



Water Rate Update

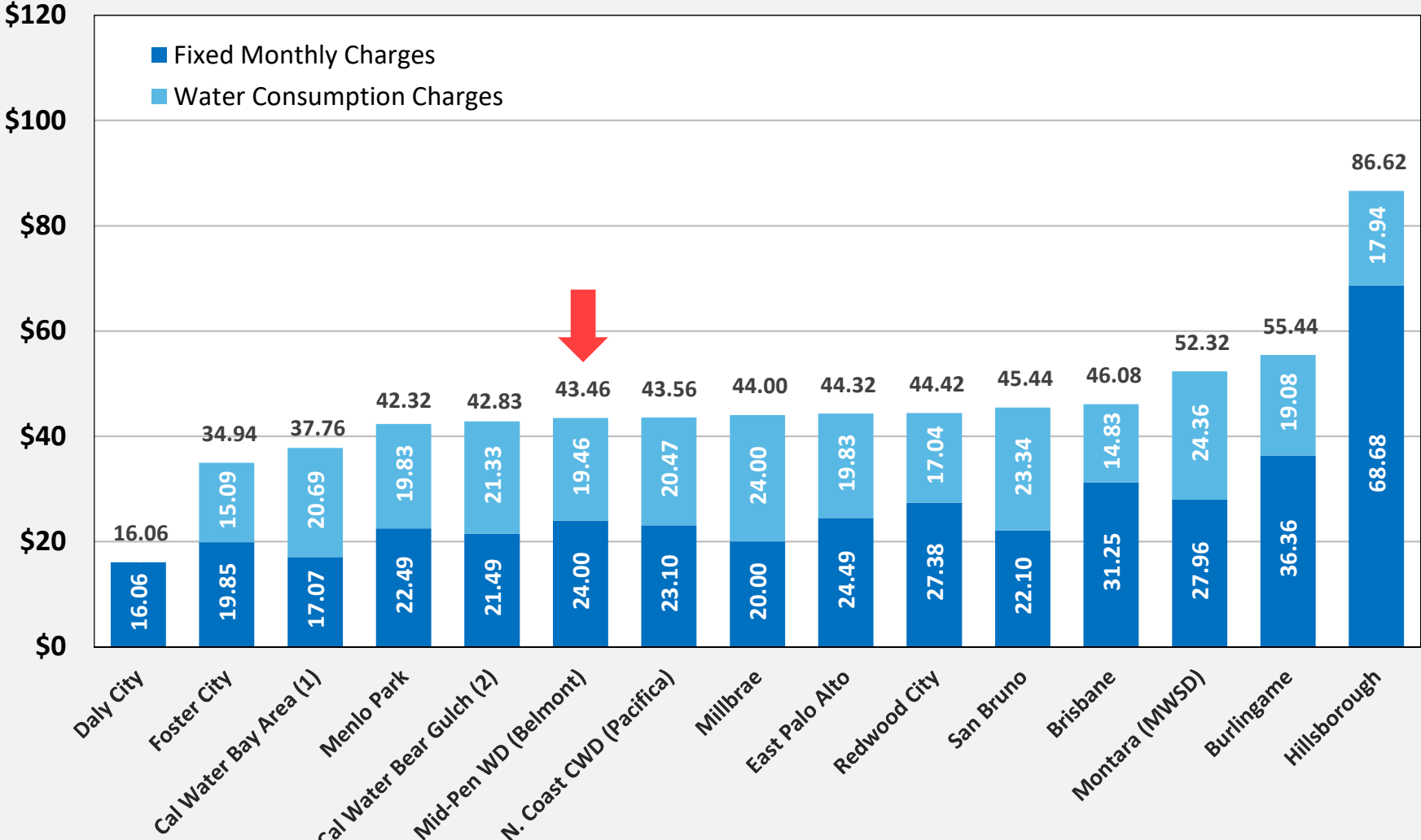
May 18, 2018



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

Single Family Residential Monthly Water Charges 2017/18

Low Use: 3 ccf monthly use (74 gpd)



