

BOARD FINANCE COMMITTEE MEETING WEDNESDAY JUNE 5, 2024, at 9:00 AM

AGENDA

Public comments may be submitted via email to General Manager, Kat Wuelfing, at kwuelfing@midpeninsulawater.org

Please indicate in your email the agenda item to which your comment applies.

Comments submitted before the meeting will be provided to the Board before or during the meeting. Comments submitted after the meeting is called to order will be included in the correspondence that will be provided to the full Board.

Board members, staff, consultants, and the public may participate remotely.

The zoom meeting link is available here: https://www.midpeninsulawater.org/zoom

Should Zoom not be operational, please check online at: www.midpeninsulawater.org for any updates or further instruction.

1. Call to Order

A. Roll Call

2. Public Comment

If you wish to address the Committee, please follow the directions at the top of the agenda. If you have anything that you wish distributed to the Committee and included for the official record, please include it in your email. Comments that require a response may be deferred for staff reply.

- 3. Review Draft Water Rate Study and Proposed 5-Year Rate Plan from HF&H, District Rate Consultant
- 4. Adjournment

This agenda was posted at the Mid-Peninsula Water District's office, 1075 Old County Road, Suite A, in Belmont, California, and on its website at www.midpeninsulawater.org.

ACCESSIBLE PUBLIC MEETINGS

Upon request, the Mid-Peninsula Water District will provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation (including auxiliary aids or services), to enable individuals with disabilities to participate in public meetings and provide comments at/related to public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, auxiliary aid, service or alternative format requested. Requests should be sent to the General Manager at (650) 591-8941 or kwuelfing@midpennsulawater.org. Requests must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.



DATE: June 5, 2024

TO: Finance Committee

FROM: Kat Wuelfing, General Manager

SUBJECT: Review Draft Water Rate Study and Proposed 5-Year Rate Plan from HF&H, District

Rate Consultant

RECOMMENDATION

Review and consider information presented.

FISCAL IMPACT

None.

BACKGROUND

MPWD previously implemented 5-year rate plans for the 2010-2014 and 2015-2019 periods. We have not increased our customer rates except for pass-throughs for SFPUC increases since July 2019. Below is a summary of the rate increases to our customers over the last several years:

- July 1, 2024 Pass-Through Rate Increase of \$0.46/HCF (6.5% increase relative to lowest residential tier)
- July 1, 2023 Pass-Through Rate Increase of \$0.46/HCF (7% increase relative to lowest residential tier)
- July 1, 2022 Pass-Through Rate Increase of \$0.65/HCF (11% increase relative to lowest residential tier)
- July 1, 2021 No Rate Increase
- July 1, 2020 No Rate Increase
- July 1, 2019 Part of 5-Year Rate Study, 3% Increase to Volumetric Rates

If the District had raised rates at 3%/year in 2020 through 2023, rates would have increased by 12.6%.

If the District had raised rates consistent with CPI over this time period, rates would have increased by 18.7%.

If the District had raised rates over this time period as contemplated in the 2015 Rate Study by Bartle Wells Associates over this time period, rates would have increased by 15% - 27%.

MPWD's customer rates as of July 1, 2024 will be:

Service Charge per Meter Size

Meter size	Charge
5/8"	\$28.00
1"	\$42.00
1 1/2"	\$70.00
2"	\$112.00
3"	\$168.00
4"	\$280.00
6"	\$700.00

Residential Rates (Single-Family)

Use	Cost Per HCF
0-2 HCF	\$7.43
3-8 HCF	\$10.26
9-20 HCF	\$12.17
>20 HCF	\$14.07

Commercial Rates

Use	Cost Per HCF
0-5 HCF	\$9.37
>5 HCF	\$10.73

DISCUSSION

Rick Simonson from HF&H Consultants will walk through a presentation detailing the preliminary results of the draft rate study, including a discussion of the impacts of potential CIP funding scenarios on rates over the next 5 years.

The results of the current rate study are similar to those from the District's 2015 rate study. A copy of a presentation and excerpts from the 2015 rate study are also attached, for reference.

The current draft 5-year CIP Budget is also attached for reference.

Attachments:

HFH Presentation of Preliminary Results, dated June 4, 2024 Draft 5-year CIP Budget Bartles Wells Associates Presentation, dated April 28, 2016 Excerpts from May 2015 Water Financial Plan & Rate Study



MID-PENINSULA WATER DISTRICT

Water Rate Study

Presentation of Preliminary Results

Finance Committee Meeting June 4, 2024



Meeting Objectives

Present preliminary findings and recommendations of the Water Rate Study

- Annual revenue increases
- Cost-of-Service analysis
- Rate adjustments and bill impacts
- Receive feedback from Finance Committee
 - Reserve target updates
 - Capital improvement project spending levels
 - Capital improvement funding strategy (PAYGo vs. Debt Funded)
 - Rate structure revisions
 - Residential commodity charges
 - Reduce # of tiers from 4 to 3
 - Update breakpoints for each tier
 - Commercial commodity charges
 - Reduce # of tiers from 1 to none (i.e., uniform charge per HCF)
 - Drought Rate Factors

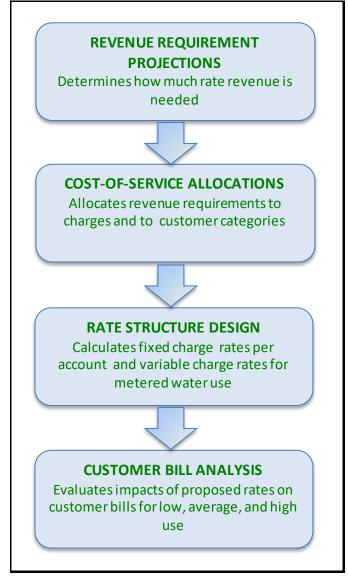
Study Objectives

- Develop 10-year financial plan
 - Provide 5-year proposed rate
 schedule for adoption (maximum # of years allowed per Proposition 218)
 - Provide funding for capital improvements and operating costs
 - Maintain reserves based on appropriate target balances
- Review rates and identify potential refinements
 - Compliant with governing laws and relevant court decisions
 - Proposition 218, San Juan Capistrano decision
- Assist with rate adoption process
 - Improve revenue stability with neutral rate adjustments during water shortages
 - Administrative simplification that avoids full Prop 218 protest process

Preliminary 5-Year CIP Spending Plan

Project		Total			FY 24/25		FY 25/26	FY 26/27		FY 27/28		FY 28/29
(Capitalized Equipment)	\$	1,200,000	Н	\$	400,000	\$	200,000	\$ 200,000	\$	200,000	\$	200,000
Old County Road Improvements	\$	225,000	П	\$	225,000	\$	-	\$ -	\$	-	\$	-
Dekoven Tank Util/Lincoln/Newlands/Oak Knoll WMR	\$	3,000,000		\$	3,000,000	\$	-	\$ -	\$	-	\$	-
Dairy Lane Operations Center Rehabilitation - Design	\$	4,800,000		\$	2,400,000	\$	2,400,000	\$ -	\$	-	\$	-
Dairy Lane Operations Center Rehabilitation - Construction	\$	14,500,000		\$	-	\$	4,350,000	\$ 10,150,000	\$	-	\$	-
Folger Property Improvements	\$	5,400,000	П	\$	2,700,000	\$	2,700,000	\$ -	\$	-	\$	-
Dekoven Tanks Replacement	\$	7,590,000	П	\$	1,897,500	\$	5,692,500	\$ -	\$	-	\$	-
SR 101 Crossing at PAMF Hospital - Phase 2	\$	2,765,000		\$	691,250	\$	2,073,750	\$ -	\$	-	\$	-
Exborne West Tank Recoating	\$	675,000	П	\$	675,000	\$	-	\$ -	\$	-	\$	-
Hallmark North Tank Recoating	\$	3,050,000	П	\$	610,000	\$	2,440,000	\$ -	\$	-	\$	-
West Belmont North Tank Recoating	\$	130,000	П	\$	130,000	\$	-	\$ -	\$	-	\$	-
Other Projects (Not Yet Identified)	\$	13,500,000		\$	-	\$	1,000,000	\$ 3,500,000	\$	4,500,000	\$	4,500,000
Total Pay-Go	\$	21,780,000		\$	5,040,000	\$	3,640,000	\$ 3,700,000	\$	4,700,000	\$	4,700,000
Total Debt Financing	\$	35,055,000		\$	7,688,750	\$		\$ 10,150,000	\$	-	\$	•
Total	\$	55,410,000		\$	12,103,750	\$	20,656,250	\$ 13,650,000	\$	4,500,000	\$	4,500,000

