



Water Finance & Rate Update

April 24, 2016



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS



Mid-Peninsula Water District

Water Finance & Rate Update 2016

Summary of Key Issues

WATER CONSUMPTION

- Based on water consumption data through end of March 2016:
 - Usage down 15% compared to same period of prior fiscal year 2014/15
 - Usage down 26% compared to same period of fiscal year 2013/14
- Water use in current fiscal year projected to end up roughly 29% below calendar year 2013 benchmark, in excess of the mandatory 20% cutback required by the SWRCB
- Customers who have conserved have been able to offset a significant portion of rate increases in recent years via reduced water purchases
- SFPUC also experiencing a substantial decline in water sales, putting upward pressure on wholesale rates



MPWD FINANCES

- Reduced water sales = reduced revenues
 - More cutback at higher tiers results in more revenue loss
 - 18% overall rate increase this fiscal year largely offset by est. 13% - 15% cutback in sales
- Reduced water sales also = reduced wholesale water purchases from SFPUC, which offsets some of the impact of reduced water sales revenues
- SFPUC wholesale water rates projected to increase more than previously estimated
- BWA updated financial projections based on data available through end of March 2016
- MPWD needs to implement the authorized *SFPUC Wholesale Water Rate Pass-through*
 - Pass-through only accounts for SFPUC wholesale rate increase and does not mitigate net revenue loss from substantial cutback in water sales
- MPWD does not necessarily need to implement *Water Shortage Emergency Rates*
 - Without these additional rate increases, capital improvement funding will need to be cut back from previously-projected levels *until water use increases from current drought levels*
- Reduced revenues also impacting MPWD's financial capacity for debt
 - Assuming no change in water sales from current year levels and no implementation of Water Shortage Emergency Rates, the financial projections indicate MPWD revenues can support a maximum of roughly \$15 million of debt financing
- Continuation of low levels of water use will reduce the level of funding generated for capital improvements each year
- Looking forward, MPWD will need to implement SFPUC rate pass-throughs for next 4 years, and can adjust capital funding each year based on revenues generated from future water sales



Table 1
 Mid-Peninsula Water District
 Water Sales by Fiscal Year

	Water Consumption (hcf)				% Change from	
	2012/13	2013/14	2014/15	2015/16	Prior Year	2013
July	155,974	156,081	134,669	105,639	-21.6%	-32.3%
August	153,190	155,788	128,924	106,832	-17.1%	-31.4%
September	145,980	145,551	118,284	105,459	-10.8%	-27.5%
October	122,618	122,117	109,652	98,345	-10.3%	-19.5%
November	90,723	106,535	86,670	77,733	-10.3%	-27.0%
December	80,604	94,062	72,835	70,423	-3.3%	-25.1%
January	84,202	102,910	82,360	69,741	-15.3%	-17.2%
February	86,478	73,221	79,782	71,345	-10.6%	-17.5%
March	106,663	89,152	102,964	71,219	-30.8%	-33.2%
April	120,265	96,019	91,491	80,000	-12.6%	-33.5%
May	155,736	126,934	97,806	95,000	-2.9%	-39.0%
June	150,614	139,729	103,863	100,000	-3.7%	-33.6%
Total		1,408,099	1,209,300	1,051,736	-13.0%	-29.1%
% Change			-14.1%	-13.0%		

Table 2
 Mid-Peninsula Water District
 Updated SFPUC Wholesale Rate Projections

	July 1 2014	July 1 2015	July 1 2016	July 1 2017	July 1 2018	July 1 2019
SFPUC Wholesale Water Rate (\$/hcf)						
Prior Projections Used in Rate Study	\$2.93	\$3.75	\$3.78	\$3.79	\$4.31	\$4.72
SFPUC Projections Dated Feb-2016	2.93	3.75	<u>4.10</u>	<u>4.28</u>	<u>4.68</u>	<u>5.33</u>
Increase from Prior Projections	-	-	0.32	0.49	0.37	0.61