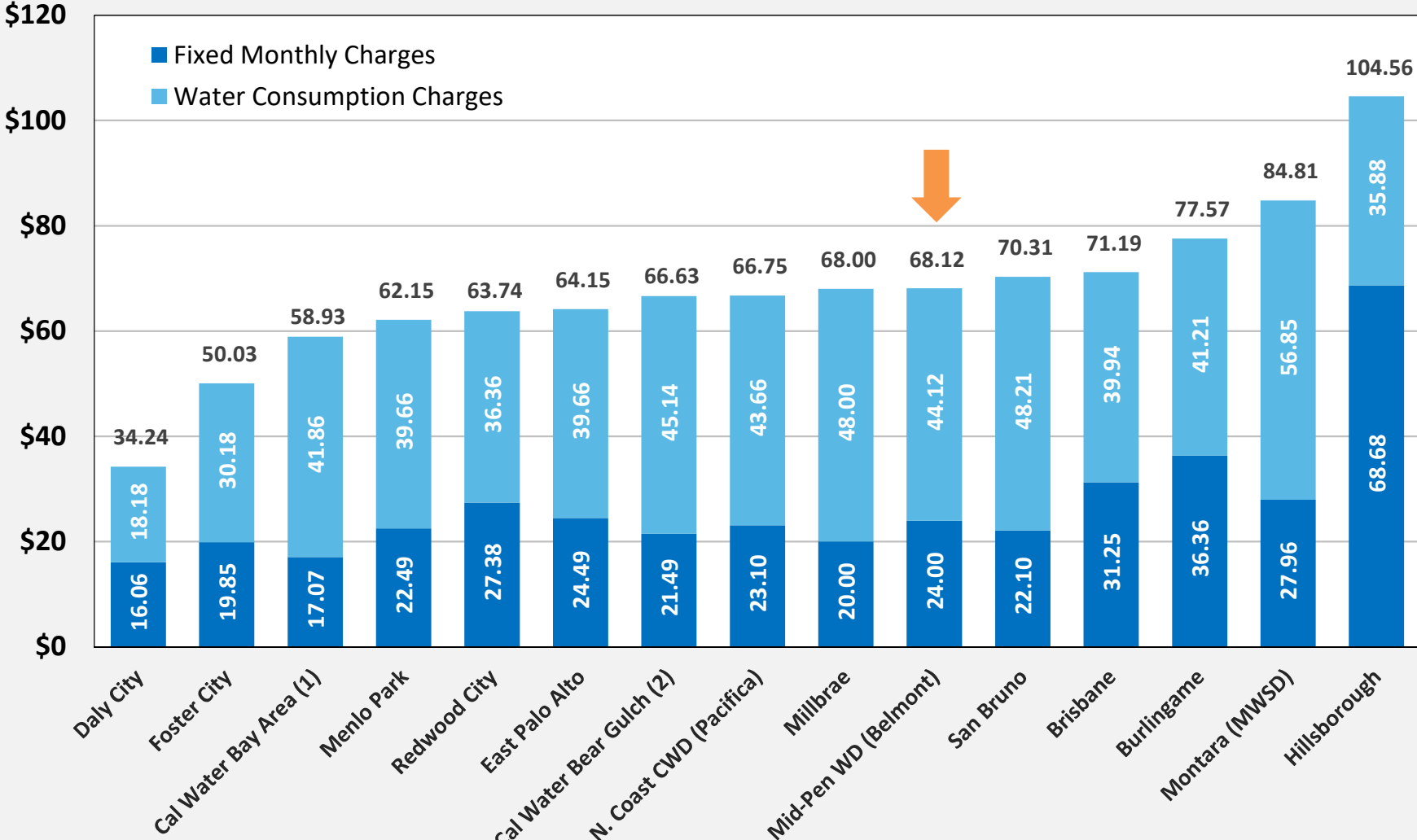
1 Bay Area service areas includes San Carlos, San Mateo, South San Francisco.