Rate Study Methodology & Objectives

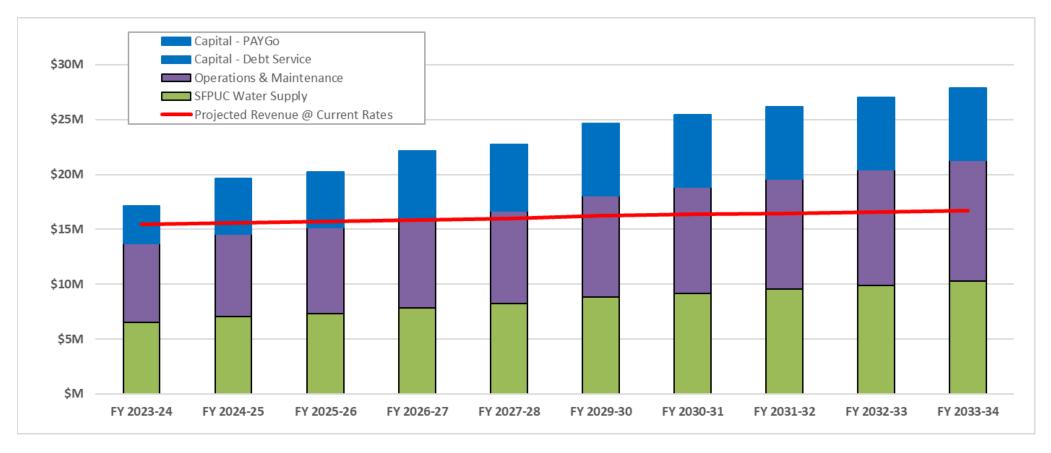


- Ensures that revenue from rates covers costs and provides adequate reserves.
- Ensures that each customer class pays its proportionate share of the revenue requirements
- Ensures that each customer pays its share of the cost of service through fixed and volumetric charges
- Indicates the impacts on customers' bills compared with the current rate structure

Study Challenges

- Except for SFPUC pass-through costs, the District has not raised rates in five years
 - Operating cost increases (excluding capital) require at a minimum 5%, 3%, 3%,
 3%, 3% increase before spending <u>anything</u> on capital improvements
- Significant Capital Improvements needed (\$55M over next five years); including Dairy Lane project due to recent flooding
- Reserves will be depleted without significant increases and/or issuing debt for Capital Improvements
 - Model reflects updated reserve targets
- Challenges meeting debt coverage as required by existing and planned debt issuances (minimum of 1.30x operating costs)

Revenue Requirement Projections



- Projected Revenue (red line) at current rates includes: growth, non-operating revenues, Capacity Fee
 revenue, and Water Demand Offset Charge revenue
- Annual revenue shortfalls can be covered by a combination of annual rate increases and the use of reserves
- Rates have not been increased in five years, except for SFPUC pass-through

Financial Model Assumptions: Capital Spending

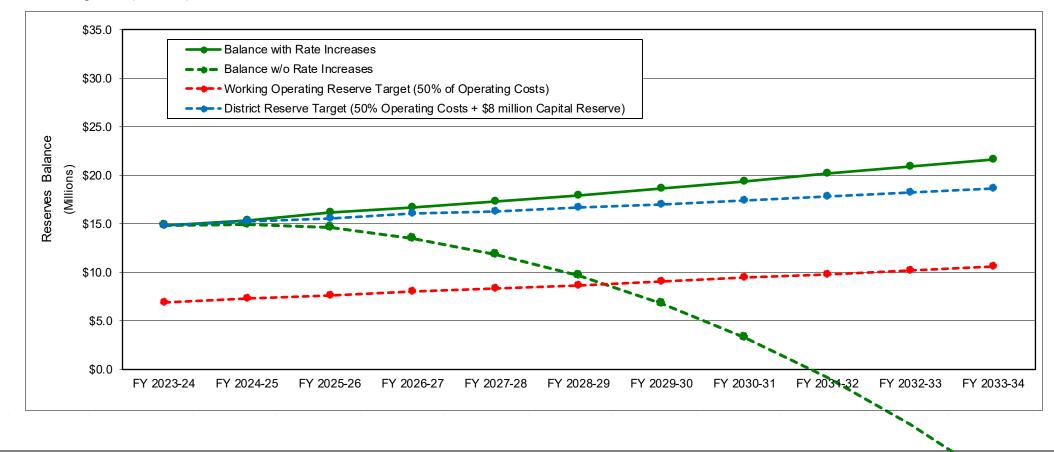
 Based on feedback from the April Financial Committee meeting, we have developed a series of scenarios to fund Operating and Capital needs, as follows:

-		(2024\$)	(2024\$)			
		PAYGo	PAYGo	Debt Financing		
		First Five Yrs	Second Five Yrs	Bond #1 (FY 2024-25)	Bond #2 (FY 2026-27)	
	Ops Only	\$0	\$0	\$0	\$0	
	CIP Funding Scenario 1	\$10,000,000	\$4,000,000	\$0	\$0	
	CIP Funding Scenario 2	\$4,000,000	\$4,000,000	\$30,000,000	\$0	
	CIP Funding Scenario 3	\$3,000,000	\$3,000,000	\$30,000,000	\$0	
	CIP Funding Scenario 4	\$0	\$0	\$50,000,000	\$0	
	CIP Funding Scenario 5	\$3,000,000	\$3,000,000	\$10,000,000	\$15,000,000	

- Modeled rate increases are higher than first presented, due to:
 - Effective date of first rate increase shifting from July 1, 2024 to January 1, 2025
 - Interest rates increasing from 4% to 5.5%
 - Increased SFPUC wholesale water rates

Revenue Increases and Unrestricted Fund Balance – Cover Ops Costs Only

Fiscal year	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	FY 2033-34
Eff. Date	1/1/2025	7/1/2025	7/1/2026	7/1/2027	7/1/2028	7/1/2029	7/1/2030	7/1/2031	7/1/2032	7/1/2033
Rate <u>Revenue</u> Increases	5.0%	3.0%	3.0%	3.0%	3.0%	4.0%	4.0%	3.0%	3.0%	3.0%
Cumulative Increase	5.0%	8.2%	11.4%	14.7%	18.2%	22.9%	27.8%	31.7%	35.6%	39.7%
Debt Coverage Ratio (1.30 min.)	1.34	1.69	1.42	1.46	1.42	1.55	1.64	1.64	1.59	1.33



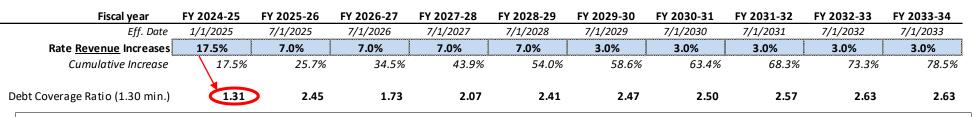
Revenue Increases and Unrestricted Fund Balance – Scenario #1

