COASTSIDE COUNTY WATER DISTRICT

766 MAIN STREET

HALF MOON BAY, CA 94019

REGULAR MEETING OF THE BOARD OF DIRECTORS

Tuesday, October 11, 2022 - 7:00 p.m.

AGENDA

Due to the Covid-19 pandemic, and in accordance with Assembly Bill 361, which modifies California Government Code Section 54953, this meeting will be conducted by teleconference. Board members and members of the public also may attend this meeting in person at the District Office located at 766 Main Street, Half Moon Bay.

The Public may watch and/or participate in the public meeting by joining the meeting through the Zoom Videoconference link provided below. The public may also join the meeting by calling the below listed teleconference phone number.

How to Join Online or by Phone

The meeting will begin at 7:00 p.m.

Whether you participate online or by telephone, you may wish to "arrive" early so that staff can address any technology questions prior to the start of the meeting.

Join Zoom Meeting
https://us06web.zoom.us/j/88691894625?pwd=UFBnaVYrSUNtUTE3NHlRZDFrVDhnZz09

Meeting ID: 886 9189 4625
Passcode: 182549
One tap mobile
+16699006833,,88691894625#,,,,*182549# US (San Jose)

Dial by your location
+1 669 900 6833 US (San Jose)

Meeting ID: 886 9189 4625
Passcode: 182549
Find your local number: https://us06web.zoom.us/u/kbyQAbTp4H

Procedures to make a public comment with Zoom Video/Conference – As a reminder, all participants except the Board Members and Staff are muted on entry.

- ***From a computer:*** *(1) Using the Zoom App. at the bottom of your screen, click on "Participants" and then "Raise Hand". Participants will be called to comment in the order in which they are received. Begin by stating your name and place of residence.*

  OR

- *(2) Using the Zoom App, at the bottom of your screen click on "Chat" and then type that you wish to make a comment into the Chat Box. Ensure that the "To:" field is populated by either "Everyone" or "the Moderator". Begin by stating your name and place of residence.*
- ***From a phone:*** *Using your keypad, dial *9, and this will notify the Moderator that you have raised your hand. Begin by stating your name and place of residence. The Moderator will call on you by stating the last 4 digits of your phone number. If you wish to block your phone number dial *67 prior to dialing in. If your phone number is not displayed, the Moderator will call you by Caller number.*

The Coastside County Water District (CCWD) does not discriminate against persons with disabilities. Upon request, the agenda and agenda packet materials can be provided in a format to accommodate special needs. If you require a copy of the agenda or related materials in an alternative format to accommodate a disability, or if you wish to attend this public meeting and will require special assistance or other special equipment, please call the District at (650) 726-4405 in advance and we will make every reasonable attempt to provide such an accommodation.

All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at the CCWD District Office, located at 766 Main Street, Half Moon Bay, CA at the same time that the public records are distributed or made available to the legislative body.

This agenda and accompanying materials can be viewed on Coastside County Water District's website located at: www.coastsidewater.org.

The Board of the Coastside County Water District reserves the right to take action on any item included on this agenda.

1) ROLL CALL

2) PLEDGE OF ALLEGIANCE

3) PUBLIC COMMENT

At this time members of the public may address the Board of Directors on issues not listed on the agenda which are within the purview of the Coastside County Water District. Comments on matters that are listed on the agenda may be made at the time the Board is considering each item. Each speaker is allowed a maximum of three (3) minutes and must complete and submit a speaker slip. The President of the Board will recognize each speaker, at which time the speaker should give their name and address and provide their comments to the Board.

4) Consider and Reaffirm Resolution 2021-06 "Making Findings Pursuant to Assembly Bill 361 That the Proclaimed State of Emergency Continues to Impact the Ability to Meet Safely in Person" (attachment)

5) CONSENT CALENDAR

The following matters before the Board of Directors are recommended for action as stated by the General Manager. All matters listed hereunder constitute a Consent Calendar, are considered as routine by the Board of Directors, and will be acted upon by a single vote of the Board. There will be no separate discussion of these items unless a member of the Board so requests, in which event the matter shall be removed from the Consent Calendar and considered as a separate item.

A. Approval of disbursements for the month ending September 30, 2022:
Claims: $ 1,722,854.44; Payroll: $ 303,845.95 for a total of $ 2,026,700.39
September 2022 Monthly Financial Claims reviewed and approved by Director Reynolds
(attachment)
B. Acceptance of Financial Reports (attachment)
C. Approval of Minutes of September 13, 2022, Regular Board of Directors Meeting (attachment)
D. Approval of Minutes of September 27, 2022, Special Board of Directors Meeting (attachment)
E. Installed Water Connection Capacity and Water Meters Report (attachment)
F. Total CCWD Production Report (attachment)
G. CCWD Monthly Sales by Category Report September 2022 (attachment)
H. Leak/Flushing Report – September 2022 (attachment)
I. Monthly Rainfall Reports (attachment)
J. SFPUC Hydrological Conditions Report – August 2022 (attachment)
K. Water Service Connection Transfer Report for September 2022 (attachment)

6) MEETINGS ATTENDED / DIRECTOR COMMENTS

7) GENERAL BUSINESS

A. 1) Review The Proposed Water Shortage Rates, Water Financial Plan and Proposed Water Service Rate Adjustments for Calendar Years 2023 and 2024, and Draft Water Financial Plan and Rate Update Study Report; and
2) Schedule a Public Hearing on Proposed Rate Adjustments for Calendar Years 2023 and 2024 and Authorize Issuance of a Notice of Public Hearing for Proposed Rate Increases effective January 19, 2023 and January 18, 2024 (attachment)
B. Approval of Coastside County Water District Response to San Mateo County Civil Grand Jury Report: "The Other Water Worry: Is Your Water Provider Prepared for the Big One?" (attachment)
C. Approval of Professional Services Agreement with Balance Hydrologics, Inc. for Denniston/San Vicente Stream Gaging, Groundwater Monitoring, and Data Collection (attachment)

D. Consider Resolution 2022-11 Authorizing the Grant Application, Acceptance, and Execution of the Financial Assistance Agreement for the Coastside County Water District Water Recycled Water Feasibility Study (attachment)

E. Quarterly Financial Review (attachment)

8) MONTHLY INFORMATIONAL REPORTS

A. General Manager's Report (attachment)
- Governor Signs AB2449 Legislation – Amendment to Brown Act Teleconferencing Procedures

B. Superintendent of Operations Report (attachment)

C. Water Resources Informational Report (attachment)

9) DIRECTOR AGENDA ITEMS – REQUESTS FOR FUTURE BOARD MEETINGS

10) ADJOURNMENT

STAFF REPORT

To: **Coastside County Water District Board of Directors**

From: **Mary Rogren, General Manager**

Agenda: **October 11, 2022**

Report Date: **October 7, 2022**

Subject: **Consider and Reaffirm Resolution 2021-06 "Making Findings Pursuant to Assembly Bill 361 That the Proclaimed State of Emergency Continues to Impact the Ability to Meet Safely in Person."**

Recommendation:

Reaffirm, by motion, Resolution 2021-06, making findings pursuant to Assembly Bill 361 that the proclaimed State of Emergency continues to impact the ability to meet safely in person.

Background:

On March 4, 2020, Governor Newsom declared a State of Emergency to exist in California as a result of the threat of COVID 19, and on March 17, 2020, the Governor issued Executive Order N-29-20 suspending certain provisions of the Ralph M. Brown Act relating to teleconferencing to allow legislative bodies to conduct meetings remotely to help protect the spread of COVID-19 and to protect the health and safety to the public. On June 11, 2021, the Governor issued Executive Order N-08-21 which specified that Executive Order N-29-20 remained in effect through September 30, 2021.

On September 16, 2021, the Governor signed Assembly Bill 361 (AB361) into law to allow legislative bodies to continue to meet remotely during a proclaimed State of Emergency after September 30, 2021.

On October 8, 2021, the Board of the Directors of the Coastside County Water District adopted Resolution 2021-06. Per AB361, the Board will need to consider and reaffirm the findings of Resolution 2021-06 monthly.

By reaffirming Resolution 2021-06, the Board has considered the circumstances of the proclaimed State of Emergency and finds that the State of Emergency continues to directly impact the ability of the members to meet safely in person, and state or local officials continue to impose or recommend measures to promote social distancing.

RESOLUTION NO. 2021-06

MAKING FINDINGS PURSUANT TO ASSEMBLY BILL 361 THAT THE PROCLAIMED STATE OF EMERGENCY CONTINUES TO IMPACT THE ABILITY TO MEET SAFELY IN PERSON

COASTSIDE COUNTY WATER DISTRICT

WHEREAS, on March 4, 2020, Governor Newsom declared a State of Emergency to exist in California as a result of the threat of COVID-19;

WHEREAS, on March 17, 2020, the Governor issued Executive Order N-29-20 suspending certain provisions of the Ralph M. Brown Act related to teleconferencing to allow legislative bodies to conduct meetings remotely to help protect against the spread of COVID-19 and to protect the health and safety of the public;

WHEREAS, on June 11, 2021, the Governor issued Executive Order N-08-21, which specified that Executive Order N-29-20 remains in effect through September 30, 2021, and then expires;

WHEREAS, on September 16, 2021, the Governor signed Assembly Bill 361 (AB 361) in to law, as urgency legislation that goes into effect immediately, that amends Government Code Section 54953 to allow legislative bodies to continue to meet remotely during a proclaimed state of emergency provided certain conditions are met and certain findings are made;

WHEREAS, on September 20, 2021, the Governor issued Executive Order N-15-21 that generally suspends the AB 361 amendments to Government Code Section 54953 until October 1, 2021, and therefore clarifying that Executive Order N-29-20 controls through the end of September 2021;

WHEREAS, the Governor's proclaimed State of Emergency remains in effect, and state and local officials, including the San Mateo County Health Officer, the California Department of Public Health, and the Department of Industrial Relations, have imposed or recommended measures to promote social distancing; and

WHEREAS, to help protect against the spread of COVID-19 and its variants, and to protect the health and safety of the public, the Board of Directors desires to take the actions necessary to comply with AB 361 and to continue to hold its Board and committee meetings remotely.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Coastside County Water District has considered the circumstances of the proclaimed State of Emergency, and finds that the State of Emergency continues to directly impact the ability of the members to meet safely in person, and state or local officials continue to impose or recommend measures to promote social distancing.

BE IT FURTHER RESOLVED that the District will comply with the requirements of Government Code Section 54953(e)(2) when holding Board and committee meetings pursuant to this Resolution.

BE IT FURTHER RESOLVED that the Board will consider the findings in this Resolution every 30 days and may, by motion, reaffirm these findings.

PASSED AND ADOPTED this 12th day of October, 2021, by the following vote:

AYES: President Reynolds, Vice-President Feldman, Directors Mickelsen, Coverdell and Muller

Glenn Reynolds, President
Board of Directors

ATTEST:

Mary Rogren, General Manager
Secretary of the Board of Directors

COASTSIDE COUNTY WATER DISTRICT
CLAIMS FOR SEPTEMBER 2022

CHECKS				
CHECK DATE	**CHECK NO.**	**VENDOR**		**AMOUNT**
09/02/2022	31205	RECORDER'S OFFICE	$	20.00
09/02/2022	31206	EMPOWER RETIREMENT, LLC	$	2,269.19
09/02/2022	31207	VALIC	$	3,906.00
09/09/2022	31208	ADP, INC.	$	1,594.95
09/09/2022	31209	AMAZON CAPITAL SERVICES, INC.	$	27.98
09/09/2022	31210	ANALYTICAL ENVIRONMENTAL SERVICES	$	872.28
09/09/2022	31211	HEALTH BENEFITS ACWA-JPIA	$	43,414.54
09/09/2022	31212	BALANCE HYDROLOGICS, INC	$	9,474.00
09/09/2022	31213	BORGES & MAHONEY, INC.	$	3,831.63
09/09/2022	31214	COMCAST	$	273.52
09/09/2022	31215	CORE & MAIN LP	$	458.54
09/09/2022	31216	JAMES COZZOLINO, TRUSTEE	$	200.00
09/09/2022	31217	HMB BLDG. & GARDEN INC.	$	54.69
09/09/2022	31218	COASTSIDE NEWS GROUP, INC.	$	682.00
09/09/2022	31219	HASSETT HARDWARE	$	1,197.49
09/09/2022	31220	HUE & CRY, INC.	$	12.00
09/09/2022	31221	INTEGRATED ID SYSTEMS, INC	$	28.48
09/09/2022	31222	IRON MOUNTAIN	$	6,024.28
09/09/2022	31223	IRVINE CONSULTING SERVICES, INC.	$	1,450.31
09/09/2022	31224	CHRISTOPHER JONES	$	86.79
09/09/2022	31225	MERCHANTS BANK OF COMMERCE	$	28,350.00
09/09/2022	31226	MISSION UNIFORM SERVICES INC.	$	95.65
09/09/2022	31227	MONTEREY BAY ANALYTICAL SERVICES, INC.	$	1,460.50
09/09/2022	31228	OFFICE DEPOT	$	991.86
09/09/2022	31229	PAULO'S AUTO CARE	$	62.57
09/09/2022	31230	PITNEY BOWES GLOBAL FINANCIAL SERVICES LLC	$	750.03
09/09/2022	31231	RAY A MORGAN COMPANY INC.	$	917.66
09/09/2022	31232	REDWOOD TRADING POST	$	247.20
09/09/2022	31233	REPUBLIC SERVICES	$	590.06
09/09/2022	31234	ROGUE WEB WORKS, LLC	$	1,143.90
09/09/2022	31235	SAN MATEO CTY PUBLIC HEALTH LAB	$	764.00
09/09/2022	31236	SM CTY ENVIRONMENTAL HEALTH	$	318.00
09/09/2022	31237	SM CTY ENVIRONMENTAL HEALTH	$	318.00
09/09/2022	31238	SM CTY ENVIRONMENTAL HEALTH	$	318.00
09/09/2022	31239	SM CTY ENVIRONMENTAL HEALTH	$	318.00
09/09/2022	31240	SM CTY ENVIRONMENTAL HEALTH	$	318.00
09/09/2022	31241	JIM STEELE	$	10,000.00
09/09/2022	31242	STRAWFLOWER ELECTRONICS	$	30.52
09/09/2022	31243	DARIN STURDIVAN	$	1,424.21
09/09/2022	31244	LISA SULZINGER	$	34.00
09/09/2022	31245	TPX COMMUNICATIONS	$	1,519.75
09/09/2022	31246	TRI COUNTIES BANK	$	2,764.21
09/09/2022	31247	NANCY TRUJILLO	$	34.00
09/09/2022	31248	UNDERGROUND REPUBLIC WATER WORKS, INC.	$	23,067.19
09/09/2022	31249	UNIVAR SOLUTIONS USA INC.	$	2,580.51
09/09/2022	31250	VERIZON CONNECT INC.	$	258.30
09/09/2022	31251	US BANK NA	$	3,625.53
09/09/2022	31252	RAYMOND WINCH	$	64.26
09/09/2022	31253	BARTKIEWICZ, KRONICK & SHANAHAN	$	232.50
09/09/2022	31254	BFI OF CALIFORNIA, INC.	$	1,586.61
09/09/2022	31255	DATAPROSE, LLC	$	3,695.17

09/09/2022	31256	JAMES DERBIN	$	10.99
09/09/2022	31257	HDR ENGINEERING, INC	$	17,847.58
09/09/2022	31258	PACIFIC GAS & ELECTRIC CO.	$	76.43
09/09/2022	31259	PACIFIC GAS & ELECTRIC CO.	$	39,429.69
09/09/2022	31260	RANGER PIPELINES, INC.	$	255,150.00
09/15/2022	31261	JPMORGAN CHASE BANK, N.A.	$	382,127.53
09/15/2022	31262	EMPOWER RETIREMENT, LLC	$	2,269.19
09/15/2022	31263	SAN FRANCISCO WATER DEPT.	$	395,758.76
09/15/2022	31264	VALIC	$	3,906.00
09/29/2022	31265	A-1 SEPTIC TANK SERVICE	$	650.00
09/29/2022	31266	AMERICAN WATER WORKS ASSOC.	$	300.00
09/29/2022	31267	ANALYTICAL ENVIRONMENTAL SERVICES	$	900.00
09/29/2022	31268	ANDREINI BROS. INC.	$	29,354.14
09/29/2022	31269	AT&T MOBILTY	$	86.48
09/29/2022	31270	AT&T	$	471.88
09/29/2022	31271	AT&T	$	690.02
09/29/2022	31272	AZTECA SYSTEMS HOLDINGS LLC	$	3,300.00
09/29/2022	31273	BADGER METER, INC.	$	2,523.10
09/29/2022	31274	BAY AREA WATER SUPPLY &	$	970.00
09/29/2022	31275	TAMMY VONALMEN	$	602.14
09/29/2022	31276	PETTY CASH	$	83.27
09/29/2022	31277	CORE & MAIN LP	$	9,865.63
09/29/2022	31278	DE LAGE LANDEN FINANCIAL SERVICES, INC.	$	968.87
09/29/2022	31279	EKI INC.	$	17,882.28
09/29/2022	31280	FREYER & LAURETA, INC.	$	16,362.50
09/29/2022	31281	GOLDEN BAY CONSTRUCTION, INC.	$	238,995.00
09/29/2022	31282	GRAINGER, INC.	$	3,022.29
09/29/2022	31283	EMPOWER RETIREMENT, LLC	$	2,269.19
09/29/2022	31284	GRISWOLD INDUSTRIES	$	454.12
09/29/2022	31285	HMB BLDG. & GARDEN INC.	$	283.76
09/29/2022	31286	COASTSIDE NEWS GROUP, INC.	$	551.00
09/29/2022	31287	HANSONBRIDGETT. LLP	$	13,547.50
09/29/2022	31288	HDR ENGINEERING, INC	$	1,560.58
09/29/2022	31289	INSTRUMENT TECHNOLOGY CORPORATION	$	410.75
09/29/2022	31290	IRVINE CONSULTING SERVICES, INC.	$	3,911.06
09/29/2022	31291	GLENNA LOMBARDI	$	91.00
09/29/2022	31292	MISSION UNIFORM SERVICES INC.	$	92.87
09/29/2022	31293	MONTEREY BAY ANALYTICAL SERVICES, INC.	$	2,694.00
09/29/2022	31294	DAVID S. MOSSA	$	1,463.00
09/29/2022	31295	OFFICE DEPOT	$	728.47
09/29/2022	31296	PACIFICA COMMUNITY TV	$	300.00
09/29/2022	31297	PAULO'S AUTO CARE	$	313.33
09/29/2022	31298	RAFTELIS FINANCIAL CONSULTANTS, INC.	$	18,506.84
09/29/2022	31299	MULTI SERVICE TECHNOLOGY SOLUTIONS, INC.	$	437.26
09/29/2022	31300	SAN FRANCISCO PUBLIC UTILITIES COMMISSION	$	2,699.67
09/29/2022	31301	SILVER LINING SOLUTIONS, LLC	$	2,363.75
09/29/2022	31302	STANDARD INSURANCE COMPANY	$	605.58
09/29/2022	31303	STETSON ENGINEERS, INC.	$	14,792.00
09/29/2022	31304	TEAMSTERS LOCAL UNION #856	$	1,549.00
09/29/2022	31305	JAMES TETER	$	480.00
09/29/2022	31306	VALIC	$	3,906.00
09/29/2022	31307	VERIZON WIRELESS	$	1,993.32
09/29/2022	31308	JUAN CARLOS SALAZAR	$	2,800.00
09/29/2022	31309	RAYMOND WINCH	$	60.00
09/30/2022	31310	JOHN EMMERY	$	48.92
09/30/2022	31311	STEVEN BRUMBAUGH	$	45.25

09/30/2022	31312	MICHAEL FAHEY	$	123.37
09/30/2022	31313	CHANDRA ANDERSON	$	11.16
		SUBTOTAL CLAIMS FOR MONTH	$	1,666,455.38

WIRE PAYMENTS				
09/08/2022	DFT0000427	PUB. EMP. RETIRE SYSTEM	$	16,116.13
09/29/2022	DFT0000428	PUB. EMP. RETIRE SYSTEM	$	15,143.28
09/29/2022	DFT0000429	PUB. EMP. RETIRE SYSTEM	$	16,177.06
9/30/2022		BANK AND CREDIT CARD FEES	$	8,962.59
		SUBTOTAL WIRE PAYMENTS FOR MONTH	$	56,399.06

TOTAL CLAIMS FOR THE MONTH	**$**	**1,722,854.44**

Coastside County Water District

Monthly Budget Report

Account Summary

For Fiscal: 2022-2023 Period Ending: 09/30/2022

		September Budget	September Activity	Variance Favorable (Unfavorable)	Percent Variance	YTD Budget	YTD Activity	Variance Favorable (Unfavorable)	Percent Variance	Total Budget
Revenue										
RevType: 1 - Operating										
1-4120-00	Water Revenue	1,263,800.00	1,147,895.08	-115,904.92	-9.17 %	3,797,300.00	3,513,344.75	-283,955.25	-7.48 %	12,791,000.00
	Total RevType: 1 - Operating:	**1,263,800.00**	**1,147,895.08**	**-115,904.92**	**-9.17 %**	**3,797,300.00**	**3,513,344.75**	**-283,955.25**	**-7.48 %**	**12,791,000.00**
RevType: 2 - Non-Operating										
1-4170-00	Water Taken From Hydrants	4,000.00	7,913.50	3,913.50	97.84 %	12,000.00	22,408.79	10,408.79	86.74 %	48,000.00
1-4180-00	Late Notice - 10% Penalty	4,100.00	6,196.97	2,096.97	51.15 %	12,300.00	20,221.44	7,921.44	64.40 %	50,000.00
1-4230-00	Service Connections	1,000.00	567.59	-432.41	-43.24 %	3,000.00	3,318.59	318.59	10.62 %	10,000.00
1-4920-00	Interest Earned	2,600.00	6,543.29	3,943.29	151.67 %	7,800.00	19,611.89	11,811.89	151.43 %	32,000.00
1-4930-00	Tax Apportionments/County Checks	0.00	871.07	871.07	0.00 %	0.00	871.07	871.07	0.00 %	950,000.00
1-4950-00	Miscellaneous Income	1,000.00	-102.00	-1,102.00	-110.20 %	2,000.00	700.00	-1,300.00	-65.00 %	10,000.00
1-4955-00	Cell Site Lease Income	16,000.00	13,609.65	-2,390.35	-14.94 %	48,000.00	48,267.58	267.58	0.56 %	192,000.00
1-4965-00	ERAF Refund - County Taxes	0.00	0.00	0.00	0.00 %	250,000.00	298,227.24	48,227.24	19.29 %	500,000.00
	Total RevType: 2 - Non-Operating:	**28,700.00**	**35,600.07**	**6,900.07**	**24.04 %**	**335,100.00**	**413,626.60**	**78,526.60**	**23.43 %**	**1,792,000.00**
	Total Revenue:	**1,292,500.00**	**1,183,495.15**	**-109,004.85**	**-8.43 %**	**4,132,400.00**	**3,926,971.35**	**-205,428.65**	**-4.97 %**	**14,583,000.00**
Expense										
ExpType: 1 - Operating										
1-5130-00	Water Purchased	374,487.00	286,583.43	87,903.57	23.47 %	1,124,254.00	870,601.56	253,652.44	22.56 %	2,467,503.00
1-5230-00	Nunes T P Pump Expense	4,000.00	5,399.16	-1,399.16	-34.98 %	12,000.00	14,565.34	-2,565.34	-21.38 %	48,000.00
1-5231-00	CSP Pump Station Pump Expense	50,000.00	26,918.71	23,081.29	46.16 %	150,000.00	68,050.25	81,949.75	54.63 %	366,000.00
1-5232-00	Other Trans. & Dist Pump Expense	2,100.00	2,464.05	-364.05	-17.34 %	6,300.00	7,214.43	-914.43	-14.51 %	25,000.00
1-5233-00	Pilarcitos Canyon Pump Expense	600.00	822.46	-222.46	-37.08 %	1,800.00	1,796.09	3.91	0.22 %	64,000.00
1-5234-00	Denniston T P Pump Expense	1,000.00	7,658.99	-6,658.99	-665.90 %	3,000.00	22,490.93	-19,490.93	-649.70 %	77,000.00
1-5242-00	CSP Pump Station Operations	1,000.00	2,096.45	-1,096.45	-109.65 %	3,000.00	4,016.55	-1,016.55	-33.89 %	12,000.00
1-5243-00	CSP Pump Station Maintenance	3,000.00	653.12	2,346.88	78.23 %	9,000.00	1,634.45	7,365.55	81.84 %	35,000.00
1-5246-00	Nunes T P Operations - General	8,000.00	13,421.94	-5,421.94	-67.77 %	24,000.00	38,574.33	-14,574.33	-60.73 %	97,000.00
1-5247-00	Nunes T P Maintenance	10,000.00	7,891.83	2,108.17	21.08 %	29,000.00	11,877.18	17,122.82	59.04 %	119,000.00
1-5248-00	Denniston T P Operations-General	2,000.00	2,181.78	-181.78	-9.09 %	6,000.00	7,168.21	-1,168.21	-19.47 %	64,000.00
1-5249-00	Denniston T.P. Maintenance	14,000.00	16,228.59	-2,228.59	-15.92 %	42,000.00	33,143.75	8,856.25	21.09 %	140,000.00
1-5250-00	Laboratory Expenses	7,000.00	4,642.50	2,357.50	33.68 %	19,000.00	14,360.50	4,639.50	24.42 %	77,000.00
1-5260-00	Maintenance - General	31,000.00	68,235.79	-37,235.79	-120.12 %	93,000.00	100,561.96	-7,561.96	-8.13 %	380,000.00
1-5261-00	Maintenance - Well Fields	8,000.00	0.00	8,000.00	100.00 %	8,000.00	0.00	8,000.00	100.00 %	50,000.00
1-5263-00	Uniforms	0.00	0.00	0.00	0.00 %	0.00	298.71	-298.71	0.00 %	12,000.00
1-5318-00	Studies/Surveys/Consulting	15,000.00	24,276.84	-9,276.84	-61.85 %	40,000.00	35,231.84	4,768.16	11.92 %	157,000.00
1-5321-00	Water Resources	2,300.00	161.57	2,138.43	92.98 %	6,800.00	842.80	5,957.20	87.61 %	26,700.00