2 Bear Gulch service area includes Atherton, Woodside, and part of Menlo Park.

Rates Effective March 2018

Single Family Residential Monthly Water Charges 2017/18

Median Use: 6 ccf monthly water use (148 gpd)



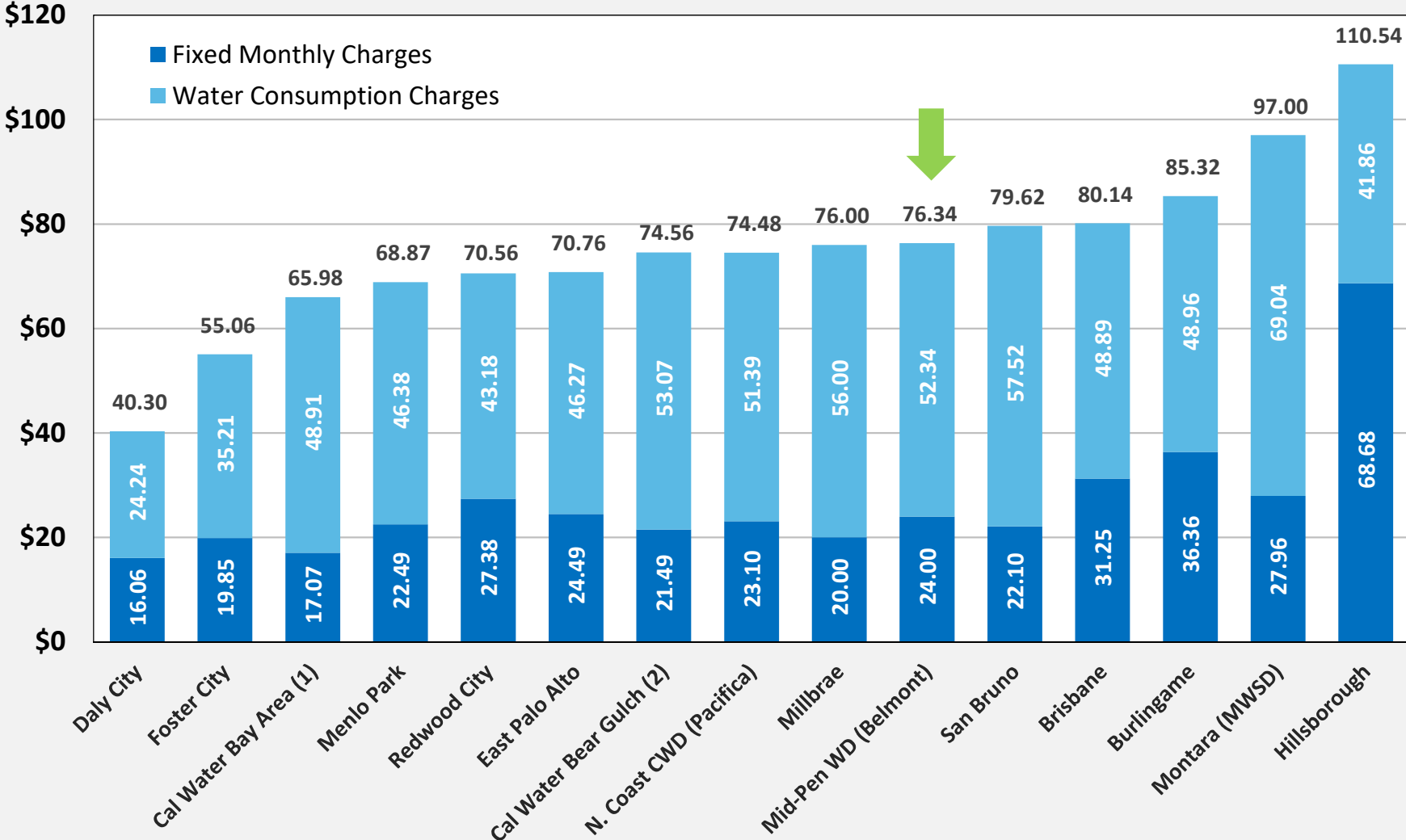
1 Bay Area service areas includes San Carlos, San Mateo, South San Francisco.