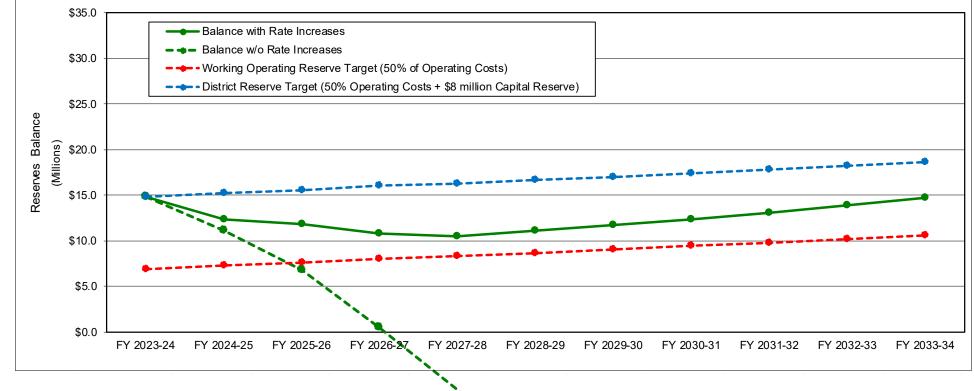
Capital Assumptions

- \$3M/yr PAYGo
- \$10 million debt financing FY 2024-25 at 5.5%, 30-year term
- \$15 million debt financing FY 2026-27 at 5.5%, 30-year term
- Total Capital = \$40 million over five years

Challenges

 Large increase the first year to achieve debt coverage ratio





Revenue Increases and Unrestricted Fund Balance – Scenario #2

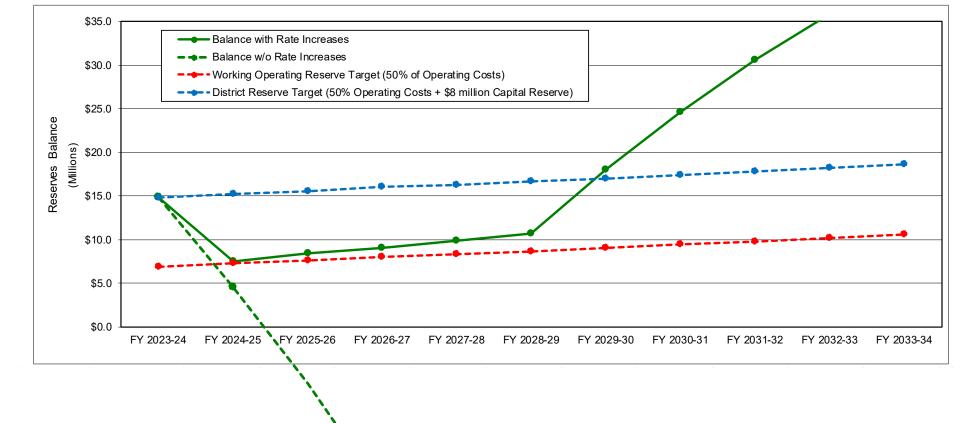
Capital Assumptions

- \$10M/yr PAYGo (for 5 years)
- \$4M/yr PAYGo
- No new debt issuances

Challenges

- Large increases first two years to maintain minimum operating reserve target
- Early large increases
 result in greater reserves
 in outer years even
 without rate increases;
 additional capital can be
 funded

Fiscal year	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	FY 2033-34
Eff. Date	1/1/2025	7/1/2025	7/1/2026	7/1/2027	7/1/2028	7/1/2029	7/1/2030	7/1/2031	7/1/2032	7/1/2033
Rate <u>Revenue</u> Increases	40.0%	30.0%	3.0%	3.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cumulative Increase	40.0%	82.0%	87.5%	93.1%	98.9%	98.9%	98.9%	98.9%	98.9%	98.9%
Debt Coverage Ratio (1.30 min.)	3.69	11.73	11.87	12.28	12.64	12.21	11.74	11.28	10.80	9.89



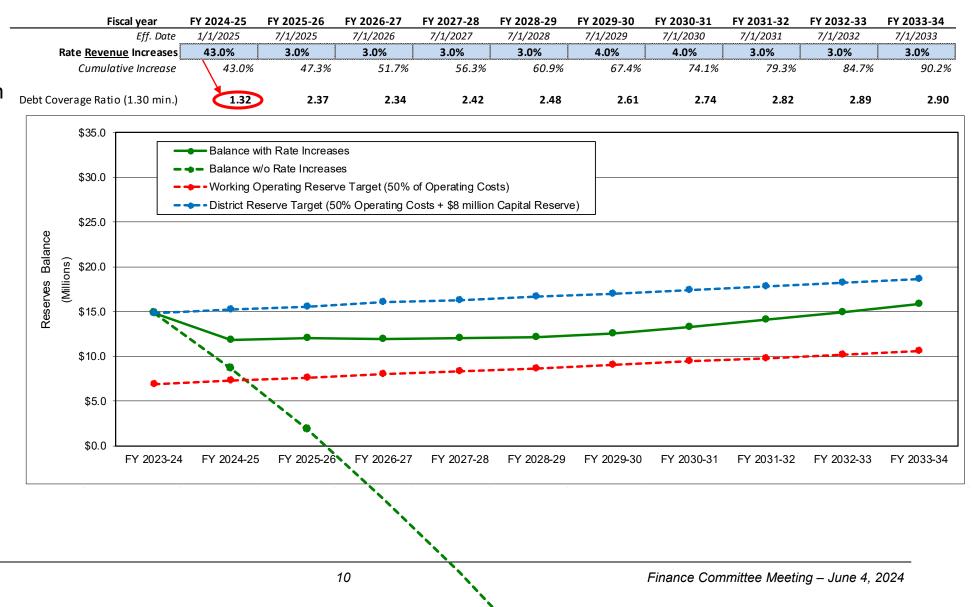
Revenue Increases and Unrestricted Fund Balance – Scenario #3

Capital Assumptions

- \$4M/yr PAYGo for all then years
- \$30 million debt financing
 FY 2024-25 at 5.5%, 30-year term

Challenges

 Large increase the first year to achieve debt coverage ratio



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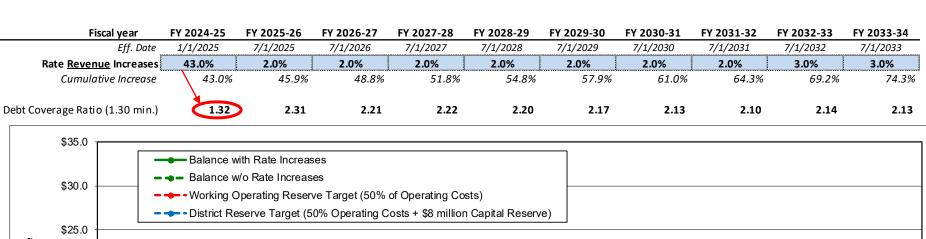
Revenue Increases and Unrestricted Fund Balance – Scenario #4

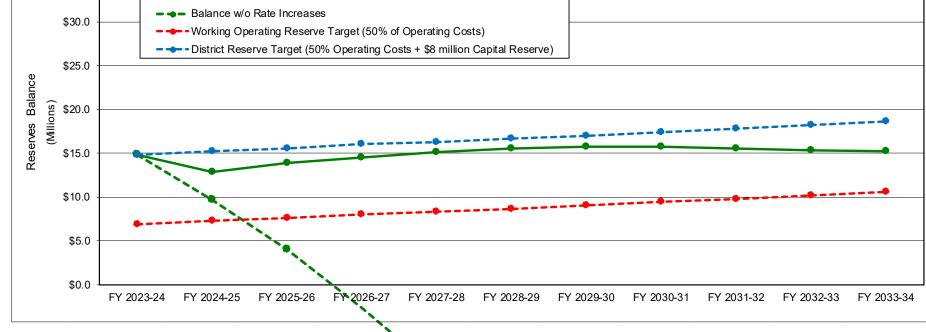
Capital Assumptions

- \$3M/yr PAYGo for all then years
- \$30 million debt financing FY 2024-25 at 5.5%, 30year term