		September Budget	September Activity	Variance Favorable (Unfavorable)	Percent Variance	YTD Budget	YTD Activity	Variance Favorable (Unfavorable)	Percent Variance	Total Budget
1-5322-00	Community Outreach	3,000.00	851.00	2,149.00	71.63 %	14,000.00	9,662.38	4,337.62	30.98 %	68,000.00
1-5325-00	Water Shortage Program	8,000.00	0.00	8,000.00	100.00 %	24,000.00	0.00	24,000.00	100.00 %	50,000.00
1-5381-00	Legal	9,000.00	8,089.50	910.50	10.12 %	27,000.00	24,755.00	2,245.00	8.31 %	110,000.00
1-5382-00	Engineering	6,300.00	4,447.08	1,852.92	29.41 %	18,900.00	13,631.00	5,269.00	27.88 %	76,000.00
1-5383-00	Financial Services	4,000.00	0.00	4,000.00	100.00 %	9,000.00	7,710.00	1,290.00	14.33 %	23,000.00
1-5384-00	Computer Services	25,000.00	23,263.82	1,736.18	6.94 %	75,000.00	61,558.05	13,441.95	17.92 %	309,025.00
1-5410-00	Salaries/Wages-Administration	97,893.00	90,928.76	6,964.24	7.11 %	313,258.00	265,419.92	47,838.08	15.27 %	1,267,717.00
1-5411-00	Salaries & Wages - Field	136,255.00	138,540.89	-2,285.89	-1.68 %	436,016.00	433,818.66	2,197.34	0.50 %	1,764,505.00
1-5420-00	Payroll Tax Expense	17,323.00	15,484.71	1,838.29	10.61 %	55,435.00	49,627.76	5,807.24	10.48 %	224,338.00
1-5435-00	Employee Medical Insurance	41,000.00	39,593.37	1,406.63	3.43 %	123,000.00	118,834.03	4,165.97	3.39 %	505,000.00
1-5436-00	Retiree Medical Insurance	4,200.00	4,125.26	74.74	1.78 %	12,500.00	11,878.01	621.99	4.98 %	52,000.00
1-5440-00	Employees Retirement Plan	46,371.00	54,896.73	-8,525.73	-18.39 %	148,388.00	149,520.13	-1,132.13	-0.76 %	600,506.00
1-5445-00	Supplemental Retirement 401a	0.00	0.00	0.00	0.00 %	0.00	0.00	0.00	0.00 %	36,000.00
1-5510-00	Motor Vehicle Expense	6,500.00	5,490.52	1,009.48	15.53 %	19,500.00	19,192.04	307.96	1.58 %	80,000.00
1-5620-00	Office & Billing Expenses	31,000.00	25,809.36	5,190.64	16.74 %	96,000.00	91,719.10	4,280.90	4.46 %	412,500.00
1-5625-00	Meetings / Training / Seminars	1,000.00	1,068.49	-68.49	-6.85 %	17,000.00	18,114.40	-1,114.40	-6.56 %	41,000.00
1-5630-00	Insurance	12,000.00	12,680.33	-680.33	-5.67 %	36,000.00	37,714.91	-1,714.91	-4.76 %	161,000.00
1-5687-00	Membership, Dues, Subscript.	8,000.00	3,393.22	4,606.78	57.58 %	24,000.00	23,771.90	228.10	0.95 %	99,975.00
1-5688-00	Election Expenses	0.00	0.00	0.00	0.00 %	0.00	0.00	0.00	0.00 %	20,000.00
1-5689-00	Labor Relations	0.00	0.00	0.00	0.00 %	0.00	0.00	0.00	0.00 %	6,000.00
1-5700-00	San Mateo County Fees	2,000.00	2,432.17	-432.17	-21.61 %	6,000.00	4,421.51	1,578.49	26.31 %	31,400.00
1-5705-00	State Fees	1,000.00	0.00	1,000.00	100.00 %	2,000.00	566.00	1,434.00	71.70 %	42,000.00
	Total ExpType: 1 - Operating:	**993,329.00**	**900,732.42**	**92,596.58**	**9.32 %**	**3,034,151.00**	**2,574,343.68**	**459,807.32**	**15.15 %**	**10,197,169.00**
ExpType: 4 - Capital Related										
1-5715-00	Debt Service/CIEDB 11-099	0.00	0.00	0.00	0.00 %	273,341.00	273,340.92	0.08	0.00 %	335,508.00
1-5716-00	Debt Service/CIEDB 2016	0.00	0.00	0.00	0.00 %	238,683.00	238,683.17	-0.17	0.00 %	322,417.00
1-5717-00	Chase Bank - 2018 Loan	382,128.00	382,127.53	0.47	0.00 %	382,128.00	382,127.53	0.47	0.00 %	436,027.00
1-5718-00	First Foundation Bank - 2022	0.00	0.00	0.00	0.00 %	420,517.00	420,517.07	-0.07	0.00 %	495,510.00
	Total ExpType: 4 - Capital Related:	**382,128.00**	**382,127.53**	**0.47**	**0.00 %**	**1,314,669.00**	**1,314,668.69**	**0.31**	**0.00 %**	**1,589,462.00**
	Total Expense:	**1,375,457.00**	**1,282,859.95**	**92,597.05**	**6.73 %**	**4,348,820.00**	**3,889,012.37**	**459,807.63**	**10.57 %**	**11,786,631.00**
	Report Total:	**-82,957.00**	**-99,364.80**	**-16,407.80**		**-216,420.00**	**37,958.98**	**254,378.98**		**2,796,369.00**

COASTSIDE COUNTY WATER DISTRICT
MONTHLY INVESTMENT REPORT
September 30, 2022

RESERVE BALANCES	**Current Year as of 09/30/2022**	**Prior Year as of 09/30/2021**
CAPITAL AND OPERATING RESERVE	$14,620,528.47	$10,768,315.93
RATE STABILIZATION RESERVE	$250,000.00	$250,000.00
TOTAL DISTRICT RESERVES	**$14,870,528.47**	**$11,018,315.93**

ACCOUNT DETAIL

ACCOUNTS WITH TRI COUNTIES BANK		
CHECKING ACCOUNT	$2,350,166.44	$5,695,579.18
CSP T & S ACCOUNT	$200,391.81	$32,081.71
MONEY MARKET GEN. FUND (Opened 7/20/17)	$2,019,729.76	$19,449.67
LOCAL AGENCY INVESTMENT FUND (LAIF) BALANCE	$10,299,440.46	$5,270,405.37
DISTRICT CASH ON HAND	$800.00	$800.00
TOTAL ACCOUNT BALANCES	**$14,870,528.47**	**$11,018,315.93**

This report is in conformity with CCWD's Investment Policy.

COASTSIDE COUNTY WATER DISTRICT
CAPITAL IMPROVEMENT PROJECTS - STATUS REPORT
FISCAL YEAR 2022/2023

* Approved June 2022

9/30/2022

		Status	Approved* CIP Budget FY22/23	Actual To Date FY22/23	Projected FY22/23	Variance vs. Budget	% Completed	Project Status/ Comments
Equipment Purchases & Replacement								
06-03	SCADA/Telemetry/Electrical Controls Replacement	ongoing	$ 50,000		$ 50,000	$ -	0%	
99-02	Vehicle Fleet Replacement	ongoing	$ 40,000		$ 40,000	$ -	0%	
Facilities & Maintenance								
09-09	Fire Hydrant Replacement	ongoing	$ 140,000		$ 140,000	$ -	0%	
	Pilarcitos Canyon Culvert Replacement	TBD	$ 40,000		$ 40,000	$ -	0%	
99-01	Meter Change Program	ongoing	$ 10,000		$ 10,000	$ -	0%	
Pipeline Projects								
20-08	Grandview Pipeline Replacement Project	Construction	$ 1,650,000	$ 43,445	$ 1,650,000	$ -	0%	Awarded in June 2022; Construction is starting in 10/2022 (ap. Cost $1.6M)
13-02	Pipeline Replacement Under Creek at Pilarcitos Ave/Strawflower	Construction	$ 400,000	$ 344,924	$ 400,000	$ -	95%	
14-01	Highway 92 - Replacement of Welded Steel Line	In design	$ 700,000	$ 3,721	$ 700,000	$ -	0%	
Pump Stations / Tanks / Wells								
21-07	Carter Hill Tank Improvement Project	In design	$ 200,000	$ 16,508	$ 200,000	$ -	0%	
09-18	Denniston Well Field Replacements	TBD	$ 500,000		$ 500,000	$ -	0%	
23-03	CSP Fire Sprinklers	TBD	$ 150,000		$ 150,000	$ -	0%	
19-05	Tanks - THM Control	Ongoing	$ 50,000		$ 50,000	$ -	0%	
Water Supply Development								
14-25	San Vicente/Denniston Water Supply Development	ongoing	$ 300,000	$ 44,118	$ 300,000	$ -	n/a	
17-12	Recycled Water Project Development	ongoing	$ 100,000		$ 100,000	$ -	n/a	
Water Treatment Plants								
20-14	Nunes Water Treatment Plant Improvement Project	Construction	$ 3,500,000	$ 492,540	$ 3,500,000	$ -	53%	Construction started August 2021; To be completed in FY 2023/2024
23-05	Sodium Hypochlorite Generator Replacement (Nunes)	TBD	$ 200,000		$ 200,000		0%	
23-09	Denniston Contact Clarfier Hatch Replacements	TBD	$ 75,000	$ 7,188	$ 75,000		0%	
UNSCHEDULED/NEW CIP ITEMS FOR CURRENT FISCAL YEAR 2021/2022								
NN-00	Unscheduled CIP		$ 100,000		$ 100,000	$ -	0%	
	NEW FY2022/2023 CIP TOTAL		**$ 8,205,000**	**$ 952,442**	**$ 8,205,000**	**$ -**		

COASTSIDE COUNTY WATER DISTRICT
CAPITAL IMPROVEMENT PROJECTS - STATUS REPORT
FISCAL YEAR 2022/2023

* Approved June 2022

9/30/2022

FY2021/2022 CIP Carryover Projects

		Status	Approved* CIP Budget FY22/23	Actual To Date FY22/23	Projected FY22/23	Variance vs. Budget	% Completed	Project Status/ Comments
22-01	Miramontes Point Road Water Main Replacement	in design	$ -	$ 6,146	$ -	$ -	n/a	
22-05	ACCELA Planning Software	in process	$ -	$ 5,580	$ -	$ -	50%	
22-06	CSP Pump #2 Replacement (2022)	in process	$ -	$ 2,812	$ -	$ -	100%	
22-07	Alameda Ave Crossing at Medio Creek Pipeline Replacemer	pre-design	$ -	$ 7,362	$ -	$ -	n/a	
22-08	WIMS Software Implementation	in process	$ -		$ -	$ -	20%	
23-08	Nunes Inflow/Outflow Magnetic Meter Project			$ 13,121				
	FY2021/2022 CARRYOVER PROJECTS		**$ -**	**$ 35,020**	**$ -**	**$ -**		

Green = approved by the Board/in process

TOTAL - FY 2022/2023 CIP + PRIOR YEAR CARRYOVER	**$ 8,205,000**	**$ 987,462**	**$ 8,205,000**	**$ -**		

Legal Cost Tracking Report
12 Months At-A-Glance

Acct. No.5681
Patrick Miyaki - HansonBridgett, LLP
Legal

Month	Admin (General Legal Fees)	Water Supply Develpmnt	Recycled Water	Transfer Program	CIP	LABOR & EMPLOYMENT	Election (CVRA)	Litigation	Infrastructure Project Review (Reimbursable)	TOTAL
Sep-21	10,969				814					**11,783**
Oct-21	18,804									**18,804**
Nov-21	9,818			943	1,739					**12,500**
Dec-22	5,582			755						**6,337**
Jan-22	13,699					1,375			751	**15,825**
Feb-22	15,073				4,810		237			**20,120**
Mar-22	9,260				1,545					**10,804**
Apr-22	6,554		3,081	1,185	1,140	3,081				**15,040**
May-22	4,986	1,580	474		295	6,597				**13,932**
Jun-22	18,524	2,528								**21,052**
Jul-22	6,666									**6,666**
Aug-22	9,090	3,753		706						**13,548**

TOTAL	**129,023**	**7,861**	**3,555**	**3,587**	**10,342**	**11,053**	**237**	**0**	**751**	**166,407**

Engineer Cost Tracking Report
12 Months At-A-Glance

Acct. No. 5682
JAMES TETER
Engineer

Month	Admin & Retainer	CIP	Studies and Non - CIP Project	TOTAL	Reimburseable from Projects
Oct-21	480			**480**	
Nov-21	987			**987**	
Dec-21	480		3,211	**3,691**	3,211
Jan-22	480	507	507	**1,494**	507
Feb-22	480	456		**936**	
Mar-22	480		1,014	**1,494**	1,014
Apr-22	480		1,859	**2,339**	1,859
May-22	480		2,366	**2,846**	2,366
Jun-22	480		1,268	**1,748**	1,268
Jul-22	480		1,690	**2,170**	1,690
Aug-22	480		5,714	**6,194**	5,714
Sep-22	480			**480**	

TOTAL	**6,267**	**963**	**17,629**	**24,858**	**17,629**

Calcon T&M Projects Tracking

9/30/2022

Project No.	Name	Status	Proposal Date	Approved Date	Project Budget	Project Actual thru 6/30/22	Project Billings FY2022-2023
FY 2021-2022 Open Projects:							
	Crystal Springs Solar System Backup			12/20/2021		$18,739.00	
	Nunes Tank Radio Solar Backup			12/20/2021		$19,927.00	
	Denniston CC Junction Box				$9,558.00		$ 2,000.00
		Open Projects - Subtotal				$38,666.00	$2,000.00
Other: Monthly Maintenance							
	Tanks						
	Crystal Springs Maintenance						
	Nunes Maintenance						$ 2,823.84
	Denniston Maintenance						$ 10,470.00
	Distribution System						$ 20,350.97
	Wells						
	Cellular Telemetry						$ 984.39
		Subtotal Maintenance					$ 34,629.20
		FINAL TOTAL FY 2022/2023					$36,629.20

EKI Environment & Water
Engineering Services Billed FY 2020-2021 to FY 2021-2023
Billed through 9/30/2022

	Contract Date	Not to Exceed Budget	Status	FY2020-2021	FY2021-2022	FY2022-2023
CIP Project Management						
Fiscal Year 2019-2020	7.29.2019	$ 180,000.00	Complete	$ 1,138.80		
Fiscal Year 2020-2021	8.13.2020	$ 100,000.00	Complete	$ 66,805.44	$ 33,162.48	
Fiscal Year 2021-2022 - Non-Complex Main line Extension Services	10.15.2021	$ 25,000.00	Open		$ 10,301.46	$ 1,791.40
Fiscal Year 2021-2022 - Drought Relief Grant Application	12.2021		Complete		$ 21,074.82	
Fiscal Year 2022-2023	4/20/2022	$ 100,000.00	Open		$ 5,453.76	$ 11,243.44
Sub Total - CIP Project Management Services		$ 405,000.00		$ 67,944.24	$ 69,992.52	$ 13,034.84

Denniston Culvert Replacement-Engineering Services during Construction	**18-13**	7.8.2020	$ 48,800.00	Complete	$ 47,647.17		
Pine Willow Oak Water Main Replacement Project	**18-01**	7.29.2019	$ 69,700.00	Complete	$ 4,991.74		
Grandview/Silver/Terrace/Spindrift Under Hwy 1 PreDesign	**20-08**	10.15.2019	$ 59,600.00	Complete	$ 40,597.27		
Grandview Water Main Replacement Project (Design, Bid Support, construction support)	**20-08**	7.29.2019	$ 56,100.00	Open	$ 5,144.36		
Grandview Crossing at Hwy 1	**20-08**	2.9.2021	$ 156,500.00	Open	$ 73,285.99	$ 37,244.28	$ 16,171.74
Pilarcitos Creek Crossing Water Main Replacement Preliminary Design	**13-02**	8.27.2019	$ 104,600.00	Complete	$ 1,226.50		
Pilarcitos Creek Crossing Water Main Replacement Design	**13-02**	7.14.2020	$ 82,900.00	Open	$ 39,340.34	$ 31,454.78	$ 12,098.84
Pilarcitos Creek Crossing Water Main Replacement Field Surveys/Land Descriptions	**13-02**		$ 28,600.00	Open		$ 20,059.82	
Pilarcitos Creek Crossing Water Main Replacement-Engineering Services during construction							$ 4,681.04
Highway 92 Potable Water Pipeline Replacement Project Design	**14-01**	7.2.2021	$ 24,800.00	Open		$ 18,139.94	$ 720.98
Miramontes Point Road Water Main Replacement	**22-01**	7.14.2021	$ 116,800.00	Open		$ 92,356.96	$ 17,169.88
Purisima Way Water Main Replacement	**14-29**	10.18.2021	$ 20,400.00	Complete		$ 19,840.91	
Medio Crossing - Alternatives Evaluation for Pipeline Replacement		4.25.2022	$ 21,900.00	Open		$ 8,410.48	$ 8,233.94
Total - All Services					**$ 280,177.61**	**$ 297,499.69**	**$ 72,111.26**

COASTSIDE COUNTY WATER DISTRICT

766 MAIN STREET

HALF MOON BAY, CA 94019

MINUTES OF THE REGULAR MEETING OF THE BOARD OF DIRECTORS

Tuesday, September 13, 2022

Due to the Covid-19 pandemic, and in accordance with Assembly Bill 361, which modifies California Government Code Section 54953, the meeting was conducted by hybrid format offering the option of participating in person, zoom video conference, or by teleconference.

The Public was able to participate in the public meeting by joining the meeting in person or through the Zoom Video Conference link provided. The public was also able to join the meeting by calling a provided teleconference phone number.

1) **ROLL CALL** –President Bob Feldman was in person and called the meeting to order at 7:01 p.m. Participating in roll call via Zoom Video Conference were Directors Chris Mickelsen and Ken Coverdell, and in person was Vice-President John Muller. Director Glenn Reynolds was absent.

Also present: Mary Rogren, General Manager, Patrick Miyaki, Legal Counsel; James Derbin, Superintendent of Operations; Cathleen Brennan, Water Resources Analyst; Gina Brazil, Office Manager; Nancy Trujillo, Accounting Manager; and Lisa Sulzinger, Administrative Analyst.

Also participating Jonathan Sutter, EKI Environment & Water, Inc.

2) **PLEDGE OF ALLEGIANCE**

3) **PUBLIC COMMENT –** The Board accepted and responded to a public comment about colored water later in the meeting.

4) **Consider and Reaffirm Resolution 2021-06 "Making Findings Pursuant to Assembly Bill 361 That the Proclaimed State of Emergency Continues to Impact the Ability to Meet Safely in Person"**

Ms. Rogren summarized Governor Newsom's Executive Order dated back on March 4, 2020, that declared a State of Emergency to exist in California because of the threat of COVID 19. The Executive Order N-29-20 suspended certain provisions of the Ralph M. Brown Act relating to teleconferencing to allow legislative bodies to conduct meetings remotely to help protect the spread of COVID-19 and to protect the health and safety of the public. On June 11, 2021, the Governor issued Executive Order N-08-21 which specified that Executive Order N-29-20 remain in effect through September 30, 2021.

On September 16, 2021, the Governor signed Assembly Bill (AB361) into law to allow legislative bodies to continue to meet remotely during a proclaimed State of Emergency after September 30, 2021. On October 8, 2021, the Board adopted Resolution 2021-06. Per AB361, the Board will need to consider and reaffirm the findings of Resolution 2021-06 monthly proclaiming that the State of Emergency continues to impact the ability of members to meet safely in person, and state or local officials continue to impose or recommend measures to promote social distancing.

ON MOTION BY Vice President Muller and seconded by Director Coverdell, the Board voted by roll call vote to Reaffirm Resolution 2021-06 "Making Findings Pursuant to Assembly Bill 361 That the Proclaimed State of Emergency Continues to Impact the Ability to Meet Safely in Person":

Director Coverdell	**Aye**
Director Mickelsen	**Aye**
Director Reynolds	**Absent**
Vice-President Muller	**Aye**
President Feldman	**Aye**

5) CONSENT CALENDAR

- **A.** Approval of disbursements for the month ending August 31, 2022:
  Claims: $ 1,278,126.27; Payroll: $ 202,010.69 for a total of $ 1,480,136.96
  August 2022 Monthly Financial Claims reviewed and approved by Director Feldman
- **B.** Acceptance of Financial Reports
- **C.** Approval of Minutes of August 9, 2022, Regular Board of Directors Meeting
- **D.** Approval of Minutes of August 24, 2022, Special Board of Directors Meeting
- **E.** Installed Water Connection Capacity and Water Meters Report
- **F.** Total CCWD Production Report
- **G.** CCWD Monthly Sales by Category Report August 2022
- **H.** Leak/Flushing Report – August 2022
- **I.** Monthly Rainfall Reports
- **J.** SFPUC Hydrological Conditions Report – July 2022
- **K.** Water Service Connection Transfer Report for August 2022

Director Feldman commented he reviewed the Financial Claims and found them to be in order.

ON MOTION BY Director Coverdell and seconded by Vice President Muller, the Board voted by roll call vote to approve the Consent Calendar:

Director Coverdell	**Aye**
Director Mickelsen	**Aye**
Director Reynolds	**Absent**
Vice-President Muller	**Aye**
President Feldman	**Aye**

6) MEETINGS ATTENDED / DIRECTOR COMMENTS

Director Muller announced he will not be able to attend the ACWA Region 5 Tour and Program October 6-7, 2022 in Monterey and offered his place to the other Board Members.

7) GENERAL BUSINESS

A. Approval of Professional Services Agreement with EKI Environment & Water, Inc. for Construction Management and Inspection Services for the Grandview Water Main Replacement Project

Mr. Derbin summarized the Grandview Water Main Replacement Project. This project will replace the existing infrastructure in the Grandview neighborhood to meet fire and design standards and will include replacing the existing 6" water main that crosses under Highway 1 using pipejacking construction methods. EKI Environment & Water, Inc. (EKI) prepared the plans and specifications for the project and will be providing engineering services during construction under a separate scope of work. The District is requesting to utilize EKI for construction management and inspection services. EKI will hire a subcontractor, Cecil and Cecil for the inspection services.

ON MOTION BY Director Coverdell and seconded by Vice President Muller, the Board voted by roll call vote to authorize the General Manager to enter into a Professional Services Agreement with EKI Environment & Water, Inc. for Construction Management and Inspection Services for the Grandview Water Main Replacement Project for $132,800.

Director Coverdell	**Aye**
Director Mickelsen	**Aye**
Director Reynolds	**Absent**
Vice-President Muller	**Aye**
President Feldman	**Aye**

B. <u>Approval of Water Service Agreement – 157 Avenue Portola, El Granada</u>

Ms. Rogren explained that this is a standard water services agreement between the District and Sean and Kathleen Frietas for construction of 130 linear feet of 6" diameter ductile iron pipe that will serve 157 Avenue Portola. There is no fiscal impact to the District.

ON MOTION BY Vice President Muller and seconded by Director Coverdell, the Board voted by roll call vote to approve the Water Service Agreement – 157 Avenue Portola, El Granada:

Director Coverdell	**Aye**
Director Mickelsen	**Aye**
Director Reynolds	**Absent**
Vice-President Muller	**Aye**
President Feldman	**Aye**

C. <u>Waive the Procedural Requirements for Sealed Competitive Bids and Authorize the General Manager to Procure Materials for the Nunes Magnetic Flow Meter.</u>

Mr. Derbin explained that the current Nunes Water Treatment Plant production numbers are calculated using multiple flow meters within the plant and include estimates for lost water from the sample taps. To better track produced water vs. unaccounted for water, staff proposes to install a 16" magnetic flow meter. This proposed meter will read and totalize bi-directionally and will produce a more accurate and precise number of the quantity of water sent to the distribution system from the Nunes Water Treatment Plant.