2 Bear Gulch service area includes Atherton, Woodside, and part of Menlo Park.

Rates Effective March 2018

Single Family Residential Monthly Water Charges 2017/18

Average Use: 7 ccf of monthly water use (172 gpd)



1 Bay Area service areas includes San Carlos, San Mateo, South San Francisco.

2 Bear Gulch service area includes Atherton, Woodside, and part of Menlo Park.

Rates Effective March 2018

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

*Includes estimates for remainder
 of fiscal year 2017/18*

	Water Consumption (hcf)					
	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
July	155,974	156,081	134,669	102,202	111,110	117,761
August	153,190	155,788	128,924	104,096	113,341	124,029
September	145,980	145,551	118,284	101,546	112,591	127,050
October	122,618	122,117	109,652	95,095	101,247	117,970
November	90,723	106,535	86,670	81,298	76,838	100,278
December	80,604	94,062	72,835	67,438	66,486	76,510
January	84,202	102,910	82,360	70,890	67,261	85,964
February	86,478	73,221	79,782	60,940	65,165	65,000
March	106,663	89,152	102,964	65,700	63,193	63,000
April	120,265	96,019	91,491	73,821	69,702	70,000
May	155,736	126,934	97,806	85,446	89,353	89,000
June	150,614	139,729	103,863	108,136	108,136	108,000
Total	1,453,047	1,408,099	1,209,300	1,016,608	1,044,423	1,144,562
% Change		-3.1%	-14.1%	-15.9%	2.7%	9.6%

2017/18 year-to-date water consumption through January 2018 is 15.5% higher than the same period in the prior fiscal year; assuming water use parallels prior year use for the remaining months of the fiscal year, water use will end up about 9.6% higher than 2016/17.

Table 2
Mid-Peninsula Water District
Water Rates

		July 1 2015	July 1 2016		July 1 2017		July 1 2018	July 1 2019
		Adopted & Charged	Adopted	Charged	Adopted	Charged	Adopted	Adopted
Fixed Monthly Charges					<i>No Increase</i>			
<i>Billed based on meter size</i>								
<u>Meter</u>	<u>Meter Ratio</u>							
5/8"	1.00	\$22.00	\$24.00	\$24.00	\$26.00	\$24.00	\$28.00	\$30.00
1"	1.50	33.00	36.00	36.00	39.00	36.00	42.00	45.00
1 1/2"	2.50	55.00	60.00	60.00	65.00	60.00	70.00	75.00
2"	4.00	88.00	96.00	96.00	104.00	96.00	112.00	120.00
3"	6.00	132.00	144.00	144.00	156.00	144.00	168.00	180.00
4"	10.00	220.00	240.00	240.00	260.00	240.00	280.00	300.00
6"	25.00	550.00	600.00	600.00	650.00	600.00	700.00	750.00
Water Consumption Charges					<i>No Increase</i>			
<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>				With \$0.32 Pass-Through				
Tier 1		\$5.00	\$5.30	\$5.62	\$5.60	\$5.62	\$5.90	\$6.25
Tier 2		7.50	7.90	8.22	8.30	8.22	8.65	9.00
Tier 3		9.00	9.50	9.82	10.00	9.82	10.50	11.00
Tier 4		10.50	11.10	11.42	11.70	11.42	12.35	13.00
<u>Commercial Rate Tiers</u>								
Tier 1	0 - 5 hcf	\$7.00	\$7.25	\$7.57	\$7.50	\$7.57	\$7.75	\$8.00
Tier 2	Over 5 hcf	8.00	8.35	8.67	8.70	8.67	9.10	9.50
* 1 hcf = one hundred cubic feet or approximately 748 gallons.								