Challenges

 Large increase the first year to achieve debt coverage ratio





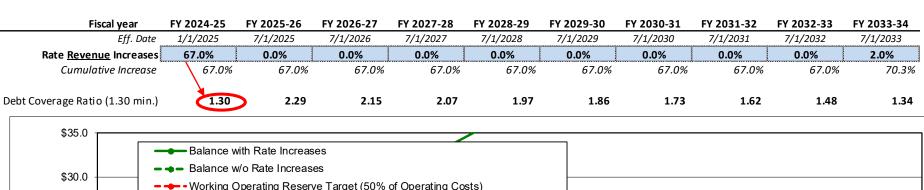
Revenue Increases and Unrestricted Fund Balance – Scenario #5

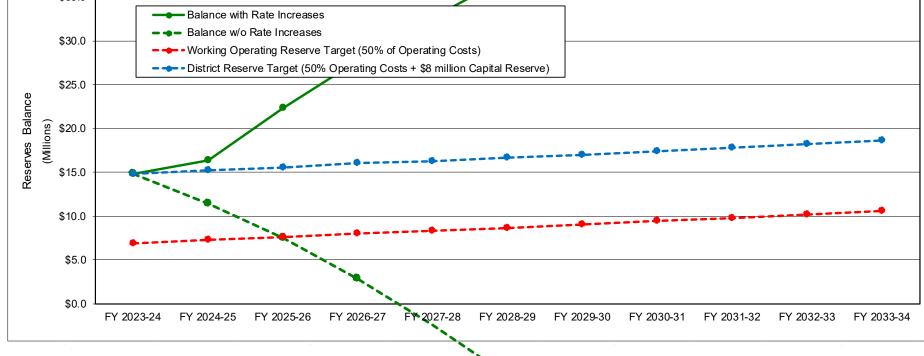
Capital Assumptions

- \$3M/yr PAYGo for all then years
- \$30 million debt financing FY 2024-25 at 5.5%, 30year term

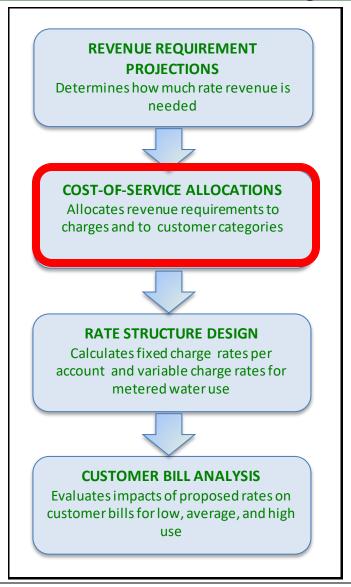
Challenges

- Large increase the first year to achieve debt coverage ratio
- Early large increase result in greater reserves then necessary, even without additional rate increases





Cost of Service Analysis – Scenario #1



- Preliminary results
 - Cost-of-Service re-alignment (FY 2024-25)
 - Overall revenue increase = 17.5%
 - Revenue increase effects each customer class differently
 - Single Family Residential revenue increases 15.0%
 - Commercial/Multi Family revenue increases 21.9%

How Do You Do Cost of Service Analysis?

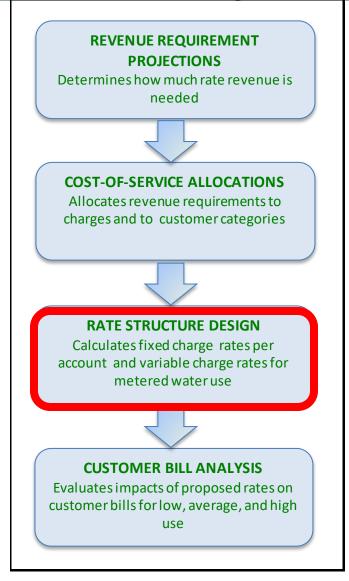
- Methodology is promulgated by the American Water Works Association
 - Base-Extra Capacity approach
 - M1 Manual Principles of Water Rates, Fees, and Charges
 - Well established, long standing, supported by courts
 - Used also for deriving tiered rate structures
 - Best tool to address 2015 San Juan Capistrano decision
- Two-step allocation process
 - 1. Allocate budgeted costs "functional" services
 - 2. Allocate services to customer classes and charges
- Followed by rate structure design
 - Also based on base/extra capacity approach

Current Revenue Compared With FY2024-25 Cost of Service

	Annual Revenue at		Annual Reve	enue at	Difference		
Components of Rate Structure	Current R	ates	Proposed FY 2024-25 Rates		COS Minus	Current	
<u>Residential</u>							
Consumption Charge Revenue	\$6,640,813	72%	\$7,504,088	71%	\$863,275	13.0%	
Fixed System Charge Revenue	\$2,585,520	28%	\$3,102,324	29%	\$516,804	20.0%	
Subtotal - Residential	\$9,226,333	100%	\$10,606,412	100%	\$1,380,079	15.0%	
<u>Commercial</u>							
Consumption Charge Revenue	\$4,580,392	87%	\$5,290,524	82%	\$710,132	15.5%	
Fixed System Charge Revenue	\$711,984	13%	\$1,162,547	18%	\$450,563	63.3%	
Subtotal - Commercial	\$5,292,376	100%	\$6,453,071	100%	\$1,160,695	21.9%	
Total							
Consumption Charge Revenue	\$11,221,205	77%	\$12,794,612	75%	\$1,573,407	14.0%	
Fixed System Charge Revenue	\$3,297,504	23%	\$4,264,871	25%	\$967,367	29.3%	
Total	\$14,518,709	100%	\$17,059,483	100%	\$2,540,774	17.5%	

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Rate Structure Design



Preliminary results

- Service charge for larger meters increase in proportion to capacity of connection to recover the fixed costs of capacity
- Consumption charges
 - Residential tiers are smaller and more tightly spaced based on current demand
 - Commercial tiers are larger based on current demand
- Policy issues
 - Consumption charge tiers
 - Residential three tiers (reduced from four)
 - Commercial one tier (reduced from two)

Service Charge Rates

Service Size	# of Accounts	Meter Ratings (gpm)	Capacity Multiplier*	EMUs
	а	b b	c = b ÷ 20	a * c
5/8" meters	7,254	20	1.00	7,254
1" meters	615	50	2.50	1,538
1 1/2" meters	159	100	5.00	795
2" meters	170	160	8.00	1,360
3" meters	35	320	16.00	560
4" meters	20	500	25.00	500
6" meters	6	1000	50.00	300
Total Accounts	8,259		Total EMUs	12,307
Units Costs	\$1,082,665			\$3,182,206
Monthly Cost		N	Nonthly Cost	
per Account	\$10.92		per EMU	\$21.55

*Capacity multiplier assumes 5/8" meter = 1 EMU = 20 gals/min

Based on M1 Manual page 386 - Turbine Type Class 1 Vertical Shaft

Higher increase to larger meters due to the re-alignment of capacity multipliers with rated capacities

	Capacit	Capacity Multiplier						
	Current	per AWWA						
5/8" meters	1.0	1.0						
1" meters	1.5	2.5						
1 1/2" meters	2.5	5.0						
2" meters	4.0	8.0						
3" meters	6.0	16.0						
4" meters	10.0	25.0						
6" meters	25.0	50.0						

			Account		Capacity Component		Proposed	Total	
	Service Size	% of Meters	Component (\$/mo.)	\$/EMU	Capacity Multiplier	Capacity Total	Service Charges (\$/mo.)	Current Charge	\$ Difference
			a	b	С	d = b * c	e = a + d		
	5/8" meters	87.8%	\$10.92	\$21.55	1.00	\$21.55	\$32.47	\$28.00	\$4.47
_	1" meters	7.4%	\$10.92	\$21.55	2.50	\$53.87	\$64.79	\$42.00	\$22.79
	1 1/2" meters	1.9%	\$10.92	\$21.55	5.00	\$107.74	\$118.67	\$70.00	\$48.67
	2" meters	2.1%	\$10.92	\$21.55	8.00	\$172.39	\$183.31	\$112.00	\$71.31
	3" meters	0.4%	\$10.92	\$21.55	16.00	\$344.77	\$355.70	\$168.00	\$187.70
	4" meters	0.2%	\$10.92	\$21.55	25.00	\$538.71	\$549.63	\$280.00	\$269.63
	6" meters	0.1%	\$10.92	\$21.55	50.00	\$1,077.41	\$1,088.34	\$700.00	\$388.34

