup>3</sup>	21,476	9,354,946	22.15

Development of the Water Production Allocation Factor - Step 2	Free Production Allowance	Additional Supply Required	Total
Estimated Total Production (AF)	15,572	5,904	21,476
Estimated Total Production (ccf)	6,783,163	2,571,782	9,354,946
<b>Water Production Allocation Factor</b>	<b>73%</b>	<b>27%</b>	<b>100%</b>

1. Provided via teleconference with District Staff on 8/3/2015.
2. Free Production Allowance is established annually by the court.
3. Updated total production amount was provided by District Staff on 8/3/2015.

VICTORVILLE WATER DISTRICT

WATER RATE STUDY

Water Cost of Service Analysis/Rate Design

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

Financial Plan Alternative #1

Free Production Allowance Analysis	
Description	HCF
FY 2013-14 Production <sup>1</sup>	10,435,697
Free Production Allowance	<u>6,783,163</u>
Excess Production	3,652,534
Conservation Equivalent <sup>2</sup>	35%

1. Per District's Production Data history.

2. If conservation exceeds 35%, this analysis will no longer accurately assess the marginal cost of production as no groundwater replenishment will be required.

Development of the Marginal Cost of Groundwater Replenishment <sup>1</sup>			
Fiscal Year	Description	Acre Foot Cost	HCF Cost
2015-16	Mojave Basin Area Watermaster	\$484	\$1.11
2016-17	Mojave Basin Area Watermaster	\$522	\$1.20

Development of the Marginal Cost Of Purchased Water <sup>2</sup>			
Fiscal Year	Description	Acre Foot Cost	HCF Cost
2015-16	Mojave Basin Area Watermaster	\$125	\$0.29

Development of the Marginal Cost Of Utilities-Production Power <sup>3</sup>		
Fiscal Year	Description	Net Change
2015-16	Budget Adjustment Utilities-Production Power <sup>4</sup>	\$130,500
2015-16	Consumption Change	<u>2,599,457</u>
2015-16	Per HCF Cost	\$0.05

1. Acre Foot Costs from the March 30, 2015 Mojave Basin Area Watermaster Memorandum

Re: Adoption of Watermaster's Administrative Budget and Assessment Rates for Water Year 2015-16.

2. Per Acre Foot Cost is \$125 and represent delivery costs, per District Staff.

3. Net change in budget figure from VWD Conservation Adjustments.xlsx

4. Per VWD Conservation Adjustments.xlsx file provided 11/23/2015.

OBJECT	DESCRIPTION	CPI Factor	2016	2017	2018	2019	2020	2021
53050	Groundwater Replenishment	8	<u>\$1.111</u>	\$1.198	\$1.294	\$1.398	\$1.510	\$1.630
53030	Purchased Water	7	<u>\$0.287</u>	\$0.306	\$0.325	\$0.347	\$0.369	\$0.393
52050	Utilities-Production Power	6	<u>\$0.050</u>	\$0.053	\$0.056	\$0.058	\$0.061	\$0.065
	Marginal Cost Per HCF - Production		\$1.448	\$1.557	\$1.675	\$1.803	\$1.940	\$2.088
	Adjustment for Non-revenued Water (System Loss)	12.3%	<u>\$0.18</u>	<u>\$0.192</u>	<u>\$0.207</u>	<u>\$0.222</u>	<u>\$0.239</u>	<u>\$0.258</u>
	<b>Marginal Cost Per HCF - Consumption</b>		<b>\$1.627</b>	<b>\$1.749</b>	<b>\$1.882</b>	<b>\$2.025</b>	<b>\$2.180</b>	<b>\$2.346</b>

ALLOCATION OF WATER REVENUE REQUIREMENTS:

Fixed vs. Variable Split, Five Year Transition:

Fixed-Variable %'s for Five-Year Period	COSA Split FY 2016/17	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21
Fixed	77%	41%	40%	40%	39%	38%
Variable	23%	59%	60%	60%	61%	62%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Classification Components	Cost-of-Service Split	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21
Commodity-Related Costs	23.1%	59.2%	59.7%	60.2%	60.6%	61.5%
Capacity-Related Costs	68.0%	35.6%	35.1%	34.7%	34.2%	33.5%
Customer-Related Costs	7.7%	4.0%	4.0%	3.9%	3.9%	3.8%
Fire Protection-Related Costs	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%
<b>Net Revenue Requirement</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Allocation of Target Rate Revenue - FY 2016/17 thru FY 2020/21:

Classification Components	Cost-of-Service Split	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21
Commodity-Related Costs		\$ 4,468,889	\$ 11,451,774	\$ 12,397,256	\$ 13,421,443	\$ 14,530,932
Capacity-Related Costs		\$ 13,151,360	\$ 6,877,765	\$ 7,296,998	\$ 7,739,281	\$ 8,205,619
Customer-Related Costs		\$ 1,486,889	\$ 777,598	\$ 824,996	\$ 875,001	\$ 927,725
Fire Protection-Related Costs		\$ 239,047	\$ 239,047	\$ 256,713	\$ 275,686	\$ 296,060
<b>Target Rate Revenue</b>		<b>\$ 19,346,184</b>	<b>19,346,184</b>	<b>20,775,964</b>	<b>22,311,411</b>	<b>23,960,336</b>
						<b>25,577,659</b>

Meter Equivalency Factors Used in Fixed Charge Calculation:

Meter Size	Standard Meters		Fire Service Meters	
	Meter Capacity (gpm) <sup>1</sup>	Equivalency to 3/4-inch	Meter Capacity (gpm)	Equivalency to 3/4-inch
	<u>Displacement</u>		<u>Displacement<sup>1</sup></u>	
3/4 inch	30	1.00	30	1.00
1 inch	50	1.67	50	1.67
1.5 inch	100	3.33	100	3.33
2 inch	160	5.33	160	5.33
	<u>Compound Type Class I</u>		<u>Fire Service Type I &amp; II<sup>2</sup></u>	
3 inch	320	10.67	350	11.67
4 inch	500	16.67	700	23.33
6 inch	1,000	33.33	1,600	53.33
	<u>Turbine Class II</u>			
8 inch	2,800	93.33	2,800	93.33
10 inch	4,200	140.00	4,400	146.67

1. Per AWWA M-1 Table VI.2-5.

2. Capacity factors are for Fire Service Type I and II meters, from AWWA M-6 Table 5-3.



Allocation of Net Revenue Requirements - FY 2016/17

Customer Classes	Classification Components				Cost of Service Net Rev. Reqts	% of COS Net Revenue Reqts
	Commodity-Related	Capacity-Related	Customer-Related	Fire Protection-		
Single Family Residential	\$ 7,455,253	\$ 4,398,800	\$ 727,293	\$ -	\$ 12,581,345	65.0%
Multi-Family Residential	\$ 1,043,374	\$ 575,068	\$ 13,191	\$ -	\$ 1,631,633	8.4%
Commercial	\$ 1,214,344	\$ 692,288	\$ 17,285	\$ -	\$ 1,923,917	9.9%
Irrigation	\$ 123,114	\$ 91,746	\$ 1,284	\$ -	\$ 216,143	1.1%
Municipal Irrigation	\$ 555,905	\$ 453,529	\$ 4,426	\$ -	\$ 1,013,860	5.2%
Fire	\$ -	\$ -	\$ 7,879	\$ 239,047	\$ 246,925	1.3%
Other	\$ 1,059,785	\$ 666,335	\$ 6,241	\$ -	\$ 1,732,361	9.0%
<b>Total Net Revenue Requirement</b>	<b>\$ 11,451,774</b>	<b>\$ 6,877,765</b>	<b>\$ 777,598</b>	<b>\$ 239,047</b>	<b>\$ 19,346,184</b>	<b>100%</b>

CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES FOR FY 2016/17

Net Revenue Requirements (41% Fixed / 59% Variable)

Number of Meters by Class and Size <sup>1</sup>	FY 2016/17									Total
	3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch	
Single Family Residential	31,493	1,369	-	-	-	-	-	-	-	32,862
Multi-Family Residential	122	109	154	113	35	17	27	17	2	596
Commercial	223	155	149	198	23	15	2	12	4	781
Irrigation	9	5	9	25	6	4	-	-	-	58
Municipal Irrigation	20	25	86	53	3	6	4	3	-	200
Other	74	37	39	65	26	21	5	13	2	282
<b>Total Meters/Accounts</b>	<b>31,941</b>	<b>1,700</b>	<b>437</b>	<b>454</b>	<b>93</b>	<b>63</b>	<b>38</b>	<b>45</b>	<b>8</b>	<b>34,779</b>
Hydraulic Capacity Factor <sup>2</sup>	1.00	1.67	3.33	5.33	10.67	16.67	33.33	93.33	140.00	
<b>Total Equivalent Meters</b>	<b>31,941</b>	<b>2,833</b>	<b>1,457</b>	<b>2,421</b>	<b>992</b>	<b>1,050</b>	<b>1,267</b>	<b>4,200</b>	<b>1,120</b>	<b>47,281</b>
<b>Monthly Fixed Service Charges</b>										
Customer Costs (\$/Acct/month) <sup>3</sup>	\$1.84	\$1.84	\$1.84	\$1.84	\$1.84	\$1.84	\$1.84	\$1.84	\$1.84	
Capacity Costs (\$/Acct/month) <sup>4</sup>	\$12.12	\$20.20	\$40.41	\$64.65	\$129.30	\$202.04	\$404.07	\$1,131.40	\$1,697.10	
<b>Total Monthly Meter Charge</b>	<b>\$13.97</b>	<b>\$22.05</b>	<b>\$42.25</b>	<b>\$66.50</b>	<b>\$131.15</b>	<b>\$203.88</b>	<b>\$405.92</b>	<b>\$1,133.24</b>	<b>\$1,698.94</b>	
<b>Annual Fixed Costs Allocated to Monthly Meter Charges</b>										
Customer Costs	\$ 769,719									
Capacity Costs	6,877,765									
<b>Total Fixed Meter Costs</b>	<b>\$ 7,647,484</b>									
<b>Annual Revenue from Monthly Meter Charges</b>										
Customer Charges	\$ 706,909	\$ 37,624	\$ 9,672	\$ 10,048	\$ 2,058	\$ 1,394	\$ 841	\$ 996	\$ 177	\$ 769,719
Capacity Charges	4,646,321	412,153	211,895	352,221	144,302	152,739	184,257	610,956	162,922	6,877,765
<b>Total Revenue from Monthly Meter Charges</b>	<b>\$ 5,353,230</b>	<b>\$ 449,777</b>	<b>\$ 221,567</b>	<b>\$ 362,269</b>	<b>\$ 146,360</b>	<b>\$ 154,133</b>	<b>\$ 185,098</b>	<b>\$ 611,952</b>	<b>\$ 163,099</b>	<b>\$ 7,647,484</b>

CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES FOR FY 2016/17

Net Revenue Requirements (41% Fixed / 59% Variable)