Freyer and Laureta, Inc. has completed a design that the District can use to solicit bids for the installation. Staff proposes to purchase parts before going to bid for installation due to possible delays caused by supply chain issues. In addition, the District will save on contractor markup on these parts. Staff has solicited informal bids from three underground parts suppliers with the low bid coming from Core and Main Inc.

ON MOTION BY Director Coverdell and seconded by Vice President Muller, the Board voted by roll call vote to waive the procedural requirements for sealed competitive bids and authorize the General Manager to procure materials for the Nunes Magnetic Flow Meter from Core & Main for $88,869:

Director Coverdell	**Aye**
Director Mickelsen	**Aye**
Director Reynolds	**Absent**
Vice-President Muller	**Aye**
President Feldman	**Aye**

D. San Mateo County Civil Grand Jury Report: "The Other Water Worry: Is Your Water Provider Prepared for the Big One?"

Ms. Rogren reported that on August 5, 2022, the San Mateo County Civil Grand Jury released a report to address the issue: "To what extent are water providers in San Mateo County prepared to supply water to customers in the event of a major seismic catastrophe?" In February 2022 the Civil Grand Jury conducted 27 confidential interviews with multiple County agencies including 10 water providers. The District must provide a response to the Grand Jury by November 4, 2022, on 2 findings and resulting recommendations. The recommendations to be reported on include: 1) By March 23, 2023, county water providers are to perform emergency preparedness exercises consistent with their emergency response plans; and 2) By March 23, 2023, county water providers perform an analysis and document an after-action report consistent with their emergency response plans.

Ms. Rogren and Mr. Derbin also shared many of the emergency preparedness activities and capital investments undertaken to improve the District's resiliency and seismic vulnerabilities. In 2021, District staff spent over 250 hours along with 350 consulting hours to prepare a Risk and Resilience Assessment and an updated Emergency Response Plan (ERP) in accordance with the American Water Infrastructure Act (AWIA). The District's ERP was certified with the US Environmental Protection Agency in December 2021. In Summer 2021, the District also completed the San Mateo County Local Hazard Mitigation Annex Plan (approved by FEMA in December 2021.)

Moving forward, District staff will be scheduling emergency drills, training, and tabletops both internally and with other agencies including the County of San Mateo and San Francisco Public Utilities Commission (SFPUC). The District has also planned emergency exercises with Coastside Fire Protection in December, 2022.

8) MONTHLY INFORMATIONAL REPORTS

A. General Manager's Report

Ms. Rogren summarized a letter from Debbie Ruddock, Mayor of the City of Half Moon Bay dated August 23, 2022 to President Feldman affirming "its support of the Coastside County Water District's pursuit of the resilient, sustainable and integrated water supply for the Coastside" and encouraging the District to "explore opportunities to diversify its water supplied including means to develop and utilize water derived from reuse and recycling."

B. Superintendent of Operations Report

Mr. Derbin summarized the Operation Highlights for the month of August 2022.

C. <u>Water Resources Report</u>

Ms. Brennan reported that the water shortage conditions remain unchanged. The District will have an ad in the HMB Review Magazine for Pumpkin Festival, and staff will setup an outreach table at the District's office on the Saturday of Pumpkin Festival.

Ms. Brennan also reported on the Alternative Water Supply (AWS) plan by the San Francisco Public Utilities Commission (SFPUC). The AWS plan is intended to improve dry year reliability of the regional water system. Currently if all projects being planned are implemented, the AWS could provide up to 35 million gallons per day. SFPUC will continue to provide quarterly updates with the final report on the AWS projects due in the summer of 2023.

9) DIRECTOR AGENDA ITEMS – REQUESTS FOR FUTURE BOARD MEETINGS

There were no requests for future agenda items.

10) ADJOURNMENT – Board Meeting Adjourned at 8:07 p.m.

_____
Mary Rogren, General Manager
Secretary to the District

_____
Robert Feldman, President
Board of Directors

COASTSIDE COUNTY WATER DISTRICT

766 MAIN STREET

HALF MOON BAY, CA 94019

MINUTES OF THE SPECIAL MEETING OF THE BOARD OF DIRECTORS

Tuesday, September 27, 2022

Due to the Covid-19 pandemic, and in accordance with Assembly Bill 361, which modifies California Government Code Section 54953, the Boardroom was not open to the public for the September 27, 2022, Special Meeting of the Board of Directors of the Coastside County Water District. The Special Meeting was conducted remotely via teleconference.

The Public was able to watch and/or participate in the public meeting by joining the meeting through the Zoom Video Conference link provided. The public was also able to join the meeting by calling a provided teleconference phone number.

1) ROLL CALL –-President Feldman called the meeting to order at 3:00 p.m. participating in roll call via Zoom Video Conference: Directors Ken Coverdell, Chris Mickelsen, Glenn Reynolds, and Vice-President Muller.

Also present: Mary Rogren, General Manager, and Patrick Miyaki, Legal Counsel

1) PUBLIC COMMENT – There were no public comments.

2) CLOSED SESSION

Pursuant to California Government Code Section 54956.9(d)(2)
Conference with Legal Counsel – Anticipated Litigation
Significant Exposure to Litigation
One Potential Case.

3) RECONVENE TO OPEN SESSION

The meeting reconvened to open session at 3:42 p.m. Public Report of closed session action – No Action Taken

4) ADJOURNMENT - The Special Meeting was adjourned at 3:43 p.m.

Respectfully submitted,

_____
Mary Rogren, General Manager
Secretary to the District

_____
Robert Feldman, President
Board of Directors

COASTSIDE COUNTY WATER DISTRICT
Installed Water Connection Capacity & Water Meters

FY 2022 / 2023

Installed Water Meters	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
HMB Non-Priority													
0.5" capacity increase													
5/8" meter	1	1											**2**
3/4" meter													
1" meter		1											
1 1/2" meter													**1**
2" meter													
3" meter													
HMB Priority													
0.5" capacity increase													
5/8" meter													
3/4" meter													
1" meter													
1 1/2" meter													
2" meter													
County Non-Priority													
0.5" capacity increase													
5/8" meter		3	1										**4**
3/4" meter													
1" meter													
County Priority													
5/8" meter													
3/4" meter													
1" meter													
1.5" meter													
Totals	1	5	1	0	0	0	0	0	0	0	0	0	**7**

5/8" meter = 1.0 connection
3/4" meter = 1.5 connections
1" meter = 2.5 connections
1.5" meter = 5.0 connections
2" meter = 8 connections
3" meter= 17.5 connections

FY 2020 Capacity (5/8" connection equivalents)	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Totals
HMB Non-Priority	1	3.5											**4.5**
HMB Priority													
County Non-Priority		3	1										**4**
County Priority													
Total	1	6.5	1										**8.5**

TOTAL CCWD PRODUCTION (MG) ALL SOURCES- FY 2023

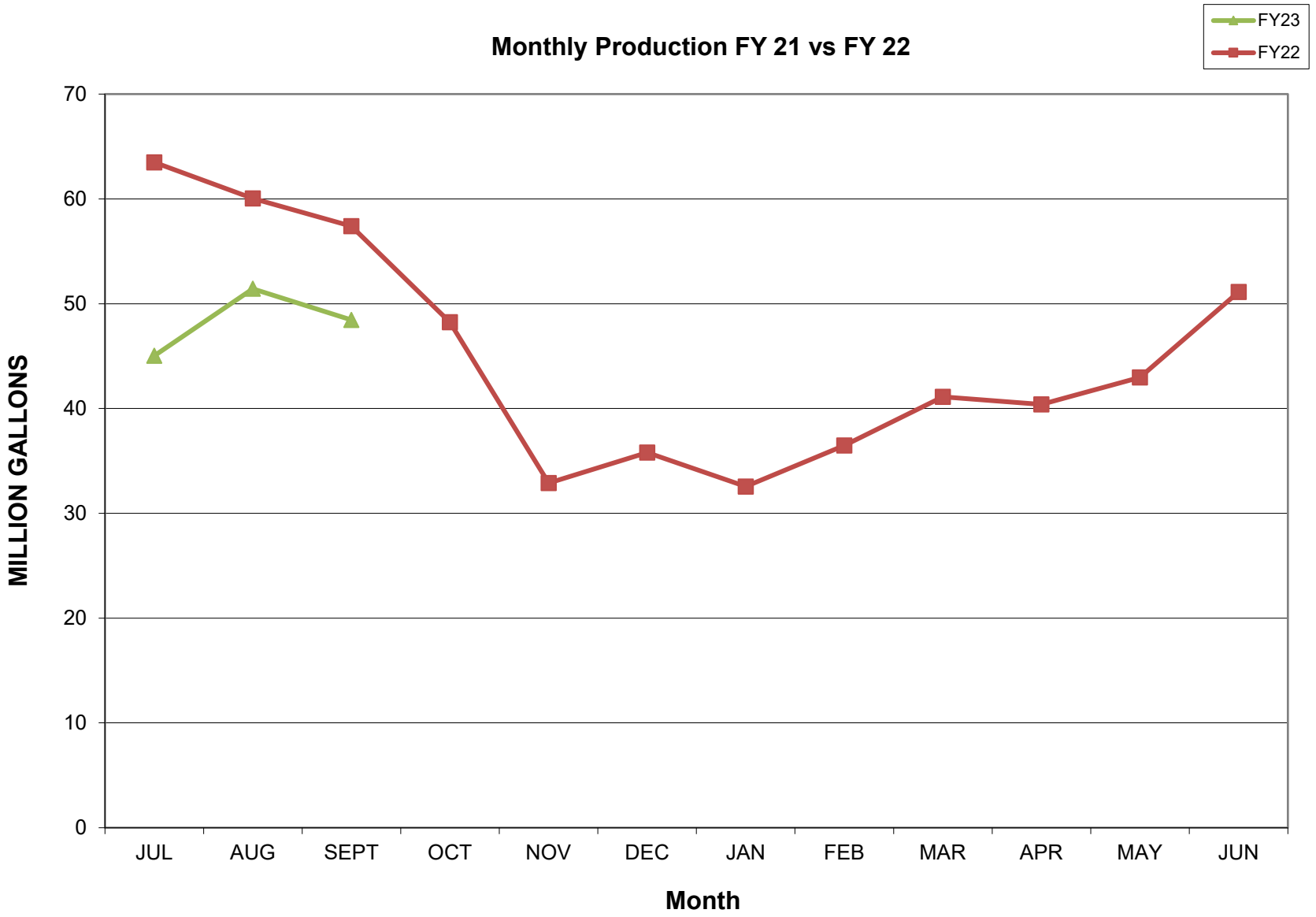
	CCWD Sources			SFPUC Sources				
	DENNISTON WELLS	DENNISTON RESERVOIR	PILARCITOS WELLS	PILARCITOS LAKE	CRYSTAL SPRINGS RESERVOIR	RAW WATER TOTAL	UNMETERED WATER	TREATED TOTAL
JUL	1.92	6.25	0.00	39.07	0.42	47.66	2.63	45.03
AUG	1.70	5.45	0.00	38.23	8.94	54.32	2.90	51.42
SEPT	1.65	5.86	0.00	15.86	27.69	51.06	2.62	48.44
OCT								
NOV								
DEC								
JAN								
FEB								
MAR								
APR								
MAY								
JUN								
TOTAL	5.27	17.56	0.00	93.16	37.05	153.04	8.15	144.89
% MONTHLY TOTAL	3.2%	11.5%	0.0%	31.1%	54.2%	100.0%	5.1%	94.9%
% ANNUAL TO DATE TOTAL	3.4%	11.5%	0.0%	60.9%	24.2%	100.0%	5.3%	94.7%

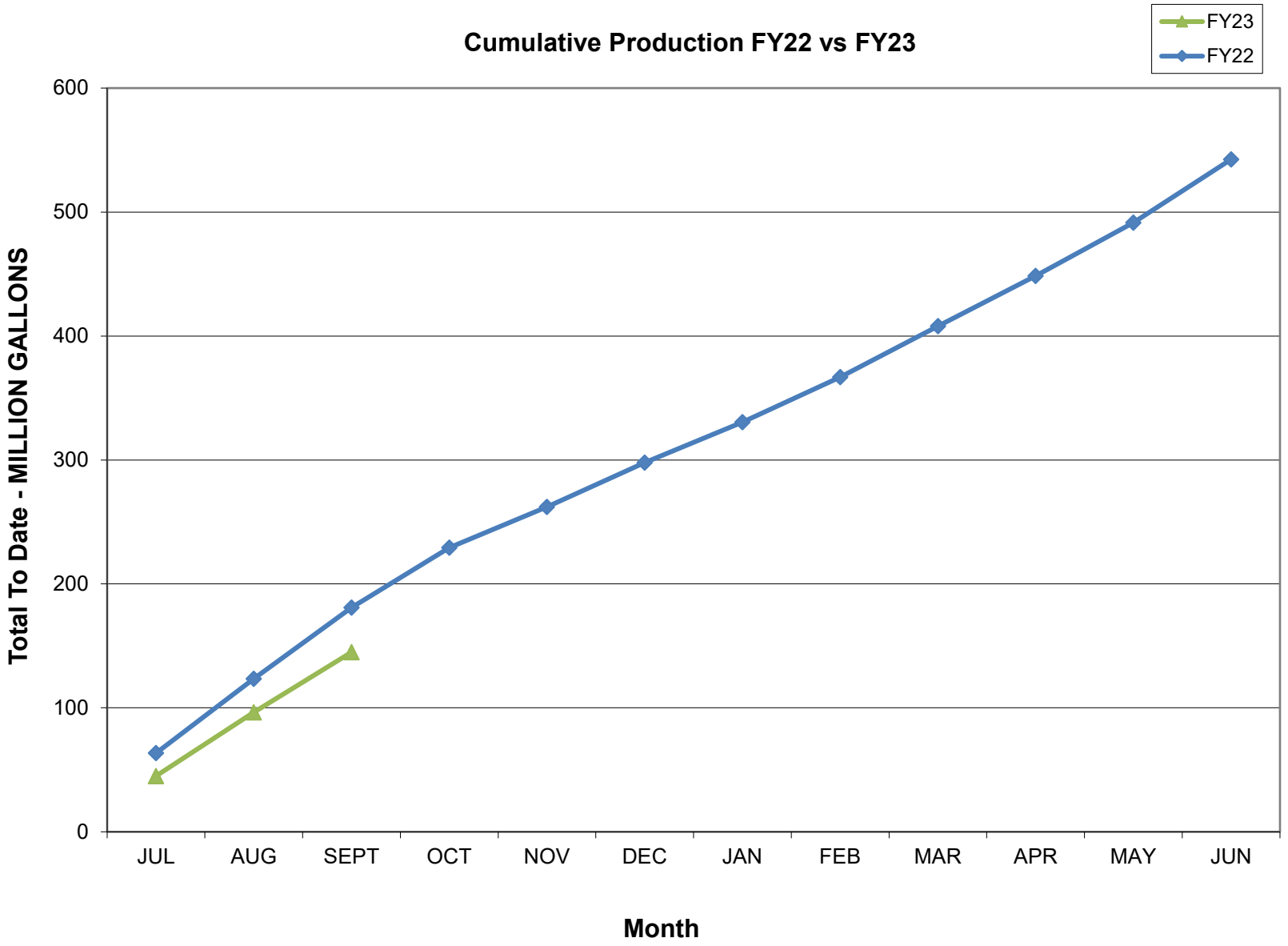
CCWD vs SFPUC- month	14.7%
CCWD vs SFPUC- annual	14.9%

12 Month Running Treated Total **473.57**

TOTAL CCWD PRODUCTION (MG) ALL SOURCES- FY 2022

	CCWD Sources			SFPUC Sources				
	DENNISTON WELLS	DENNISTON RESERVOIR	PILARCITOS WELLS	PILARCITOS LAKE	CRYSTAL SPRINGS RESERVOIR	RAW WATER TOTAL	UNMETERED WATER	TREATED TOTAL
JUL	0.00	0.00	0.00	0.00	65.93	65.93	2.44	63.49
AUG	0.00	0.00	0.00	0.00	61.90	61.90	1.86	60.04
SEPT	0.00	0.00	0.00	0.00	59.74	59.74	2.34	57.40
OCT	0.53	1.57	0.00	3.69	44.32	50.11	1.87	48.24
NOV	1.62	17.20	9.78	0.00	7.87	36.47	3.58	32.89
DEC	0.69	5.75	21.2	0.00	10.80	38.44	2.64	35.80
JAN	0.00	7.62	24.44	0.00	3.16	35.22	2.66	32.56
FEB	0.00	14.10	21.88	0.00	3.63	39.61	3.13	36.48
MAR	0.00	14.97	24.71	0.00	5.16	44.84	3.72	41.12
APR	2.33	23.27	0.00	9.22	9.25	44.07	3.68	40.39
MAY	2.15	19.30	0.00	22.75	2.61	46.81	3.84	42.97
JUN	1.91	12.20	0.00	35.05	5.04	54.20	3.08	51.12
TOTAL	9.23	115.98	102.01	70.71	279.41	577.34	34.84	542.50
% TOTAL	1.6%	20.1%	17.7%	12.2%	48.4%	100.0%	6.0%	94.0%


Monthly Production FY 21 vs FY 22
FY23
FY22
MILLION GALLONS
70
60
50
40
30
20
10
0
JUL
AUG
SEPT
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
Month


Cumulative Production FY22 vs FY23
FY23
FY22
Total To Date - MILLION GALLONS
600
500
400
300
200
100
0
JUL
AUG
SEPT
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
Month

Coastside County Water District Monthly Sales By Category (MG)
FY2023

	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	MG to Date
RESIDENTIAL	26.06	25.90	28.19										**80.14**
COMMERCIAL	2.49	2.80	2.99										**8.28**
RESTAURANT	1.67	1.64	1.87										**5.17**
HOTELS/MOTELS	2.39	2.55	2.65										**7.59**
SCHOOLS	0.59	0.49	0.53										**1.61**
MULTI DWELL	2.57	2.50	2.83										**7.90**
BEACHES/PARKS	0.74	0.64	0.64										**2.03**
AGRICULTURE	4.96	4.75	3.78										**13.49**
RECREATIONAL	0.22	0.24	0.24										**0.70**
MARINE	0.51	0.54	0.58										**1.62**
RES. IRRIGATION	1.22	1.23	1.28										**3.73**
DETECTOR CHECKS	0.00	0.01	0.00										**0.01**
NON-RES. IRRIGATION	3.53	5.48	4.81										**13.82**
RAW WATER	3.69	2.72	5.03										**11.45**
PORTABLE METERS	0.27	0.32	0.34										**0.94**
CONSTRUCTION	0.35	0.38	0.40										**1.13**
TOTAL - MG	**51.27**	**52.19**	**56.15**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**159.61**
Non Residential Usage	25.21	26.30	27.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Running 12 Month Total			**540.33**										
12 mo Residential			**284.88**										
12 mo Non Residential			**255.46**										

FY2022

	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	MG to Date
RESIDENTIAL	29.63	28.15	28.29	26.89	20.43	20.84	20.63	21.31	23.16	23.02	23.86	24.60	**290.81**
COMMERCIAL	3.00	2.96	2.91	2.96	2.27	2.30	2.01	2.22	2.36	2.37	2.44	2.40	**30.19**
RESTAURANT	1.52	1.36	1.33	1.38	1.30	1.19	1.15	1.24	1.38	1.52	1.48	1.51	**16.36**
HOTELS/MOTELS	2.73	2.90	2.39	2.46	2.04	1.81	1.75	1.65	2.05	2.24	2.17	2.26	**26.45**
SCHOOLS	0.70	0.63	0.81	0.54	0.26	0.35	0.25	0.38	0.44	0.33	0.47	0.53	**5.69**
MULTI DWELL	2.60	2.50	2.59	2.71	2.32	2.34	2.42	2.30	2.43	2.41	2.45	2.40	**29.49**
BEACHES/PARKS	0.68	0.79	0.64	0.69	0.21	0.19	0.18	0.42	0.46	0.35	0.47	0.52	**5.59**
AGRICULTURE	6.54	5.54	6.40	7.01	5.65	4.86	4.58	5.96	7.79	4.27	5.01	6.39	**70.00**
RECREATIONAL	0.23	0.21	0.21	0.22	0.18	0.17	0.15	0.16	0.18	0.19	0.19	0.20	**2.29**
MARINE	0.59	0.51	0.45	0.43	0.35	0.40	0.56	0.44	0.41	0.33	0.53	0.48	**5.48**
RES. IRRIGATION	1.40	1.51	1.50	1.15	0.27	0.30	0.08	0.64	1.09	0.81	0.89	1.09	**10.73**
DETECTOR CHECKS	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.00	0.00	**0.10**
NON-RES. IRRIGATION	4.05	5.39	5.06	0.50	0.23	0.32	0.19	0.31	0.35	0.26	0.38	4.88	**21.92**
RAW WATER	7.74	7.11	7.52	8.01	1.03	0.99	0.00	1.96	2.84	3.97	0.66	0.61	**42.43**
PORTABLE METERS	0.19	0.30	0.34	0.27	0.12	0.08	0.04	0.15	0.14	0.15	0.15	0.26	**2.19**
CONSTRUCTION	0.33	0.30	0.33	0.34	0.30	0.28	0.30	0.31	0.35	0.35	0.33	0.34	**3.85**
TOTAL - MG	**61.92**	**60.17**	**60.78**	**55.55**	**36.97**	**36.43**	**34.31**	**39.48**	**45.44**	**42.59**	**41.47**	**48.48**	**563.59**

MONTH **Sep-22**

Coastside County Water District Monthly Discharge Report

EMERGENCY MAIN AND SERVICE REPAIRS

	Date Reported Discovered	Date Repaired	Location	Pipe Class	Pipe Size & Type	Estimated Water Loss (MG)
1	9/20/2022	9/20/2022	54 Santa Rosa Ave	Main	2" GSP	0.0002
2						
3						
4						
5						
6						
7						
8						
					Totals	**0.0002**

OTHER DISCHARGES

Total Volumes (MG)	
Flushing Program	0.013
Reservoir Cleaning	
Automatic Blowoffs	0.278
Dewatering Operations	
Other (includes flow	0.000

DISCHARGES GRAND TOTAL (MG)