94% of Residential Customers

EMU = Equivalent Meter Unit = 5/8" meter = 20 gpm

Determining Breakpoints For Residential Tier Structure

- Each level of service has an average flow that can be used as the division ("breakpoint") between tiers
- The averages for Base Day, Average Day, and Maximum Day yield the breakpoints that lead to tiers

	Base	Average	Maximum	Maximum
Flow per Customer (hcf per month)	Day	Day	Day	Hour
Residential				
hcf per day	1,341	1,762	3,362	5,043
hcf per month	40,242	52,848	100,865	
# of Accounts	7,266	7,266	7,266	
Average flow per Acct (hcf/mo)	6.0	7.0	14.0	15+

Residential Volume Charge Rates

Three-Tier Structure

	Base	Average Day/	Maximum
Residential COS per Unit	Day	Max Day	Hour
Residential COS - Consumpti	\$6,353,512	\$947,254	\$203,322
Demand Per Tier			
Tier 1 (0-6 hcf)	428,610		
Tier 2 (7-14 hcf)	171,134	171,134	
Tier 3 (15+ hcf)	58,328	58,328	58,328
Total hcf per Tier	658,072	229,462	58,328
_			
Cost-of-Service per Unit (hcf	\$9.65	\$4.13	\$3.49

Total \$7,504,088

Incremental Cost per Tier

	Base	Average Day/	Maximum
Unit Cost Calculation	Day	Max Day	Hour
Tier 1 (0-6 hcf)	\$9.65	\$9.65	\$9.65
Tier 2 (7-14 hcf)		\$4.13	\$4.13
Tier 3 (15+ hcf)			\$3.49
Unit Cost per hcf (by Tier)	\$9.65	\$13.78	\$17.27

Rates per tier

Commercial Volume Charge Rates

Current Structure – 2 Tiers

- Current breakpoint of 5 HCF is well below demand patterns
- Unlike single family residential customers commercial/MFR customers do not use water uniformly; As such, industry practice is to charge a uniform rate

Flow per Customer (hcf per month)	Base Day	Average Day	Maximum Day	Maximum Hour
Commercial (includes MFR)				
hcf per day	936	1,257	2,524	3,786
hcf per month	28,085	37,711	75,726	
# of Accounts	832	832	832	
Average flow per Acct (hcf/mo)	34.0	45.0	91.0	92+

Proposed Structure – Unform charge; 1 Tier

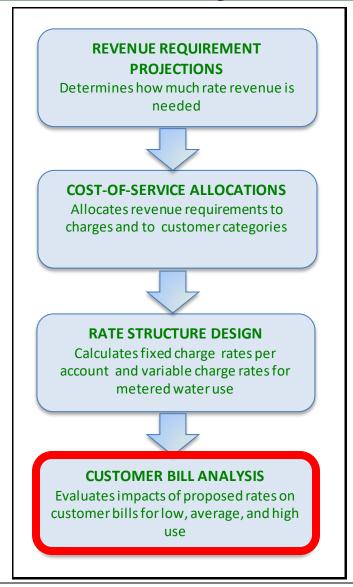
Consumption Charge	Base	Average	Maximum	Maximum	
Cost of Service	Day	Day	Day	Hour	Total
Total COS - Commercial	\$4,434,077	\$141,187	\$141,187 \$562,614 \$1		\$5,290,524
			Annual v	vater use (hcf)_	429,355
				\$ per hcf	\$12.32

Volume Charge Rates

- Breakpoints are based on recent customer demand, not on deemed values
 - Consistent with San Juan Capistrano decision

Current C	Quantity Charge	Rates			Recommende	ed Quantity C	Charge Rates		
							Prop	osed	
	Tier Size	\$/HCF		Tier Size	7/1/2024	7/1/2025	7/1/2026	7/1/2027	7/1/2028
	(HCF)				COS Rates	+ 7.0%	+ 7.0%	+ 7.0%	+ 7.0%
					\$/HCF	\$/HCF	\$/HCF	\$/HCF	\$/HCF
Residential			Residential						
Tier 1	/ 0 to 2	\$7.43	Tier 1	/ 0 to 6	\$9.65	\$10.33	\$11.05	\$11.82	\$12.65
Tier 2	3 to 8	\$10.26	Tier 2	7 to 14	\$13.78	\$14.74	\$15.77	\$16.87	\$18.05
Tier 3	9 to 20	\$12.17	Tier 3	15+	\$17.27	\$18.48	\$19.77	\$21.15	\$22.63
Tier 4	21+	\$14.07							
Commercial			Commercial						
Tier 1	0 to 5	\$9.37		All Usage	\$12.32	\$13.18	\$14.10	\$15.09	\$16.15
Tier 2	6+	\$10.73							
			-						

Customer Bill Analysis



Preliminary results

- Residential bills increase <\$10/month for 57% of bills with water use of 6 hcf (150 gpd or less)
- More of the residential cost of peaking shifts to the highest 43% of bills
- Commercial bill impacts vary depending on size of connection and demand

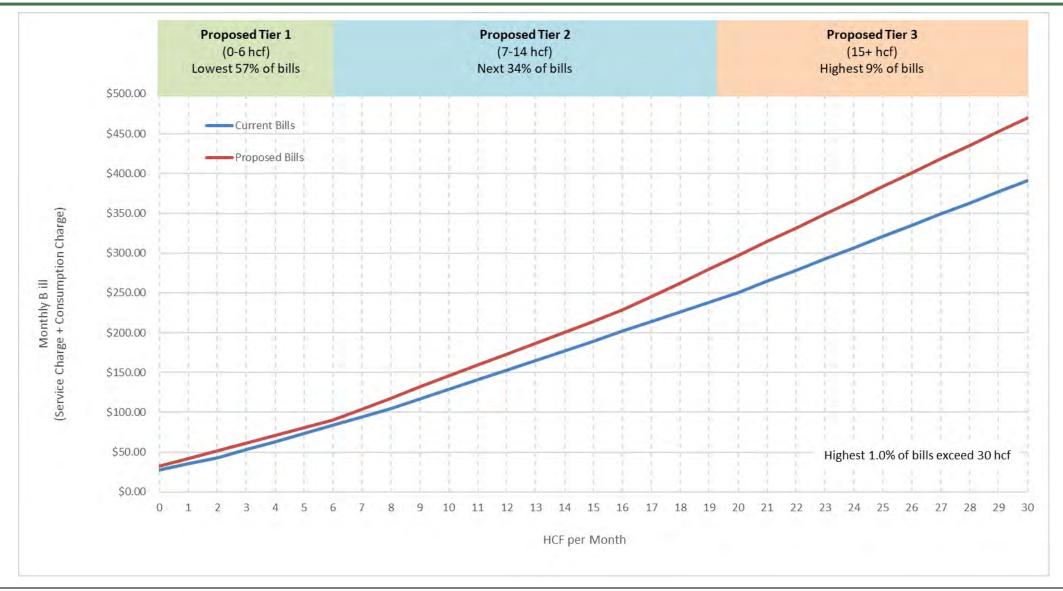
Residential Bills – 5/8" Meter (94% of customers)