Number of Meters by Class and Size <sup>5</sup>	FY 2016/17									Total
	3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch	
Fire	-	-	-	-	6	31	79	170	39	325
<b>Total Meters/Accounts</b>					<b>6</b>	<b>31</b>	<b>79</b>	<b>170</b>	<b>39</b>	<b>325</b>
Hydraulic Capacity Factor <sup>2</sup>	1.00	1.67	3.33	5.33	11.67	23.33	53.33	93.33	146.67	
<b>Total Equivalent Meters</b>					<b>70</b>	<b>723</b>	<b>4,213</b>	<b>15,867</b>	<b>5,720</b>	<b>26,593</b>
<b>Monthly Fixed Service Charges</b>										
Customer Costs (\$/Acct/month) <sup>3</sup>	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	
Capacity Costs (\$/Acct/month) <sup>4</sup>	\$0.75	\$1.25	\$2.50	\$4.00	8.74	17.48	39.95	69.91	109.87	
<b>Total Monthly Meter Charge</b>	<b>\$2.77</b>	<b>\$3.27</b>	<b>\$4.52</b>	<b>\$6.02</b>	<b>\$10.76</b>	<b>\$19.50</b>	<b>\$41.97</b>	<b>\$71.93</b>	<b>\$111.89</b>	
<b>Annual Fixed Costs Allocated to Monthly Meter Charges</b>										
Customer Costs	\$ 7,879									
Capacity & Fire Protection Costs	239,047									
<b>Total Fixed Meter Costs</b>	<b>\$ 246,925</b>									
<b>Annual Revenue from Monthly Meter Charges</b>										
Customer Charges	\$ -	\$ -	\$ -	\$ -	\$ 145	\$ 752	\$ 1,915	\$ 4,121	\$ 945	\$ 7,879
Capacity Charges	-	-	-	-	629	6,502	37,874	142,625	51,417	239,047
<b>Total Revenue from Monthly Meter Charges</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 775</b>	<b>\$ 7,254</b>	<b>\$ 39,789</b>	<b>\$ 146,746</b>	<b>\$ 52,362</b>	<b>\$ 246,925</b>

1. Number of meters by Class and Size are based on June 2014 customer data. File: VWD14 Revenue Model Meter.xls. Excludes Municipal Well customer, Flow meters and Intertie Connections.

2. Source: AWWA Manual M1, "Principles of Water Rates, Fees, and Charges", Table VI.2-5.

Assumes displacement meters for 3/4 - 2 inch meters, compound meters for 3 - 6 inch and turbine class II meters for 8 and 10 inch meters.

3. Customer costs are allocated to each customer by dividing the total customer costs by the total number of customers.

4. Capacity costs are allocated by meter size and the hydraulic capacity of the meter.

5. Number of fire meters by size were provided by District Staff on 8/3/2015 (file: VWD Rate Analysis 08-03-2015.xlsx.)

Allocation of Net Revenue Requirements - FY 2017/18

Customer Classes	Classification Components				Cost of Service Net Rev. Reqts	% of COS Net Revenue Reqts
	Commodity-Related	Capacity-Related	Customer-Related	Fire Protection-Related		
Single Family Residential	\$ 8,070,774	\$ 4,666,928	\$ 771,625	\$ -	\$ 13,509,326	65.0%
Multi-Family Residential	\$ 1,129,517	\$ 610,121	\$ 13,995	\$ -	\$ 1,753,633	8.4%
Commercial	\$ 1,314,603	\$ 734,486	\$ 18,338	\$ -	\$ 2,067,427	10.0%
Irrigation	\$ 133,278	\$ 97,338	\$ 1,362	\$ -	\$ 231,978	1.1%
Municipal Irrigation	\$ 601,801	\$ 481,174	\$ 4,696	\$ -	\$ 1,087,671	5.2%
Fire	\$ -	\$ -	\$ 8,359	\$ 256,713	\$ 265,072	1.3%
Other	\$ 1,147,283	\$ 706,951	\$ 6,622	\$ -	\$ 1,860,855	9.0%
<b>Total Net Revenue Requirement</b>	<b>\$ 12,397,256</b>	<b>\$ 7,296,998</b>	<b>\$ 824,996</b>	<b>\$ 256,713</b>	<b>\$ 20,775,964</b>	<b>100%</b>

CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES FOR FY 2017/18

Net Revenue Requirements (40% Fixed / 60% Variable)

Number of Meters by Class and Size <sup>1</sup>	FY 2017/18									Total	
	3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch		
Single Family Residential	31,682	1,377	-	-	-	-	-	-	-	-	33,059
Multi-Family Residential	123	110	155	114	35	17	27	17	2	2	600
Commercial	224	156	150	199	23	15	2	12	4	4	786
Irrigation	9	5	9	25	6	4	-	-	-	-	58
Municipal Irrigation	20	25	87	53	3	6	4	3	-	-	201
Other	74	37	39	65	26	21	5	13	2	2	284
<b>Total Meters/Accounts</b>	<b>32,133</b>	<b>1,710</b>	<b>440</b>	<b>457</b>	<b>94</b>	<b>63</b>	<b>38</b>	<b>45</b>	<b>8</b>	<b>8</b>	<b>34,988</b>
Hydraulic Capacity Factor <sup>2</sup>	1.00	1.67	3.33	5.33	10.67	16.67	33.33	93.33	140.00		
<b>Total Equivalent Meters</b>	<b>32,133</b>	<b>2,850</b>	<b>1,465</b>	<b>2,436</b>	<b>998</b>	<b>1,056</b>	<b>1,274</b>	<b>4,225</b>	<b>1,127</b>		<b>47,565</b>
<b>Monthly Fixed Service Charges</b>											
Customer Costs (\$/Acct/month) <sup>3</sup>	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	
Capacity Costs (\$/Acct/month) <sup>4</sup>	\$12.78	\$21.31	\$42.61	\$68.18	\$136.37	\$213.07	\$426.14	\$1,193.21	\$1,789.81		
<b>Total Monthly Meter Charge</b>	<b>\$14.73</b>	<b>\$23.25</b>	<b>\$44.56</b>	<b>\$70.13</b>	<b>\$138.31</b>	<b>\$215.02</b>	<b>\$428.09</b>	<b>\$1,195.15</b>	<b>\$1,791.75</b>		
<b>Annual Fixed Costs Allocated to Monthly Meter Charges</b>											
Customer Costs	\$ 816,637										
Capacity Costs	7,296,998										
<b>Total Fixed Meter Costs</b>	<b>\$ 8,113,635</b>										
<b>Annual Revenue from Monthly Meter Charges</b>											
Customer Charges	\$ 749,999	\$ 39,917	\$ 10,261	\$ 10,660	\$ 2,184	\$ 1,479	\$ 892	\$ 1,057	\$ 188		\$ 816,637
Capacity Charges	4,929,536	437,276	224,811	373,691	153,098	162,049	195,488	648,197	172,852		7,296,998
<b>Total Revenue from Monthly Meter Charges</b>	<b>\$ 5,679,535</b>	<b>\$ 477,193</b>	<b>\$ 235,072</b>	<b>\$ 384,351</b>	<b>\$ 155,282</b>	<b>\$ 163,528</b>	<b>\$ 196,380</b>	<b>\$ 649,253</b>	<b>\$ 173,040</b>		<b>\$ 8,113,635</b>

CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES FOR FY 2017/18

Net Revenue Requirements (40% Fixed / 60% Variable)

Number of Meters by Class and Size <sup>5</sup>	FY 2017/18									Total	
	3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch		
Fire	-	-	-	-	6	31	79	171	39		327
<b>Total Meters/Accounts</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6</b>	<b>31</b>	<b>79</b>	<b>171</b>	<b>39</b>		<b>327</b>
Hydraulic Capacity Factor <sup>2</sup>	1.00	1.67	3.33	5.33	11.67	23.33	53.33	93.33	146.67		
<b>Total Equivalent Meters</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>70</b>	<b>728</b>	<b>4,239</b>	<b>15,962</b>	<b>5,754</b>		<b>26,753</b>
<b>Monthly Fixed Service Charges</b>											
Customer Costs (\$/Acct/month) <sup>3</sup>	\$2.13	\$2.13	\$2.13	\$2.13	\$2.13	\$2.13	\$2.13	\$2.13	\$2.13	\$2.13	
Capacity Costs (\$/Acct/month) <sup>4</sup>	\$0.80	\$1.33	\$2.67	\$4.26	9.33	18.66	42.65	74.63	117.28		
<b>Total Monthly Meter Charge</b>	<b>\$2.93</b>	<b>\$3.46</b>	<b>\$4.80</b>	<b>\$6.40</b>	<b>\$11.46</b>	<b>\$20.79</b>	<b>\$44.78</b>	<b>\$76.76</b>	<b>\$119.41</b>		
<b>Annual Fixed Costs Allocated to Monthly Meter Charges</b>											
Customer Costs	\$ 8,359										
Capacity & Fire Protection Costs	256,713										
<b>Total Fixed Meter Costs</b>	<b>\$ 265,072</b>										
<b>Annual Revenue from Monthly Meter Charges</b>											
Customer Charges	\$ -	\$ -	\$ -	\$ -	\$ 154	\$ 797	\$ 2,032	\$ 4,372	\$ 1,003		\$ 8,359
Capacity Charges	-	-	-	-	676	6,983	40,673	153,166	55,217		256,713
<b>Total Revenue from Monthly Meter Charges</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 830</b>	<b>\$ 7,780</b>	<b>\$ 42,704</b>	<b>\$ 157,538</b>	<b>\$ 56,220</b>		<b>\$ 265,072</b>

1. Number of meters by Class and Size are based on June 2014 customer data. File: VWD14 Revenue Model Meter.xls. Excludes Municipal Well customer, Flow meters and Intertie Connections.  
2. Source: AWWA Manual M1, "Principles of Water Rates, Fees, and Charges", Table VI.2-5.  
Assumes displacement meters for 3/4 - 2 inch meters, compound meters for 3 - 6 inch and turbine class II meters for 8 and 10 inch meters.  
3. Customer costs are allocated to each customer by dividing the total customer costs by the total number of customers.  
4. Capacity costs are allocated by meter size and the hydraulic capacity of the meter.  
5. Number of fire meters by size were provided by District Staff on 8/3/2015 (file: VWD Rate Analysis 08-03-2015.xlsx.)