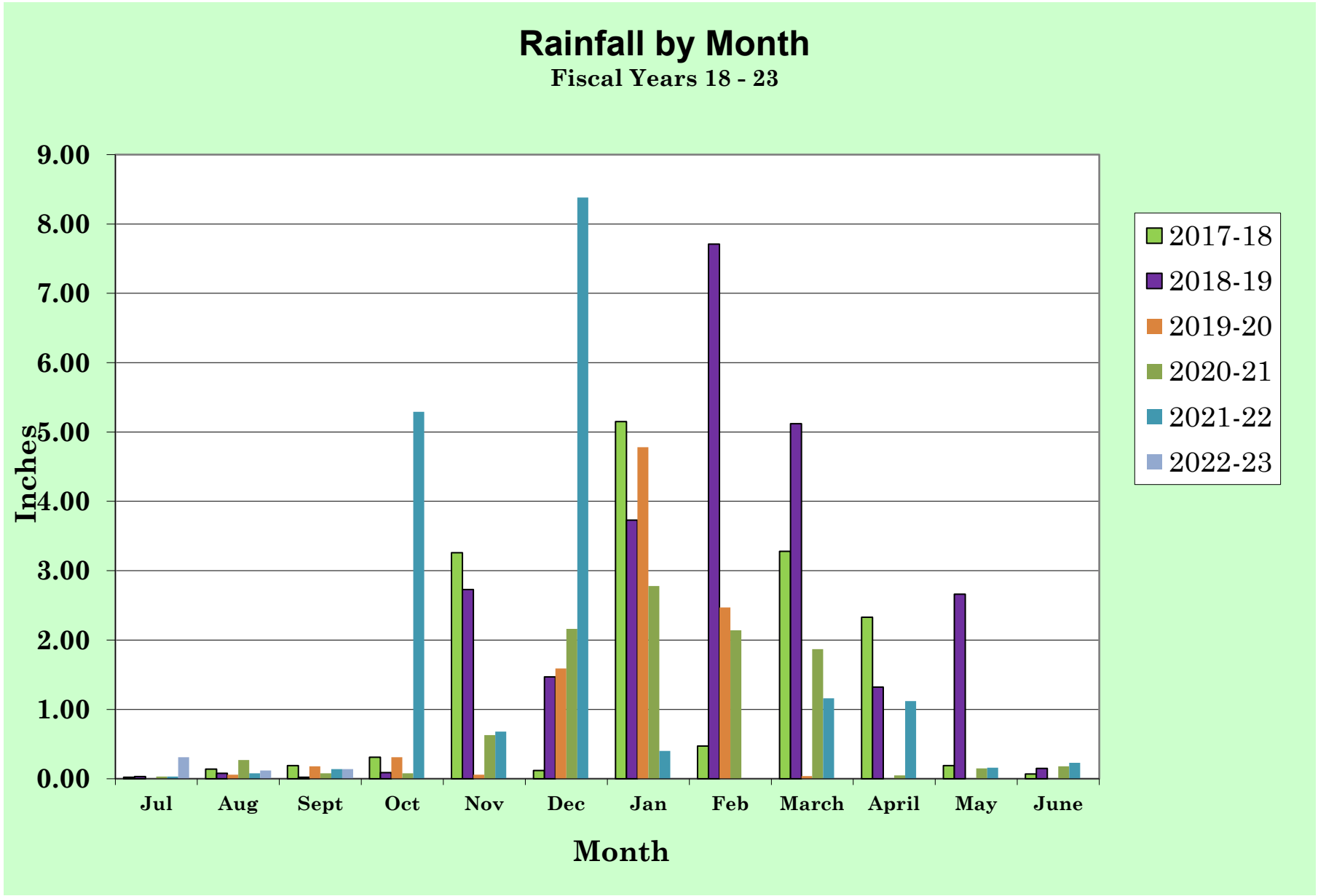
0.291

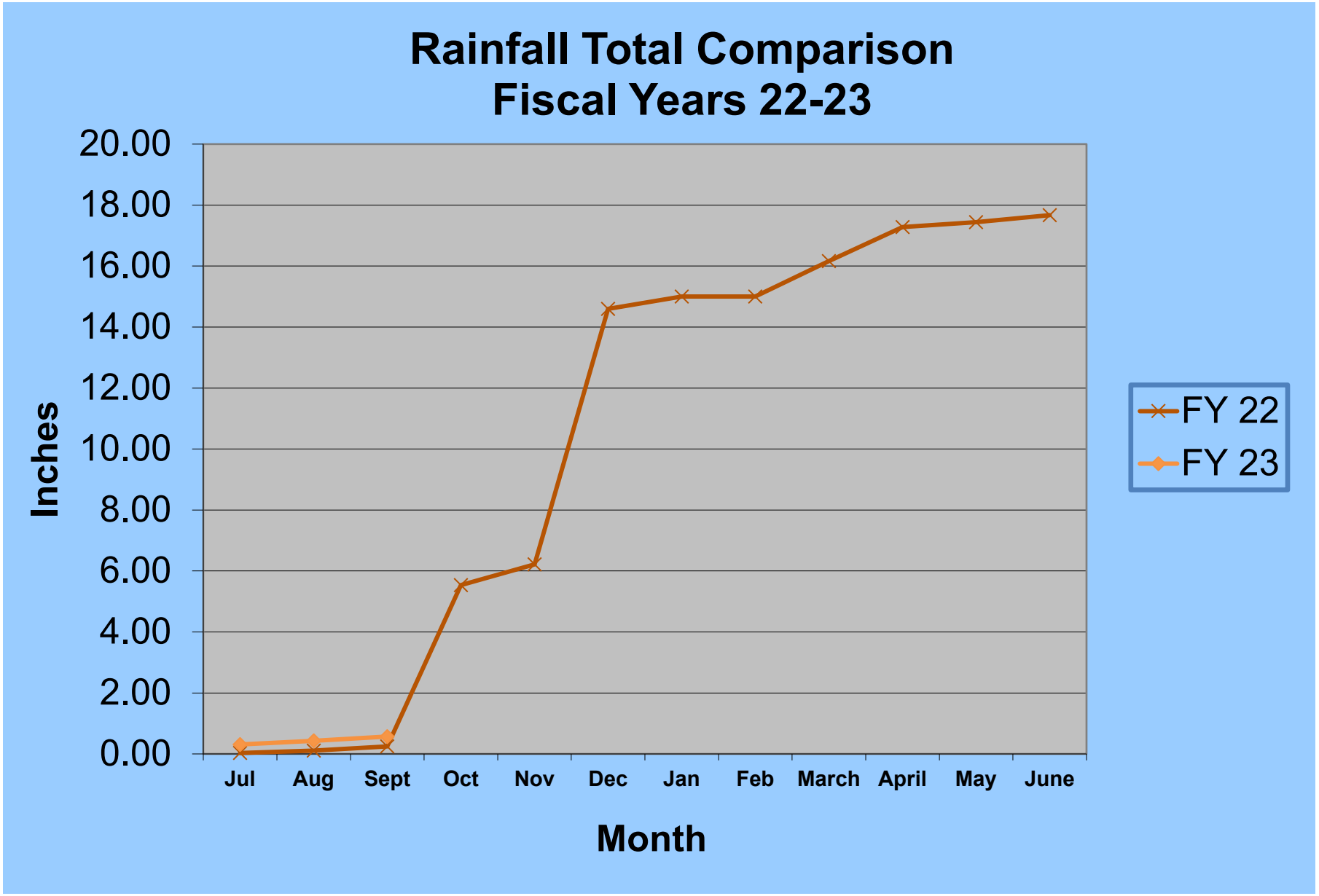
Coastside County Water District
766 Main Street
July 2022 - June 2023

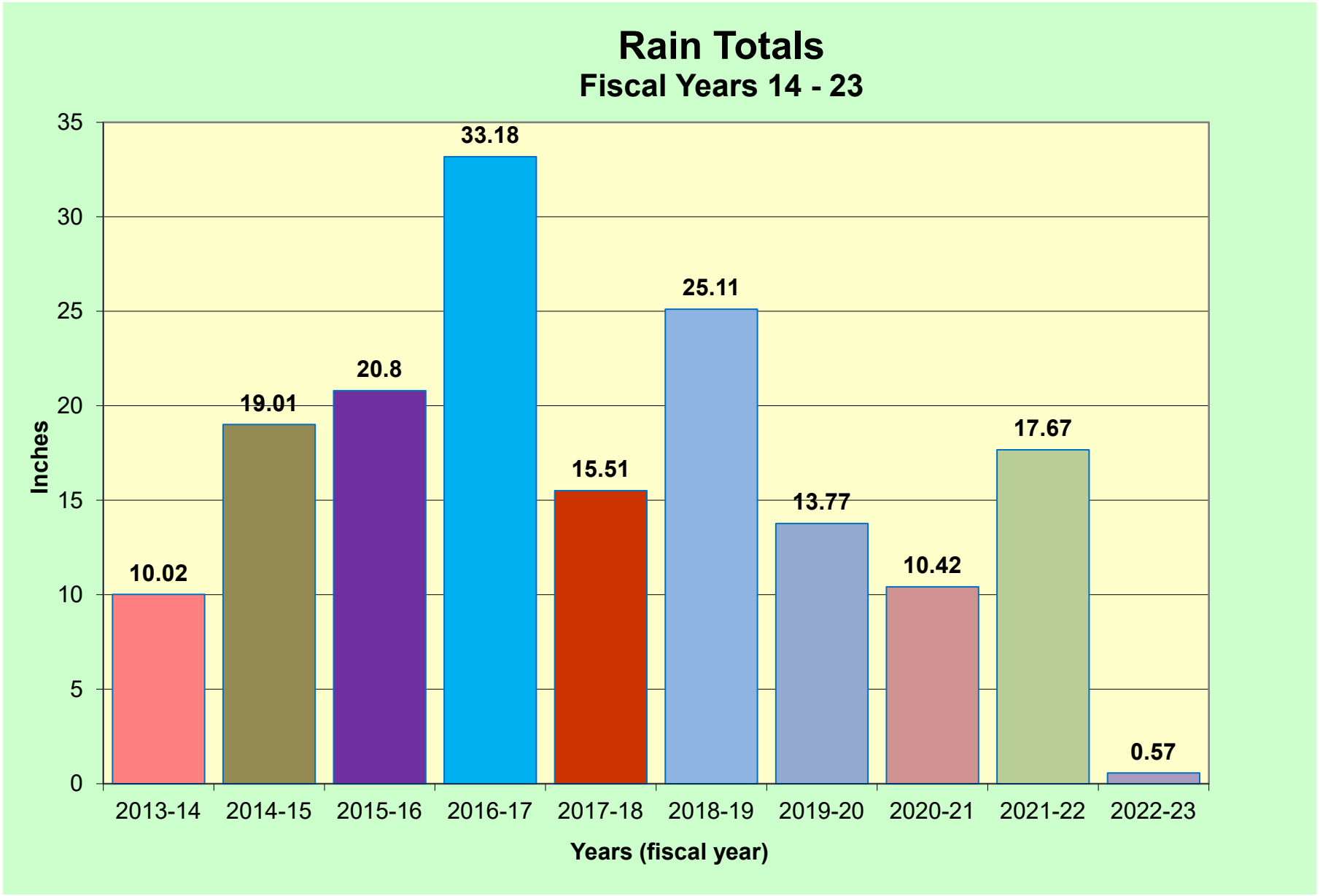
Nunes
Rainfall in Inches

	2022			2023								
	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June
1	0.02	0.01	0									
2	0.05	0	0									
3	0.02	0	0									
4	0	0	0									
5	0.02	0	0									
6	0.04	0	0									
7	0.01	0	0									
8	0	0	0									
9	0	0	0									
10	0.01	0	0									
11	0	0	0									
12	0.01	0	0									
13	0	0	0									
14	0	0	0									
15	0	0	0									
16	0.01	0	0									
17	0	0.01	0									
18	0	0	0.12									
19	0	0.01	0									
20	0	0	0									
21	0	0	0.2									
22	0	0	0									
23	0	0.02	0									
24	0.01	0.02	0									
25	0.01	0.02	0									
26	0	0.01	0									
27	0.01	0.02	0									
28	0.02	0	0									
29	0.03	0	0									
30	0.03	0	0									
31	0.01	0										
Mon.Total	0.31	0.12	0.14									
Year Total	0.31	0.43	0.57									

Coastside County Water District

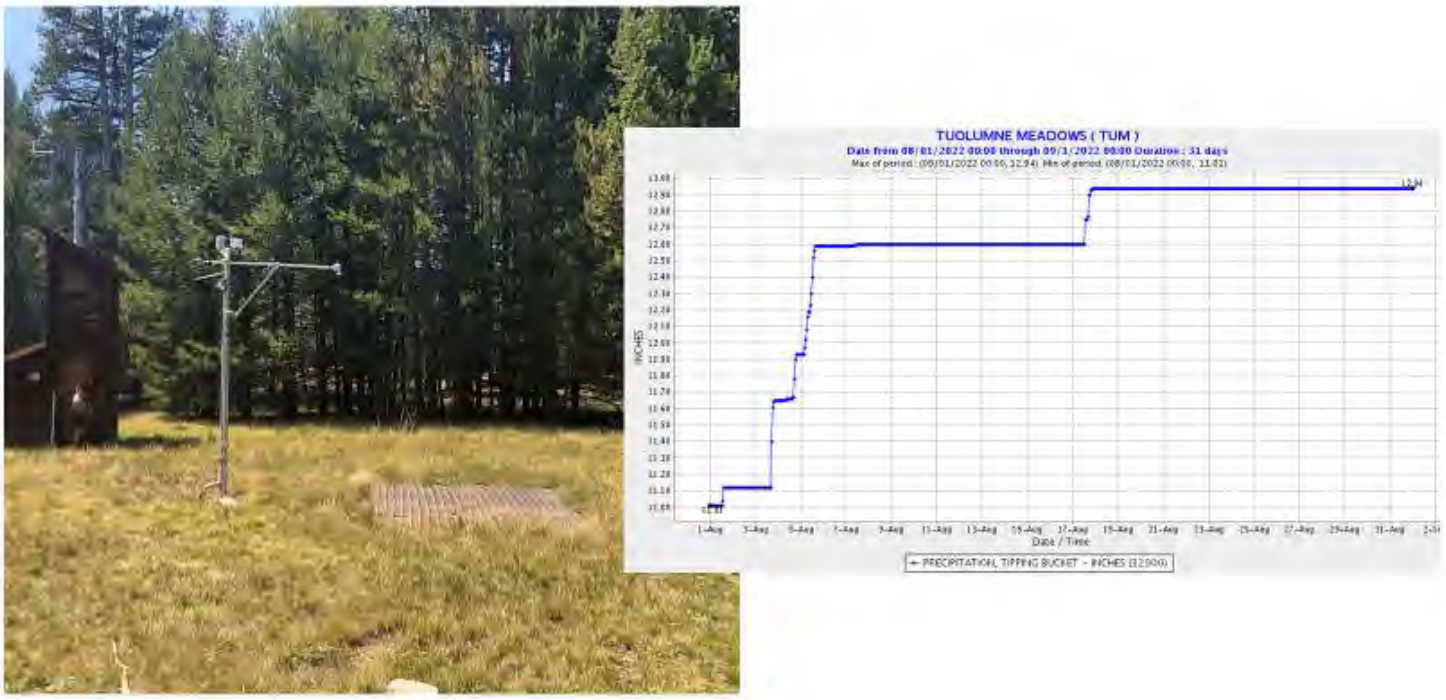



Rainfall Total Comparison
Fiscal Years 22-23
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Inches
Jul
Aug
Sept
Oct
Nov
Dec
Jan
Feb
March
April
May
June
Month
FY 22
FY 23


Rain Totals
Fiscal Years 14 - 23
Inches
35
30
25
20
15
10
5
0
10.02
19.01
20.8
33.18
15.51
25.11
13.77
10.42
17.67
0.57
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
2019-20
2020-21
2021-22
2022-23
Years (fiscal year)

San Francisco Public Utilities Commission
Hydrological Conditions Report
August 2022

J. Chester, C. Graham, N. Waelty, H. Forrester September 15, 2022



The Tuolumne Meadows weather station (left) is at 8,600 feet elevation and recorded nearly 2 inches of precipitation in August (right) from localized thunderstorms, which were driven by an influx of monsoonal moisture from the desert Southwest. Yosemite National Park, Stanislaus National Forest, and HHWP personnel visit this station and others across the Upper Tuolumne Watershed during the summer to perform maintenance and prepare for the winter season.

System Storage

Current Tuolumne System and Local Bay Area storage conditions are summarized in Table 1.

Table 1
Current System Storage
as of September 1, 2022

	Current Storage		Maximum Storage		Available Capacity		Percentage of Maximum Storage
	acre-feet	millions of gallons	acre-feet	millions of gallons	acre-feet	millions of gallons	
Tuolumne System							
Hetch Hetchy Reservoir[1]	305,152		360,360		55,208		85%
Cherry Reservoir[2]	239,566		273,345		33,779		88%
Lake Eleanor[3]	23,634		27,100		3,466		87%
Water Bank	250,620		570,000		319,380		44%
Tuolumne Storage	818,972		1,230,805		411,833		67%
Local Bay Area Storage							
Calaveras Reservoir	58,920	19,199	96,824	31,550	37,904	12,351	61%
San Antonio Reservoir	45,754	14,909	52,506	17,109	6,752	2,200	87%
Crystal Springs Reservoir	51,205	16,685	58,377	19,022	7,171	2,337	88%
San Andreas Reservoir	16,177	5,271	18,996	6,190	2,819	919	85%
Pilarcitos Reservoir	2,426	791	2,995	976	568	185	81%
Total Local Storage	174,483	56,855	229,697	74,847	55,214	17,992	76%
Total System	993,455		1,460,502		467,047		68%

[1] Maximum Hetch Hetchy Reservoir storage with drum gates activated.
[2] Maximum Cherry Reservoir storage with flash-boards in.
[3] Maximum Lake Eleanor storage with flash-boards in.

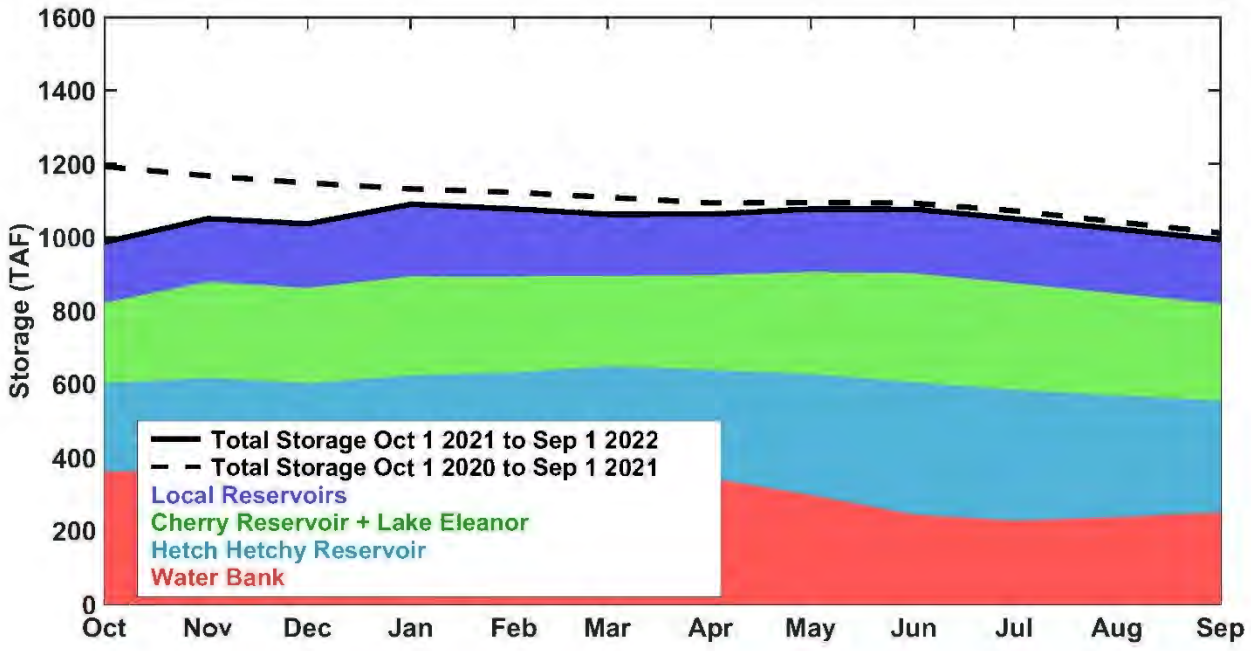


Figure 1: System storage for past 12 months. Color bands show contributions to total system storage. Solid black line shows total system storage for the past 12 months. Dashed black line shows total system storage the previous 12 months.

Hetch Hetchy System Precipitation Index

Current Month: The August 2022 six-station precipitation index was 0.15 inches, well above the median long-term index for the month of 0.01 inches.

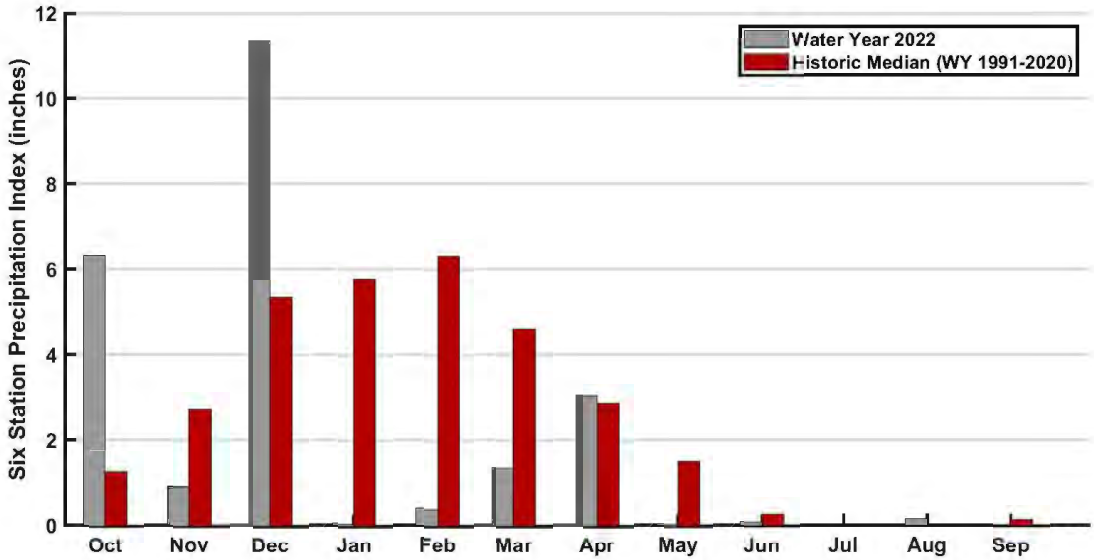


Figure 2: Monthly distribution of the six-station precipitation index relative to the monthly precipitation medians. The precipitation index is computed as the average of six Sierra precipitation stations and is an indicator of the overall basin wetness.

Cumulative Precipitation to Date: As of September 1, the six-station precipitation index for Water Year (WY) 2022 was 23.79 inches, which is 77% of the median annual total and 77% of median to-date. The Hetch Hetchy Weather Station received 0.18 inches of precipitation in August resulting in a total of 24.18 inches for WY 2022, or 70% of median to-date. The cumulative WY 2022 Hetch Hetchy precipitation is shown in Figure 3 in red.

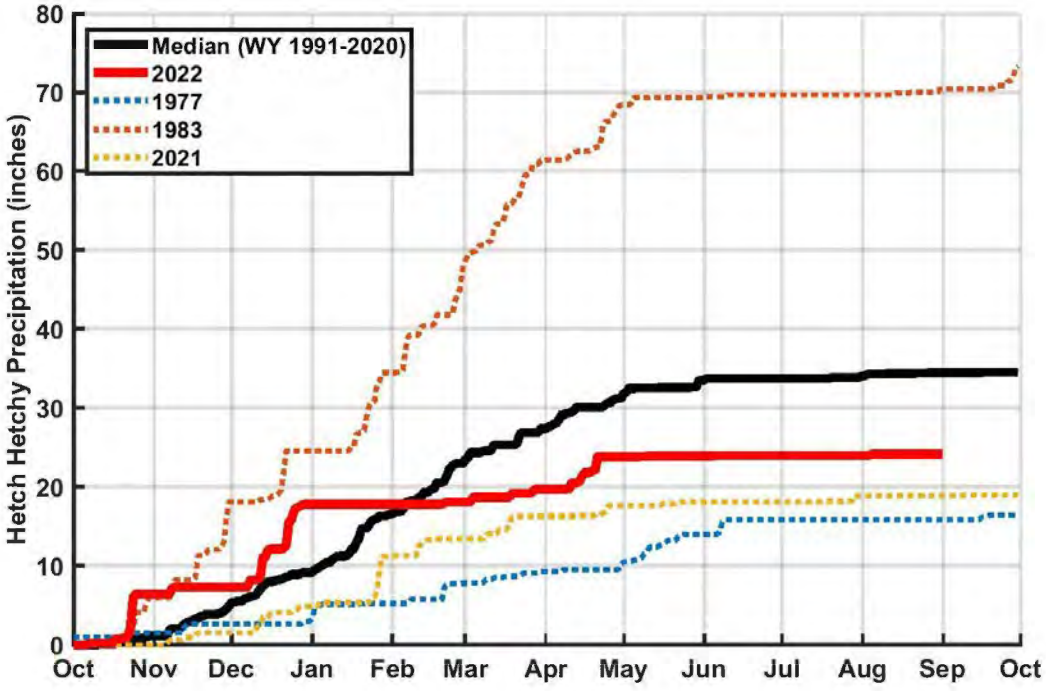


Figure 3: Water Year 2022 cumulative precipitation measured at Hetch Hetchy Weather Station. Median cumulative precipitation measured at Hetch Hetchy Weather Station and example wet and dry years are included with Water Year 2021 for comparison purposes.

Tuolumne Basin Unimpaired Inflow

Unimpaired inflow to SFPUC reservoirs and the Tuolumne River at La Grange for August 2022 and the water year to date is summarized below in Table 2.

Table 2. Calculated Reservoir Inflows and Water Available to City

* All flows are in acre-feet	August 2022				October 1, 2021 through August 31, 2022			
	Observed Flow	Median[1]	Mean[1]	Percent of Mean	Observed Flow	Median[1]	Mean[1]	Percent of Mean
Inflow to Hetch Hetchy Reservoir	3,053	5,262	13,011	23%	493,840	701,700	756,455	65%
Inflow to Cherry Lake and Lake Eleanor	0	2,325	4,561	0%	338,785	464,076	503,655	67%
Tuolumne River at LaGrange	17,341	16,872	28,918	60%	1,125,532	1,653,577	1,930,331	58%
Water Available to City	0	0	1,636	0%	201,328	580,260	870,168	23%

[1]Hydrologic Record: 1991-2020

Hetch Hetchy System Operations

Water deliveries via the San Joaquin Pipeline were 246 MGD from August 1 – 17, and 205 MGD from August 18 - 31.

Hetch Hetchy Reservoir power draft and stream releases during the month totaled 28,737 acre-feet. Hetch Hetchy Reservoir minimum instream release requirements for August were 110 cfs. Total precipitation for Water Year 2022, as of September 1, has resulted in a Water Year Type B for Hetch Hetchy Reservoir. Hetch Hetchy Reservoir instream release is 80 cfs for September 1 – 14, and 65 cfs for September 15-30.

Cherry Reservoir power draft and stream releases totaled 11,554 acre-feet for the month of August with power draft providing recreational releases. The required minimum instream release from Cherry Reservoir for August was 15 cfs and will remain at 15 cfs for September. Lake Eleanor required release for August was 20 cfs and will remain at that rate until September 15.