Table 3
 Mid-Peninsula Water District
 Estimated Water Rate Revenues 2017/18

	Water Use (hcf)	Usage Charges	Fixed Charges	Total Charges
July	117,761	\$991,425	\$221,480	\$1,212,905
August	124,029	1,058,492	221,539	1,280,031
September	127,050	1,086,960	221,731	1,308,691
October	117,970	969,367	220,229	1,189,596
November	100,278	842,728	221,252	1,063,980
December	76,510	597,628	221,492	819,120
January	85,964	460,723	221,521	682,244
February	65,000	517,000	221,500	738,500
March	63,000	207,000	221,500	428,500
April	70,000	555,000	221,500	776,500
May	89,000	718,000	221,500	939,500
June	108,000	992,000	221,500	1,213,500
Total	1,144,562	8,996,323	2,656,744	11,653,067
<i>% of Total</i>		77.2%	22.8%	100.0%

Table 4
 Mid-Peninsula Water District
 Projected vs. Actual SFPUC Wholesale Water Rates

	July 1 2015	July 1 2016	July 1 2017	July 1 2018
Prior SFPUC Projections (2015 Rate Study)	3.75	3.78	3.79	4.31
Actual or Updated Wholesale Rates	3.75	4.10	4.10	4.10
Difference	-	0.32	0.31	(0.21)