Allocation of Net Revenue Requirements - FY 2018/19

Customer Classes	Classification Components				Cost of Service Net Rev. Reqts	% of COS Net Revenue Reqts
	Commodity-Related	Capacity-Related	Customer-Related	Fire Protection-		
Single Family Residential	\$ 8,737,533	\$ 4,949,798	\$ 818,394	\$ -	\$ 14,505,725	65.0%
Multi-Family Residential	\$ 1,222,831	\$ 647,102	\$ 14,843	\$ -	\$ 1,884,776	8.4%
Commercial	\$ 1,423,207	\$ 779,004	\$ 19,450	\$ -	\$ 2,221,662	10.0%
Irrigation	\$ 144,289	\$ 103,238	\$ 1,444	\$ -	\$ 248,971	1.1%
Municipal Irrigation	\$ 651,518	\$ 510,339	\$ 4,981	\$ -	\$ 1,166,838	5.2%
Fire	\$ -	\$ -	\$ 8,866	\$ 275,686	\$ 284,551	1.3%
Other	\$ 1,242,065	\$ 749,800	\$ 7,023	\$ -	\$ 1,998,888	9.0%
<b>Total Net Revenue Requirement</b>	<b>\$ 13,421,443</b>	<b>\$ 7,739,281</b>	<b>\$ 875,001</b>	<b>\$ 275,686</b>	<b>\$ 22,311,411</b>	<b>100%</b>

CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES FOR FY 2018/19

Net Revenue Requirements (40% Fixed / 60% Variable)

Number of Meters by Class and Size <sup>1</sup>	FY 2018/19									Total	
	3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch		
Single Family Residential	31,872	1,385	-	-	-	-	-	-	-	-	33,258
Multi-Family Residential	123	110	156	114	35	17	27	17	2	2	603
Commercial	226	157	151	200	23	15	2	12	4	4	790
Irrigation	9	5	9	25	6	4	-	-	-	-	59
Municipal Irrigation	20	25	87	54	3	6	4	3	-	-	202
Other	75	37	39	66	26	21	5	13	2	2	285
<b>Total Meters/Accounts</b>	<b>32,325</b>	<b>1,720</b>	<b>442</b>	<b>459</b>	<b>94</b>	<b>64</b>	<b>38</b>	<b>46</b>	<b>8</b>	<b>8</b>	<b>35,198</b>
Hydraulic Capacity Factor <sup>2</sup>	1.00	1.67	3.33	5.33	10.67	16.67	33.33	93.33	140.00	-	-
<b>Total Equivalent Meters</b>	<b>32,325</b>	<b>2,867</b>	<b>1,474</b>	<b>2,450</b>	<b>1,004</b>	<b>1,063</b>	<b>1,282</b>	<b>4,251</b>	<b>1,133</b>	<b>1,133</b>	<b>47,850</b>
<b>Monthly Fixed Service Charges</b>											
Customer Costs (\$/Acct/month) <sup>3</sup>	\$2.05	\$2.05	\$2.05	\$2.05	\$2.05	\$2.05	\$2.05	\$2.05	\$2.05	\$2.05	\$2.05
Capacity Costs (\$/Acct/month) <sup>4</sup>	\$13.48	\$22.46	\$44.93	\$71.88	143.77	224.64	449.28	1,257.98	1,886.97	-	-
<b>Total Monthly Meter Charge</b>	<b>\$15.53</b>	<b>\$24.51</b>	<b>\$46.98</b>	<b>\$73.94</b>	<b>\$145.82</b>	<b>\$226.69</b>	<b>\$451.33</b>	<b>\$1,260.03</b>	<b>\$1,889.02</b>	<b>\$1,889.02</b>	<b>\$1,889.02</b>
<b>Annual Fixed Costs Allocated to Monthly Meter Charges</b>											
Customer Costs	\$ 866,135										
Capacity Costs	7,739,281										
<b>Total Fixed Meter Costs</b>	<b>\$ 8,605,416</b>										
<b>Annual Revenue from Monthly Meter Charges</b>											
Customer Charges	\$ 795,458	\$ 42,337	\$ 10,883	\$ 11,306	\$ 2,316	\$ 1,569	\$ 946	\$ 1,121	\$ 199	\$ 199	\$ 866,135
Capacity Charges	5,228,324	463,780	238,437	396,341	162,377	171,871	207,337	687,485	183,329	183,329	7,739,281
<b>Total Revenue from Monthly Meter Charges</b>	<b>\$ 6,023,781</b>	<b>\$ 506,116</b>	<b>\$ 249,320</b>	<b>\$ 407,647</b>	<b>\$ 164,693</b>	<b>\$ 173,440</b>	<b>\$ 208,283</b>	<b>\$ 688,606</b>	<b>\$ 183,529</b>	<b>\$ 183,529</b>	<b>\$ 8,605,416</b>

CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES FOR FY 2018/19

Net Revenue Requirements (40% Fixed / 60% Variable)

Number of Meters by Class and Size <sup>5</sup>	FY 2018/19									Total	
	3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch		
Fire	-	-	-	-	6	31	80	172	39	39	329
<b>Total Meters/Accounts</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6</b>	<b>31</b>	<b>80</b>	<b>172</b>	<b>39</b>	<b>39</b>	<b>329</b>
Hydraulic Capacity Factor <sup>2</sup>	1.00	1.67	3.33	5.33	11.67	23.33	53.33	93.33	146.67	-	-
<b>Total Equivalent Meters</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>71</b>	<b>732</b>	<b>4,264</b>	<b>16,058</b>	<b>5,789</b>	<b>5,789</b>	<b>26,913</b>
<b>Monthly Fixed Service Charges</b>											
Customer Costs (\$/Acct/month) <sup>3</sup>	\$2.25	\$2.25	\$2.25	\$2.25	\$2.25	\$2.25	\$2.25	\$2.25	\$2.25	\$2.25	\$2.25
Capacity Costs (\$/Acct/month) <sup>4</sup>	\$0.85	\$1.42	\$2.85	\$4.55	9.96	19.92	45.53	79.67	125.20	-	-
<b>Total Monthly Meter Charge</b>	<b>\$3.10</b>	<b>\$3.67</b>	<b>\$5.09</b>	<b>\$6.80</b>	<b>\$12.21</b>	<b>\$22.16</b>	<b>\$47.77</b>	<b>\$81.92</b>	<b>\$127.44</b>	<b>\$127.44</b>	<b>\$127.44</b>
<b>Annual Fixed Costs Allocated to Monthly Meter Charges</b>											
Customer Costs	\$ 8,866										
Capacity & Fire Protection Costs	275,686										
<b>Total Fixed Meter Costs</b>	<b>\$ 284,551</b>										
<b>Annual Revenue from Monthly Meter Charges</b>											
Customer Charges	\$ -	\$ -	\$ -	\$ -	\$ 164	\$ 846	\$ 2,155	\$ 4,638	\$ 1,064	\$ 1,064	\$ 8,866
Capacity Charges	-	-	-	-	726	7,499	43,678	164,485	59,298	59,298	275,686
<b>Total Revenue from Monthly Meter Charges</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 890</b>	<b>\$ 8,344</b>	<b>\$ 45,834</b>	<b>\$ 169,123</b>	<b>\$ 60,362</b>	<b>\$ 60,362</b>	<b>\$ 284,551</b>

1. Number of meters by Class and Size are based on June 2014 customer data. File: VWD14 Revenue Model Meter.xls. Excludes Municipal Well customer, Flow meters and Intertie Connections.  
 2. Source: AWWA Manual M1, "Principles of Water Rates, Fees, and Charges", Table VI.2-5.  
 Assumes displacement meters for 3/4 - 2 inch meters, compound meters for 3 - 6 inch and turbine class II meters for 8 and 10 inch meters.  
 3. Customer costs are allocated to each customer by dividing the total customer costs by the total number of customers.  
 4. Capacity costs are allocated by meter size and the hydraulic capacity of the meter.  
 5. Number of fire meters by size were provided by District Staff on 8/3/2015 (file: VWD Rate Analysis 08-03-2015.xlsx.)

Allocation of Net Revenue Requirements - FY 2019/20

Customer Classes	Classification Components				Cost of Service Net Rev. Reqts	% of COS Net Revenue Reqts
	Commodity-Related	Capacity-Related	Customer-Related	Fire Protection-Related		
Single Family Residential	\$ 9,459,824	\$ 5,248,053	\$ 867,707	\$ -	\$ 15,575,584	65.0%
Multi-Family Residential	\$ 1,323,917	\$ 686,094	\$ 15,737	\$ -	\$ 2,025,748	8.5%
Commercial	\$ 1,540,857	\$ 825,944	\$ 20,622	\$ -	\$ 2,387,423	10.0%
Irrigation	\$ 156,217	\$ 109,459	\$ 1,531	\$ -	\$ 267,206	1.1%
Municipal Irrigation	\$ 705,376	\$ 541,090	\$ 5,281	\$ -	\$ 1,251,747	5.2%
Fire	\$ -	\$ -	\$ 9,400	\$ 296,060	\$ 305,460	1.3%
Other	\$ 1,344,740	\$ 794,980	\$ 7,446	\$ -	\$ 2,147,167	9.0%
<b>Total Net Revenue Requirement</b>	<b>\$ 14,530,932</b>	<b>\$ 8,205,619</b>	<b>\$ 927,725</b>	<b>\$ 296,060</b>	<b>\$ 23,960,336</b>	<b>100%</b>

CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES FOR FY 2019/20

Net Revenue Requirements (39% Fixed / 61% Variable)

Number of Meters by Class and Size <sup>1</sup>	FY 2019/20									Total
	3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch	
Single Family Residential	32,063	1,394	-	-	-	-	-	-	-	33,457
Multi-Family Residential	124	111	157	115	36	17	27	17	2	607
Commercial	227	158	152	202	23	15	2	12	4	795
Irrigation	9	5	9	25	6	4	-	-	-	59
Municipal Irrigation	20	25	88	54	3	6	4	3	-	204
Other	75	38	40	66	26	21	5	13	2	287
<b>Total Meters/Accounts</b>	<b>32,519</b>	<b>1,731</b>	<b>445</b>	<b>462</b>	<b>95</b>	<b>64</b>	<b>39</b>	<b>46</b>	<b>8</b>	<b>35,409</b>
Hydraulic Capacity Factor <sup>2</sup>	1.00	1.67	3.33	5.33	10.67	16.67	33.33	93.33	140.00	
<b>Total Equivalent Meters</b>	<b>32,519</b>	<b>2,885</b>	<b>1,483</b>	<b>2,465</b>	<b>1,010</b>	<b>1,069</b>	<b>1,290</b>	<b>4,276</b>	<b>1,140</b>	<b>48,137</b>
<b>Monthly Fixed Service Charges</b>										
Customer Costs (\$/Acct/month) <sup>3</sup>	\$2.16	\$2.16	\$2.16	\$2.16	\$2.16	\$2.16	\$2.16	\$2.16	\$2.16	\$2.16
Capacity Costs (\$/Acct/month) <sup>4</sup>	\$14.21	\$23.68	\$47.35	\$75.76	\$151.52	\$236.75	\$473.51	\$1,325.83	\$1,988.74	
<b>Total Monthly Meter Charge</b>	<b>\$16.37</b>	<b>\$25.84</b>	<b>\$49.51</b>	<b>\$77.92</b>	<b>\$153.68</b>	<b>\$238.92</b>	<b>\$475.67</b>	<b>\$1,327.99</b>	<b>\$1,990.90</b>	
<b>Annual Fixed Costs Allocated to Monthly Meter Charges</b>										
Customer Costs	\$ 918,325									
Capacity Costs	8,205,619									
<b>Total Fixed Meter Costs</b>	<b>\$ 9,123,943</b>									
<b>Annual Revenue from Monthly Meter Charges</b>										
Customer Charges	\$ 843,389	\$ 44,888	\$ 11,539	\$ 11,988	\$ 2,456	\$ 1,663	\$ 1,003	\$ 1,188	\$ 211	\$ 918,325
Capacity Charges	5,543,361	491,725	252,805	420,222	172,162	182,228	219,830	728,910	194,376	8,205,619
<b>Total Revenue from Monthly Meter Charges</b>	<b>\$ 6,386,750</b>	<b>\$ 536,613</b>	<b>\$ 264,343</b>	<b>\$ 432,210</b>	<b>\$ 174,617</b>	<b>\$ 183,891</b>	<b>\$ 220,833</b>	<b>\$ 730,098</b>	<b>\$ 194,587</b>	<b>\$ 9,123,943</b>

CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES FOR FY 2019/20

Net Revenue Requirements (39% Fixed / 61% Variable)

Number of Meters by Class and Size <sup>5</sup>	FY 2019/20									Total
	3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch	
Fire	-	-	-	-	6	32	80	173	40	331
<b>Total Meters/Accounts</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6</b>	<b>32</b>	<b>80</b>	<b>173</b>	<b>40</b>	<b>331</b>
Hydraulic Capacity Factor <sup>2</sup>	1.00	1.67	3.33	5.33	11.67	23.33	53.33	93.33	146.67	
<b>Total Equivalent Meters</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>71</b>	<b>736</b>	<b>4,290</b>	<b>16,154</b>	<b>5,824</b>	<b>27,075</b>
<b>Monthly Fixed Service Charges</b>										
Customer Costs (\$/Acct/month) <sup>3</sup>	\$2.37	\$2.37	\$2.37	\$2.37	\$2.37	\$2.37	\$2.37	\$2.37	\$2.37	\$2.37
Capacity Costs (\$/Acct/month) <sup>4</sup>	\$0.91	\$1.52	\$3.04	\$4.86	10.63	21.26	48.60	85.05	133.65	
<b>Total Monthly Meter Charge</b>	<b>\$3.28</b>	<b>\$3.89</b>	<b>\$5.40</b>	<b>\$7.23</b>	<b>\$13.00</b>	<b>\$23.63</b>	<b>\$50.97</b>	<b>\$87.42</b>	<b>\$136.02</b>	
<b>Annual Fixed Costs Allocated to Monthly Meter Charges</b>										
Customer Costs	\$ 9,400									
Capacity & Fire Protection Costs	296,060									
<b>Total Fixed Meter Costs</b>	<b>\$ 305,460</b>									
<b>Annual Revenue from Monthly Meter Charges</b>										
Customer Charges	\$ -	\$ -	\$ -	\$ -	\$ 174	\$ 897	\$ 2,285	\$ 4,917	\$ 1,128	\$ 9,400
Capacity Charges	-	-	-	-	779	8,053	46,907	176,642	63,680	296,060
<b>Total Revenue from Monthly Meter Charges</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 953</b>	<b>\$ 8,949</b>	<b>\$ 49,191</b>	<b>\$ 181,559</b>	<b>\$ 64,808</b>	<b>\$ 305,460</b>

1. Number of meters by Class and Size are based on June 2014 customer data. File: VWD14 Revenue Model Meter.xls. Excludes Municipal Well customer, Flow meters and Intertie Connections.  
 2. Source: AWWA Manual M1, "Principles of Water Rates, Fees, and Charges", Table VI.2-5.  
 Assumes displacement meters for 3/4 - 2 inch meters, compound meters for 3 - 6 inch and turbine class II meters for 8 and 10 inch meters.  
 3. Customer costs are allocated to each customer by dividing the total customer costs by the total number of customers.  
 4. Capacity costs are allocated by meter size and the hydraulic capacity of the meter.  
 5. Number of fire meters by size were provided by District Staff on 8/3/2015 (file: VWD Rate Analysis 08-03-2015.xlsx.)

Allocation of Net Revenue Requirements - FY 2020/21

Customer Classes	Classification Components				Cost of Service Net Rev. Reqts	% of COS Net Revenue Reqts
	Commodity-Related	Capacity-Related	Customer-Related	Fire Protection-		
Single Family Residential	\$ 10,242,305	\$ 5,475,248	\$ 905,271	\$ -	\$ 16,622,825	65.0%
Multi-Family Residential	\$ 1,433,426	\$ 715,796	\$ 16,418	\$ -	\$ 2,165,640	8.5%
Commercial	\$ 1,668,311	\$ 861,700	\$ 21,515	\$ -	\$ 2,551,526	10.0%
Irrigation	\$ 169,138	\$ 114,197	\$ 1,598	\$ -	\$ 284,933	1.1%
Municipal Irrigation	\$ 763,723	\$ 564,514	\$ 5,510	\$ -	\$ 1,333,746	5.2%
Fire	\$ -	\$ -	\$ 9,807	\$ 316,044	\$ 325,851	1.3%
Other	\$ 1,455,972	\$ 829,396	\$ 7,768	\$ -	\$ 2,293,137	9.0%
<b>Total Net Revenue Requirement</b>	<b>\$ 15,732,875</b>	<b>\$ 8,560,852</b>	<b>\$ 967,887</b>	<b>\$ 316,044</b>	<b>\$ 25,577,659</b>	<b>100%</b>

CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES FOR FY 2020/21 Net Revenue Requirements (38% Fixed / 62% Variable)

Number of Meters by Class and Size <sup>1</sup>	FY 2020/21									Total
	3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch	
Single Family Residential	32,256	1,402	-	-	-	-	-	-	-	33,658
Multi-Family Residential	125	112	158	116	36	17	28	17	2	610
Commercial	228	159	153	203	24	15	2	12	4	800
Irrigation	9	5	9	26	6	4	-	-	-	59
Municipal Irrigation	20	26	88	54	3	6	4	3	-	205
Other	76	38	40	67	27	22	5	13	2	289
<b>Total Meters/Accounts</b>	<b>32,715</b>	<b>1,741</b>	<b>448</b>	<b>465</b>	<b>95</b>	<b>65</b>	<b>39</b>	<b>46</b>	<b>8</b>	<b>35,621</b>
Hydraulic Capacity Factor <sup>2</sup>	1.00	1.67	3.33	5.33	10.67	16.67	33.33	93.33	140.00	
<b>Total Equivalent Meters</b>	<b>32,715</b>	<b>2,902</b>	<b>1,492</b>	<b>2,480</b>	<b>1,016</b>	<b>1,075</b>	<b>1,297</b>	<b>4,302</b>	<b>1,147</b>	<b>48,426</b>
<b>Monthly Fixed Service Charges</b>										
Customer Costs (\$/Acct/month) <sup>3</sup>	\$2.24	\$2.24	\$2.24	\$2.24	\$2.24	\$2.24	\$2.24	\$2.24	\$2.24	
Capacity Costs (\$/Acct/month) <sup>4</sup>	\$14.73	\$24.55	\$49.11	\$78.57	\$157.14	\$245.53	\$491.06	\$1,374.97	\$2,062.46	
<b>Total Monthly Meter Charge</b>	<b>\$16.97</b>	<b>\$26.79</b>	<b>\$51.35</b>	<b>\$80.81</b>	<b>\$159.38</b>	<b>\$247.77</b>	<b>\$493.30</b>	<b>\$1,377.21</b>	<b>\$2,064.70</b>	
<b>Annual Fixed Costs Allocated to Monthly Meter Charges</b>										
Customer Costs	\$ 958,080									
Capacity Costs	8,560,852									
<b>Total Fixed Meter Costs</b>	<b>\$ 9,518,932</b>									
<b>Annual Revenue from Monthly Meter Charges</b>										
Customer Charges	\$ 879,900	\$ 46,831	\$ 12,038	\$ 12,507	\$ 2,562	\$ 1,736	\$ 1,047	\$ 1,240	\$ 220	\$ 958,080
Capacity Charges	5,783,341	513,013	263,749	438,414	179,615	190,116	229,347	760,466	202,791	8,560,852
<b>Total Revenue from Monthly Meter Charges</b>	<b>\$ 6,663,241</b>	<b>\$ 559,844</b>	<b>\$ 275,787</b>	<b>\$ 450,921</b>	<b>\$ 182,177</b>	<b>\$ 191,852</b>	<b>\$ 230,394</b>	<b>\$ 761,705</b>	<b>\$ 203,011</b>	<b>\$ 9,518,932</b>

**CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES FOR FY 2020/21** **Net Revenue Requirements (38% Fixed / 62% Variable)**

Number of Meters by Class and Size <sup>5</sup>	FY 2020/21										Total
	3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch		
Fire	-	-	-	-	6	32	81	174	40		333
<b>Total Meters/Accounts</b>	-	-	-	-	<b>6</b>	<b>32</b>	<b>81</b>	<b>174</b>	<b>40</b>		<b>333</b>
Hydraulic Capacity Factor <sup>2</sup>	1.00	1.67	3.33	5.33	11.67	23.33	53.33	93.33	146.67		
<b>Total Equivalent Meters</b>	-	-	-	-	<b>72</b>	<b>741</b>	<b>4,315</b>	<b>16,251</b>	<b>5,859</b>		<b>27,237</b>
<b>Monthly Fixed Service Charges</b>											
Customer Costs (\$/Acct/month) <sup>3</sup>	\$2.46	\$2.46	\$2.46	\$2.46	\$2.46	\$2.46	\$2.46	\$2.46	\$2.46		
Capacity Costs (\$/Acct/month) <sup>4</sup>	\$0.97	\$1.61	\$3.22	\$5.16	11.28	22.56	51.57	90.25	141.82		
<b>Total Monthly Meter Charge</b>	<b>\$3.42</b>	<b>\$4.07</b>	<b>\$5.68</b>	<b>\$7.61</b>	<b>\$13.74</b>	<b>\$25.02</b>	<b>\$54.03</b>	<b>\$92.70</b>	<b>\$144.27</b>		
<b>Annual Fixed Costs Allocated to Monthly Meter Charges</b>											
Customer Costs	\$ 9,807										
Capacity & Fire Protection Costs	316,044										
<b>Total Fixed Meter Costs</b>	<b>\$ 325,851</b>										
<b>Annual Revenue from Monthly Meter Charges</b>											
Customer Charges	\$ -	\$ -	\$ -	\$ -	\$ 181	\$ 935	\$ 2,384	\$ 5,130	\$ 1,177		\$ 9,807
Capacity Charges	-	-	-	-	832	8,596	50,073	188,565	67,978		316,044
<b>Total Revenue from Monthly Meter Charges</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,013</b>	<b>\$ 9,532</b>	<b>\$ 52,457</b>	<b>\$ 193,695</b>	<b>\$ 69,155</b>		<b>\$ 325,851</b>

1. Number of meters by Class and Size are based on June 2014 customer data. File: VWD14 Revenue Model Meter.xls. Excludes Municipal Well customer, Flow meters and Intertie Connections.  
2. Source: AWWA Manual M1, "Principles of Water Rates, Fees, and Charges", Table VI.2-5.  
Assumes displacement meters for 3/4 - 2 inch meters, compound meters for 3 - 6 inch and turbine class II meters for 8 and 10 inch meters.  
3. Customer costs are allocated to each customer by dividing the total customer costs by the total number of customers.  
4. Capacity costs are allocated by meter size and the hydraulic capacity of the meter.  
5. Number of fire meters by size were provided by District Staff on 8/3/2015 (file: VWD Rate Analysis 08-03-2015.xlsx.)