Water Use Total Bill (with 5/8" meter)		h 5/8" meter)				
HCF	Gal	Current	FY 2024-25	\$	%	
/Mo.	/Day	Rates	Proposed	Difference	of Bills	Cumulative
0	0	\$28.00	\$32.47	\$4.47	3.01%	3.01%
1	25	\$35.43	\$42.13	\$6.70	4.43%	7.44%
2	50	\$42.86	\$51.78	\$8.92	7.66%	15.11%
3	75	\$53.12	\$61.44	\$8.32	10.44%	25.55%
4	100	\$63.38	\$71.09	\$7.71	11.32%	36.86%
5	125	\$73.64	\$80.75	\$7.11	10.95%	47.81%
6	150	\$83.90	\$90.40	\$6.50	9.66%	57.47%
7	175	\$94.16	\$104.18	\$10.02	8.01%	65.48%
8	200	\$104.42	\$117.97	\$13.55	6.50%	71.98%
9	225	\$116.59	\$131.75	\$15.16	5.16%	77.14%
10	250	\$128.76	\$145.53	\$16.77	4.11%	81.25%
11	275	\$140.93	\$159.32	\$18.39	3.33%	84.58%
12	300	\$153.10	\$173.10	\$20.00	2.69%	87.27%
13	325	\$165.27	\$186.88	\$21.61	2.18%	89.45%
14	350	\$177.44	\$200.66	\$23.22	1.82%	91.27%
15	375	\$189.61	\$214.45	\$24.84	1.42%	92.69%
16	400	\$201.78	\$228.23	\$26.45	1.19%	93.88%
17	425	\$213.95	\$245.50	\$31.55	0.96%	94.84%
18	450	\$226.12	\$262.77	\$36.65	0.81%	95.65%
19	475	\$238.29	\$280.04	\$41.75	0.67%	96.32%
20	500	\$250.46	\$297.30	\$46.84	0.53%	96.85%
21	525	\$264.53	\$314.57	\$50.04	0.46%	97.30%
22	550	\$278.60	\$331.84	\$53.24	0.35%	97.66%
23	575	\$292.67	\$349.11	\$56.44	0.31%	97.97%
24	600	\$306.74	\$366.38	\$59.64	0.29%	98.26%
25	625	\$320.81	\$383.65	\$62.84	0.24%	98.50%

First breakpointshifts from 2 hcf to6 hcf

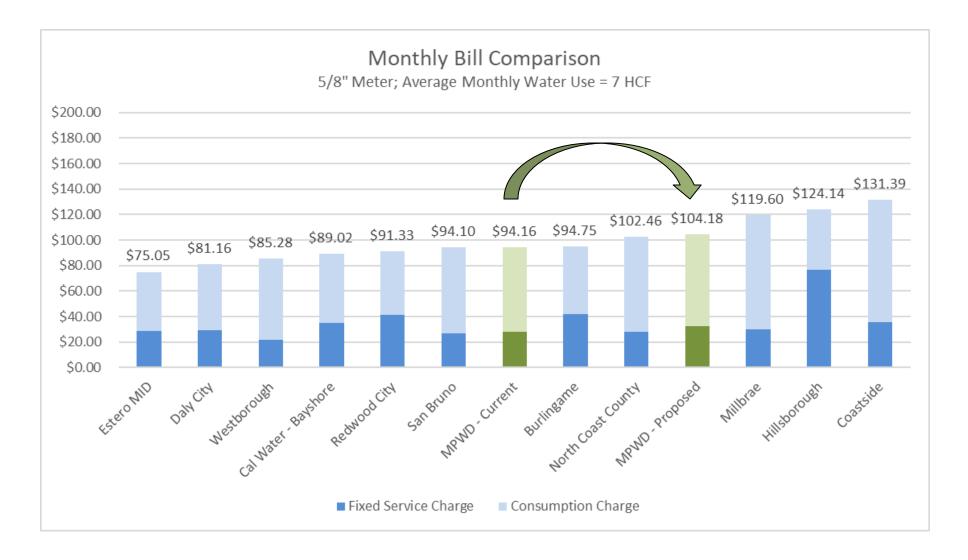
 Last breakpoint shifts from 20 hcf to 14 hcf

Residential Bills – 5/8" Meter



Residential Bill Comparison

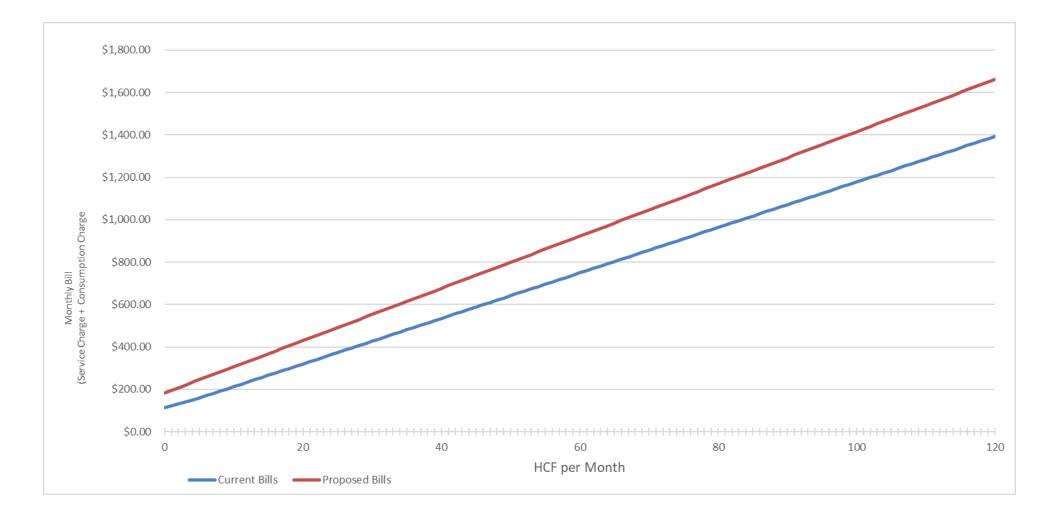
- Rates reflect rates in effect on 7/1/2024, with the exception of Westborough (2023)



Commercial Bills – 5/8" Meter (315 meters ~37% of customers)



Commercial Bills – 2" Meter (166 Meters ~20% of customers)



Drought Rate Factors

 If mandatory cutbacks, Board can declare water shortage stage in line with the District's Water Shortage Contingency Plan

- Reduced revenue from short-term conservation may be covered with reserves
- If long-term conservation results in depleting reserves, Board can authorize implementation of approved Drought Rate Factors (if included in the Proposition 218 notice)

Percent Cutbacks by Class at Various Declared Shortage Stages

Class			Stage 3 Up to 30% Reduction	Stage 4 Up to 40% Reduction	Stage 5 Up to 50% Reduction	Stage 6 Greater than 50% Reduction
SFR	9.9%	19.8%	29.8%	39.7%	49.6%	59.5%
MFR	8.5%	17.0%	25.5%	34.0%	42.5%	51.6%
Commercial	11.3%	22.7%	34.0%	45.4%	56.7%	67.6%

Drought Rate Factors

Class	Stage 1 Up to 10% Reduction	Stage 2 Up to 20% Reduction	Stage 3 Up to 30% Reduction	Stage 4 Up to 40% Reduction	Stage 5 Up to 50% Reduction	Stage 6 Greater than 50% Reduction
SFR	1.051	1.116	1.198	1.307	1.460	1.687
MFR	1.043	1.096	1.160	1.241	1.346	1.498
Commercial	1.060	1.137	1.241	1.388	1.613	1.973

To be applied to the non-shortage Consumption rates in effect at the time of the shortage declaration

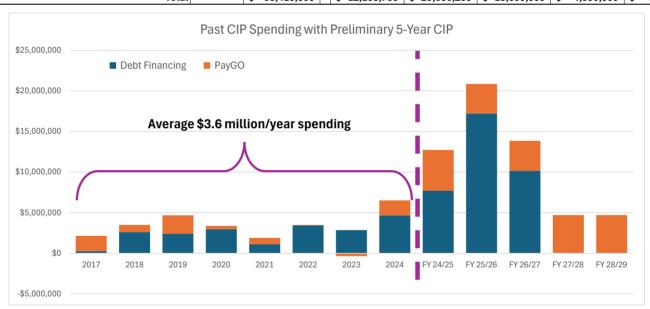
Summary

Open policy issues

- Revenue requirements
 - Operating and Capital Reserve Targets
 - Capital spending
 - Debt Issuance
- Rate design
 - Number of residential tiers for consumption charges
 - Number of commercial tiers for consumption charges
- Adding revenue neutral rate adjustments during water shortages to avoid revenue shortfalls
 - An administrative benefit that does not affect rate analysis