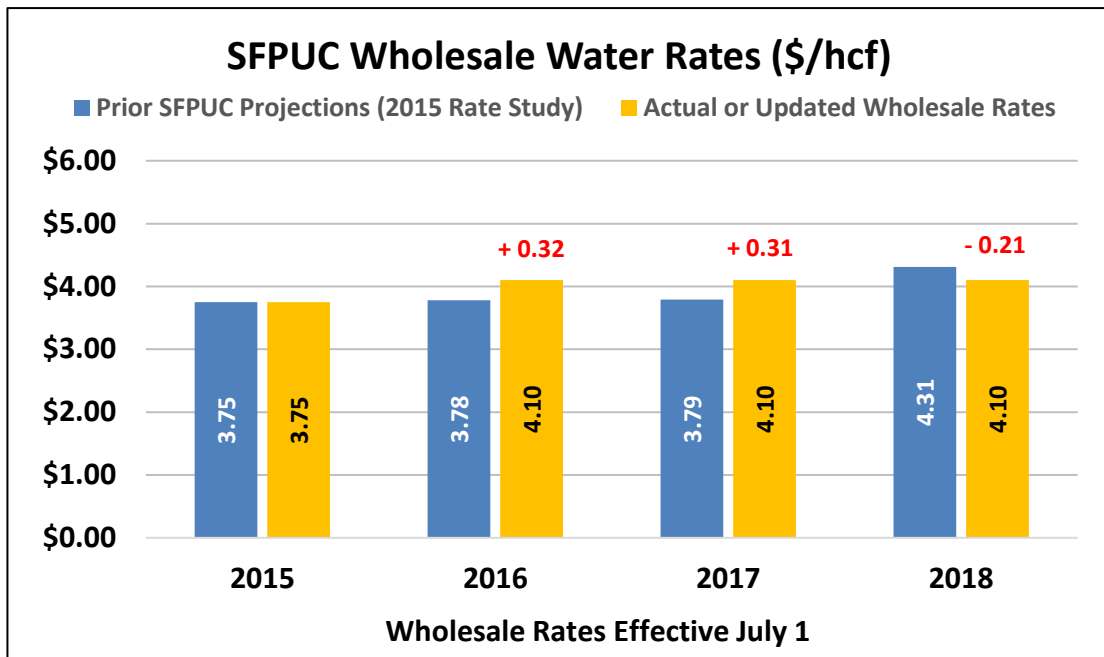


Table 5
 Mid-Peninsula Water District
 Fund Reserves

	Fund Reserves as of June 30				
	2013	2014	2015	2016	2017
Cash & Equivalents	\$3,621,126	\$4,465,380	\$3,582,734	\$4,265,885	\$5,203,740
Plus					
Accounts Receivable	916,448	849,549	679,566	973,931	1,212,306
Prepaid Expenses & Assets	<u>115,278</u>	<u>92,625</u>	<u>135,503</u>	<u>255,814</u>	<u>231,282</u>
Subtotal	1,031,726	942,174	815,069	1,229,745	1,443,588
Less					
Accounts Payable	162,195	422,373	185,507	206,936	236,936
Accrued Expenses/Unearned Revs	<u>131,706</u>	<u>54,431</u>	<u>78,189</u>	<u>711,290</u>	<u>1,512,722</u>
Subtotal	293,901	476,804	263,696	918,226	1,749,658
Adjusted Total	4,358,951	4,930,750	4,134,107	4,577,404	4,897,670
Source: Audited Financial Statements					

Table 6 - MPWD Cash Flow Projections

	2017/18	2018/19	2019/20	2020/21	2021/22
		Projected	Projected	Projected	Projected
Overall Rate Increase	0.0%	4.1%	4.1%	4.0%	6.0%
Consumption Charge Adjustments	0.0%	2.8%	3.0%	3.0%	6.0%
Fixed Rate Adjustments (1-year lag)	0.0%	8.3%	7.7%	7.1%	6.0%
Growth in Service Connections	32	5	5	1	5
Water System Capacity Charge	\$9,750	\$9,950	\$10,150	\$10,350	\$10,560
Change in Water Sales	9.6%	0.0%	0.0%	0.0%	0.0%
Total Water Sales (hcf)	1,144,600	1,144,600	1,144,600	1,144,600	1,144,600
SFPUC Water Purchases (hcf) +7%	1,224,700	1,224,700	1,224,700	1,224,700	1,224,700
Projected SFPUC Rate per hcf	\$4.10	\$4.10	\$4.10	\$4.30	\$4.50
<i>Prior Est of SFPUC Rate per hcf</i>	<i>\$3.79</i>	<i>\$4.31</i>	<i>\$4.72</i>	<i>\$4.74</i>	<i>\$4.90</i>
Interest Earnings Rate	1.5%	1.5%	1.5%	1.5%	1.5%
Cost Escalation		4.0%	4.0%	4.0%	4.0%
Beginning Fund Reserves	\$4,898,000	\$3,729,000	\$2,323,000	\$2,590,000	\$2,675,000
REVENUES					
Monthly Service Charges	2,657,000	2,880,000	3,104,000	3,326,000	3,528,000
Water Sales	8,996,000	9,248,000	9,525,000	9,811,000	10,400,000
Subtotal Rate Revenues	11,653,000	12,128,000	12,629,000	13,137,000	13,928,000
<i>Annual Increase %</i>	<i>3.5%</i>	<i>4.1%</i>	<i>4.1%</i>	<i>4.0%</i>	<i>6.0%</i>
Interest Revenue	50,000	56,000	35,000	39,000	40,000
Lease of Physical Property	150,000	155,000	160,000	165,000	170,000
Property Taxes	260,000	268,000	276,000	284,000	293,000
Capacity/Demand Offset Charges	310,000	250,000	250,000	10,000	53,000
Other/Miscellaneous Revenues	295,000	65,000	67,000	69,000	71,000
Total Revenues	12,718,000	12,922,000	13,417,000	13,704,000	14,555,000
EXPENSES					
<u>Operating & Maintenance</u>					
Personnel Costs	2,978,000	3,131,000	3,256,000	3,386,000	3,521,000
SFPUC Water Purchases	5,096,000	5,096,000	5,096,000	5,341,000	5,586,000
BAWSCA Bond Surcharge	500,000	500,000	500,000	500,000	500,000
Maintenance & Repair	654,000	680,000	707,000	735,000	764,000
Utilities	306,000	318,000	331,000	344,000	358,000
Professional Services	406,000	422,000	439,000	457,000	475,000
Admin & Equipment	317,000	330,000	343,000	357,000	371,000
Membership & Gov't Fees	209,000	217,000	226,000	235,000	244,000
Other Operating Costs	400,000	416,000	433,000	450,000	468,000
Subtotal	10,866,000	11,110,000	11,331,000	11,805,000	12,287,000
Debt Service	1,052,000	1,068,000	1,069,000	1,064,000	1,070,000
<u>Non-Operating</u>					
Capital Improvements (Pay-Go)	419,000	600,000	750,000	750,000	1,500,000
OPEB & PRSP Contributions	1,550,000	1,550,000	0	0	0
Subtotal	1,969,000	2,150,000	750,000	750,000	1,500,000
Total Expenses	13,887,000	14,328,000	13,150,000	13,619,000	14,857,000
Revenues Less Expenses	(1,169,000)	(1,406,000)	267,000	85,000	(302,000)
Ending Fund Reserves	3,729,000	2,323,000	2,590,000	2,675,000	2,373,000
<i>% of O&M+Debt</i>	<i>31%</i>	<i>19%</i>	<i>21%</i>	<i>21%</i>	<i>18%</i>
Debt Service Coverage	1.76	1.70	1.95	1.78	2.12
Project Fund for 2016 COPs					
Beginning Project Fund	19,225,000	15,977,000	12,815,000	4,217,000	1,090,000
Interest Earnings	200,000	143,000	85,000	26,000	5,000
Capital Improvements	3,448,000	3,305,000	8,683,000	3,153,000	1,095,000
Ending Project Fund	15,977,000	12,815,000	4,217,000	1,090,000	0
<i>Capital Funding Target</i>	<i>3,448,000</i>	<i>3,305,000</i>	<i>8,683,000</i>	<i>3,153,000</i>	<i>4,074,000</i>