WATER RATE STUDY

Water Cost of Service Analysis/Rate Design

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

**PROPOSED VOLUMETRIC CHARGES FOR FY 2016/17**

**Net Revenue Requirements (41% Fixed / 59% Variable)**

Customer Classes	Number of Meters <sup>1</sup>	Water Consumption (hcf/yr.) <sup>2</sup>	Target Rev. Req't from Vol. Charges	% of Total Rate Revenue	Uniform Commodity Rates (\$/hcf)	Proposed Rate Structure
<i>Treated Water:</i>						
Single Family Residential	32,862	4,262,924	\$ 7,455,253	39%	\$1.749	Uniform
Multi-Family Residential	596	596,603	\$ 1,043,374	5%	\$1.749	Uniform
Commercial	781	694,364	\$ 1,214,344	6%	\$1.749	Uniform
Irrigation	58	70,397	\$ 123,114	1%	\$1.749	Uniform
Municipal Irrigation	200	317,867	\$ 555,905	3%	\$1.749	Uniform
Fire	356	0	\$ -	0%	\$1.749	Uniform
Other	282	605,987	\$ 1,059,785	5%	\$1.749	Uniform
<b>Total</b>	<b>35,135</b>	<b>6,548,141</b>	<b>\$ 11,451,774</b>	<b>59%</b>		

**Net Revenue Requirements (41% Fixed / 59% Variable), continued**

**Calculated Rate for Non-Recurring (Commercial & Municipal Flow and Intertie) Users:**

Calculated Rate for Flow Meters and Intertie Connections	Water Consumption (hcf/yr.) <sup>2</sup>	Total Target Rev. Req't.	Average Cost Per Unit (\$/hcf)
All Treated Water	6,548,141	\$ 19,346,184	\$2.954

**Estimated Revenue from Flow Meters and Intertie Connections, Based on FY 2013/14 Consumption:**

Customer Classes	Number of Meters <sup>1</sup>	Water Consumption (hcf/yr.) <sup>2</sup>	Estimated Rate Revenue FY 2015/16
Commercial Flow Meter	36	37,166	\$ 109,804
Municipal Flow Meter	19	2,458	\$ 7,262
Intertie <sup>3</sup>	3	96,553	\$ 285,261
<b>Total</b>	<b>58</b>	<b>136,176</b>	<b>\$ 402,327</b>

1. Number of meters is based on the number of customers billed a fixed and/or variable charge in June 2014, except for intertie customers. File: VWD14 Revenue Model Meter.xls.

2. Assumes the District will meet the 28% conservation mandate from the State of CA, as noted in the draft usage analysis released 4/28/2015 by the State Water Res.

3. Number of meters is based on September 2013 customer data, which is the most meters connected at any point during FY 2013/14.

WATER RATE STUDY

Water Cost of Service Analysis/Rate Design

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

**PROPOSED VOLUMETRIC CHARGES FOR FY 2017/18**

**Net Revenue Requirements (40% Fixed / 60% Variable)**

Customer Classes	Number of Meters <sup>1</sup>	Water Consumption (hcf/vr.) <sup>2</sup>	Target Rev. Req't from Vol. Charges	% of Total Rate Revenue	Uniform Commodity Rates (\$/hcf)	Proposed Rate Structure
<i>Treated Water:</i>						
Single Family Residential	33,059	4,288,502	\$ 8,070,774	39%	\$1.882	Uniform
Multi-Family Residential	600	600,182	\$ 1,129,517	5%	\$1.882	Uniform
Commercial	786	698,530	\$ 1,314,603	6%	\$1.882	Uniform
Irrigation	58	70,819	\$ 133,278	1%	\$1.882	Uniform
Municipal Irrigation	201	319,774	\$ 601,801	3%	\$1.882	Uniform
Fire	358	0	\$ -	0%	\$1.882	Uniform
Other	284	609,622	\$ 1,147,283	6%	\$1.882	Uniform
<b>Total</b>	<b>35,346</b>	<b>6,587,430</b>	<b>\$ 12,397,256</b>	<b>60%</b>		

**Net Revenue Requirements (40% Fixed / 60% Variable), continued**

**Calculated Rate for Non-Recurring (Commercial & Municipal Flow and Intertie) Users:**

Calculated Rate for Flow Meters and Intertie Connections	Water Consumption (hcf/vr.) <sup>2</sup>	Total Target Rev. Req't.	Average Cost Per Unit (\$/hcf)
All Treated Water	6,587,430	\$ 20,775,964	\$3.154

**Estimated Revenue from Flow Meters and Intertie Connections, Based on FY 2013/14 Consumption:**

Customer Classes	Number of Meters <sup>1</sup>	Water Consumption (hcf/vr.) <sup>2</sup>	Estimated Rate Revenue FY 2015/16
Commercial Flow Meter	36	37,166	\$ 109,804
Municipal Flow Meter	19	2,458	\$ 7,262
Intertie <sup>3</sup>	3	96,553	\$ 285,261
<b>Total</b>	<b>58</b>	<b>136,176</b>	<b>\$ 402,327</b>

1. Number of meters is based on the number of customers billed a fixed and/or variable charge in June 2014, except for intertie customers. File: VWD14 Revenue Model Meter.xls.

2. Assumes the District will meet the 28% conservation mandate from the State of CA, as noted in the draft usage analysis released 4/28/2015 by the State Water Res

3. Number of meters is based on September 2013 customer data, which is the most meters connected at any point during FY 2013/14.



WATER RATE STUDY

Water Cost of Service Analysis/Rate Design

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

**PROPOSED VOLUMETRIC CHARGES FOR FY 2018/19**

**Net Revenue Requirements (40% Fixed / 60% Variable)**

Customer Classes	Number of Meters <sup>1</sup>	Water Consumption (hcf/vr.) <sup>2</sup>	Target Rev. Req't from Vol. Charges	% of Total Rate Revenue	Uniform Commodity Rates (\$/hcf)	Proposed Rate Structure
<i>Treated Water:</i>						
Single Family Residential	33,258	4,314,233	\$ 8,737,533	39%	\$2.025	Uniform
Multi-Family Residential	603	603,784	\$ 1,222,831	5%	\$2.025	Uniform
Commercial	790	702,721	\$ 1,423,207	6%	\$2.025	Uniform
Irrigation	59	71,244	\$ 144,289	1%	\$2.025	Uniform
Municipal Irrigation	202	321,693	\$ 651,518	3%	\$2.025	Uniform
Fire	360	0	\$ -	0%	\$2.025	Uniform
Other	285	613,280	\$ 1,242,065	6%	\$2.025	Uniform
<b>Total</b>	<b>35,558</b>	<b>6,626,954</b>	<b>\$ 13,421,443</b>	<b>60%</b>		

**Net Revenue Requirements (40% Fixed / 60% Variable), continued**

**Calculated Rate for Non-Recurring (Commercial & Municipal Flow and Intertie) Users:**

Calculated Rate for Flow Meters and Intertie Connections	Water Consumption (hcf/vr.) <sup>2</sup>	Total Target Rev. Req't.	Average Cost Per Unit (\$/hcf)
All Treated Water	6,626,954	\$ 22,311,411	\$3.367

**Estimated Revenue from Flow Meters and Intertie Connections, Based on FY 2013/14 Consumption:**

Customer Classes	Number of Meters <sup>1</sup>	Water Consumption (hcf/vr.) <sup>2</sup>	Estimated Rate Revenue FY 2015/16
Commercial Flow Meter	36	37,166	\$ 109,804
Municipal Flow Meter	19	2,458	\$ 7,262
Intertie <sup>3</sup>	3	96,553	\$ 285,261
<b>Total</b>	<b>58</b>	<b>136,176</b>	<b>\$ 402,327</b>

1. Number of meters is based on the number of customers billed a fixed and/or variable charge in June 2014, except for intertie customers. File: VWD14 Revenue Model Meter.xls.

2. Assumes the District will meet the 28% conservation mandate from the State of CA, as noted in the draft usage analysis released 4/28/2015 by the State Water Res

3. Number of meters is based on September 2013 customer data, which is the most meters connected at any point during FY 2013/14.

WATER RATE STUDY

Water Cost of Service Analysis/Rate Design

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

**PROPOSED VOLUMETRIC CHARGES FOR FY 2019/20**

**Net Revenue Requirements (39% Fixed / 61% Variable)**

Customer Classes	Number of Meters <sup>1</sup>	Water Consumption (hcf/vr.) <sup>2</sup>	Target Rev. Req't from Vol. Charges	% of Total Rate Revenue	Uniform Commodity Rates (\$/hcf)	Proposed Rate Structure
<i>Treated Water:</i>						
Single Family Residential	33,457	4,340,118	\$ 9,459,824	39%	\$2.180	Uniform
Multi-Family Residential	607	607,406	\$ 1,323,917	6%	\$2.180	Uniform
Commercial	795	706,937	\$ 1,540,857	6%	\$2.180	Uniform
Irrigation	59	71,671	\$ 156,217	1%	\$2.180	Uniform
Municipal Irrigation	204	323,623	\$ 705,376	3%	\$2.180	Uniform
Fire	362	0	\$ -	0%	\$2.180	Uniform
Other	287	616,960	\$ 1,344,740	6%	\$2.180	Uniform
<b>Total</b>	<b>35,771</b>	<b>6,666,716</b>	<b>\$ 14,530,932</b>	<b>61%</b>		

**Net Revenue Requirements (39% Fixed / 61% Variable), continued**

**Calculated Rate for Non-Recurring (Commercial & Municipal Flow and Intertie) Users:**

Calculated Rate for Flow Meters and Intertie Connections	Water Consumption (hcf/vr.) <sup>2</sup>	Total Target Rev. Req't.	Average Cost Per Unit (\$/hcf)
All Treated Water	6,666,716	\$ 23,960,336	\$3.594

**Estimated Revenue from Flow Meters and Intertie Connections, Based on FY 2013/14 Consumption:**

Customer Classes	Number of Meters <sup>1</sup>	Water Consumption (hcf/vr.) <sup>2</sup>	Estimated Rate Revenue FY 2015/16
Commercial Flow Meter	36	37,166	\$ 109,804
Municipal Flow Meter	19	2,458	\$ 7,262
Intertie <sup>3</sup>	3	96,553	\$ 285,261
<b>Total</b>	<b>58</b>	<b>136,176</b>	<b>\$ 402,327</b>

1. Number of meters is based on the number of customers billed a fixed and/or variable charge in June 2014, except for intertie customers. File: VWD14 Revenue Model Meter.xls.

