

Western Hills Water District

Water Rate Study

Board Meeting – Project Status Update
March 10, 2021

HF&H Consultants, LLC



Agenda

- Introductions
- Purpose of the Meeting
- Background
- Current Rates, Rate Structure, and Revenues
- Revenue Requirements
- Proposed Rates
- Bill Comparisons (current vs proposed rates)
- How to Handle Water Banking Revenue
- Questions & Discussion



Purpose of the Meeting

- Inform Board and public of the rate study process and status
- Present preliminary analysis to facilitate brainstorming
- Elicit input from Board members



Background – Water System Overview

- **8 miles** of steel pipeline conveying purchased raw water from Kern County
- **2 MGD** treatment plant including pumps, generators, tanks and a clarifier
- **20,000 gallon** water storage tank
- Can accommodate 750 residential connections
 - 595 existing connections
- Distribution pipeline to serve all customers
- Maintenance and operation of existing facilities
- Efficient District staff to maintain water system assets, manage District finances and to provide customer administrative support
- **Water Banking Revenue:**
 - District water received is determined by allotment from State, based on snowpack available
 - When available, District sells excess water to Kern County Water Agency
 - Revenue from selling excess water varies widely from year to year and there is no guaranteed minimum



Current Rates, Rate Structure, and Observations

Customer Class	Service Charge		Usage Charge	
	Per Month	% of Revenue	Per ccf/mo. ¹	% of Revenue
Treated Water				
Residential	\$100.69	84%	\$1.49	16%
Residential - HOA	\$0.00	0%	\$5.10	100%
Non-Residential ²	\$0.00	0%	\$5.10	100%
<i>Combined %</i>		78%		22%
Raw Water	\$0.00	0%	\$4.01	100%
			= \$1,747,63/AF	

¹ ccf = hundred cubic feet = 748.052 gallons

² Non-residential includes COAs, District office, clubhouse, fire station

Observations:

- 78% of revenue coming from fixed charges provides the District a high-level of revenue reliability
- **Current revenue < cost of service.**
- Current rates do not allow for contributions to operating or capital reserves



Revenue at Current Rates ~ \$926,000

	Current Meter Count	Current Service Chg per meter per mo	Projected Annual Service Charge Revenue	Projected Usage (CCF)	Current Usage Charge per CCF	Projected Annual Usage Charge Revenue	Annual Revenue Current Cust.
Treated Water							
Residential	595	\$100.69	\$ 718,927	91,759	\$1.49	\$ 136,721	\$ 855,648
Residential HOA							
1-1/2" Meter	1	\$0.00	\$ -	4,221	\$5.87	\$ 24,776	24,776
2" Meter	4	\$0.00	\$ -	4,173	\$5.87	\$ 24,494	24,494
Subtotal Residential	600		718,927	100,153		185,991	904,918
			79%			21%	
Non-Residential							
Commercial Owners Assoc (COA) (2")	8	\$0.00	-	3,441	\$5.87	\$ 20,197	20,197
Golf Course							
1" Meter	1	\$0.00	-	-	\$5.87	-	-
2" Meter	1	\$0.00	-	-	\$5.87	-	-
District Office	1	\$0.00	-	157	\$5.87	919	919
Fire Station	1	\$0.00	-	32	\$5.87	188	188
Subtotal Non-Residential	12		-	3,629		21,304	21,304
Total Treated Water	612		\$ 718,927	103,782		\$ 207,295	\$ 926,222
			78%			22%	
Raw Water							
Vineyard	1	\$0.00	\$ -	-	\$4.01	\$ -	\$ -
Golf Course	1	\$0.00	-	-	\$4.01	-	-
2" Meter (COA #9)	1			69	\$4.01	276	276
Total Raw Water	3		\$ -	69		\$ 276	\$ 276
Grand Total	615		\$ 718,927	103,851		\$ 207,572	\$ 926,498