Table 3
 Mid-Peninsula Water District
 Adopted Water Rates

Phase In Increases to Fixed Monthly Charges
 Small Reduction in Tier Breakpoints Over 2 Years

		July 1 2015	July 1 2016	July 1 2017	July 1 2018	July 1 2019
Fixed Monthly Charges						
<i>Billed based on meter size</i>						
<u>Meter</u>	<u>Meter Ratio</u>					
5/8"	1.00	\$22.00	\$24.00	\$26.00	\$28.00	\$30.00
1"	1.50	33.00	36.00	39.00	42.00	45.00
1 1/2"	2.50	55.00	60.00	65.00	70.00	75.00
2"	4.00	88.00	96.00	104.00	112.00	120.00
3"	6.00	132.00	144.00	156.00	168.00	180.00
4"	10.00	220.00	240.00	260.00	280.00	300.00
6"	25.00	550.00	600.00	650.00	700.00	750.00
Water Consumption Charges						
<i>Billed based on monthly metered water use (\$/hcf)*</i>						
<u>Residential Use per Tier</u>						
Tier 1		0 - 2 hcf	0 - 2 hcf	0 - 2 hcf	0 - 2 hcf	0 - 2 hcf
Tier 2		3 - 9 hcf	3 - 8 hcf	3 - 8 hcf	3 - 8 hcf	3 - 8 hcf
Tier 3		10 - 22 hcf	9 - 20 hcf	9 - 20 hcf	9 - 20 hcf	9 - 20 hcf
Tier 4		>22 hcf	>20 hcf	>20 hcf	>20 hcf	>20 hcf
<u>Residential Rate Tiers</u>						
Tier 1		\$5.00	\$5.30	\$5.60	\$5.90	\$6.25
Tier 2		7.50	7.90	8.30	8.65	9.00
Tier 3		9.00	9.50	10.00	10.50	11.00
Tier 4		10.50	11.10	11.70	12.35	13.00
<u>Commercial Rate Tiers</u>						
Tier 1	0 - 5 hcf	\$7.00	\$7.25	\$7.50	\$7.75	\$8.00
Tier 2	Over 5 hcf	8.00	8.35	8.70	9.10	9.50
* 1 hcf = one hundred cubic feet or approximately 748 gallons.						

Table 4
 Mid-Peninsula Water District
 Water Rates with SFPUC Wholesale Rate Pass-Through for 2016/17

2016/17 Rates With SFPUC Wholesale Pass-Through					
	Current Water Rates	Proposed Rates Effective July 1, 2016			
		Adopted Rates	+ SFPUC Add'l Pass-Through	Rate With Pass-Through	
Water Consumption Charges					
<i>Billed based on monthly metered water use (\$/hcf)*</i>					
<u>Residential Rate Tiers</u>					
Tier 1	\$5.00	\$5.30	\$0.32	\$5.62	
Tier 2	7.50	7.90	0.32	8.22	
Tier 3	9.00	9.50	0.32	9.82	
Tier 4	10.50	11.10	0.32	11.42	
<u>Commercial Rate Tiers</u>					
Tier 1	0 - 5 hcf	\$7.00	\$7.25	\$0.32	\$7.57
Tier 2	Over 5 hcf	8.00	8.35	0.32	8.67
* 1 hcf = one hundred cubic feet or approximately 748 gallons.					