Regional System Treatment Plant Production

The Harry Tracy Water Treatment Plant average production rate for August was 28 MGD. The Sunol Valley Water Treatment Plant was in standby for the month, there was no production.

Regional System Water Delivery

The average August delivery rate was 214 MGD, which is a 2% above the July delivery rate of 209 MGD.

Local Precipitation

The rainfall summary for August 2022 is presented in Table 3.

Table 3
Precipitation Totals at Three Local Area Reservoirs

Weather Station Location	August		October 1, 2021 through August 31, 2022	
	Total (inches)	Percent of Mean for the Month	Total (inches)	Percent of Mean for the Year-To-Date
Pilarcitos Reservoir	0.04	133%	43.19	129%
Lower Crystal Springs Reservoir	0.04	400%	23.20	105%
Calaveras Reservoir	0.00	100%	15.49	86%

*Mean Period = WY 1991-2020

Water Supply and Planned Water Supply Management

Due to carry over storage and conservative water resource management, all three upcountry reservoirs were greater than 80% full as of September 1, 2022. Hetch Hetchy Reservoir, Cherry Reservoir and Lake Eleanor are drafting as current and forecasted inflows are less than minimum instream releases and SJPL deliveries.

Hetch Hetchy Reservoir is drafting via SJPL deliveries and minimum instream releases. Cherry Reservoir is drafting via minimum instream releases; scheduled recreational releases at Holm Powerhouse ended September 5. Lake Eleanor is drafting via minimum instream release. Water Bank has begun crediting as upcountry reservoir releases exceed inflows.

As of September 1, there has been 201,328 acre-feet of water available to the city (Figure 5).

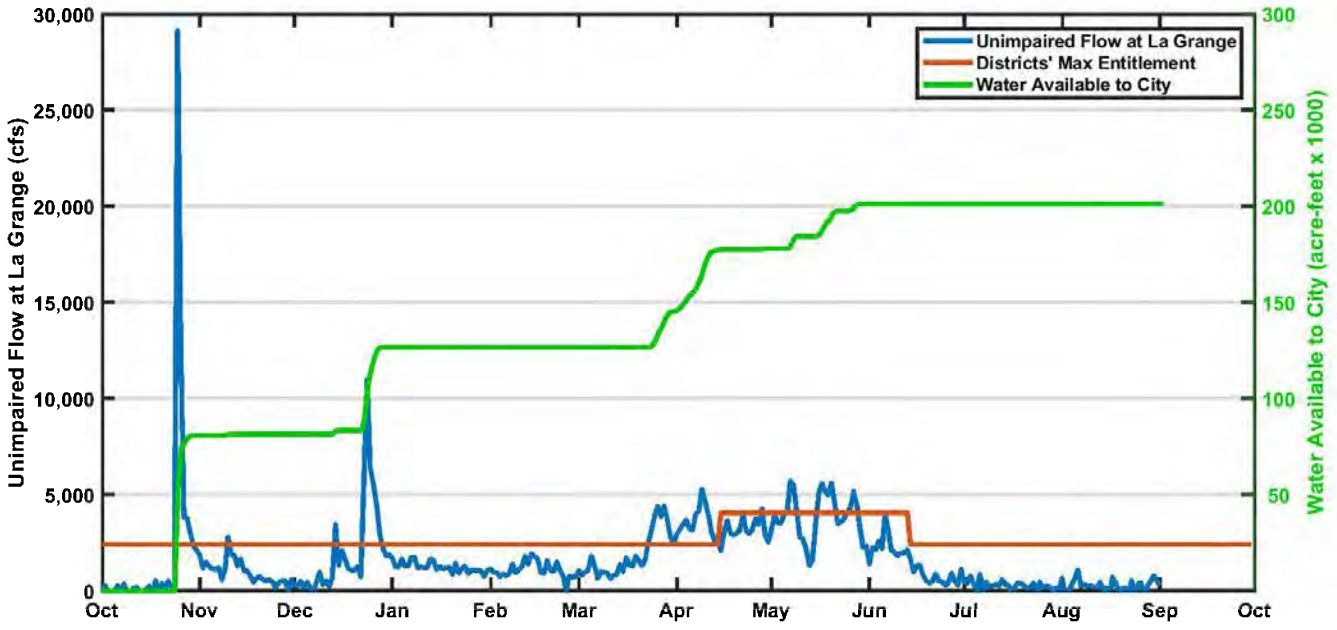


Figure 5: Calculated unimpaired flow at La Grange and the allocation of flows between the Districts and the City.

WATER SERVICE CONNECTION TRANSFER REPORT
TRANSFERS APPROVED FOR THE MONTH OF SEPTEMBER 2022

DONATING APN	PROPERTY OWNER(S)	RECIPIENT APN	PROPERTY OWNER(S)	# OF CONNECTIONS	DATE
047-143-500	Alen Malaki	047-222-260	Jaimon Jose, Tomy Mathew, Genius Construction LLC and Jestine Jose	1 - 5/8"	September 1, 2022
047-141-160	Josh Simpson and Pamela Daniels	048-133-030	Mark Stoloski & Robert Gonzalez	One half (.5) 5/8"	September 28, 2022
047-141-160	Josh Simpson and Pamela Daniels	048-133-040	Mark Stoloski & Robert Gonzalez	One half (.5) 5/8"	September 28, 2022
056-135-520 (Old APN 056-135-240 / 056-135-470)	Jeff & Jessica Cislini	047-192-060	Alexis Genest	1 - 5/8"	September 29, 2022

STAFF REPORT

To: **Coastside County Water District Board of Directors**

From: **Mary Rogren, General Manager**

Agenda: **October 11, 2022**

Report Date: October 7, 2022

Subject: **1) Review the Proposed Water Shortage Rates, Water Financial Plan and Proposed Water Service Rate Adjustments for Calendar Years 2023 and 2024, and Draft Water Financial Plan and Rate Update Study Report; and**
2) Schedule a Public Hearing on Proposed Rate Adjustments for Calendar Years 2023 and 2024 and Authorize Issuance of a Notice of Public Hearing for Proposed Rate Increases effective January 19, 2023 and January 18, 2024

Recommendation:
Review the proposed Water Shortage Rates, water financial plan and proposed water service rate adjustments for calendar years 2023 and 2024. Also review the Draft Water Financial Plan and Rate Update Study Report dated October 2022 prepared by Raftelis Financial Consultants, LLC ("Raftelis").

Schedule a public hearing for Tuesday, December 13, 2022 at 7:00 p.m. during the regular Board of Directors' Meeting on the proposed rate adjustments effective January 19, 2023 and effective January 18, 2024 and authorize the issuance of a Notice of Public Hearing for the proposed rate increases effective January 19, 2023 and effective January 18, 2024.

Background:

At the June 14, 2022 Regular Board of Directors' Meeting, the Board approved the Fiscal Year 2022/23 Operations (O&M) Budget and the Fiscal Year 2022/23 to 2031/32 Capital Improvement Program (CIP). Staff reviewed these plans with the Facilities and Finance Committees in April 2022 and again in May 2022 and presented them at the May 10, 2022 and June 14, 2022 Regular Board meetings. These plans were approved with a rate adjustment to be determined recognizing that they would be used in the development of the District's Water Financial Plan and Rate Update Study for arriving at the District's future rate adjustments.

At the June 14, 2022 Board meeting, the Board also approved for staff to engage Raftelis Financial Consultants, Inc. (Raftelis) to prepare a Water Financial Plan and Rate Update Study and to assist the District in developing a framework for future rate adjustments to Water Service and Water Shortage Rates. The Finance Committee met with Raftelis

on August 11, 2022, and the Board of Directors met with Raftelis in a Special Meeting – Rate Study Workshop on August 24, 2022 to review the financial model developed by Raftelis utilizing the District's approved Fiscal Year 2022/23 O&M Budget and Fiscal Year 2022/23 to 2031/32 CIP. The Raftelis consultants utilized the interactive financial model and modified inputs to the model at the request of Board members to determine the effects of potential water rate increases and debt financing on the District's cash reserves. The Board members discussed various alternatives, including a potential 6% rate increase in January 2023 and a 6% increase in January 2024 with a potential $7 million debt issuance in 2025.

Raftelis applied the proposed 6% increase across the District's current water service rate structure based on its 2018 Cost of Service and Rate Study (discussed below) to arrive at Water Service Rates to be effective January 19, 2023 and again on January 18, 2024. Next Raftelis prepared an update to the Water Shortage Rates based on its Water Shortage Contingency Stage Rate Study dated October 29, 2021 to be effective at the same time. The Finance Committee met with Raftelis on October 4, 2022 on the Water Shortage Rates, and Raftelis will present the proposed Water Shortage Rates at the October 11, 2022 meeting. All of the proposed rates are set forth in the attached draft Proposition 218 Notice of Public Hearing (Exhibit B).

Water Financial Plan and Rate Update Study Report (dated October 5, 2022 – Exhibit A)

In 2018, the District Staff engaged Raftelis to prepare a "Cost of Service and Rate Study" (dated May 15, 2018) in order to develop cost of service-based water rates which would meet the requirements of Proposition 218. This Study was used to set the District's rates for Fiscal Years 2018/19 and 2019/20 and to comply with the substantive requirements of Proposition 218 as interpreted by the courts, including the April 2015 Appellate Court decision in Capistrano Taxpayers Association, Inc. v. City of San Juan Capistrano. The cost of service analysis is the fundamental benchmark used to establish utility rates in the United States. The cost of service analysis is used to allocate/recover the District's costs to users in proportion to their use of the system, recognizing the impact of each customer class on system facilities and operations.

In August 2020, Raftelis conducted an updated study (entitled Water Financial Plan and Rate Update Study dated August 3, 2020) based upon the 2018 Cost of Service Analysis and Rate Study and prepared a financial planning model to develop rates for calendar years 2021 and 2022.

In 2021, Raftelis prepared a Water Shortage Contingency Stage Rate Study (dated October 29, 2021) utilizing the May 15, 2018 Cost of Service and Rate Study as well as the August 3, 2020 Water Financial Plan and Rate Update Study. The Water Shortage

Rates (formerly called Water Shortage Contingency Stage Rates) were approved by the Board at the January 11, 2022 regular Board Meeting.

The October 5, 2022 Water Financial Plan and Rate Update Study Report provides an update to the District's financial model, Water Service Rates and Water Shortage Rates utilizing the May 2018 Cost of Service and Rate Study and updated O&M Budget and CIP information. The study supports the proposed "up to 6%" rate adjustment to be effective January 19, 2023 and "up to 6%" rate adjustment to be effective January 18, 2024 and potential of $7 Million in debt financing discussed by the Board of Directors at the August 24, 2022 workshop.

Water Shortage Rates:

Given Proposition 218 requirements, Water Shortage Rates are designed to recover lost revenue due to the reduction in water, to incorporate the potential changes to the District's water supply sources and their corresponding costs; to align with specific water shortage stages as outlined in the 2020 Water Shortage Contingency Plan; and to provide financial flexibility for the District when declaring water shortage emergency stages and implementing the appropriate Water Shortage Rates.

The purpose of Water Shortage Rates is strictly financial to enable the District to maintain financial stability at the various stages of water shortages as defined by the District's 2020 Water Shortage Contingency Plan. Water Shortage Rates should not be construed to be penalties. The Water Shortage Rates consider the financial impacts of each of the following water shortage stages as defined by the District:

Drought Stages – Shortage Levels:

Stage 1	**Up to 10%**	***Water Shortage Advisory***
Stage 2	**Up to 20%**	***Water Shortage Emergency Warning***
Stage 3	**Up to 30%**	***Water Shortage Emergency***
Stage 4	**Up to 40%**	***Water Shortage Severe Emergency***
Stage 5	**Up to 50%**	***Water Shortage Extreme Emergency***
Stage 6	**Up to 60%**	***Water Shortage Catastrophic (Extraordinary) Emergency***

In addition, based on Proposition 218 requirements, the resulting Water Shortage Rates are the maximum that the Board of Directors can implement. When officially declaring a water shortage stage based upon the 2020 Water Shortage Contingency Plan, the Board has the discretion to implement a lower or no water shortage rate, use reserves to make up for lost revenue, defer capital projects, or a combination of strategies.

The water shortage rate structure follows the same rate structure as the Water Shortage Rates approved on January 11, 2022 and is based on the Raftelis Water Shortage

Contingency Stage Rate Study dated October 29, 2021 and applies a uniform percentage increase to all quantity charges, regardless of customer class or tier.

Utilizing the financial model update presented to the Board of Directors at the August 24, 2022 Rate Study Workshop (and presented in the attached draft Water Financial Plan and Rate Update Study report dated October 5, 2022), Raftelis calculated the proposed Water Shortage Rates to be effective January 19, 2023 as follows:

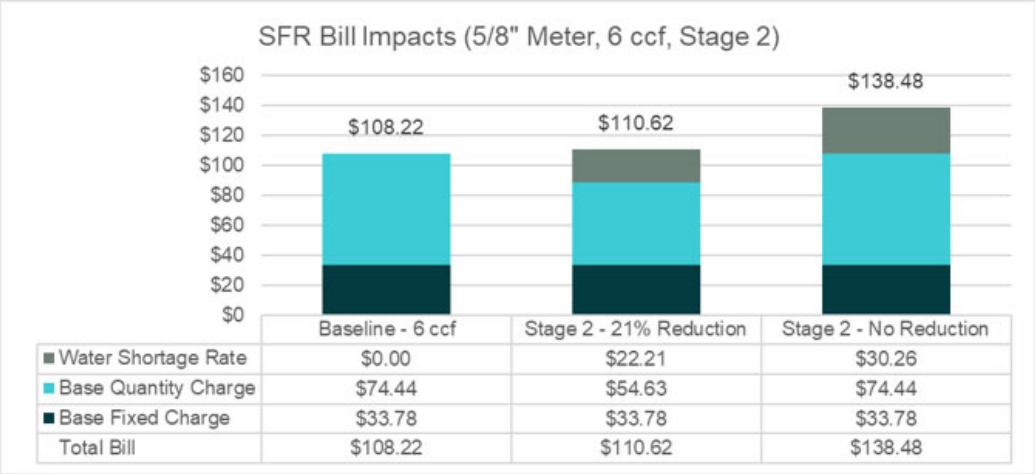
Table 5-10: Proposed 2023 Water Shortage Rates Effective January 19, 2023

A Customer Class	B Baseline	C Stage 1	D Stage 2	E Stage 3	F Stage 4	G Stage 5	H Stage 6
Drought Increase (%)		23%	41%	57%	79%	119%	236%
Proposed Water Shortage Rates							
Single Family							
Tier 1	$0.00	$2.47	$4.37	$6.14	$8.52	$12.85	$25.42
Tier 2	$0.00	$3.60	$6.39	$8.98	$12.46	$18.79	$37.16
Tier 3	$0.00	$4.36	$7.73	$10.87	$15.07	$22.73	$44.97
Multi-Family	$0.00	$3.29	$5.82	$8.19	$11.36	$17.12	$33.88
Non-Residential	$0.00	$3.50	$6.21	$8.73	$12.10	$18.25	$36.10
Combined Quantity Rates							
Single Family							
Tier 1	$10.75	$13.22	$15.12	$16.89	$19.27	$23.60	$36.17
Tier 2	$15.72	$19.32	$22.11	$24.70	$28.18	$34.51	$52.88
Tier 3	$19.02	$23.38	$26.75	$29.89	$34.09	$41.75	$63.99
Multi-Family	$14.33	$17.62	$20.15	$22.52	$25.69	$31.45	$48.21
Non-Residential	$15.27	$18.77	$21.48	$24.00	$27.37	$33.52	$51.37

The proposed Water Shortage Rates shown in Table 5-10 above is the incremental cost attributed to the water shortage. The Combined Quantity adds the "Baseline" or Quantity Charge per unit during non-shortage period included on the Rate and Fee Schedule plus the Water Shortage Rate.

An example of the bill impact is shown in the next figure using typical monthly use of 6 units by a residential customer. This figure demonstrates that when the District's customers comply with the recommended water usage reductions as defined in the Water Shortage Contingency Plan, the impact to customer bills will be minimal.

Figure 5-1: Single Family Residential Bill Impacts



These Water Shortage Rates would adjust again as part of the January 18, 2024 rate adjustment as shown below:

Table 5-10A: Proposed 2024 Water Shortage Rates Effective January 18, 2024

A Customer Class	B Baseline	C Stage 1	D Stage 2	E Stage 3	F Stage 4	G Stage 5	H Stage 6
Drought Increase (%)		22%	40%	57%	79%	120%	238%
Proposed Water Shortage Rates							
Single Family							
Tier 1	$0.00	$2.57	$4.58	$6.48	$9.03	$13.67	$27.17
Tier 2	$0.00	$3.75	$6.69	$9.47	$13.20	$19.98	$39.71
Tier 3	$0.00	$4.53	$8.10	$11.46	$15.97	$24.18	$48.05
Multi-Family	$0.00	$3.42	$6.10	$8.64	$12.03	$18.22	$36.20
Non-Residential	$0.00	$3.64	$6.50	$9.21	$12.83	$19.42	$38.59
Combined Quantity Rates							
Single Family							
Tier 1	$11.40	$13.97	$15.98	$17.88	$20.43	$25.07	$38.57
Tier 2	$16.66	$20.41	$23.35	$26.13	$29.86	$36.64	$56.37
Tier 3	$20.16	$24.69	$28.26	$31.62	$36.13	$44.34	$68.21
Multi-Family	$15.19	$18.61	$21.29	$23.83	$27.22	$33.41	$51.39
Non-Residential	$16.19	$19.83	$22.69	$25.40	$29.02	$35.61	$54.78

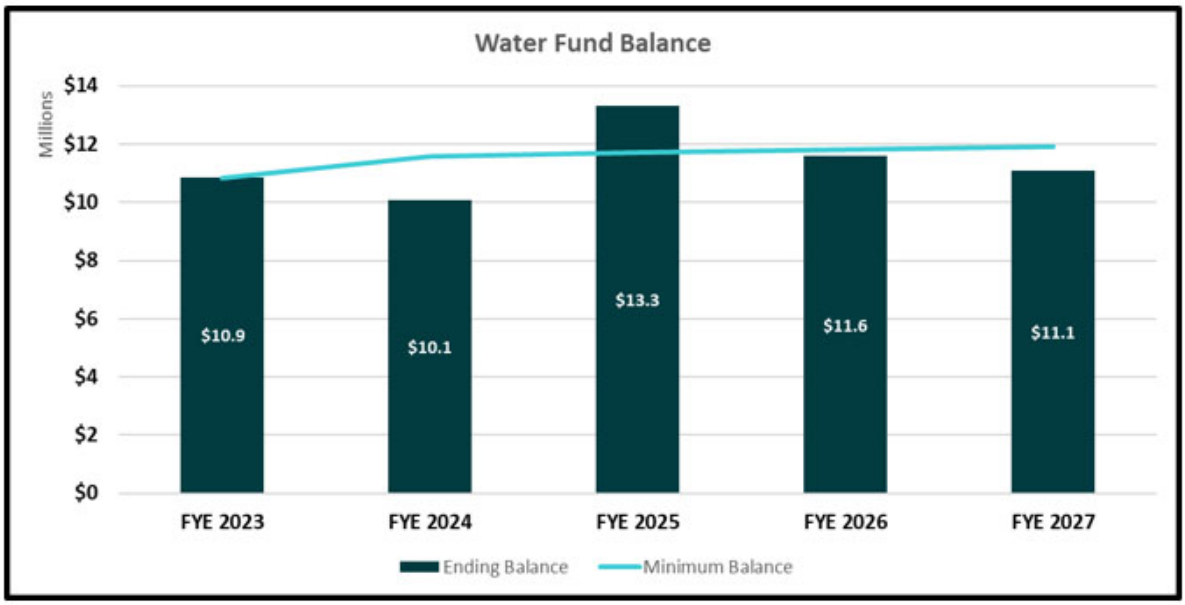
Statute of Limitations for Challenging Proposed Rates

Pursuant to California Government Code section 53759, there is a 120-day statute of limitations for challenging all the rates described in this staff report and set forth in the attached Proposition 218 Notice of Public Hearing from the date the Board of Directors adopts the resolution amending the Rate and Fee Schedule that approves these rates.

Review of Financial Model

At the October 11, 2022 Board Meeting, the Board will have the opportunity to review the financial model prepared by Raftelis. The financial model assumes a 6% increase in January 2023 and a 6% increase in January 2024, and $7 Million of debt financing in Fiscal Year 2025. The resulting impact on ending cash reserves (water fund balance) is shown in the figure below. Given these rate increases, reserves can stay in the range of the minimum balance per the District's reserve requirements.

Figure 2-6: Proposed Ending Fund Balances



Schedule a Public Hearing and Authorize Issuance of Proposition 218 Notice

In order to comply with the requirements of Proposition 218, the recommended Board action would schedule a public hearing for Tuesday, December 13, 2022 at 7:00 p.m. during the regular Board of Directors meeting and authorize issuance of a Notice of a Public Hearing to amend the District's Rate and Fee Schedule to adjust rates effective January 19, 2023 and January 18, 2024.* Following the public hearing, the Board can adopt the amendment. If a majority of affected property owners submit written protests, the amendment cannot be adopted.

A draft of the proposed Proposition 218 Notice of Public Hearing is attached as Exhibit B. The Notice of Public Hearing includes all the proposed rate adjustments and additional information.

(Note – The effective date reflects the start of a billing period to avoid pro-ration of rates over two billing periods.)*

Attachments

Exhibit A – Draft Water Financial Plan and Rate Update Study Report – Raftelis Financial Consultants, Inc. dated October 5, 2022

Exhibit B – Draft Proposition 218 Notice of Public Hearing

Exhibit A

Coastside

COUNTY WATER DISTRICT

Water Financial Plan and Rate Update Study

Draft Report / October 2022

RAFTELIS

COASTSIDE COUNTY WATER DISTRICT

RAFTELIS

October 7, 2022

Mary Rogren
General Manager
Coastside County Water District
766 Main Street
Half Moon Bay, CA 94019

Subject: Water Financial Plan and Rate Update Study Report

Dear Mary Rogren,

Raftelis Financial Consultants, Inc. (Raftelis) is pleased to provide this Water Financial Plan and Rate Update Study Report for the Coastside County Water District (District).

The major objectives of the study include the following:

- Developing a long-term financial plan that sufficiently funds operating expenses, capital replacement and improvement costs, and prudent reserve balances
- Calculating water rates that fully recover costs to serve customers, while minimizing rate impacts to the extent possible, and promoting affordability for essential needs
- Designing water shortage rates that recover all costs related to drought at each drought stage following the usage reduction guidelines of the District's 2020 Water Shortage Contingency Plan
- Preparing a study report, or administrative record, that clearly and comprehensively explains each step of the rate study process
- Developing water and water shortage rates that are in alignment with cost of service principles and Proposition 218 requirements

The report details the long-term financial plan and proposed rates for the District's water utility. It was a pleasure working with you and your team and we wish to express our gratitude for the support you and the other District staff provided to us during the study.

Sincerely,

Kevin Kostiuk
Project Director

Nancy Phan
Project Manager

Lindsay Roth
Lead Analyst

445 S Figueroa St Suite 1925
Los Angeles, CA 90071
www.raftelis.com

Table of Contents

1.1. List of Tables

1.2. List of Figures

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1. Executive Summary

1.1. Study Background

In 2022, the Coastside County Water District contracted with Raftelis to conduct a Water Rate Study, which includes the development of a long-term financial plan, proposed water rates, and proposed water shortage rates. The study culminates in two years of water and water shortage rate recommendations based on the results of financial planning exercise and the calculation of water shortage rates based on the most recent Water Shortage Contingency Plan. This Executive Summary outlines the rate proposal and contains a description of the study process, methodology, and recommendations for the District's water rates and water shortage rates.

1.2. Objectives of the Study

The major component and objectives of the study include:

1. Developing a long-term financial plan that meets the water utility's revenue requirements, including operations and maintenance (O&M) expenses and the capital improvement plan (CIP), while adequately funding reserves in accordance with industry best practices and the District's adopted financial practices
2. Developing two years of water rates that align with Proposition 218 requirements and ensure financial sufficiency to fund operating and capital costs over the study period
3. Developing water shortage rates that recover the financial impacts of each drought stage based on the cost of providing service

1.3. Current Rates

The District's current water rates were implemented January 1, 2022 and include a monthly base charge based on meter size, a monthly fire service charge for private fire customers based on fire line size, a tiered quantity charge for single family residential (SFR) customers charged for every hundred cubic feet (ccf) of water used, and a uniform rate for all other customer classes charged for every ccf of water used.

Table 1-1 shows the current monthly base charges by meter size. **Table 1-2** shows the current monthly fire service charges by line size. **Table 1-3** shows the current tiered quantity charges by customer class and monthly tiers.