Preliminary 5-Year CIP Budget

CIP#	Project	Proposed Funding	Total	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29
	(Capitalized Equipment)	Pay-Go	\$ 1,200,000	\$ 400,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
CIP 15-75a	Old County Road Improvements	Pay-Go	\$ 225,000	\$ 225,000	\$ -	\$ -	\$ -	\$ -
CIP 15-09/ 15-19	Dekoven Tank Util/Lincoln/Newlands/Oak Knoll WMR	Pay-Go	\$ 3,000,000	\$ 3,000,000	\$ -	\$ -	\$ -	\$ -
CIP 20-09	Dairy Lane Operations Center Rehabilitation - Design	Debt Financ	\$ 4,800,000	\$ 2,400,000	\$ 2,400,000	\$ -	\$ -	\$ -
CIP 20-10	Dairy Lane Operations Center Rehabilitation - Construction	Debt Financ	\$ 14,500,000	\$ -	\$ 4,350,000	\$ 10,150,000	\$ -	\$ -
CIP 24-07	Folger Property Improvements	Debt Financ	\$ 5,400,000	\$ 2,700,000	\$ 2,700,000	\$ -	\$ -	\$ -
CIP 15-89	Dekoven Tanks Replacement	Debt Financ	\$ 7,590,000	\$ 1,897,500	\$ 5,692,500	\$ -	\$ -	\$ -
CIP 15-72b	SR 101 Crossing at PAMF Hospital - Phase 2	Debt Financ	\$ 2,765,000	\$ 691,250	\$ 2,073,750	\$ -	\$ -	\$ -
CIP 24-08	Exborne West Tank Recoating	Pay-Go	\$ 675,000	\$ 675,000	\$ -	\$ -	\$ -	\$ -
CIP 24-09	Hallmark North Tank Recoating	Pay-Go	\$ 3,050,000	\$ 610,000	\$ 2,440,000	\$ -	\$ -	\$ -
CIP 24-10	West Belmont North Tank Recoating	Pay-Go	\$ 130,000	\$ 130,000	\$ -	\$ -	\$ -	\$ -
	Other Projects (Not Yet Identified)	Pay-Go	\$ 13,500,000	\$ -	\$ 1,000,000	\$ 3,500,000	\$ 4,500,000	\$ 4,500,000
	Total Pay-Go	+	\$ 21,780,000	\$ 5,040,000	\$ 3,640,000	\$ 3,700,000	\$ 4,700,000	\$ 4,700,000
	Total Debt Financing		\$ 35,055,000	\$ 7,688,750	\$ 17,216,250	\$ 10,150,000	\$ -	\$ -
	Total		\$ 55,410,000	\$ 12,103,750	\$ 20,656,250	\$ 13,650,000	\$ 4,500,000	\$ 4,500,000



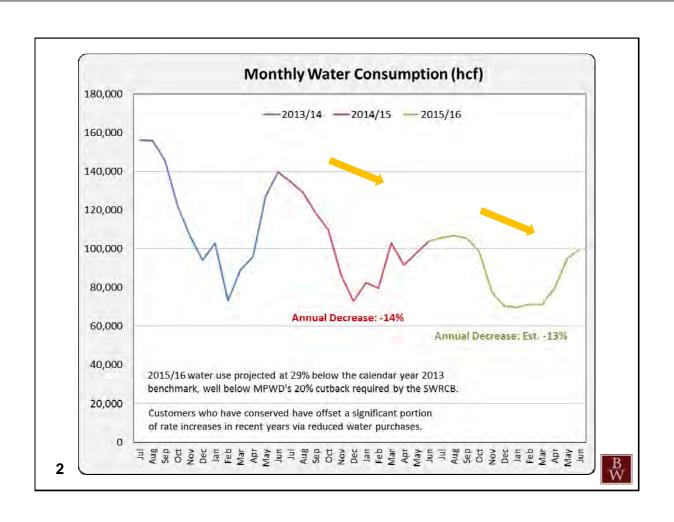
Mid-Peninsula Water District



Water Finance & Rate Update

April 28, 2016





Water Sales

- 2015/16 water sales projected at 29% below the calendar year 2013 benchmark
 - > Substantially below MPWD's 20% SWRCB-required cutback
 - > Reduced water sales = reduced revenues
 - > More cutback at higher tiers results in more revenue loss



- Reduced water sales also = reduced SFPUC wholesale purchases, which offsets some of the revenue loss
- Customers who have conserved have offset a significant portion of rate increases in recent years via reduced water purchases

3



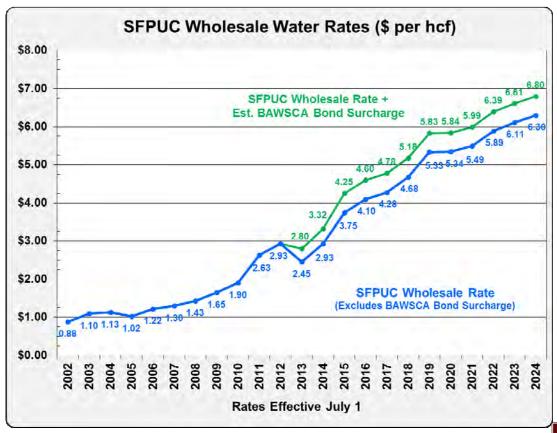
SFPUC Revised Rate Projections

	July 1	July 1	July 1	July 1	July 1	July 1
	2014	2015	2016	2017	2018	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 Projections in Rate Study	-	-	0.32	0.49	0.37	0.61



- SFPUC also impacted from reduced volume of wholesale water sales, resulting in additional SFPUC rate increases
- MPWD can pass through the additional SFPUC rate increases based on SFPUC rates adopted each year

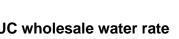




BW

Updated Financial Projections

- BWA updated long-term financial projections based on data available through end of March 2016
 - > Assumes water use remains constant at est. 2015/16 levels
 - > Includes revised SFPUC wholesale rate projections
 - > Incorporates debt financing



- MPWD needs to implement the authorized SFPUC wholesale water rate pass-through effective July 1, 2016
 - Pass-through only accounts for SFPUC wholesale rate increase and does not mitigate net revenue loss from the cutback in water sales
- MPWD does not 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



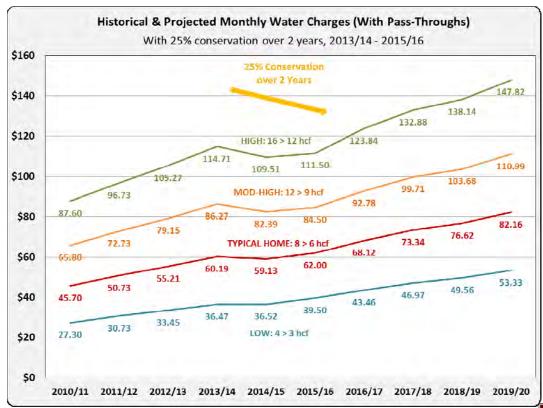
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		Adopted \	Water Ra	ates		
		July 1	July 1	July 1	July 1	July 1
Circus I NA		2015	2016	2017	2018	2019
	onthly Charges ased on meter size					
Meter	Meter Ratio					
5/8"	1.00	\$22.00	\$24.00	\$26.00	\$28.00	\$30.00
1"	1.50	33.00	36.00	39.00	42.00	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
Billed ba	Consumption Charges ased on monthly metere tial Use per Tier	ed water use (\$	S/hcf)*			
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
Resident	tial Rate Tiers					
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
Commer	cial Rate Tiers					
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 fee	t or approxima	tely 748 gallo	ns.		