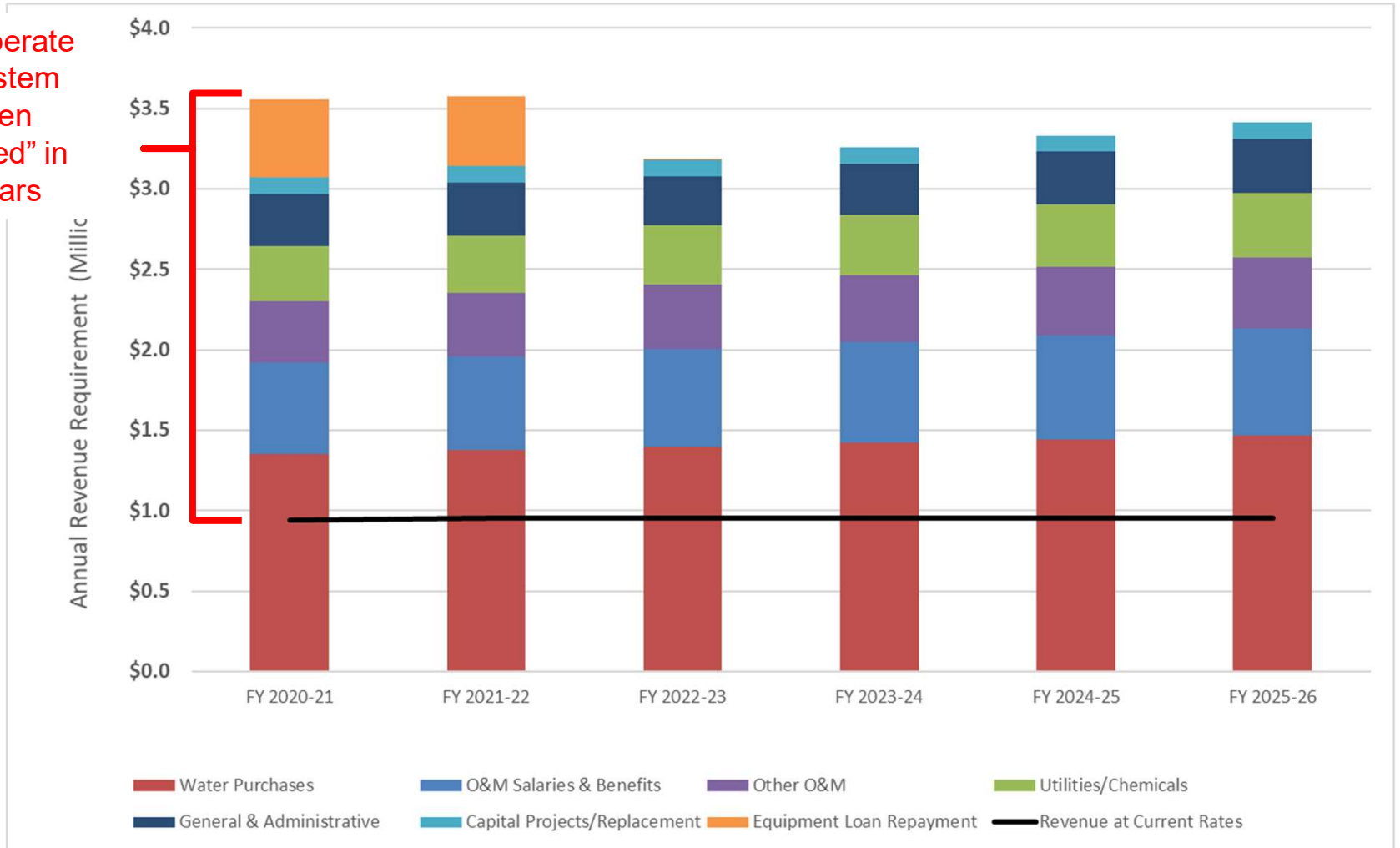
Assumptions:

- 3-year average of CY 2017, 2018, 2019 water use.
- Golf course and vineyard no longer receiving water; Historical use: ~200,000 CCF per year