Table 7

Mid-Peninsula Water District
Projected Water Rates

Fixed Charges: Lag Adopted Rate Increases by 1 Year
Usage Charges: Adopted Rates Adjusted by SFPUC Differential

Proposed Water Rates Effective July 1, 2018						
		2017/18 Current Rates	2018/19 Adopted Rates	Decrease from Adopted Rates		2018/19 Proposed Rates
				\$	%	
Fixed Monthly Charges						
<i>Billed based on meter size</i>						
<u>Meter</u>	<u>Meter Ratio</u>					
5/8"	1.00	\$24.00	\$28.00	(\$2.00)	-7.1%	\$26.00
1"	1.50	36.00	42.00	(3.00)	-7.1%	39.00
1 1/2"	2.50	60.00	70.00	(5.00)	-7.1%	65.00
2"	4.00	96.00	112.00	(8.00)	-7.1%	104.00
3"	6.00	144.00	168.00	(12.00)	-7.1%	156.00
4"	10.00	240.00	280.00	(20.00)	-7.1%	260.00
6"	25.00	600.00	700.00	(50.00)	-7.1%	650.00
Water Consumption Charges						
<i>Billed based on monthly metered water use (\$/hcf)</i>						
<u>Residential Rate Tiers</u>						
Tier 1	0 - 2 hcf	\$5.62	\$5.90	(0.21)	-3.6%	\$5.69
Tier 2	3 - 8 hcf	8.22	8.65	(0.21)	-2.4%	8.44
Tier 3	9 - 20 hcf	9.82	10.50	(0.21)	-2.0%	10.29
Tier 4	Over 20 hcf	11.42	12.35	(0.21)	-1.7%	12.14
<u>Commercial Rate Tiers</u>						
Tier 1	0 - 5 hcf	\$7.57	\$7.75	maintain current rate	0.0%	\$7.57
Tier 2	Over 5 hcf	8.67	9.10	(0.21)	-2.3%	8.89
Note: 1 hcf = one hundred cubic feet or approximately 748 gallons.						