2. Assumes the District will meet the 28% conservation mandate from the State of CA, as noted in the draft usage analysis released 4/28/2015 by the State Water Res

3. Number of meters is based on September 2013 customer data, which is the most meters connected at any point during FY 2013/14.

WATER RATE STUDY

Water Cost of Service Analysis/Rate Design

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

**PROPOSED VOLUMETRIC CHARGES FOR FY 2020/21**

**Net Revenue Requirements (38% Fixed / 62% Variable)**

Customer Classes	Number of Meters <sup>1</sup>	Water Consumption (hcf/vr.) <sup>2</sup>	Target Rev. Req't from Vol. Charges	% of Total Rate Revenue	Uniform Commodity Rates (\$/hcf)	Proposed Rate Structure
<i>Treated Water:</i>						
Single Family Residential	33,658	4,366,159	\$ 10,242,305	40%	\$2.346	Uniform
Multi-Family Residential	610	611,051	\$ 1,433,426	6%	\$2.346	Uniform
Commercial	800	711,179	\$ 1,668,311	7%	\$2.346	Uniform
Irrigation	59	72,101	\$ 169,138	1%	\$2.346	Uniform
Municipal Irrigation	205	325,565	\$ 763,723	3%	\$2.346	Uniform
Fire	365	0	\$ -	0%	\$2.346	Uniform
Other	289	620,662	\$ 1,455,972	6%	\$2.346	Uniform
<b>Total</b>	<b>35,986</b>	<b>6,706,716</b>	<b>\$ 15,732,875</b>	<b>62%</b>		

**Net Revenue Requirements (38% Fixed / 62% Variable), continued**

**Calculated Rate for Non-Recurring (Commercial & Municipal Flow and Intertie) Users:**

Calculated Rate for Flow Meters and Intertie Connections	Water Consumption (hcf/vr.) <sup>2</sup>	Total Target Rev. Req't.	Average Cost Per Unit (\$/hcf)
All Treated Water	6,706,716	\$ 25,577,659	\$3.814

**Estimated Revenue from Flow Meters and Intertie Connections, Based on FY 2013/14 Consumption:**

Customer Classes	Number of Meters <sup>1</sup>	Water Consumption (hcf/vr.) <sup>2</sup>	Estimated Rate Revenue FY 2015/16
Commercial Flow Meter	36	37,166	\$ 109,804
Municipal Flow Meter	19	2,458	\$ 7,262
Intertie <sup>3</sup>	3	96,553	\$ 285,261
<b>Total</b>	<b>58</b>	<b>136,176</b>	<b>\$ 402,327</b>

1. Number of meters is based on the number of customers billed a fixed and/or variable charge in June 2014, except for intertie customers. File: VWD14 Revenue Model Meter.xls.

2. Assumes the District will meet the 28% conservation mandate from the State of CA, as noted in the draft usage analysis released 4/28/2015 by the State Water Res

3. Number of meters is based on September 2013 customer data, which is the most meters connected at any point during FY 2013/14.

WATER RATE STUDY

Water Cost of Service Analysis/Rate Design

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

Projected Revenue Check from Rates Using Marginal Water Cost, FY 2016/17:

Conservation to FY 2013/14 Level	Fiscal Year 2016/17 Estimates									
	Production	Net Revenue Requirement	Marginal Water Cost Adjustment	Total Revenue Requirement	Consumption	Fixed Revenue	Variable Revenue	Total Revenue	Excess (Shortfall)	Percent of Total Revenue
-10%	11,479,267	\$ 19,346,184	\$ 6,173,486	\$ 25,519,670	10,004,104	\$ 7,894,410	\$ 17,495,766	\$ 25,390,176	\$ (129,494)	-0.5%
0%	10,435,697	\$ 19,346,184	\$ 4,548,884	\$ 23,895,068	9,094,640	\$ 7,894,410	\$ 15,905,242	\$ 23,799,651	\$ (95,417)	-0.4%
10%	9,392,127	\$ 19,346,184	\$ 2,924,283	\$ 22,270,467	8,185,176	\$ 7,894,410	\$ 14,314,717	\$ 22,209,127	\$ (61,339)	-0.3%
20%	8,348,558	\$ 19,346,184	\$ 1,299,681	\$ 20,645,865	7,275,712	\$ 7,894,410	\$ 12,724,193	\$ 20,618,603	\$ (27,262)	-0.1%
28%	7,513,702	\$ 19,346,184	\$ -	\$ 19,346,184	6,548,141	\$ 7,894,410	\$ 11,451,774	\$ 19,346,184	\$ -	0.0%
35%	6,783,203	\$ 19,346,184	\$ (1,137,221)	\$ 18,208,963	5,911,516	\$ 7,894,410	\$ 10,338,407	\$ 18,232,817	\$ 23,854	0.1%
40%	6,261,418	\$ 19,346,184	\$ (1,163,416)	\$ 18,182,768	5,456,784	\$ 7,894,410	\$ 9,543,145	\$ 17,437,555	\$ (745,213)	-4.3%
45%	5,739,633	\$ 19,346,184	\$ (1,189,611)	\$ 18,156,573	5,002,052	\$ 7,894,410	\$ 8,747,883	\$ 16,642,293	\$ (1,514,280)	-9.1%
50%	5,217,849	\$ 19,346,184	\$ (1,215,806)	\$ 18,130,378	4,547,320	\$ 7,894,410	\$ 7,952,621	\$ 15,847,031	\$ (2,283,347)	-14.4%
55%	4,696,064	\$ 19,346,184	\$ (1,242,001)	\$ 18,104,182	4,092,588	\$ 7,894,410	\$ 7,157,359	\$ 15,051,769	\$ (3,052,414)	-20.3%
60%	4,174,279	\$ 19,346,184	\$ (1,268,196)	\$ 18,077,987	3,637,856	\$ 7,894,410	\$ 6,362,097	\$ 14,256,506	\$ (3,821,481)	-26.8%

Calculation of Drought Surcharges in FY 2016/17:

Conservation to FY 2013/14 Level	Consumption	Costs to Recover	Drought Surcharge (\$/hcf)	Estimated Rate + Drought Surcharge Revenue				Total Revenue Requirement	Excess (Shortfall)
				Fixed Revenue	Variable Revenue	Drought Surcharge Revenue	Total Revenue		
40%	5,456,784	\$ 745,213	\$0.137	\$ 7,894,410	\$ 9,543,145	\$ 745,213	\$ 18,182,768	\$ 18,182,768	\$ -
45%	5,002,052	\$ 1,514,280	\$0.303	\$ 7,894,410	\$ 8,747,883	\$ 1,514,280	\$ 18,156,573	\$ 18,156,573	\$ -
50%	4,547,320	\$ 2,283,347	\$0.502	\$ 7,894,410	\$ 7,952,621	\$ 2,283,347	\$ 18,130,378	\$ 18,130,378	\$ -
55%	4,092,588	\$ 3,052,414	\$0.746	\$ 7,894,410	\$ 7,157,359	\$ 3,052,414	\$ 18,104,182	\$ 18,104,182	\$ -
60%	3,637,856	\$ 3,821,481	\$1.050	\$ 7,894,410	\$ 6,362,097	\$ 3,821,481	\$ 18,077,987	\$ 18,077,987	\$ -

FY 2016/17 Drought Surcharges for Construction Flow Meter/Filler Spout Water/Intertie:

Conservation to FY 2013/14 Level	Total Revenue Requirement	Consumption	Water Rate in Drought	Standard Rate	Drought Surcharge
40%	\$ 18,182,768	5,456,784	\$3.332	\$2.954	\$0.378
45%	\$ 18,156,573	5,002,052	\$3.630	\$2.954	\$0.675
50%	\$ 18,130,378	4,547,320	\$3.987	\$2.954	\$1.033
55%	\$ 18,104,182	4,092,588	\$4.424	\$2.954	\$1.469
60%	\$ 18,077,987	3,637,856	\$4.969	\$2.954	\$2.015

WATER RATE STUDY

Water Cost of Service Analysis/Rate Design

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

Projected Revenue Check from Rates Using Marginal Water Cost, FY 2017/18:

Conservation to FY 2013/14 Level	Fiscal Year 2017/18 Estimates									
	Production (1)	Net Revenue Requirement	Marginal Water Cost Adjustment	Total Revenue Requirement	Consumption (1)	Fixed Revenue	Variable Revenue	Total Revenue	Excess (Shortfall)	Percent of Total Revenue
-10%	11,548,142	\$ 20,775,964	\$ 6,683,182	\$ 27,459,145	10,064,129	\$ 8,378,708	\$ 18,940,252	\$ 27,318,960	\$ (140,185)	-0.5%
0%	10,498,311	\$ 20,775,964	\$ 4,924,450	\$ 25,700,413	9,149,208	\$ 8,378,708	\$ 17,218,411	\$ 25,597,119	\$ (103,294)	-0.4%
10%	9,448,480	\$ 20,775,964	\$ 3,165,718	\$ 23,941,681	8,234,287	\$ 8,378,708	\$ 15,496,570	\$ 23,875,278	\$ (66,404)	-0.3%
20%	8,398,649	\$ 20,775,964	\$ 1,406,986	\$ 22,182,949	7,319,366	\$ 8,378,708	\$ 13,774,729	\$ 22,153,436	\$ (29,513)	-0.1%
28%	7,558,784	\$ 20,775,964	\$ -	\$ 20,775,964	6,587,430	\$ 8,378,708	\$ 12,397,256	\$ 20,775,964	\$ -	0.0%
35%	6,823,902	\$ 20,775,964	\$ (1,231,112)	\$ 19,544,851	5,946,985	\$ 8,378,708	\$ 11,191,967	\$ 19,570,675	\$ 25,824	0.1%
40%	6,298,987	\$ 20,775,964	\$ (1,260,277)	\$ 19,515,687	5,489,525	\$ 8,378,708	\$ 10,331,047	\$ 18,709,754	\$ (805,933)	-4.3%
45%	5,774,071	\$ 20,775,964	\$ (1,289,441)	\$ 19,486,523	5,032,064	\$ 8,378,708	\$ 9,470,126	\$ 17,848,834	\$ (1,637,689)	-9.2%
50%	5,249,156	\$ 20,775,964	\$ (1,318,605)	\$ 19,457,359	4,574,604	\$ 8,378,708	\$ 8,609,206	\$ 16,987,913	\$ (2,469,446)	-14.5%
55%	4,724,240	\$ 20,775,964	\$ (1,347,769)	\$ 19,428,195	4,117,144	\$ 8,378,708	\$ 7,748,285	\$ 16,126,993	\$ (3,301,202)	-20.5%
60%	4,199,324	\$ 20,775,964	\$ (1,376,933)	\$ 19,399,031	3,659,683	\$ 8,378,708	\$ 6,887,364	\$ 15,266,072	\$ (4,132,959)	-27.1%