Projected Revenue Requirements

Cost to operate water system has been “subsidized” in prior years



- Revenue line includes \$12,000 – 28,000 annually of non-operating revenue



Revenue Requirements – Key Assumptions

- FY 2021-22 Net Revenue Requirement from Water Rates = ~\$3.55 million

Annual Revenue Requirement	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Water Purchases	\$ 1,351,686	\$ 1,373,930	\$ 1,396,547	\$ 1,419,544	\$ 1,442,926	\$ 1,466,702
O&M Salaries & Benefits	568,659	587,262	606,547	626,544	647,285	668,803
Utilities/Chemicals	344,020	354,341	364,971	375,920	387,198	398,813
Other O&M	381,227	391,938	402,951	414,272	425,913	437,880
Equipment Loan Repayment	483,127	437,676	4,798	0	0	0
General & Administrative	324,720	330,784	308,848	317,733	326,881	336,301
Capital Projects/Replacement	101,660	101,660	101,660	101,660	101,660	101,660
Total Expenses	3,555,098	3,577,590	3,186,321	3,255,673	3,331,862	3,410,160
(Less) Non-Rate Revenue	(11,925)	(25,459)	(26,172)	(26,904)	(27,658)	(28,432)
Net Revenue Requirement	3,543,173	3,552,132	3,160,149	3,228,768	3,304,205	3,381,728
<i>Annual increase</i>		0.3%	-11.0%	2.2%	2.3%	2.3%

- Started with TOTAL District-wide FY 2019-20 budget (\$3.63 million) and adjusted as follows:
 - Annual inflationary adjustments:
 - 2.8% general inflation (CPI)
 - 3.0% salaries/wages
 - 8.0% benefits
 - 3.0% Utilities
 - Excludes sanitary sewer and storm sewer expenses (~\$700-820k)
- Equipment loans will be paid off by end of FY 2022-23



FY 2021-22 Cost-of-Service Rates

- \$390 per month fixed service charge + Usage Charge @ \$7.39 per CCF of water use
 - Remember, the \$390 includes the final full year of repaying the equipment loans (~\$61.00/mo. per household)

	Annual Revenue Calculation Proposed Rate Structure	Meter Count	Proposed Service Chg per meter per mo	Projected Service Charge Revenue	Projected Usage (CCF)	Proposed Usage Charge per CCF	Projected Usage Charge Revenue	Projected Annual Revenue
1								
2								
3	Treated Water							
4	Residential - Current	595	\$390.00	\$ 2,784,600	91,759	\$7.39	\$ 678,099	\$ 3,462,699
5	Residential HOA							
6	1-1/2" Meter	1	\$0.00	-	4,221	\$7.39	\$ 31,192	31,192
7	2" Meter	4	\$0.00	-	4,173	\$7.39	\$ 30,836	30,836
8	Non-Residential							
9	COA (2")	8	\$0.00	-	3,441	\$7.39	\$ 25,426	25,426
10	Golf Course							
11	1" Meter	1	\$0.00	-	-	\$7.39	\$ -	-
12	2" Meter	1	\$0.00	-	-	\$7.39	\$ -	-
13	District/World Office (1")	1	\$0.00	-	157	\$7.39	\$ 1,157	1,157
14	Fire Station (1")	1	\$0.00	-	32	\$7.39	\$ 237	237
15								
16	Total Treated Water	612		\$ 2,784,600	103,782		\$ 766,949	\$ 3,551,549
17				78%			22%	
18	Raw Water							
19	2" Meter	1	\$0.00	-	69	\$7.39	\$ 509	509
20	Vineyard	1	\$0.00	\$ -	-	\$0.00	\$ -	\$ -
21	Golf Course	1	\$0.00	-	-	\$0.00	\$ -	-
22	Total Raw Water	3		\$ -	-		\$ 509	\$ 509
23								
24	Grand Total	615		\$ 2,784,600	103,782		\$ 767,457	\$ 3,552,057

Net Revenue Needed from Rates = \$3.55 million



Summary of Proposed Rates – Next Five Years

	Water Rates	Current	Proposed				
		FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
1							
2	Service Charge						
3	Fixed Monthly Service Charge	\$100.69	\$328.70	\$336.59	\$344.67	\$352.94	\$361.41
4	Loan Repayment	\$0.00	\$61.30	\$0.67	\$0.00	\$0.00	\$0.00
5	Monthly Service Charge	\$100.69	\$390.00	\$337.26	\$344.67	\$352.94	\$361.41
6	\$ Change		\$289.31	(\$52.74)	\$7.41	\$8.27	\$8.47
7	Usage Rate						
8	Monthly Usage Rate (S/HCF)	\$1.49	\$7.39	\$7.57	\$7.75	\$7.93	\$8.13
9	\$ Change		\$5.90	\$0.18	\$0.18	\$0.19	\$0.19

- Once rates meet cost of service in FY 2021-22, service charge and usage rates will increase 2.4% annually.
- Equipment loans will be fully paid off in early FY 2022-23 which will reduce the monthly service charge.