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
	Adopted	Adopted	Adopted	Adopted	Adopted	Projected	Projected	Projected	Projected
Overall Rate Adjustments	18%	6%	6%	6%	6%	8%	6%	6%	5%
Growth in Service Connections	5	30	20	2	2	2	2	2	2
Water System Capacity Charge	\$9,375	\$9,560	\$9,750	\$9,950	\$10,150	\$10,350	\$10,560	\$10,770	\$10,990
Change in Water Sales	-13.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Change in Sales Revenues	-14.63%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Water Sales (hcf)	1,052,000	1,052,000	1,052,000	1,052,000	1,052,000	1,052,000	1,052,000	1,052,000	1,052,000
SFPUC Water Supply (hcf) +7%		1,125,600	1,125,600	1,125,600	1,125,600	1,125,600	1,125,600	1,125,600	1,125,600
Prior SFPUC Rate per hcf	\$3.75	\$3.78	\$3.79	\$4.31	\$4.72	\$4.74	\$4.90	\$5.03	\$5.17
Revised SFPUC Rate per hcf	\$3.75	\$4.10	\$4.28	\$4.68	\$5.33	\$5.34	\$5.49	\$5.89	\$6.11
SFPUC Add'l Rate Pass-Through	-	0.32	0.49	0.37	0.61				
Interest Earnings Rate	0.30%	0.50%	0.75%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Cost Escalation	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Beginning Fund Reserves	\$3,387,000	\$3,046,000	\$3,108,000	\$3,135,000	\$3,152,000	\$3,232,000	\$3,273,000	\$3,348,000	\$3,425,000
REVENUES									
Monthly Service Charges	2,460,000	2,684,000	2,908,000	3,132,000	3,356,000	3,625,000	3,844,000	4,076,000	4,281,000
Water Sales	7,250,000	7,737,000	8,093,000	8,461,000	8,842,000	9,549,000	10,122,000	10,729,000	11,265,000
Add'l Revs from Pass-Through	0	337,000	515,000	389,000	642,000	0	0	0	0
Subtotal Rate Revenues	9,710,000	10,758,000	11,516,000	11,982,000	12,840,000	13,174,000	13,966,000	14,805,000	15,546,000
Interest Revenue	10,000	15,000	23,000	31,000	32,000	32,000	33,000	33,000	34,000
Lease of Physical Property	150,000	155,000	160,000	165,000	170,000	175,000	180,000	185,000	191,000
Property Taxes	245,000	252,000	260,000	268,000	276,000	284,000	293,000	302,000	311,000
Capacity Charges	235,000	287,000	195,000	20,000	20,000	21,000	21,000	22,000	22,000
Other/Miscellaneous Revenues	50,000	50,000	52,000	54,000	56,000	58,000	60,000	62,000	64,000
Total Revenues	10,400,000	11,517,000	12,206,000	12,520,000	13,394,000	13,744,000	14,553,000	15,409,000	16,168,000
Debt Proceeds		15,000,000							
EXPENSES									
<u>Operating & Maintenance</u>	<u>Revised</u>	<u>Revised</u>							
Personnel Costs	2,500,000	2,800,000	2,912,000	3,028,000	3,149,000	3,275,000	3,406,000	3,542,000	3,684,000
SFPUC Water Purchases	4,130,000	4,680,000	4,900,000	5,328,000	6,034,000	6,110,000	6,265,000	6,690,000	6,955,000
BAWSCA Bond Surcharge	461,000	475,000	490,000	490,000	490,000	490,000	490,000	490,000	490,000
Maintenance & Repair	500,000	500,000	520,000	541,000	563,000	586,000	609,000	633,000	658,000
Utilities	300,000	300,000	312,000	324,000	337,000	350,000	364,000	379,000	394,000
Professional Services	550,000	500,000	520,000	541,000	563,000	586,000	609,000	633,000	658,000
Wtr Conservation Prog & Rebates	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000
Other Operating Costs	600,000	625,000	650,000	676,000	703,000	731,000	760,000	790,000	822,000
Subtotal	9,171,000	10,010,000	10,434,000	11,058,000	11,969,000	12,258,000	12,633,000	13,287,000	13,791,000
Debt Service (20-Years, 3.25%)		1,045,000	1,045,000	1,045,000	1,045,000	1,045,000	1,045,000	1,045,000	1,045,000
Capital Improvements	1,570,000	400,000	700,000	400,000	300,000	400,000	800,000	1,000,000	1,300,000
Total Expenses	10,741,000	11,455,000	12,179,000	12,503,000	13,314,000	13,703,000	14,478,000	15,332,000	16,136,000
Revenues Less Expenses	(341,000)	62,000	27,000	17,000	80,000	41,000	75,000	77,000	32,000
Ending Fund Reserves	3,046,000	3,108,000	3,135,000	3,152,000	3,232,000	3,273,000	3,348,000	3,425,000	3,457,000
Debt Service Coverage		1.44	1.70	1.40	1.36	1.42	1.84	2.03	2.27