Table 1-1: Current Monthly Base Charge

Line	A Meter Size	B Current
1	5/8"	$31.87
2	3/4"	$47.09
3	1"	$77.52
4	1 1/2"	$153.60
5	2"	$244.91
6	3"	$534.02
7	4"	$960.12

Table 1-2: Current Monthly Fire Service Charges

Line	A Fire Line Size	B Current
1	3/4"	$5.35
2	1"	$7.13
3	1 1/2"	$10.70
4	2"	$14.26
5	3"	$21.39
6	4"	$28.52
7	6"	$42.78
8	8"	$57.04
9	10"	$71.30

Table 1-3: Current Quantity Charges

Line	A Quantity Charges	B Current
1	Single Family	
2	Tier 1	$10.14
3	Tier 2	$14.83
4	Tier 3	$17.94
5	Multi-Family	$13.52
6	Non-Residential	$14.41

1.4. Process and Approach

Raftelis held several meetings with District staff to discuss and understand objectives, characteristics, and challenges of the District's water and utility to provide the recommendations and results detailed in this report. Raftelis confirmed various assumptions and inputs and used an iterative process to view several scenarios to determine the recommended financial plan and water and water shortage rates. District staff discussed the capital project requirements and capital funding sources over a five-year horizon, which are the primary drivers of the future revenue needs of the utility. Raftelis then proposed a two-year rate schedule based on the adjustments needed as a result of the financial planning process.

The proposed financial plan detailed in this report follows industry standards for long-term financial planning. The financial plan relies on reasonable assumptions based on industry indices, such as general inflation based on the Consumer Price Index (CPI) and input from District staff. Raftelis worked closely with District staff to determine

the most accurate methodology to project future revenues and expenses to reinforce sound fiscal management practices.

The financial plan includes the five-year period between FY 2023 to FY 2027. Each fiscal year begins on July 1 and ends on July 30. For example, FY 2023 is defined as the year beginning on July 1, 2022 and ending on June 30, 2023. The proposed rates were developed for implementation on January 1, 2023 in FY 2023 and in January of the following year.

1.5. Legal Framework[1]

1.5.1. CALIFORNIA CONSTITUTION – ARTICLE XIII D, SECTION 6 (PROPOSITION 218)

Proposition 218 was enacted by voters in 1996 to ensure, in part, that fees and charges imposed for ongoing delivery of a service to a property (property-related fees and charges) are proportional to, and do not exceed, the cost of providing service. Water service fees and charges are property-related fees and charges subject to the provisions of California Constitution Article XIII D, Section 6 (Proposition 218). The principal requirements, as they relate to public water service fees and charges are as follows:

1. Revenues derived from the fee or charge shall not exceed the costs required to provide the property-related service.
2. Revenues derived by the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
3. The amount of the fee or charge imposed upon any parcel shall not exceed the proportional cost of service attributable to the parcel.
4. No fee or charge may be imposed for a service unless that service is actually used or immediately available to the owner of property.
5. A written notice of the proposed fee or charge shall be mailed to the record owner of each parcel not less than 45 days prior to a public hearing, when the agency considers all written protests against the charge.

As stated in the American Water Works Association's (AWWA) *Principles of Water Rates, Fees, and Charges, 7th edition* (M1 Manual), "water rates and charges should be recovered from classes of customers in proportion to the cost of serving those customers." Raftelis follows industry standard rate setting methodologies set forth by the AWWA M1 Manual to ensure that the results of this study align with Proposition 218 requirements and create rates that do not exceed the proportionate cost of providing water service.

1.5.2. CALIFORNIA CONSTITUTION – ARTICLE X, SECTION 2

Article X, Section 2 of the California Constitution states the following:

> *"It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare."*

[1]Raftelis does not practice law, nor does it provide legal advice. The above discussion provides a general overview of Raftelis' understanding as rate practitioners and is labeled "legal framework" for literary convenience only. The District should consult with its legal counsel for clarification and/or specific guidance.

Article X, Section 2 of the State Constitution establishes the need to preserve the state's water supplies and to discourage the waste or unreasonable use of water by encouraging conservation. Public agencies are constitutionally mandated to maximize the beneficial use of water, prevent waste, and encourage conservation.

In addition, Section 106 of the California Water Code declares that the highest priority use of water is for domestic purposes, with irrigation water secondary. To meet the objectives of Article X, Section 2 and the California Water Code, a water purveyor may utilize its water rate design to incentivize the efficient use of water. The District established tiered water rates (also known as "inclining tier" or "inclining block") to incentivize customers to use water in an efficient manner. The inclining tier rates (as well as rates for uniform rate classes) need to be based on the proportionate costs incurred to provide water to, and within, each customer class to align with Proposition 218.

Tiered water rate structures, when properly designed and differentiated by customer class, allow a water utility to send conservation price signals to customers while proportionately allocating the costs of service. Due to a necessity in reducing water waste and increasing efficiency, tiered water rates are ubiquitous, especially in relatively water-scarce regions like California. Tiered rates align with the requirements of Proposition 218 if the tiered rates reflect the proportionate cost of providing service *within* each tier.

1.6. Financial Plan Results and Recommendations

1.6.1. FACTORS AFFECTING REVENUE REQUIREMENTS

The following items affect the water utility's costs and thus its water rates. The utility's expenses include O&M expenses, capital project costs, debt service, and reserve funding.

- **O&M Funding:** There are a few factors influencing the increase in spending on O&M. First, higher than usual inflation has led to higher O&M costs than were previously planned for under the current water rates. Next, because of recent drought conditions, San Francisco Public Utilities Commission (SFPUC) variable purchased water costs are increasing 16% in FY 2023 and an additional 11% in FY 2024.
- **Capital Funding:** The water utility has approximately $35.5M in planned capital expenditures from FY 2023 through FY 2027. Planned capital project costs are anticipated to be entirely cash funded through net rate revenues and existing and future reserves in FY 2023 and FY 2024. In FY 2025, the District plans to receive $7M in debt proceeds to fund most of the CIP in that year, with the remainder and all CIP in FY 2026 and FY 2027 cash funded.
- **Reserve Funding:** Reserve targets are adopted to ensure enough cash on hand to meet routine cash flow needs, provide adequate for planned repairs and replacements (R&R) CIP, navigate emergencies in the event of asset failure or natural disaster, and to protect ratepayers from rate spikes. **Table 1-4** summarizes the District's current reserve policy.

Table 1-4: Reserve Policy

	A	B	C
Line	Reserve Policy	Target Policy	FY 2023 Target
1	Operating	25% of Operating Expenses	$2,625,543
2	Capital	Average CIP over 5 years	$7,099,234
3	Debt Service	Annual Debt Service Payments	$1,094,498
4	**Total**		**$10,819,276**

1.6.2. FINANCIAL PLAN RESULTS

Table 1-6 shows the proposed revenue adjustments that allows the District to maintain financial sufficiency, fund operating and capital expenses, and achieve recommended cash reserves for the water utility. The proposed adjustments apply to the District's rate revenues, which were projected for future years assuming no growth in customer accounts during the study period. Water demand in FY 2022 represents estimated baseline use for the District's customers. **Table 1-5** shows the projected water demand and usage from FY 2022 to FY 2027. Demand is expected to drop in FY 2023 as a result of the current drought and incrementally recover to pre-drought demand by FY 2025.

Table 1-5: Projected Water Demand and Usage

	A	B	C	D	E	F	G
Line	Consumption (ccf)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
1	Single Family Residential						
2	Tier 1	231,604	226,277	246,642	257,001	257,001	257,001
3	Tier 2	103,832	101,444	110,574	115,218	115,218	115,218
4	Tier 3	53,314	52,088	56,776	59,160	59,160	59,160
5	Multi-Family Residential	39,513	38,604	42,079	43,846	43,846	43,846
6	Non-Residential	324,970	317,496	346,070	360,605	360,605	360,605
7	**Total**	**753,233**	**735,909**	**802,140**	**835,830**	**835,830**	**835,830**

The proposed revenue adjustments represent the increase to total rate revenues required to recover the water utility's costs and not the expected impact to each customer class. Revenue adjustments are applied across all charges, classes, and tiers proportional to the current rates.

Table 1-6: Proposed Revenue Adjustments

	A	B	C
Line	Revenue Adjustment	FY 2023	FY 2024
1	Effective Month	January	January
2	Percent Adjustment	6.0%	6.0%

Figure 1-1 shows the five-year financial plan for FY 2023 through FY 2027. The stacked bars represent the costs of the water utility: O&M expenses make up most of the water financial plan (dark blue bars). Water supply costs are shown in the light blue bars, rate funded CIP is shown in the gray bars, and debt service is shown in the green bars. Cash to reserves (yellow bars) represents revenue used to contribute to reserve targets and is seen in FY 2025. This means that in all other years of the study, reserves are withdrawn to pay for operating expenses or rate funded capital projects. Current revenues (solid line) equal the projected revenues at the District's existing water rates and proposed revenues (dotted line) equal the projected revenues with the proposed revenue adjustments in **Table 1-6** applied.

Figure 1-1: Proposed Water Financial Plan

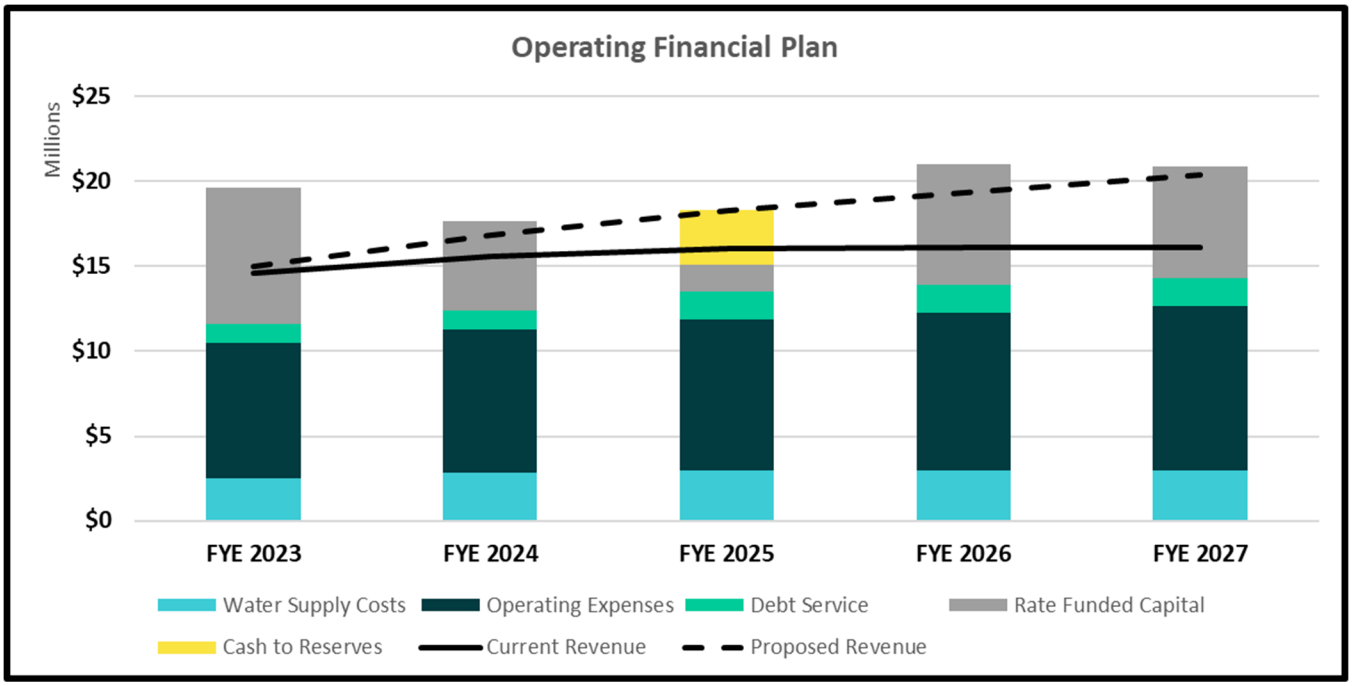


Figure 1-2 shows the combined ending fund balances from FY 2023 to FY 2027. The minimum reserve target (light blue line) is determined based on the recommended reserve policy targets in **Table 1-4**. The ending fund balances meet or almost meet the reserve targets in all years.

Figure 1-2: Proposed Fund Balances

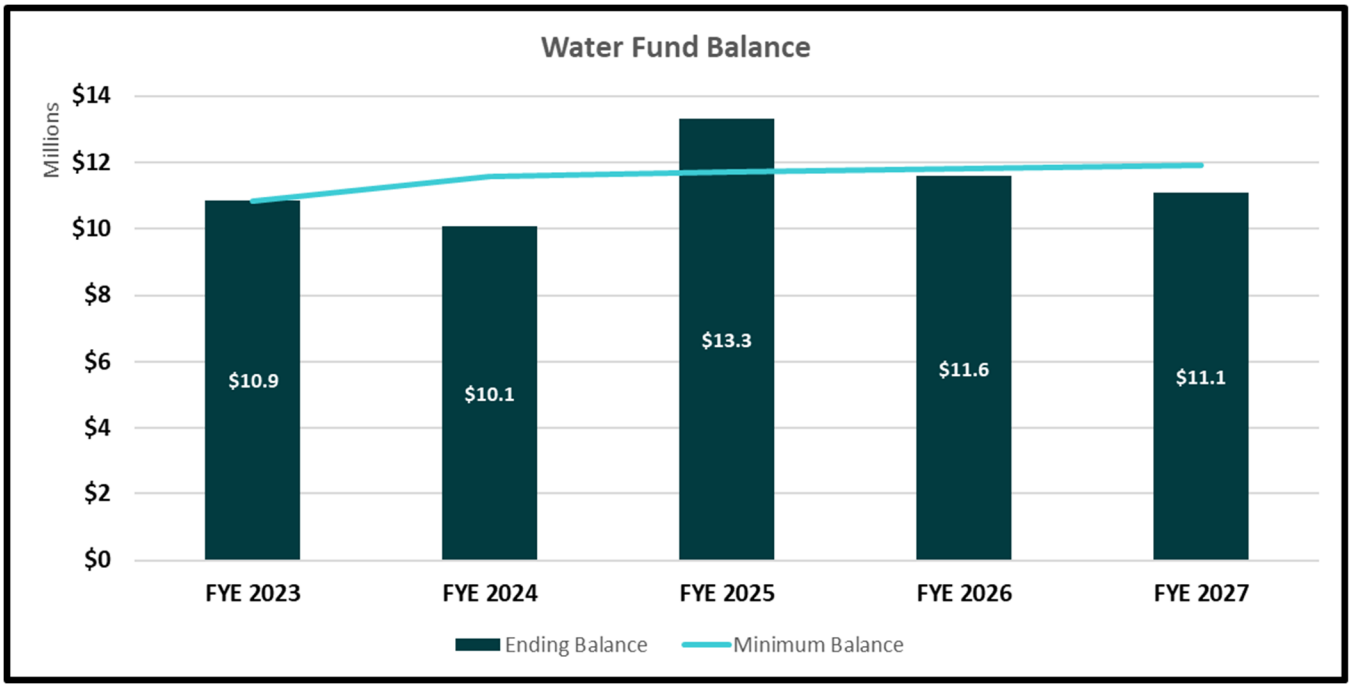
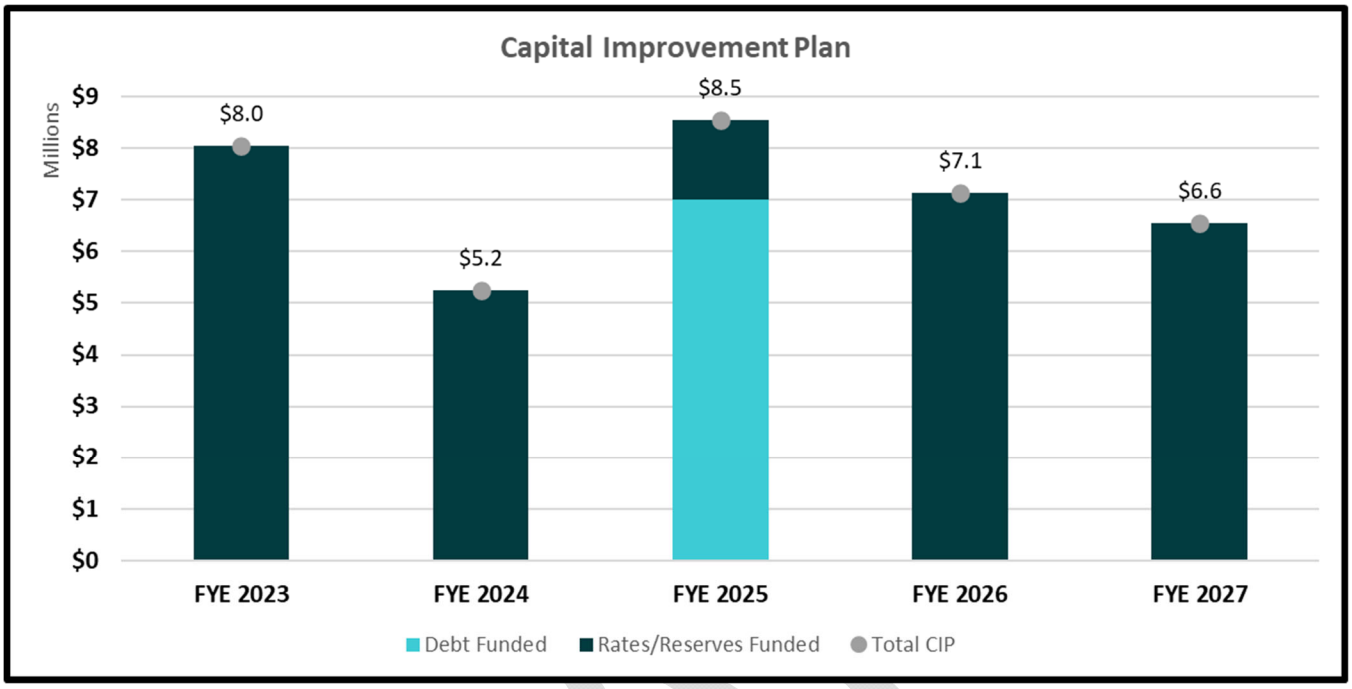


Figure 1-3 shows the five-year CIP expenditures from FY 2023 through FY 2027. All planned CIP expenses in FY 2023, FY 2024, FY 2026, and FY 2027 are anticipated to be entirely cash funded through rate revenues and

existing capital reserves. Most of the CIP expenses for FY 2025 will be funded through $7M in debt proceeds, with the remaining $1.5M funded through rate revenues and capital reserves.

Figure 1-3: Planned CIP Expenditures



1.7. Proposed Water Rates

Table 1-7, **Table 1-8**, and **Table 1-9** show the proposed monthly base charges, monthly fire service charges, and quantity charges, respectively, for FY 2023 and FY 2024 based on the above recommendations. The proposed water rates are reflective of an across-the-board increase based on the District's existing water rate structure, developed in the 2018 Water Cost of Service and Rate Study. Rates for both years are determined based on the corresponding revenue adjustments in **Table 1-6**.

Table 1-7: Proposed Monthly Base Charges

Line	A Meter Size	B Current FY 2022	C Proposed FY 2023	D Proposed FY 2024
1	5/8"	$31.87	$33.78	$35.81
2	3/4"	$47.09	$49.92	$52.92
3	1"	$77.52	$82.17	$87.10
4	1 1/2"	$153.60	$162.82	$172.59
5	2"	$244.91	$259.60	$275.18
6	3"	$534.02	$566.06	$600.02
7	4"	$960.12	$1,017.73	$1,078.79

Table 1-8: Proposed Monthly Fire Service Charges

Line	A Fire Line Size	B Current FY 2022	C Proposed FY 2023	D Proposed FY 2024
1	3/4"	$5.35	$5.67	$6.01
2	1"	$7.13	$7.56	$8.01
3	1 1/2"	$10.70	$11.34	$12.02
4	2"	$14.26	$15.12	$16.03
5	3"	$21.39	$22.67	$24.03
6	4"	$28.52	$30.23	$32.04
7	6"	$42.78	$45.35	$48.07
8	8"	$57.04	$60.46	$64.09
9	10"	$71.30	$75.58	$80.11

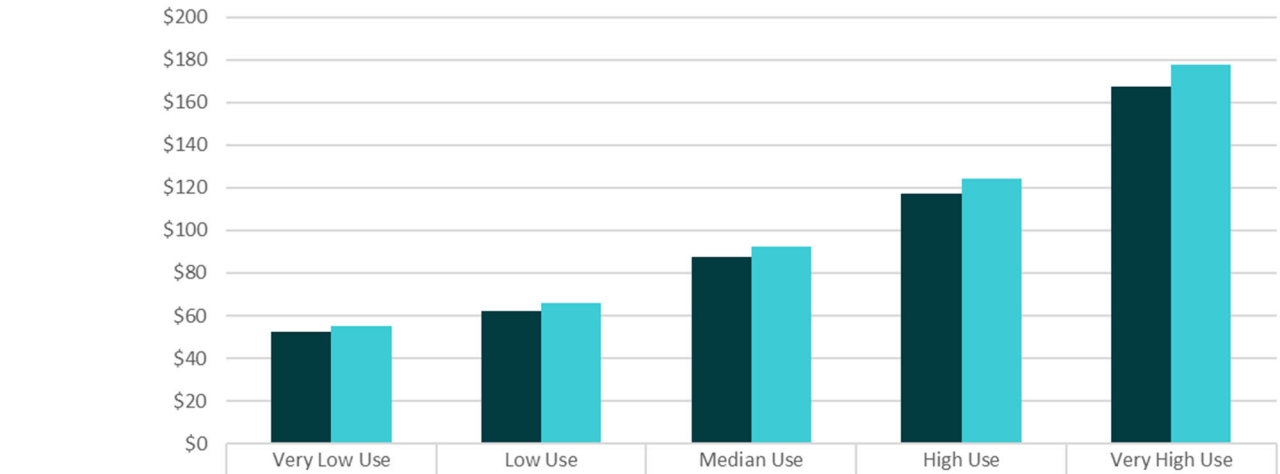
Table 1-9: Proposed Quantity Charges

Line	A Customer Class	B Current FY 2022	C Proposed FY 2023	D Proposed FY 2024
1	Single Family			
2	Tier 1	$10.14	$10.75	$11.40
3	Tier 2	$14.83	$15.72	$16.66
4	Tier 3	$17.94	$19.02	$20.16
5	Multi-Family	$13.52	$14.33	$15.19
6	Non-Residential	$14.41	$15.27	$16.19

1.8. Customer Impacts

Figure 1-4 shows the proposed FY 2023 monthly bill impacts for SFR customers at various levels of water usage. The impacts show bills for a 5/8" meter, the most common meter size for SFR customers. Bill increases match the rate adjustment at 6%.

Figure 1-4: Single Family Residential Bill Impacts



	Very Low Use	Low Use	Median Use	High Use	Very High Use
Current Monthly Bill	$52.15	$62.29	$87.26	$116.92	$167.63
Proposed Monthly Bill	$55.28	$66.03	$92.50	$123.94	$177.70
Difference (%)	6.0%	6.0%	6.0%	6.0%	6.0%
Difference ($)	$3.13	$3.74	$5.24	$7.02	$10.07
Usage (hcf)	2	3	5	7	10

1.9. Water Shortage Rates

The District engaged Raftelis to update water shortage rates as part of the Water Rate Study. The District adopted its latest Water Shortage Contingency Plan in June 2021, which details the six drought stages and the corresponding water usage reductions. The resulting water shortage rates align with Proposition 218 requirements and allow the District to reliably recover the necessary revenue to fully fund the water system in times of drought.

The major objectives when developing water shortage rates include:

- Determine water allocations for each customer class during each drought stage based on the 2020 Water Shortage Contingency Plan
- Calculate the financial impacts of reduced water sales and changes to water supply sources
- Evaluate various rate structures to determine the structure best suited to meet the District's needs
- Develop water shortage rates that recover the financial impacts of each drought stage based on the cost of providing service

1.9.1. PROCESS AND APPROACH

Water shortage rates are governed by the requirements of Proposition 218 and Article X of the California Constitution. The development of the water shortage rates must show the nexus between the costs of providing water service and the rates charged to customers, should maximize the beneficial use of water (often defined as indoor use for health and hygiene), and should encourage conservation.

Water shortage rates are designed to recover lost revenue due to reduction in water use during each stage, to incorporate the potential changes to the District's water supply sources and their corresponding costs, to align with specific drought stages outlined in the 2020 Water Shortage Contingency Plan, and to provide financial flexibility for the District when declaring drought stages and implementing the appropriate water shortage rates. The

proposed rates are based on the District's proposed water rates for FY 2023, which will go into effect January 1, 2023.

There are four steps to calculating water shortage rates, which include:

1. Allocating water reductions between various customer classes based on defined drought stages
2. Calculating financial impacts to the District in each stage
3. Determining the most appropriate drought cost recovery mechanism (rate structure)
4. Evaluating financial impacts to customers

District staff provided the Water Shortage Contingency Plan which was adopted in 2021. **Table 1-10** shows the overall reduction targets for the entire water system.