* Accounts for difference between SFPUC's prior projected rate used in the rate study (\$4.31), and SFPUC's latest wholesale rate projection for fiscal year 2018/19 (4.10).

Table 8
Mid-Peninsula Water District
Impact of Proposed Rates on Monthly Water Bills

Impact of Proposed Rates Effective July 1, 2018							
Monthly Use (hcf)	% of Bills in Block	% of Bills at or Below	Monthly Charges			Impact of Proposed Rates Compared to	
			Current	Adopted	Proposed	Current Rates	Adopted Rates
0	1.1%	1.1%	\$24.00	\$28.00	\$26.00	\$2.00	(\$2.00)
1	2.8%	3.9%	29.62	33.90	31.69	2.07	(2.21)
2	5.1%	9.1%	35.24	39.80	37.38	2.14	(2.42)
3	7.5%	16.5%	43.46	48.45	45.82	2.36	(2.63)
4	9.4%	26.0%	51.68	57.10	54.26	2.58	(2.84)
5	9.9%	35.8%	59.90	65.75	62.70	2.80	(3.05)
6	9.0%	44.9%	68.12	74.40	71.14	3.02	(3.26)
7	7.7%	52.6%	76.34	83.05	79.58	3.24	(3.47)
8	6.9%	59.5%	84.56	91.70	88.02	3.46	(3.68)
9	5.8%	65.3%	94.38	102.20	98.31	3.93	(3.89)
10	5.0%	70.2%	104.20	112.70	108.60	4.40	(4.10)
11	4.3%	74.5%	114.02	123.20	118.89	4.87	(4.31)
12	3.7%	78.2%	123.84	133.70	129.18	5.34	(4.52)
13	3.1%	81.3%	133.66	144.20	139.47	5.81	(4.73)
14	2.7%	84.0%	143.48	154.70	149.76	6.28	(4.94)
15	2.2%	86.2%	153.30	165.20	160.05	6.75	(5.15)
16	1.9%	88.1%	163.12	175.70	170.34	7.22	(5.36)
17	1.6%	89.6%	172.94	186.20	180.63	7.69	(5.57)
18	1.3%	91.0%	182.76	196.70	190.92	8.16	(5.78)
19	1.2%	92.2%	192.58	207.20	201.21	8.63	(5.99)
20	1.1%	93.3%	202.40	217.70	211.50	9.10	(6.20)
21	0.9%	94.2%	213.82	230.05	223.64	9.82	(6.41)
22	0.7%	94.9%	225.24	242.40	235.78	10.54	(6.62)
23	0.7%	95.6%	236.66	254.75	247.92	11.26	(6.83)
24	0.6%	96.2%	248.08	267.10	260.06	11.98	(7.04)
25	0.4%	96.6%	259.50	279.45	272.20	12.70	(7.25)
26	0.4%	97.1%	270.92	291.80	284.34	13.42	(7.46)
27	0.4%	97.4%	282.34	304.15	296.48	14.14	(7.67)
28	0.3%	97.8%	293.76	316.50	308.62	14.86	(7.88)
29	0.2%	98.0%	305.18	328.85	320.76	15.58	(8.09)
30	0.2%	98.2%	316.60	341.20	332.90	16.30	(8.30)
50	31-50: 1.5%	99.7%	545.00	588.20	575.70	30.70	(12.50)
75	>50: 0.3%	100.0%	830.50	896.95	879.20	48.70	(17.75)