Impact of 2016/17 Adopted Rates + \$0.32 SFPUC Pass-Through
(Does not account for any reduction in water use)

Monthly Use (hcf)	% of Bills in Block	% of Bills at or Below	Monthly Water Bills			Impact of Rate Increase + Pass-Through		
			Current	Adopted	w/Pass-Thru	Base Impact	Pass-Through	Total Impact
0	1.1%	1.1%	\$22.00	\$24.00	\$24.00	\$2.00	\$0.00	\$2.00
1	2.8%	3.9%	27.00	29.30	29.62	2.30	0.32	2.62
2	5.1%	9.1%	32.00	34.60	35.24	2.60	0.64	3.24
3	7.5%	16.5%	39.50	42.50	43.46	3.00	0.96	3.96
4	9.4%	26.0%	47.00	50.40	51.68	3.40	1.28	4.68
5	9.9%	35.8%	54.50	58.30	59.90	3.80	1.60	5.40
6	9.0%	44.9%	62.00	66.20	68.12	4.20	1.92	6.12
7	7.7%	52.6%	69.50	74.10	76.34	4.60	2.24	6.84
8	6.9%	59.5%	77.00	82.00	84.56	5.00	2.56	7.56
9	5.8%	65.3%	84.50	91.50	94.38	7.00	2.88	9.88
10	5.0%	70.2%	93.50	101.00	104.20	7.50	3.20	10.70
11	4.3%	74.5%	102.50	110.50	114.02	8.00	3.52	11.52
12	3.7%	78.2%	111.50	120.00	123.84	8.50	3.84	12.34
13	3.1%	81.3%	120.50	129.50	133.66	9.00	4.16	13.16
14	2.7%	84.0%	129.50	139.00	143.48	9.50	4.48	13.98
15	2.2%	86.2%	138.50	148.50	153.30	10.00	4.80	14.80
16	1.9%	88.1%	147.50	158.00	163.12	10.50	5.12	15.62
17	1.6%	89.6%	156.50	167.50	172.94	11.00	5.44	16.44
18	1.3%	91.0%	165.50	177.00	182.76	11.50	5.76	17.26
19	1.2%	92.2%	174.50	186.50	192.58	12.00	6.08	18.08
20	1.1%	93.3%	183.50	196.00	202.40	12.50	6.40	18.90
21	0.9%	94.2%	192.50	207.10	213.82	14.60	6.72	21.32
22	0.7%	94.9%	201.50	218.20	225.24	16.70	7.04	23.74
23	0.7%	95.6%	212.00	229.30	236.66	17.30	7.36	24.66
24	0.6%	96.2%	222.50	240.40	248.08	17.90	7.68	25.58
25	0.4%	96.6%	233.00	251.50	259.50	18.50	8.00	26.50
26	0.4%	97.1%	243.50	262.60	270.92	19.10	8.32	27.42
27	0.4%	97.4%	254.00	273.70	282.34	19.70	8.64	28.34
28	0.3%	97.8%	264.50	284.80	293.76	20.30	8.96	29.26
29	0.2%	98.0%	275.00	295.90	305.18	20.90	9.28	30.18
30	0.2%	98.2%	285.50	307.00	316.60	21.50	9.60	31.10
50	31-50: 1.5%	99.7%	495.50	529.00	545.00	33.50	16.00	49.50
75	>50: 0.3%	100.0%	758.00	806.50	830.50	48.50	24.00	72.50

Historical & Projected Monthly Water Charges (With Pass-Through)

With 25% conservation over 2 years, 2013/14 - 2015/16