Table 1-10: Drought Stages and Reduction

	A	B	C	D	E	F	G	H
Line	Customer Class	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
1	Single Family Residential	0%	15%	21%	30%	36%	41%	52%
2	Multi-Family Residential	0%	14%	21%	30%	35%	41%	52%
3	Non-Residential	0%	5%	21%	30%	43%	62%	88%
4								
5	Target Reduction Goal	0%	≤10%	20%	30%	40%	50%	>50%

The water sales by drought stage are calculated using the target reductions developed in the Water Shortage Contingency Plan. **Table 1-11** shows the estimated water sales in ccf for each stage of drought that aligns with the percent reductions shown above in **Table 1-10**. Baseline is defined as the "new normal" water usage, which is approximately equal to the projected water usage in FY 2025.

Table 1-11: Estimated Water Sales by Stage (ccf)

	A	B	C	D	E	F	G	H
Line	Customer Class	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
1	**Total (ccf)**	**836,842**	**747,859**	**661,106**	**585,790**	**510,745**	**417,918**	**271,709**
2	% Reduction	0%	11%	21%	30%	39%	50%	68%

A key step in a water shortage rate study is to calculate the financial implications for the District during a drought. Considerations include:

- How much commodity revenue is expected due to cutbacks?
- How much will this change the District's water supply mix and the costs associated with each source?
- How will this change the District's operating costs, if at all?

For the District, the most significant financial consequence is the loss of consumption-based revenue, the severity of which depends on the drought stage. Drought conditions will also require more staff to be hired to handle conservation efforts and respond to an increase in customer service requests. The District will also expect changes to the cost of purchased water from SFPUC. Local sources of water will be reduced in Stage 1 and may be eliminated from the supply mix entirely by Stage 2, which will increase the demand for purchased water and increasing purchased water costs overall through Stage 3. However, by Stage 4, the reduction in demand will decrease the overall purchase cost of water below what it was during baseline conditions, so the cost of water will result in cost savings in Stages 4-6.

Based on direction provided by District staff, the water shortage rates were developed as a uniform percentage increase to the proposed water usage charges for FY 2023, which allows for the ability of customers to change their water bill, encourages conservation, and promotes affordability.

1.9.2. PROPOSED WATER SHORTAGE RATES

Table 1-12 shows the proposed water shortage rates by customer class and tier for Stages 1 through 6. The water shortage rates for each stage are calculated based on the proportion of drought costs that need to be recovered in each stage multiplied by the base water usage rates. The water shortage rate methodology is based on the prior January 2022 rate study. Based on Proposition 218 requirements, the resulting water shortage rates are the maximum that the Board of Directors can implement. When officially declaring a drought stage, the Board has the discretion to implement a lower water shortage rate, use reserves to make up for lost revenue, defer capital projects to reduce total expenditures, or a combination of any of these strategies to best meet the needs of the District.

Table 1-12: Proposed Water Shortage Rates ($/ccf)

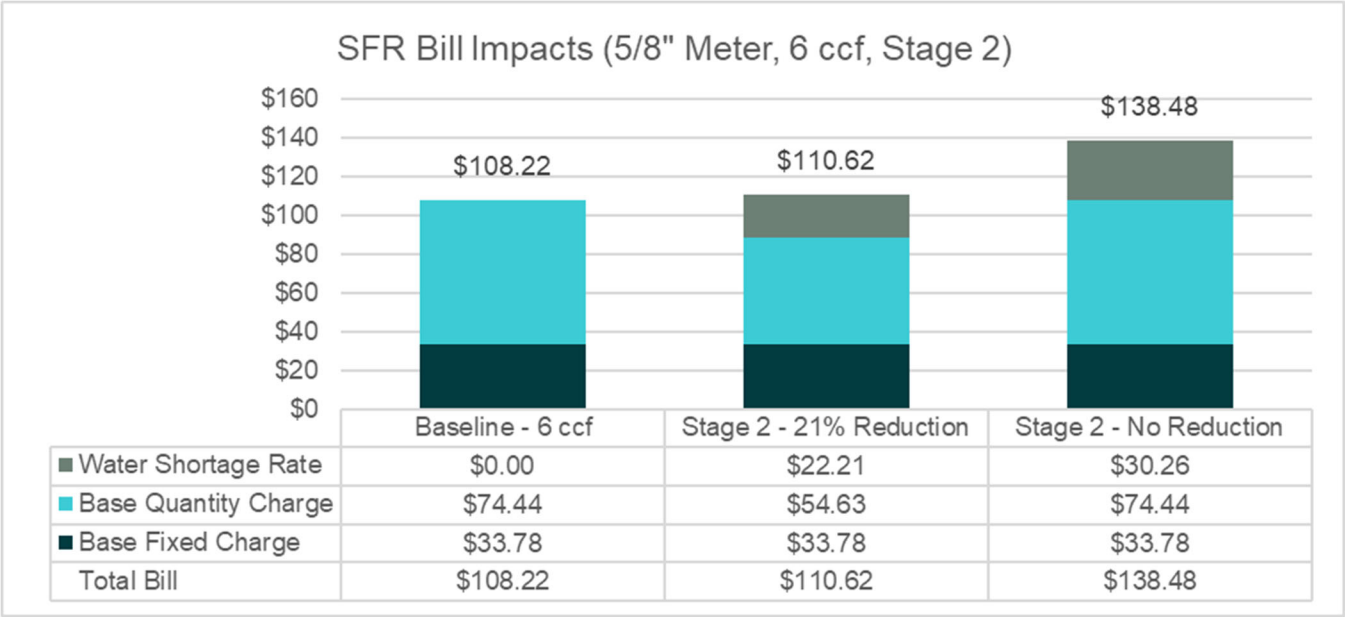
	A	B	C	D	E	F	G
Line	Customer Class	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
1	Single Family						
2	Tier 1	$2.47	$4.37	$6.14	$8.52	$12.85	$25.42
3	Tier 2	$3.60	$6.39	$8.98	$12.46	$18.79	$37.16
4	Tier 3	$4.36	$7.73	$10.87	$15.07	$22.73	$44.97
5	Multi-Family	$3.29	$5.82	$8.19	$11.36	$17.12	$33.88
6	Non-Residential	$3.50	$6.21	$8.73	$12.10	$18.25	$36.10

1.9.3. CUSTOMER IMPACTS

Figure 1-5 through **Figure 1-7** show the bill impacts for a Single Family, Multi-Family, and Non-Residential customer, respectively. Each bill calculation uses the most common meter size and the median usage for that customer class.

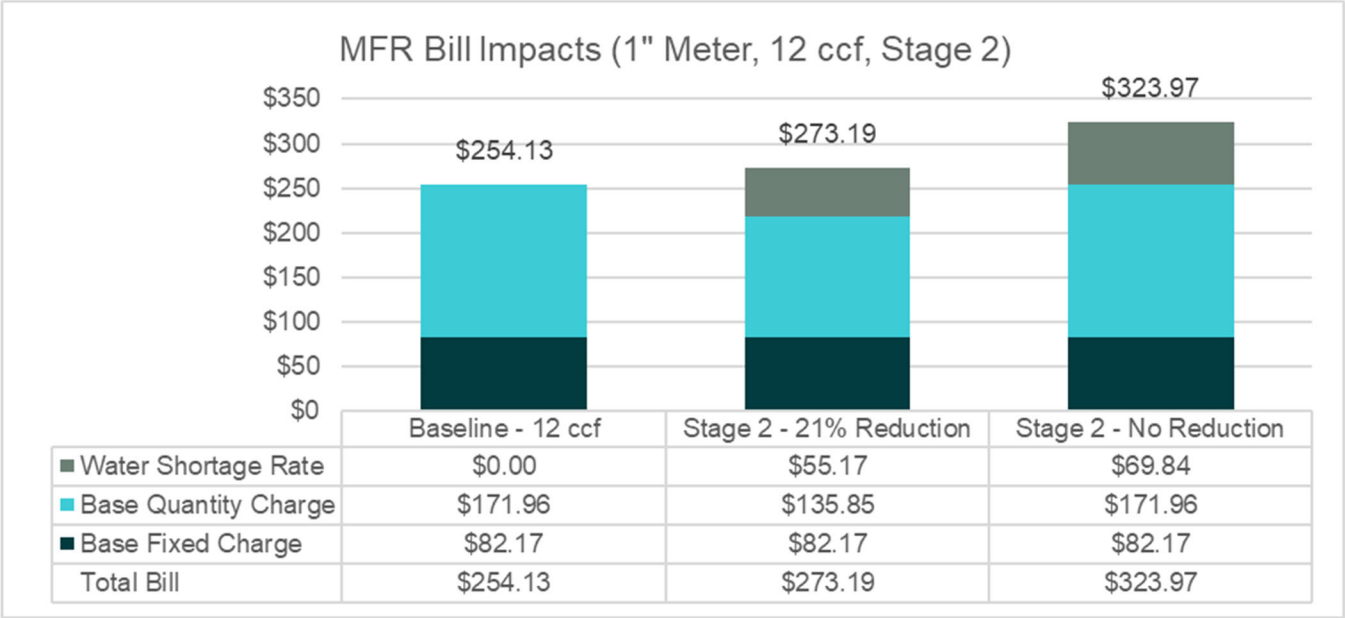
The figures demonstrate that when the District's customers comply with the recommended water usage reductions as defined by the Water Shortage Contingency Plan, the customer's water bill impact will be significantly smaller than if they did not reduce their water consumption.

Figure 1-5: Single Family Residential Bill Impacts



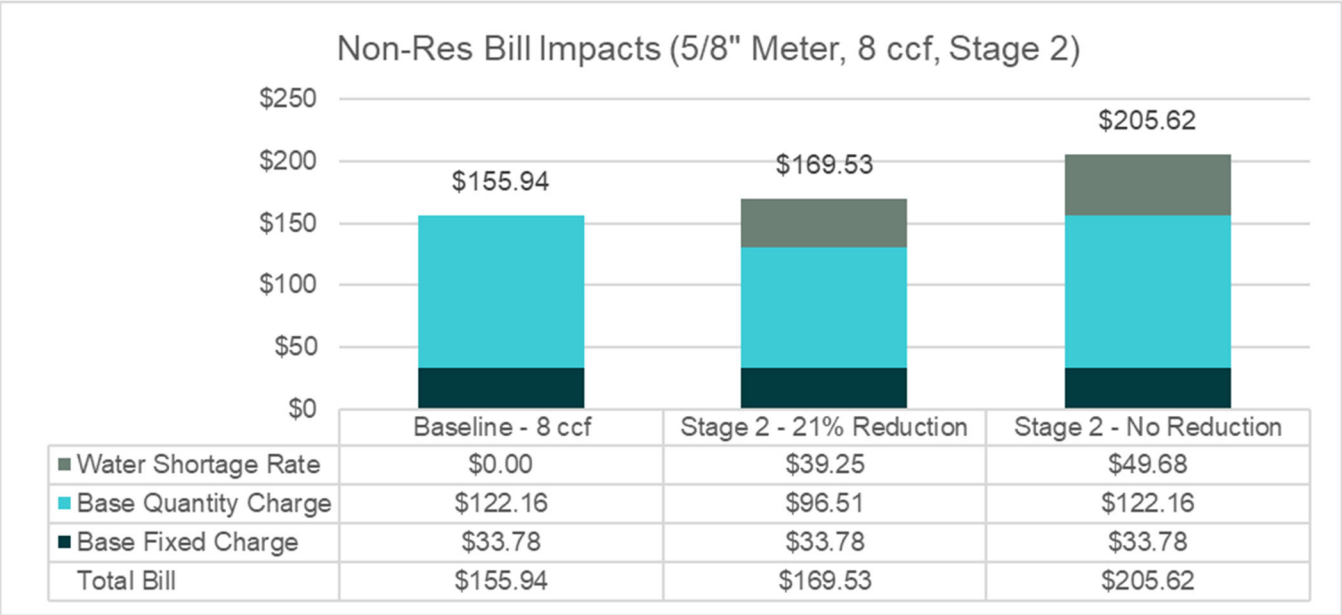
	Baseline - 6 ccf	Stage 2 - 21% Reduction	Stage 2 - No Reduction
Water Shortage Rate	$0.00	$22.21	$30.26
Base Quantity Charge	$74.44	$54.63	$74.44
Base Fixed Charge	$33.78	$33.78	$33.78
Total Bill	$108.22	$110.62	$138.48

Figure 1-6: Multi-Family Residential Bill Impacts



	Baseline - 12 ccf	Stage 2 - 21% Reduction	Stage 2 - No Reduction
Water Shortage Rate	$0.00	$55.17	$69.84
Base Quantity Charge	$171.96	$135.85	$171.96
Base Fixed Charge	$82.17	$82.17	$82.17
Total Bill	$254.13	$273.19	$323.97

Figure 1-7: Non-Residential Bill Impacts



	Baseline - 8 ccf	Stage 2 - 21% Reduction	Stage 2 - No Reduction
Water Shortage Rate	$0.00	$39.25	$49.68
Base Quantity Charge	$122.16	$96.51	$122.16
Base Fixed Charge	$33.78	$33.78	$33.78
Total Bill	$155.94	$169.53	$205.62

2. Financial Plan

This section of the report describes the proposed financial plan for the water utility. To develop the financial plan, Raftelis projected annual revenues and expenses, modeled reserve balances, projected capital expenditures, and calculated debt service coverage to estimate the amount of additional rate revenue needed each year. Numbers shown in the tables of this section are rounded. Therefore, hand calculations based on the displayed numbers, such as summing or multiplying, may not equal the exact results shown.

2.1. Inflationary Assumptions

Inflationary factors are used to escalate the revenue and cost categories across the planning period, which for this study is from FY 2023 to FY 2027. The District's most recent adopted revenue and expense budgets are for FY 2023. Raftelis worked with District staff to escalate individual budget line items according to the appropriate escalation factor. The escalation factors used to project revenues are shown in **Table 2-1**. These factors are based on industry indices, such as general inflation based on CPI, and input from District staff. Inflation factors were increased for FY 2024 because of recent high inflation and were linearly decreased back to historical averages by FY 2027.

Table 2-1: Inflation Factors

Line	A Escalation Factors	B FY 2023	C FY 2024	D FY 2025	E FY 2026	F FY 2027
1	General	2.7%	5.0%	4.2%	3.5%	2.7%
2	Salary	4.5%	6.5%	5.8%	5.2%	4.5%
3	Benefits	6.0%	6.5%	5.8%	5.2%	4.5%
4	Power	5.0%	6.0%	5.7%	5.3%	5.0%
5	Capital	3.2%	5.0%	4.4%	3.8%	3.2%
6	Interest Income	0.3%	0.9%	0.9%	0.9%	0.9%

2.2. Current Water Rates

The District's current water rates were implemented January 1, 2022 and include a monthly base charge based on meter size, a monthly fire service charge based on fire line size, and a tiered quantity charge for every ccf of water used. **Table 2-2** shows the current monthly base charges by meter size. **Table 2-3** shows the current monthly fire service charges by fire line size. **Table 2-4** shows the current quantity charge by customer class and by monthly tiers.

Table 2-2: Current Monthly Base Charge

Line	A Meter Size	B Current
1	5/8"	$31.87
2	3/4"	$47.09
3	1"	$77.52
4	1 1/2"	$153.60
5	2"	$244.91
6	3"	$534.02
7	4"	$960.12

Table 2-3: Current Monthly Fire Service Charges

Line	A Fire Line Size	B Current
1	3/4"	$5.35
2	1"	$7.13
3	1 1/2"	$10.70
4	2"	$14.26
5	3"	$21.39
6	4"	$28.52
7	6"	$42.78
8	8"	$57.04
9	10"	$71.30

Table 2-4: Current Quantity Charges

Line	A Quantity Charges	B Current
1	Single Family	
2	Tier 1	$10.14
3	Tier 2	$14.83
4	Tier 3	$17.94
5	Multi-Family	$13.52
6	Non-Residential	$14.41

2.3. Customer Accounts and Usage

District Staff provided detailed customer billing data for FY 2022, which included information such as customer class, billed consumption in ccf, and meter size for each of the monthly billing periods. Future usage and accounts were projected based off of FY 2022 data.

Table 2-5 shows the projected meter counts by meter size for the study period. **Table 2-6** shows the projected private fire accounts for the study period. **Table 2-7** shows the projected water demand for the study period. Demand slowly increases from FY 2023 to FY 2025, bouncing back from the current drought conditions. **Table 2-8** shows the resulting projected water usage in ccf by customer class and tier for the study period. We assume no account growth for the study period. There is a projected decrease in demand in FY 2023 recovering to historical demand by FY 2024 as shown in **Table 1-5**.

Table 2-5: Projected Customer Accounts

Line	A Customer Accounts	B FY 2022	C FY 2023	D FY 2024	E FY 2025	F FY 2026	G FY 2027
1	5/8"	6,114	6,114	6,114	6,114	6,114	6,114
2	3/4"	198	198	198	198	198	198
3	1"	184	184	184	184	184	184
4	1 1/2"	29	29	29	29	29	29
5	2"	34	34	34	34	34	34
6	3"	5	5	5	5	5	5
7	4"	2	2	2	2	2	2
8	**Total**	**6,566**	**6,566**	**6,566**	**6,566**	**6,566**	**6,566**

Table 2-6: Projected Private Fire Accounts

Line	A Private Fire Accounts	B FY 2022	C FY 2023	D FY 2024	E FY 2025	F FY 2026	G FY 2027
1	3/4"	10	10	10	10	10	10
2	1"	735	735	735	735	735	735
3	1 1/2"	50	50	50	50	50	50
4	2"	89	89	89	89	89	89
5	3"	4	4	4	4	4	4
6	4"	128	128	128	128	128	128
7	6"	62	62	62	62	62	62
8	8"	14	14	14	14	14	14
9	10"	1	1	1	1	1	1
10	**Total**	**1,093**	**1,093**	**1,093**	**1,093**	**1,093**	**1,093**

Table 2-7: Projected Water Demand

Line	A Projected Water Demand	B FY 2023	C FY 2024	D FY 2025	E FY 2026	F FY 2027
1	% of FY 2022 Usage	97.7%	109.0%	104.2%	100.0%	100.0%
2	Total Projected Water Sales (MG)	550	600	625	625	625

Table 2-8: Projected Water Usage

Line	A Consumption (ccf)	B FY 2022	C FY 2023	D FY 2024	E FY 2025	F FY 2026	G FY 2027
1	Single Family Residential						
2	Tier 1	231,604	226,277	246,642	257,001	257,001	257,001
3	Tier 2	103,832	101,444	110,574	115,218	115,218	115,218
4	Tier 3	53,314	52,088	56,776	59,160	59,160	59,160
5	Multi-Family Residential	39,513	38,604	42,079	43,846	43,846	43,846
6	Non-Residential	324,970	317,496	346,070	360,605	360,605	360,605
7	**Total**	**753,233**	**735,909**	**802,140**	**835,830**	**835,830**	**835,830**

2.4. Projected Revenues at Current Rates

Rate revenues for FY 2023 through FY 2027 were calculated based on the District's current water rates. The projected annual rate revenues from the monthly base charges are shown in **Table 2-9** and **Table 2-10** shows the projected revenue collected from current quantity charges by customer class. **Table 2-11** shows the total projected revenues including the base charges, fire service charges, and quantity charges.

Table 2-9: Calculated Service Charge Revenue

Line	A Service Charge Revenue	B FY 2022	C FY 2023	D FY 2024	E FY 2025	F FY 2026	G FY 2027
1	Base Charge	$2,762,265	$2,829,748	$2,829,748	$2,829,748	$2,829,748	$2,829,748
2	Fire Service Charge	$168,168	$172,275	$172,275	$172,275	$172,275	$172,275
3	**Total Service Charge Revenue**	**$2,930,432**	**$3,002,023**	**$3,002,023**	**$3,002,023**	**$3,002,023**	**$3,002,023**

Table 2-10: Calculated Quantity Charge Revenue

Line	A Quantity Charge Revenue	B FY 2022	C FY 2023	D FY 2024	E FY 2025	F FY 2026	G FY 2027
1	Single Family	$4,715,866	$4,733,317	$5,159,316	$5,376,007	$5,376,007	$5,376,007
2	Multi-Family	$520,013	$521,929	$568,902	$592,796	$592,796	$592,796
3	Non-Residential	$4,558,819	$4,575,113	$4,986,873	$5,196,322	$5,196,322	$5,196,322
4	**Total Quantity Charge Revenue**	**$9,794,698**	**$9,830,359**	**$10,715,091**	**$11,165,125**	**$11,165,125**	**$11,165,125**

Table 2-11: Calculated Water Rate Revenue

Line	A Calculated Rate Revenue	B FY 2022	C FY 2023	D FY 2024	E FY 2025	F FY 2026	G FY 2027
1	Service Charge Revenue	$2,930,432	$3,002,023	$3,002,023	$3,002,023	$3,002,023	$3,002,023
2	Quantity Charge Revenue	$9,794,698	$9,830,359	$10,715,091	$11,165,125	$11,165,125	$11,165,125
3	**Total Calculated Rate Revenue**	**$12,725,130**	**$12,832,382**	**$13,717,114**	**$14,167,148**	**$14,167,148**	**$14,167,148**

2.5. Projected Revenues

Table 2-12 shows the utility's projected revenues for the study period. District staff provided budgeted revenues for FY 2023 (Column B). Water rate revenues (Line 3) are equal to the calculated rate revenues at current rates for FY 2023 and beyond.

Miscellaneous, non-rate revenues are considered other revenue (Lines 5, 7-8) and are inflated using the general escalation factor (**Table 2-1**, Line 1). Interest income (Line 6) is calculated based on the reserve interest rate (**Table 2-1**, Line 6) and projected fund balances.

2.6. Estimated Purchased Water Costs

The District purchases most of its water supply from SFPUC. The water utility's annual purchased water cost includes an annual fixed charge and a variable rate per ccf of water. **Table 2-13** shows the purchased water cost calculations for the study period. The District estimates 8% water loss for the system (Line 1). Water demand (Line 3) is equal to the total water demand for all customers. The amount of water produced (Line 4) is based on water demand accounting for water loss.

District staff provided current and projected SFPUC fixed and variable water costs for FY 2023 through FY 2027. SFPUC variable water costs (Line 20) are calculated by multiplying the water produced (Line 4) by the variable water cost (Line 16). The annual fixed charge for each year (Line 19) is calculated by multiplying the SFPUC monthly charge (Line 15) by 12.

2.7. Projected O&M Expenses

Table 2-15 summarizes the projected O&M expenses for the study period. District staff provided the adopted budget for FY 2023, which was inflated for future years using the escalation factors (**Table 2-1**). Water purchase costs (Line 1) are equal to the calculated costs (**Table 2-13**) from FY 2023 and beyond.

2.8. Existing Debt Service

Table 2-15 shows the District's existing debt service. Annual existing debt service payments are $1.5M annually. The District expects to issue any additional debt to fund capital projects in FY 2025.

2.9. Capital Project Funding

Table 2-16 details the District's capital improvement plan. District staff provided ten-year CIP based on current year dollars. From FY 2023 onward, CIP costs are inflated using the expense escalation factor for capital (**Table 2-1**, Line 5). The District expects to fully fund its water capital program using cash from rate revenues and reserves in all years except FY 2025, where $7M of the CIP will be funded through debt proceeds.