Calculation of Drought Surcharges in FY 2017/18:

Conservation to FY 2013/14 Level	Consumption	Costs to Recover	Drought Surcharge (\$/hcf)	Estimated Rate + Drought Surcharge Revenue				Total Revenue Requirement	Excess (Shortfall)
				Fixed Revenue	Variable Revenue	Drought Surcharge Revenue	Total Revenue		
40%	5,489,525	\$ 805,933	\$0.147	\$ 8,378,708	\$ 10,331,047	\$ 805,933	\$ 19,515,687	\$ 19,515,687	\$ -
45%	5,032,064	\$ 1,637,689	\$0.325	\$ 8,378,708	\$ 9,470,126	\$ 1,637,689	\$ 19,486,523	\$ 19,486,523	\$ -
50%	4,574,604	\$ 2,469,446	\$0.540	\$ 8,378,708	\$ 8,609,206	\$ 2,469,446	\$ 19,457,359	\$ 19,457,359	\$ -
55%	4,117,144	\$ 3,301,202	\$0.802	\$ 8,378,708	\$ 7,748,285	\$ 3,301,202	\$ 19,428,195	\$ 19,428,195	\$ -
60%	3,659,683	\$ 4,132,959	\$1.129	\$ 8,378,708	\$ 6,887,364	\$ 4,132,959	\$ 19,399,031	\$ 19,399,031	\$ -

FY 2017/18 Drought Surcharges for Construction Flow Meter/Filler Spout Water/Intertie:

Conservation to FY 2013/14 Level	Total Revenue Requirement	Consumption	Water Rate in Drought	Standard Rate	Drought Surcharge
40%	\$ 19,515,687	5,489,525	\$3.555	\$3.154	\$0.401
45%	\$ 19,486,523	5,032,064	\$3.872	\$3.154	\$0.719
50%	\$ 19,457,359	4,574,604	\$4.253	\$3.154	\$1.099
55%	\$ 19,428,195	4,117,144	\$4.719	\$3.154	\$1.565
60%	\$ 19,399,031	3,659,683	\$5.301	\$3.154	\$2.147

WATER RATE STUDY

Water Cost of Service Analysis/Rate Design

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

Projected Revenue Check from Rates Using Marginal Water Cost, FY 2018/19:

Conservation to FY 2013/14 Level	Fiscal Year 2018/19 Estimates									
	Production (1)	Net Revenue Requirement	Marginal Water Cost Adjustment	Total Revenue Requirement	Consumption (1)	Fixed Revenue	Variable Revenue	Total Revenue	Excess (Shortfall)	Percent of Total Revenue
-10%	11,617,431	\$22,311,411	\$ 7,235,306	\$29,546,717	10,124,513	\$ 8,889,968	\$20,504,983	\$29,394,951	\$ (151,767)	-0.5%
0%	10,561,301	\$22,311,411	\$ 5,331,278	\$27,642,689	9,204,103	\$ 8,889,968	\$18,640,894	\$27,530,861	\$ (111,828)	-0.4%
10%	9,505,171	\$22,311,411	\$ 3,427,250	\$25,738,661	8,283,693	\$ 8,889,968	\$16,776,804	\$25,666,772	\$ (71,889)	-0.3%
20%	8,449,041	\$22,311,411	\$ 1,523,222	\$23,834,633	7,363,282	\$ 8,889,968	\$14,912,715	\$23,802,683	\$ (31,951)	-0.1%
28%	7,604,137	\$22,311,411	\$ -	\$22,311,411	6,626,954	\$ 8,889,968	\$13,421,443	\$22,311,411	\$ -	0.0%
35%	6,864,846	\$22,311,411	\$ (1,332,820)	\$20,978,592	5,982,667	\$ 8,889,968	\$12,116,581	\$21,006,549	\$ 27,957	0.1%
40%	6,336,781	\$22,311,411	\$ (1,363,684)	\$20,947,727	5,522,462	\$ 8,889,968	\$11,184,536	\$20,074,504	\$ (873,223)	-4.3%
45%	5,808,716	\$22,311,411	\$ (1,394,549)	\$20,916,862	5,062,257	\$ 8,889,968	\$10,252,491	\$19,142,459	\$ (1,774,403)	-9.3%
50%	5,280,651	\$22,311,411	\$ (1,425,414)	\$20,885,997	4,602,052	\$ 8,889,968	\$ 9,320,447	\$18,210,415	\$ (2,675,583)	-14.7%
55%	4,752,585	\$22,311,411	\$ (1,456,279)	\$20,855,133	4,141,846	\$ 8,889,968	\$ 8,388,402	\$17,278,370	\$ (3,576,763)	-20.7%
60%	4,224,520	\$22,311,411	\$ (1,487,143)	\$20,824,268	3,681,641	\$ 8,889,968	\$ 7,456,357	\$16,346,325	\$ (4,477,943)	-27.4%

1. Adjusted to Account for Growth.

Calculation of Drought Surcharges in FY 2018/19:

Conservation to FY 2013/14 Level	Consumption	Costs to Recover	Drought Surcharge (\$/hcf)	Estimated Rate + Drought Surcharge Revenue				Total Revenue Requirement	Excess (Shortfall)
				Fixed Revenue	Variable Revenue	Drought Surcharge Revenue	Total Revenue		
40%	5,522,462	\$ 873,223	\$0.158	\$ 8,889,968	\$11,184,536	\$ 873,223	\$20,947,727	\$20,947,727	\$ -
45%	5,062,257	\$ 1,774,403	\$0.351	\$ 8,889,968	\$10,252,491	\$ 1,774,403	\$20,916,862	\$20,916,862	\$ -
50%	4,602,052	\$ 2,675,583	\$0.581	\$ 8,889,968	\$ 9,320,447	\$ 2,675,583	\$20,885,997	\$20,885,997	\$ -
55%	4,141,846	\$ 3,576,763	\$0.864	\$ 8,889,968	\$ 8,388,402	\$ 3,576,763	\$20,855,133	\$20,855,133	\$ -
60%	3,681,641	\$ 4,477,943	\$1.216	\$ 8,889,968	\$ 7,456,357	\$ 4,477,943	\$20,824,268	\$20,824,268	\$ -

FY 2018/19 Drought Surcharges for Construction Flow Meter/Filler Spout Water/Intertie:

Conservation to FY 2013/14 Level	Total Revenue Requirement	Consumption	Water Rate in Drought	Standard Rate	Drought Surcharge
40%	\$20,947,727	5,522,462	\$3.793	\$3.367	\$0.426
45%	\$20,916,862	5,062,257	\$4.132	\$3.367	\$0.765
50%	\$20,885,997	4,602,052	\$4.538	\$3.367	\$1.172
55%	\$20,855,133	4,141,846	\$5.035	\$3.367	\$1.668
60%	\$20,824,268	3,681,641	\$5.656	\$3.367	\$2.289

WATER RATE STUDY

Water Cost of Service Analysis/Rate Design

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

Projected Revenue Check from Rates Using Marginal Water Cost, FY 2019/20:

Conservation to FY 2013/14 Level	Fiscal Year 2019/20 Estimates									
	Production (1)	Net Revenue Requirement	Marginal Water Cost Adjustment	Total Revenue Requirement	Consumption (1)	Fixed Revenue	Variable Revenue	Total Revenue	Excess (Shortfall)	Percent of Total Revenue
-10%	11,687,136	\$23,960,336	\$ 7,833,416	\$31,793,752	10,185,260	\$ 9,429,404	\$22,200,036	\$31,629,439	\$ (164,313)	-0.5%
0%	10,624,669	\$23,960,336	\$ 5,771,991	\$29,732,326	9,259,328	\$ 9,429,404	\$20,181,851	\$29,611,254	\$ (121,072)	-0.4%
10%	9,562,202	\$23,960,336	\$ 3,710,565	\$27,670,901	8,333,395	\$ 9,429,404	\$18,163,665	\$27,593,069	\$ (77,832)	-0.3%
20%	8,499,735	\$23,960,336	\$ 1,649,140	\$25,609,476	7,407,462	\$ 9,429,404	\$16,145,480	\$25,574,884	\$ (34,592)	-0.1%
28%	7,649,762	\$23,960,336	\$ -	\$23,960,336	6,666,716	\$ 9,429,404	\$14,530,932	\$23,960,336	\$ -	0.0%
35%	6,906,035	\$23,960,336	\$ (1,442,998)	\$22,517,338	6,018,563	\$ 9,429,404	\$13,118,203	\$22,547,606	\$ 30,268	0.1%
40%	6,374,801	\$23,960,336	\$ (1,475,662)	\$22,484,674	5,555,597	\$ 9,429,404	\$12,109,110	\$21,538,514	\$ (946,160)	-4.4%
45%	5,843,568	\$23,960,336	\$ (1,508,327)	\$22,452,009	5,092,630	\$ 9,429,404	\$11,100,018	\$20,529,421	\$ (1,922,588)	-9.4%
50%	5,312,334	\$23,960,336	\$ (1,540,991)	\$22,419,345	4,629,664	\$ 9,429,404	\$10,090,925	\$19,520,329	\$ (2,899,016)	-14.9%
55%	4,781,101	\$23,960,336	\$ (1,573,656)	\$22,386,680	4,166,697	\$ 9,429,404	\$ 9,081,833	\$18,511,236	\$ (3,875,444)	-20.9%
60%	4,249,868	\$23,960,336	\$ (1,606,320)	\$22,354,016	3,703,731	\$ 9,429,404	\$ 8,072,740	\$17,502,144	\$ (4,851,872)	-27.7%

1. Adjusted to Account for Growth.

Calculation of Drought Surcharges in FY 2019/20:

Conservation to FY 2013/14 Level	Consumption	Costs to Recover	Drought Surcharge (\$/hcf)	Estimated Rate + Drought Surcharge Revenue				Total Revenue Requirement	Excess (Shortfall)
				Fixed Revenue	Variable Revenue	Drought Surcharge Revenue	Total Revenue		
40%	5,555,597	\$ 946,160	\$0.170	\$ 9,429,404	\$12,109,110	\$ 946,160	\$22,484,674	\$22,484,674	\$ -
45%	5,092,630	\$ 1,922,588	\$0.378	\$ 9,429,404	\$11,100,018	\$ 1,922,588	\$22,452,009	\$22,452,009	\$ -
50%	4,629,664	\$ 2,899,016	\$0.626	\$ 9,429,404	\$10,090,925	\$ 2,899,016	\$22,419,345	\$22,419,345	\$ -
55%	4,166,697	\$ 3,875,444	\$0.930	\$ 9,429,404	\$ 9,081,833	\$ 3,875,444	\$22,386,680	\$22,386,680	\$ -
60%	3,703,731	\$ 4,851,872	\$1.310	\$ 9,429,404	\$ 8,072,740	\$ 4,851,872	\$22,354,016	\$22,354,016	\$ -

FY 2019/20 Drought Surcharges for Construction Flow Meter/Filler Spout Water/Intertie:

Conservation to FY 2013/14 Level	Total Revenue Requirement	Consumption	Water Rate in Drought	Standard Rate	Drought Surcharge
40%	\$22,484,674	5,555,597	\$4.047	\$3.594	\$0.453
45%	\$22,452,009	5,092,630	\$4.409	\$3.594	\$0.815
50%	\$22,419,345	4,629,664	\$4.843	\$3.594	\$1.249
55%	\$22,386,680	4,166,697	\$5.373	\$3.594	\$1.779
60%	\$22,354,016	3,703,731	\$6.036	\$3.594	\$2.442

WATER RATE STUDY

Water Cost of Service Analysis/Rate Design

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

Projected Revenue Check from Rates Using Marginal Water Cost, FY 2020/21:

Conservation to FY 2013/14 Level	Fiscal Year 2020/21 Estimates									
	Production (1)	Net Revenue Requirement	Marginal Water Cost Adjustment	Total Revenue Requirement	Consumption (1)	Fixed Revenue	Variable Revenue	Total Revenue	Excess (Shortfall)	Percent of Total Revenue
-10%	11,757,259	\$25,577,659	\$ 8,481,366	\$34,059,024	10,246,372	\$ 9,844,783	\$24,036,337	\$33,881,121	\$ (177,904)	-0.5%
0%	10,688,417	\$25,577,659	\$ 6,249,427	\$31,827,086	9,314,884	\$ 9,844,783	\$21,851,216	\$31,695,999	\$ (131,087)	-0.4%
10%	9,619,575	\$25,577,659	\$ 4,017,489	\$29,595,148	8,383,395	\$ 9,844,783	\$19,666,094	\$29,510,877	\$ (84,270)	-0.3%
20%	8,550,733	\$25,577,659	\$ 1,785,551	\$27,363,209	7,451,907	\$ 9,844,783	\$17,480,973	\$27,325,756	\$ (37,453)	-0.1%
28%	7,695,660	\$25,577,659	\$ -	\$25,577,659	6,706,716	\$ 9,844,783	\$15,732,875	\$25,577,659	\$ -	0.0%
35%	6,947,471	\$25,577,659	\$ (1,562,357)	\$24,015,302	6,054,674	\$ 9,844,783	\$14,203,290	\$24,048,074	\$ 32,772	0.1%
40%	6,413,050	\$25,577,659	\$ (1,596,926)	\$23,980,732	5,588,930	\$ 9,844,783	\$13,110,729	\$22,955,513	\$ (1,025,220)	-4.5%
45%	5,878,629	\$25,577,659	\$ (1,631,495)	\$23,946,163	5,123,186	\$ 9,844,783	\$12,018,169	\$21,862,952	\$ (2,083,211)	-9.5%
50%	5,344,208	\$25,577,659	\$ (1,666,065)	\$23,911,594	4,657,442	\$ 9,844,783	\$10,925,608	\$20,770,391	\$ (3,141,203)	-15.1%
55%	4,809,788	\$25,577,659	\$ (1,700,634)	\$23,877,025	4,191,698	\$ 9,844,783	\$ 9,833,047	\$19,677,830	\$ (4,199,194)	-21.3%
60%	4,275,367	\$25,577,659	\$ (1,735,203)	\$23,842,455	3,725,953	\$ 9,844,783	\$ 8,740,486	\$18,585,270	\$ (5,257,186)	-28.3%

1. Adjusted to Account for Growth.

Calculation of Drought Surcharges in FY 2020/21:

Conservation to FY 2013/14 Level	Consumption	Costs to Recover	Drought Surcharge (\$/hcf)	Estimated Rate + Drought Surcharge Revenue				Total Revenue Requirement	Excess (Shortfall)
				Fixed Revenue	Variable Revenue	Drought Surcharge Revenue	Total Revenue		
40%	5,588,930	\$ 1,025,220	\$0.183	\$ 9,844,783	\$ 13,110,729	\$ 1,025,220	\$23,980,732	\$23,980,732	\$ -
45%	5,123,186	\$ 2,083,211	\$0.407	\$ 9,844,783	\$ 12,018,169	\$ 2,083,211	\$23,946,163	\$23,946,163	\$ -
50%	4,657,442	\$ 3,141,203	\$0.674	\$ 9,844,783	\$ 10,925,608	\$ 3,141,203	\$23,911,594	\$23,911,594	\$ -
55%	4,191,698	\$ 4,199,194	\$1.002	\$ 9,844,783	\$ 9,833,047	\$ 4,199,194	\$23,877,025	\$23,877,025	\$ -
60%	3,725,953	\$ 5,257,186	\$1.411	\$ 9,844,783	\$ 8,740,486	\$ 5,257,186	\$23,842,455	\$23,842,455	\$ -

FY 2020/21 Drought Surcharges for Construction Flow Meter/Filler Spout Water/Intertie:

Conservation to FY 2013/14 Level	Total Revenue Requirement	Consumption	Water Rate in Drought	Standard Rate	Drought Surcharge
40%	\$23,980,732	5,588,930	\$4.291	\$3.814	\$0.477
45%	\$23,946,163	5,123,186	\$4.674	\$3.814	\$0.860
50%	\$23,911,594	4,657,442	\$5.134	\$3.814	\$1.320
55%	\$23,877,025	4,191,698	\$5.696	\$3.814	\$1.883
60%	\$23,842,455	3,725,953	\$6.399	\$3.814	\$2.585



VICTORVILLE WATER DISTRICT

Financial Plan Alternative #1

WATER RATE STUDY

Water Cost of Service Analysis/Rate Design

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

**CURRENT VS. PROPOSED WATER RATES:**

Water Rate Schedule	Current Rates	Proposed Rates - Alternative #1				
		FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21
<i>Projected Increase in Rate Revenue per Financial Plan:</i>		6.75%	6.75%	6.75%	6.75%	6.75%
<b>Fixed Service Charge</b>						
<b>Fixed Periodic Service Charge (Average Daily Use in HCF):</b>						
0.00 - 0.26	\$17.25	N.A.	N.A.	N.A.	N.A.	N.A.
0.27 - 1.17	\$18.25	N.A.	N.A.	N.A.	N.A.	N.A.
1.18 - 6.60	\$36.50	N.A.	N.A.	N.A.	N.A.	N.A.
6.61 and above	\$130.50	N.A.	N.A.	N.A.	N.A.	N.A.
<b>Fixed Service Charges</b>						
3/4 inch	N.A.	\$13.97	\$14.73	\$15.53	\$16.37	\$16.97
1 inch	N.A.	\$22.05	\$23.25	\$24.51	\$25.84	\$26.79
1.5 inch	N.A.	\$42.25	\$44.56	\$46.98	\$49.51	\$51.35
2 inch	N.A.	\$66.50	\$70.13	\$73.94	\$77.92	\$80.81
3 inch	N.A.	\$131.15	\$138.31	\$145.82	\$153.68	\$159.38
4 inch	N.A.	\$203.88	\$215.02	\$226.69	\$238.92	\$247.77
6 inch	N.A.	\$405.92	\$428.09	\$451.33	\$475.67	\$493.30
8 inch	N.A.	\$1,133.24	\$1,195.15	\$1,260.03	\$1,327.99	\$1,377.21
10 inch	N.A.	\$1,698.94	\$1,791.75	\$1,889.02	\$1,990.90	\$2,064.70
<b>Fire Fixed Service Charges:</b>						
3 inch	\$10.00	\$10.76	\$11.46	\$12.21	\$13.00	\$13.74
4 inch	\$10.00	\$19.50	\$20.79	\$22.16	\$23.63	\$25.02
6 inch	\$10.00	\$41.97	\$44.78	\$47.77	\$50.97	\$54.03
8 inch	\$10.00	\$71.93	\$76.76	\$81.92	\$87.42	\$92.70
10 inch	\$10.00	\$111.89	\$119.41	\$127.44	\$136.02	\$144.27
<b>Commodity Charges for All Water Consumed (per hcf)</b>						
<b>Rate Per hcf of Water Consumed:</b>						
Standard Domestic Water	\$1.530	\$1.749	\$1.882	\$2.025	\$2.180	\$2.346
Public Benefit Use Water (Municipal Irrigation)	\$0.610	\$1.749	\$1.882	\$2.025	\$2.180	\$2.346
Construction Flow Meter/Filler Spout Water/Intertie	\$2.470	\$2.954	\$3.154	\$3.367	\$3.594	\$3.814

WATER RATE STUDY

Water Cost of Service Analysis/Rate Design

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

CURRENT VS. PROPOSED WATER RATES:

Drought Rate Schedule	Current Rates	Proposed Rates - Alternative #1				
		FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21
<i>Projected Increase in Rate Revenue per Financial Plan:</i>		6.75%	6.75%	6.75%	6.75%	6.75%
<b>Rates for Standard Domestic &amp; Public Benefit Use Water Consumed (per hcf) <sup>1</sup></b>						
<b>Conservation Level Compared to FY 2013/14</b>						
40%	N.A.	\$1.885	\$2.029	\$2.183	\$2.350	\$2.529
45%	N.A.	\$2.052	\$2.207	\$2.376	\$2.557	\$2.752
50%	N.A.	\$2.251	\$2.422	\$2.607	\$2.806	\$3.020
55%	N.A.	\$2.495	\$2.684	\$2.889	\$3.110	\$3.348
60%	N.A.	\$2.799	\$3.011	\$3.242	\$3.490	\$3.757
<b>Rates for Construction Flow Meter/Filler Spout Water/Inertie (per hcf) <sup>1</sup></b>						
<b>Conservation Level Compared to FY 2013/14</b>						
40%	N.A.	\$3.332	\$3.555	\$3.793	\$4.047	\$4.291
45%	N.A.	\$3.630	\$3.872	\$4.132	\$4.409	\$4.674
50%	N.A.	\$3.987	\$4.253	\$4.538	\$4.843	\$5.134
55%	N.A.	\$4.424	\$4.719	\$5.035	\$5.373	\$5.696
60%	N.A.	\$4.969	\$5.301	\$5.656	\$6.036	\$6.399

1. Drought surcharges will apply to all consumption, if conservation is at or above 40% from FY 2013/14 baseline consumption levels.