Sample Bill Impacts

	Water Use	Current Bill	Proposed					
			7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025	
1	Low Water Use Month (50% of Avg.)	6.5						
2	Fixed Service Charge	CCF	\$100.69	\$328.70	\$336.59	\$344.67	\$352.94	\$361.41
3	Variable Water Use Charge		\$9.69	\$48.04	\$49.19	\$50.37	\$51.58	\$52.82
4	Loan Payoff		[a]	\$61.30	\$0.67	\$0.00	\$0.00	\$0.00
5	Total Bill		\$110.38	\$438.04	\$386.45	\$395.04	\$404.52	\$414.23
6	\$ Change			\$327.66	(\$51.59)	\$8.59	\$9.48	\$9.71
7	Average Water Use Month	12.9						
8	Fixed Service Charge	CCF	\$100.69	\$328.70	\$336.59	\$344.67	\$352.94	\$361.41
9	Variable Water Use Charge		\$19.22	\$95.33	\$97.62	\$99.96	\$102.36	\$104.82
10	Loan Payoff		[a]	\$61.30	\$0.67	\$0.00	\$0.00	\$0.00
11	Total Bill		\$119.91	\$485.33	\$434.88	\$444.63	\$455.30	\$466.23
12	\$ Change			\$365.42	(\$50.45)	\$9.75	\$10.67	\$10.93
13	High Water Use Month (2x Avg.)	25.8						
14	Fixed Service Charge	CCF	\$100.69	\$328.70	\$336.59	\$344.67	\$352.94	\$361.41
15	Variable Water Use Charge		\$38.44	\$190.66	\$195.24	\$199.92	\$204.72	\$209.64
16	Loan Payoff		[a]	\$61.30	\$0.67	\$0.00	\$0.00	\$0.00
17	Total Bill		\$139.13	\$580.66	\$532.50	\$544.59	\$557.66	\$571.05
18	\$ Change			\$441.53	(\$48.16)	\$12.09	\$13.07	\$13.38

[a] previously subsidized by the developer



Monthly Water Rates Comparison

Average water usage bills (12.94 HCF):

Jurisdiction	Fixed	Commodity	Total
City of Tracy	\$ 30.90	\$ 26.01	\$ 56.91
City of Modesto	\$ 36.11	\$ 25.63	\$ 61.74
Oakwood Lake Water District	\$ 55.50	\$ 21.74	\$ 77.24
Golden Hills Community Services District	\$ 29.01	\$ 44.22	\$ 73.23
Mountain House	\$ 77.65	\$ 11.13	\$ 88.78
Western Hills (Current)	\$ 100.69	\$ 19.28	\$ 119.97
Western Hills Water District (COS)	\$ 390.00	\$ 95.65	\$ 485.65

Assumptions:

- Residential Rates
- 1” meter

High water usage bills (25.89 HCF):

Jurisdiction	Fixed	Commodity	Total
City of Tracy	\$ 30.90	\$ 52.03	\$ 82.93
City of Modesto	\$ 36.11	\$ 51.25	\$ 87.36
Oakwood Lake Water District	\$ 55.50	\$ 43.49	\$ 98.99
Mountain House	\$ 77.65	\$ 22.27	\$ 99.92
Golden Hills Community Services District	\$ 29.01	\$ 91.59	\$ 120.60
Western Hills (Current)	\$ 100.69	\$ 38.57	\$ 139.26
Western Hills Water District (COS)	\$ 390.00	\$ 191.29	\$ 581.29



How to Handle Water Banking Revenue?

1. Preliminary rates assume water banking revenue is not used to “buy down” the rates.
2. Options:
 - A. “Buying down” the rates by \$100k reduces necessary rate increases by 10% (~\$31/month). **Presents a risk that actual water banking revenues are less than the “buy down” in the rates.**
 - B. Provide a credit on bills when actual banking revenue is received.
 - C. Save water banking revenue in a reserve account to cover unexpected expenses
 - D. Combination of Options A, B, and C
 - E. Combination of Options B and C

Water Banking Income Received	
Year	
2011	\$ 816,183.98
2012	\$ 602,255.01
2013	\$ 404,360.00
2014	\$ (285,178.01)
2015	\$ 141,962.00
2016	\$ 668,999.65
2017	\$ 1,006,044.99
2018	\$ 159,329.00
2019	\$ 964,720.00
Average	\$ 497,630.74



QUESTIONS & DISCUSSION