2016/17 Rates With SFPUC Wholesale Pass-Through									
		Proposed Rates Effective July 1, 2016							
		Adopted	+ SFPUC Add'I	Rate With					
		Rates	Pass-Through	Pass-Through					
	Water Consumption Charges Billed based on monthly metered water use (\$/hcf)*								
Residen	Residential Rate Tiers								
Tier 1	0 - 2 hcf	\$5.30	\$0.32	\$5.62					
Tier 2	3 - 8 hcf	7.90	0.32	8.22					
Tier 3	9 - 20 hcf	9.50	0.32	9.82					
Tier 4	Over 20 hcf	11.10	0.32	11.42					
Commer	Commercial Rate Tiers								
Tier 1	0 - 5 hcf	\$7.25	\$0.32	\$7.57					
Tier 2	Over 5 hcf	8.35	0.32	8.67					
* 1 hcf =	one hundred cubi	c feet or approxima	ately 748 gallons.						





9



Capital Funding & Debt

- Reduced water sales revenues result in a reduction of MPWD's financial capacity for funding capital improvements and debt
- Financial projections indicate maximum financing capacity for roughly
 \$15 million of debt
 - > Assumes no change in water sales from current drought levels
 - > Assumes no implementation of Water Shortage Emergency Rates
- 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



MINIAID Cook Flow Projections									
	MPWD Cash Flow Projections 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21 2021/22							2022/23	2023/24 Oraft
Overall Rate Adjustments	Adopted 18%	Adopted 6%	Adopted 6%	Adopted 6%	Adopted 6%	Projected 8%	Projected 6%	Projected 6%	Projected 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									
Operating & Maintenance	Revised	Revised							
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



Questions / Discussion





Figure 2 shows a survey of monthly regional water bills for a typical single family home with monthly water use of 9 hcf. MPWD's rates are in the middle range compared to other local and regional agencies. Many of these agencies obtain wholesale water from the SFPUC and will also be implementing rate increases over the next few years.

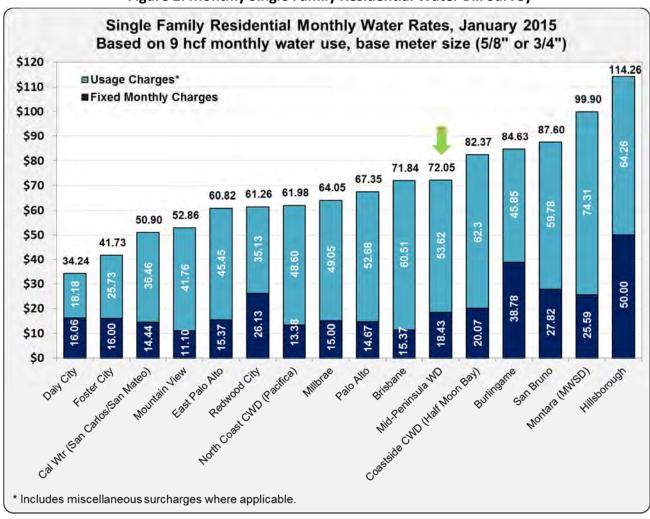


Figure 2: Monthly Single Family Residential Water Bill Survey

Mid-Peninsula Water District Cash Flow Projections										
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Rate Adjustments	9%	18%	6%	6%	6%	6%	3.5%	3.5%	3.5%	3.5%
Growth in Service Connections		20	20	20	10	10	10	10	10	10
Water System Capacity Charge	\$1,450	\$9,375	\$9,560	\$9,750	\$9,950	\$10,150	\$10,350	\$10,560	\$10,770	\$10,990
Change in Water Sales	-13.00%	-4.40%	-1.02%	-1.02%	-1.02%	-1.02%	-0.60%	-0.60%	-0.60%	-0.60%
Change in Sales Revenues	-14.56%	-4.95%	-1.15%	-1.15%	-1.15%	-1.15%	-0.67%	-0.67%	-0.67%	-0.67%
Total Water Sales (hcf)	1,160,000	1,109,000	1,097,700	1,086,500	1,075,400	1,064,400	1,058,100	1,051,800	1,045,500	1,039,300
SFPUC Water Supply (hcf) +7%	1,241,200	1,186,600	1,174,500	1,162,600	1,150,700	1,138,900	1,132,200	1,125,400	1,118,700	1,112,100
Reduction in Supply Since 2013	-16.4%	-20.0%	-20.9%	-21.7%	-22.5%	-23.3%	-23.7%	-24.2%	-24.6%	-25.1%
SFPUC Rate per hcf	\$2.93	\$3.75	\$3.78	\$3.79	\$4.31	\$4.72	\$4.74	\$4.90	\$5.03	\$5.17
Interest Earnings Rate	0.30%	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 Balances	\$4,377,000	\$2,483,000	\$2,512,000	\$2,778,000	\$3,195,000	\$3,322,000	\$3,344,000	\$3,498,000	\$3,632,000	\$3,781,000
REVENUES										
Monthly Service Charges	2,050,000	2,420,000	2,654,000	2,879,000	3,103,000	3,294,000	3,414,000	3,538,000	3,667,000	3,801,000
Water Sales	6,570,000	8,229,000	8,620,000	8,933,000	9,248,000	9,564,000	9,832,000	10,108,000	10,392,000	10,684,000
Subtotal Rate Revenues	8,620,000	10,649,000	11,274,000	11,812,000	12,351,000	12,858,000	13,246,000	13,646,000	14,059,000	14,485,000
Interest Revenue	10,000	7,000	13,000	21,000	32,000	33,000	33,000	35,000	36,000	38,000
Lease of Physical Property	238,000	248,000	255,000	263,000	271,000	279,000	287,000	296,000	305,000	314,000
Property Taxes	245,000	245,000	252,000	260,000	268,000	276,000	284,000	293,000	302,000	311,000
Capacity Charges	50,000	188,000	191,000	195,000	100,000	102,000	104,000	106,000	108,000	110,000
Other/Miscellaneous Revenues	34,400	79,000	50,000	52,000	54,000	56,000	58,000	60,000	62,000	64,000
Total Revenues	9,197,400	11,416,000	12,035,000	12,603,000	13,076,000	13,604,000	14,012,000	14,436,000	14,872,000	15,322,000
EXPENSES										
Operating & Maintenance										
Personnel Costs	2,470,000	2,659,000	2,765,000	2,876,000	2,991,000	3,111,000	3,235,000	3,364,000	3,499,000	3,639,000
SFPUC Water Purchases	3,737,000	4,550,000	4,540,000	4,506,000	5,060,000	5,476,000	5,467,000	5,614,000	5,727,000	5,850,000
BAWSCA Bond Surcharge	500,000	461,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000
Maintenance & Repair	500,000	524,000	545,000	567,000	590,000	614,000	639,000	665,000	692,000	720,000
Utilities	330,000	344,000	358,000	372,000	387,000	402,000	418,000	435,000	452,000	470,000
Professional Services	536,000	591,000	615,000	640,000	666,000	693,000	721,000	750,000	780,000	811,000
Wtr Conservation Prog & Rebates	72,000	73,000	76,000	79,000	82,000	85,000	88,000	92,000	96,000	100,000
Other Operating Costs	586,000	615,000	640,000	666,000	693,000	721,000	750,000	780,000	811,000	843,000
Subtotal	8,731,000	9,817,000	10,019,000	10,186,000	10,949,000	11,582,000	11,798,000	12,180,000	12,537,000	12,913,000
Capital Improvements	2,360,000	1,570,000	1,750,000	2,000,000	2,000,000	2,000,000	2,060,000	2,122,000	2,186,000	2,252,000
Total Expenses	11,091,000	11,387,000	11,769,000	12,186,000	12,949,000	13,582,000	13,858,000	14,302,000	14,723,000	15,165,000
Revenues Less Expenses	(1,893,600)	29,000	266,000	417,000	127,000	22,000	154,000	134,000	149,000	157,000
Ending Fund Balances	2,483,400	2,512,000	2,778,000	3,195,000	3,322,000	3,344,000	3,498,000	3,632,000	3,781,000	3,938,000