Table 2-12: Projected Revenue Summary

Line	A Revenue Summary	B FY 2022	C FY 2023	D FY 2024	E FY 2025	F FY 2026	G FY 2027
1	Rate Revenue						
2	Service Charges	$2,930,432	$3,002,023	$3,002,023	$3,002,023	$3,002,023	$3,002,023
3	Quantity Charges	$9,794,698	$9,830,359	$10,715,091	$11,165,125	$11,165,125	$11,165,125
4	Other Revenue						
5	Fees	$16,484	$60,000	$60,000	$60,000	$60,000	$60,000
6	Interest	$15,097	$32,000	$89,725	$100,162	$106,549	$97,062
7	Taxes	$1,027,746	$950,000	$969,000	$988,380	$1,008,148	$1,028,311
8	Other	$926,166	$750,000	$750,000	$750,000	$750,000	$750,000
9	**Total Revenue**	**$14,710,624**	**$14,624,382**	**$15,585,839**	**$16,065,690**	**$16,091,845**	**$16,102,521**

Table 2-13: Calculated SFPUC Water Supply Cost

Line	A Water Supply Cost	B FY 2022	C FY 2023	D FY 2024	E FY 2025	F FY 2026	G FY 2027
1	Water Loss	8.1%	8.0%	8.0%	8.0%	8.0%	8.0%
2							
3	Water Sales	753,233	735,909	802,140	835,830	835,830	835,830
4	Water Production	819,622	799,901	871,892	908,511	908,511	908,511
5							
6	Water Supply Mix						
7	CCWD Sources	38%	30%	35%	35%	35%	35%
8	SFPUC Sources	62%	70%	65%	65%	65%	65%
9							
10	Water Production & Purchase						
11	CCWD Sources	311,457	239,970	305,162	317,979	317,979	317,979
12	SFPUC Sources	508,166	559,930	566,730	590,532	590,532	590,532
13							
14	Water Supply Costs						
15	SFPUC Fixed Monthly Charge	$6,782	$7,264	$8,054	$8,054	$8,054	$8,071
16	SFPUC Variable Rate ($/ccf)	$3.74	$4.32	$4.79	$4.79	$4.79	$4.80
17							
18	Calculated Water Costs						
19	SFPUC Fixed Charge	$81,384	$87,162	$96,645	$96,645	$96,645	$96,847
20	SFPUC Variable Charges	$1,900,540	$2,418,900	$2,714,635	$2,828,650	$2,828,650	$2,834,555
21							
22	**Total Calculated Water Costs**	**$1,981,924**	**$2,506,062**	**$2,811,280**	**$2,925,295**	**$2,925,295**	**$2,931,402**

Table 2-14: Projected O&M Expenses

Line	A Operating Expenditures	B FY 2022	C FY 2023	D FY 2024	E FY 2025	F FY 2026	G FY 2027
1	Water Purchases	$1,981,924	$2,506,062	$2,811,280	$2,925,295	$2,925,295	$2,931,402
2	O&M	$6,988,556	$7,996,110	$8,481,698	$8,967,527	$9,330,786	$9,712,036
3	**Total Expenditures**	**$8,970,480**	**$10,502,172**	**$11,292,978**	**$11,892,822**	**$12,256,081**	**$12,643,438**

Table 2-15: Existing Debt Service Summary

Line	A Existing Debt Service	B FY 2022	C FY 2023	D FY 2024	E FY 2025	F FY 2026	G FY 2027
1	Existing Bond-CIEDB 11-099	$335,669	$335,508	$335,343	$335,173	$334,998	$334,819
2	CIEDB 16-111	$322,895	$322,417	$321,923	$321,412	$320,883	$320,337
3	Chase - 2018 Loan (Refunding of 2006B Bonds)	$435,168	$436,027	$437,233	$432,821	$432,880	$437,180
4	First Foundation 2022 Loan	$0	$495,510	$417,501	$417,434	$417,365	$417,295
5	**Total Existing Debt**	**$1,093,732**	**$1,589,462**	**$1,512,000**	**$1,506,840**	**$1,506,127**	**$1,509,630**

Table 2-16: Projected CIP Summary

Line	A Capital Improvement Plan Summary	B FY 2022	C FY 2023	D FY 2024	E FY 2025	F FY 2026	G FY 2027
1	Equipment Purchase & Replacement	$47,500	$85,500	$85,500	$85,500	$85,500	$85,500
2	Facilities & Maintenance	$152,000	$180,500	$142,500	$142,500	$142,500	$142,500
3	Pipeline Projects	$95,000	$2,707,500	$617,500	$95,000	$2,470,000	$3,705,000
4	Pump Stations/Tanks/Wells	$332,500	$855,000	$1,425,000	$6,270,000	$2,137,500	$712,500
5	Water Supply Development	$285,000	$380,000	$1,187,500	$950,000	$1,235,000	$760,000
6	Water Treatment Plants	$2,755,000	$3,586,250	$1,377,500	$0	$0	$0
7	Revised Annual CIP Costs (Additions/Deletions)	$3,358,250	$0	$0	$0	$0	$0
8	**Total Projected CIP**	**$7,025,250**	**$7,794,750**	**$4,835,500**	**$7,543,000**	**$6,070,500**	**$5,405,500**

2.10. Status Quo Financial Plan

Table 2-17 shows the projected financial plan based on revenues at existing rates with no adjustments, or the "status quo" scenario. Revenues (Lines 1-6) are derived from **Table 2-12**. Note that the revenues from interest income in the status quo scenario is lower due to a decrease in fund balances. O&M expenses (Lines 8-11) are derived from
Table 2-14. Existing debt service (Line 14) and cash funded CIP (Line 19) are derived from **Table 2-15** and **Table 2-16**, respectively.

Net revenue is equal to total revenues (Line 6) less O&M expenses (Line 10). Net cash flow (Line 25) is equal to net revenue less debt service (Line 16) and cash funded CIP (Line 19). Debt coverage (Line 27) is calculated by dividing net revenue by debt service. The water utility will not default on debt coverage during the study period. District staff provided beginning fund balances for FY 2023 (Column B, Line 30). Ending balances (Line 31) are calculated by adding beginning balances to net cash flow. The reserve targets of 25% of annual water O&M expenses are derived from the District's existing reserve policies. Under the status quo scenario, the water utility as a whole will not meet reserve targets in any year of the study period and fund balances will fall below zero in FY 2026.

Table 2-17: Status Quo Financial Plan

Line	A Financial Plan	B FY 2022	C FY 2023	D FY 2024	E FY 2025	F FY 2026	G FY 2027
1	**Revenue**						
2	Revenue from Rates	$12,725,130	$12,832,382	$13,717,114	$14,167,148	$14,167,148	$14,167,148
3	Additional Revenue	$0	$0	$0	$0	$0	$0
4	Interest Income	$15,097	$32,000	$80,999	$48,667	$5,923	$0
5	Other Revenue	$1,970,397	$1,760,000	$1,779,000	$1,798,380	$1,818,148	$1,838,311
6	**Total Revenue**	**$14,710,624**	**$14,624,382**	**$15,577,114**	**$16,014,196**	**$15,991,219**	**$16,005,459**
7							
8	**Operating Expenditures**						
9	Water Purchases	$1,981,924	$2,506,062	$2,811,280	$2,925,295	$2,925,295	$2,931,402
10	O&M	$6,988,556	$7,996,110	$8,481,698	$8,967,527	$9,330,786	$9,712,036
11	**Total Operating Expenditures**	**$8,970,480**	**$10,502,172**	**$11,292,978**	**$11,892,822**	**$12,256,081**	**$12,643,438**
12							
13	**Debt Service**						
14	Existing Debt	$1,093,732	$1,093,952	$1,094,498	$1,089,406	$1,088,762	$1,092,335
15	New Proposed Debt	$0	$0	$0	$0	$0	$0
16	**Total Debt Service**	**$1,093,732**	**$1,093,952**	**$1,094,498**	**$1,089,406**	**$1,088,762**	**$1,092,335**
17							
18	**CIP**						
19	Rate Funded	$7,025,250	$8,044,182	$5,239,748	$8,533,233	$7,128,388	$6,550,620
20	Debt Funded	$0	$0	$0	$0	$0	$0
21	**Total CIP**	**$7,025,250**	**$8,044,182**	**$5,239,748**	**$8,533,233**	**$7,128,388**	**$6,550,620**
22							
23	**Total Expenses**	**$17,089,462**	**$19,640,305**	**$17,627,224**	**$21,515,461**	**$20,473,230**	**$20,286,394**
24							
25	**Net Cashflow**	($2,378,838)	($5,015,923)	($2,050,111)	($5,501,265)	($4,482,011)	($4,280,935)
26							
27	Calculated Debt Coverage Ratio	525%	377%	391%	378%	343%	308%
28	Required Debt Coverage Ratio	120%	120%	120%	120%	120%	120%
29							
30	Beginning Balance	$10,000,000	$15,500,000	$10,484,077	$8,433,966	$2,932,701	($1,549,310)
31	**Ending Balance**	**$7,621,162**	**$10,484,077**	**$8,433,966**	**$2,932,701**	**($1,549,310)**	**($5,830,244)**
32	*Minimum Target*	*$10,435,806*	*$10,819,276*	*$11,011,885*	*$11,161,201*	*$11,255,590*	*$11,350,132*

Figure 2-1 shows the projected status quo financial plan in graphical format. The bars represent the water utility's cash needs: O&M expenses (dark blue), debt service (green), rate funded capital (gray), and purchased water (light blue). The solid line represents the current revenues, which is below the stacked bars for each year, signifying that the District's current water revenues are not sufficient to fund its costs.

Figure 2-1: Status Quo Financial Plan – Water

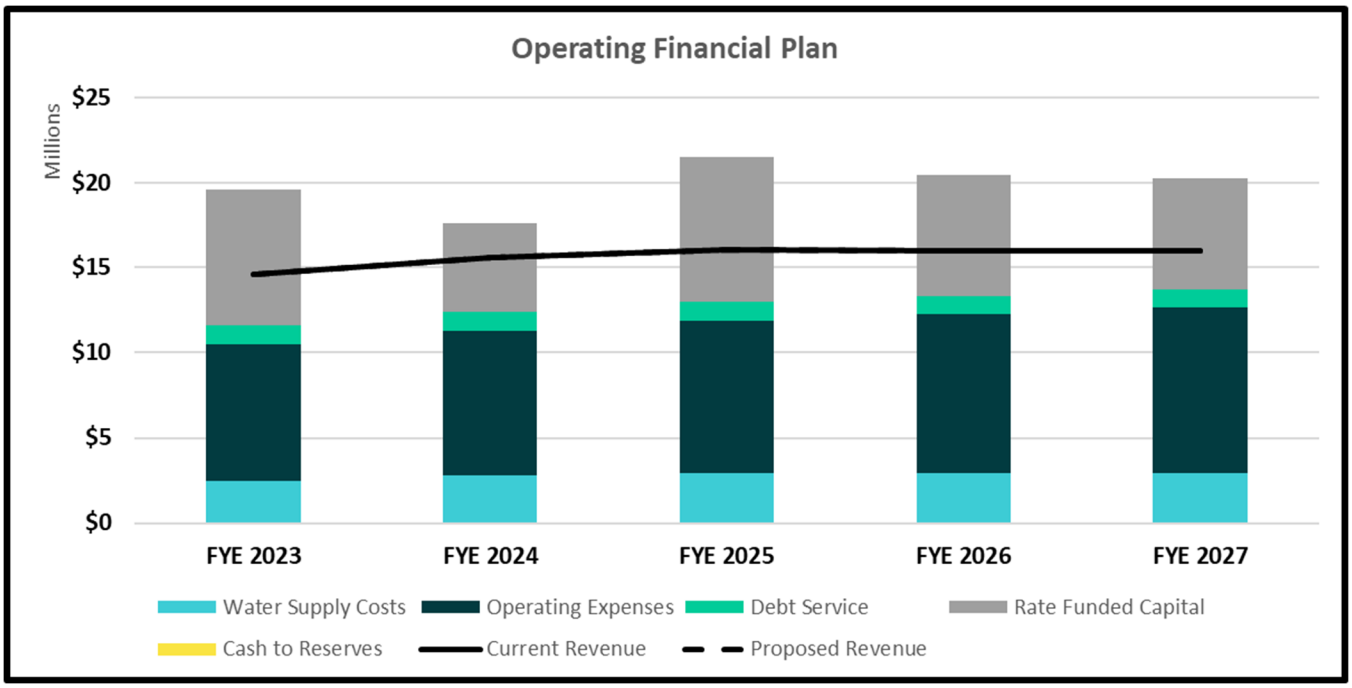


Figure 2-2 shows the projected debt service coverage under the status quo scenario for the study period. The dark blue solid line represents the target debt service coverage of 1.2 and the light blue dashed line represents the calculated debt service coverage. The water utility will not default on debt service coverage during the study period even though fund balances fall far below target.

Figure 2-2: Status Quo Debt Service Coverage

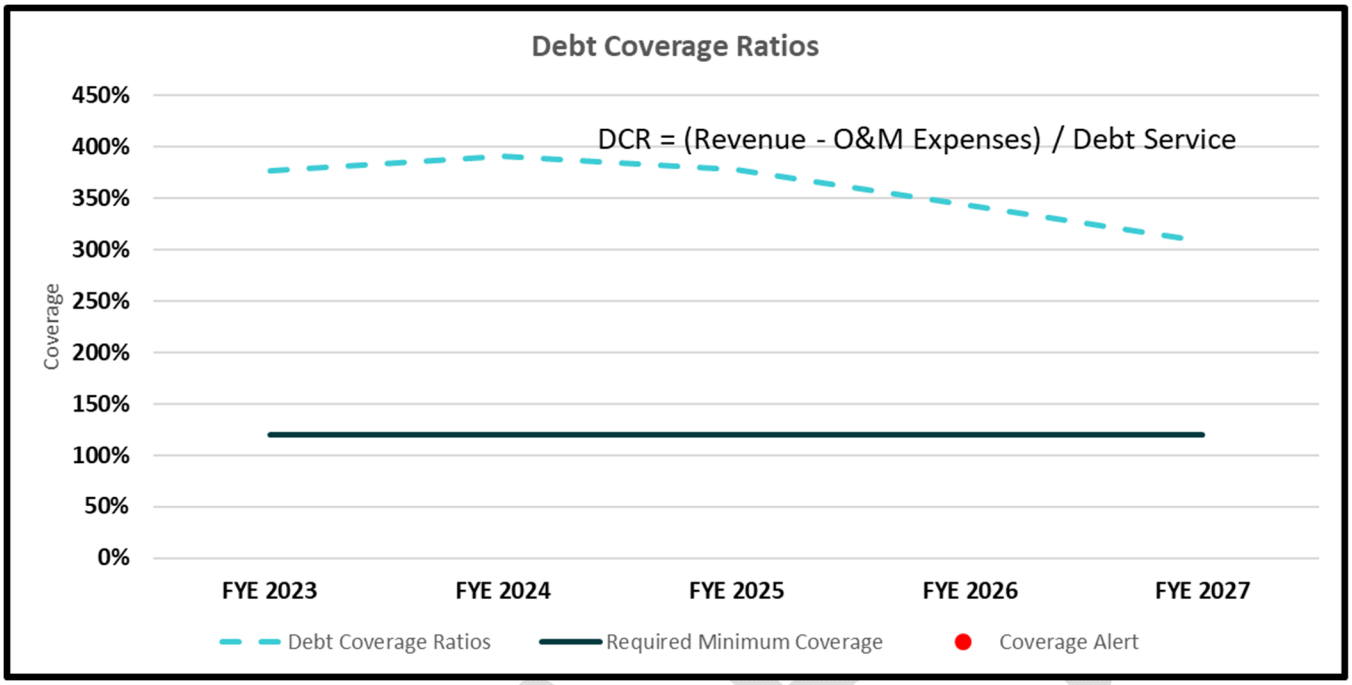
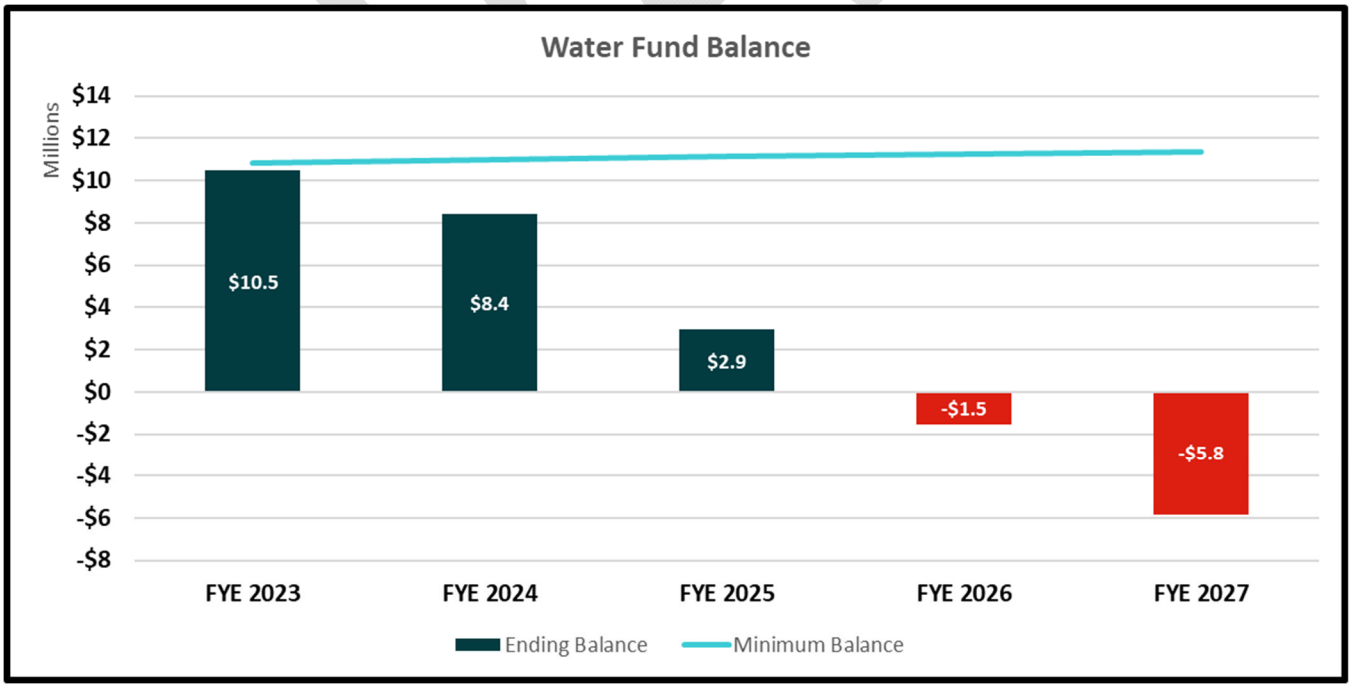


Figure 2-3 shows the projected combined fund balances under the status quo scenario for the study period. The dark blue bars represent the ending balances and the solid light blue line represents the reserve target amounts. The water fund will be under target in every year of the rate study and fall below zero in FY 2026.

Figure 2-3: Status Quo Scenario Fund Balances



2.11. Proposed Financial Plan

Table 2-18 shows the proposed revenue adjustments that allow the District to maintain financial sufficiency, fund operating and capital expenses, and build up cash reserves to achieve target fund balances by the end of the study period. The proposed revenue adjustments represent the increase to total rate revenues required to recover the water utility's costs and not the expected impact to each customer class. Revenue adjustments in subsequent years are applied across all charges, classes, and tiers proportional to the base year rates developed for FY 2023. The revenue adjustments are effective on January 1 of every year.

Table 2-18: Proposed Revenue Adjustments

Line	A Revenue Adjustment	B FY 2023	C FY 2024
1	Effective Month	January	January
2	Percent Adjustment	6.0%	6.0%

Table 2-19 shows the projected financial plan with the proposed revenue adjustments in **Table 2-18** applied to the water rate revenues and a proposed debt issuance of $7M to fund CIP. Revenues from interest income (Line 4) are greater than those shown in the status quo scenario (**Table 2-17**, Line 4) due to additional cash from the proposed adjustments. O&M expenses (Line 11) and debt service (Line 16) are the same as the status quo scenario. Cash funded CIP in FY 2025 (Column E, Line 19) is less than the status quo scenario due to proposed debt proceeds to fund CIP (Column E, Line 20).

Net cash flow (Line 25) is positive in FY 2025 which means that the District will be funding its reserves in those years. Net cash flow is negative for all other years, which means that the District will be drawing down its cash reserves to pay for capital costs. The ending balance (Line 31) will meet or almost meet the reserve target (Line 32) in FY 2023 through FY 2027. Calculated debt service coverage (Line 27) exceeds target debt service coverage (Line 28) in all years through FY 2027.

Table 2-19: Proposed Financial Plan

Line	A Financial Plan	B FY 2022	C FY 2023	D FY 2024	E FY 2025	F FY 2026	G FY 2027
1	**Revenue**						
2	Revenue from Rates	$12,725,130	$12,832,382	$13,717,114	$14,167,148	$14,167,148	$14,167,148
3	Additional Revenue	$0	$384,971	$1,259,231	$2,228,606	$3,212,351	$4,255,121
4	Interest Income	$15,097	$32,000	$89,725	$100,162	$106,549	$97,062
5	Other Revenue	$1,970,397	$1,760,000	$1,779,000	$1,798,380	$1,818,148	$1,838,311
6	**Total Revenue**	**$14,710,624**	**$15,009,354**	**$16,845,070**	**$18,294,296**	**$19,304,196**	**$20,357,642**
7							
8	**Operating Expenditures**						
9	Water Purchases	$1,981,924	$2,506,062	$2,811,280	$2,925,295	$2,925,295	$2,931,402
10	O&M	$6,988,556	$7,996,110	$8,481,698	$8,967,527	$9,330,786	$9,712,036
11	**Total Operating Expenditures**	**$8,970,480**	**$10,502,172**	**$11,292,978**	**$11,892,822**	**$12,256,081**	**$12,643,438**
12							
13	**Debt Service**						
14	Existing Debt	$1,093,732	$1,093,952	$1,094,498	$1,089,406	$1,088,762	$1,092,335
15	New Proposed Debt	$0	$0	$0	$558,999	$558,999	$558,999
16	**Total Debt Service**	**$1,093,732**	**$1,093,952**	**$1,094,498**	**$1,648,405**	**$1,647,761**	**$1,651,335**
17							
18	**CIP**						
19	Rate Funded	$7,025,250	$8,044,182	$5,239,748	$1,533,233	$7,128,388	$6,550,620
20	Debt Funded	$0	$0	$0	$7,000,000	$0	$0
21	**Total CIP**	**$7,025,250**	**$8,044,182**	**$5,239,748**	**$8,533,233**	**$7,128,388**	**$6,550,620**
22							
23	**Total Expenses**	**$17,089,462**	**$19,640,305**	**$17,627,224**	**$15,074,460**	**$21,032,229**	**$20,845,393**
24							
25	**Net Cashflow**	($2,378,838)	($4,630,952)	($782,154)	$3,219,836	($1,728,033)	($487,751)
26							
27	Calculated Debt Coverage Ratio	525%	412%	507%	388%	428%	467%
28	Required Debt Coverage Ratio	120%	120%	120%	120%	120%	120%
29							
30	Beginning Balance	$10,000,000	$15,500,000	$10,869,048	$10,086,894	$13,306,730	$11,578,697
31	**Ending Balance**	**$7,621,162**	**$10,869,048**	**$10,086,894**	**$13,306,730**	**$11,578,697**	**$11,090,946**
32	*Minimum Target*	*$10,435,806*	*$10,819,276*	*$11,570,884*	*$11,720,201*	*$11,814,589*	*$11,909,132*

Figure 2-4 shows the projected financial plans with the proposed revenue adjustments. The dotted line represents the proposed revenues with the adjustments applied.

Figure 2-4: Proposed Water Financial Plan

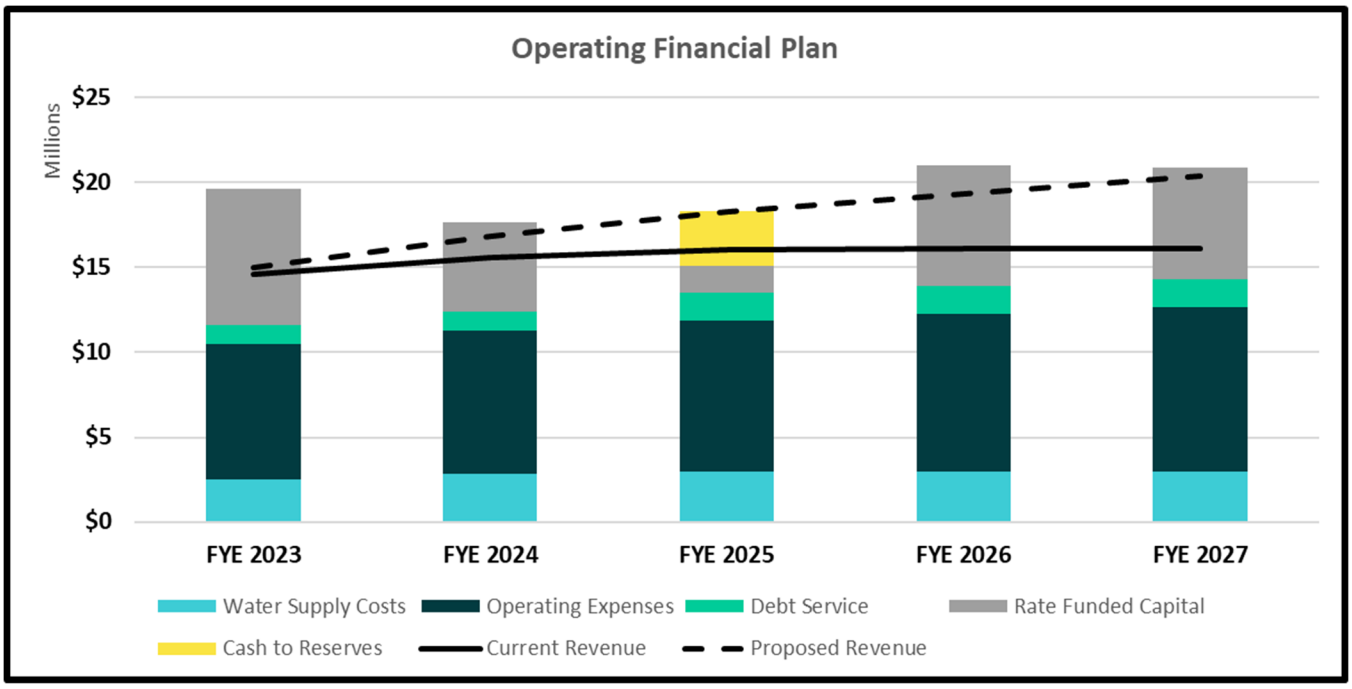


Figure 2-5 shows the projected debt service coverage for the water utility with the proposed adjustments in **Table 2-18** applied over the study period. The water utility is expected to meet its debt service coverage target in each year through FY 2027.

Figure 2-5: Proposed Debt Service Coverage

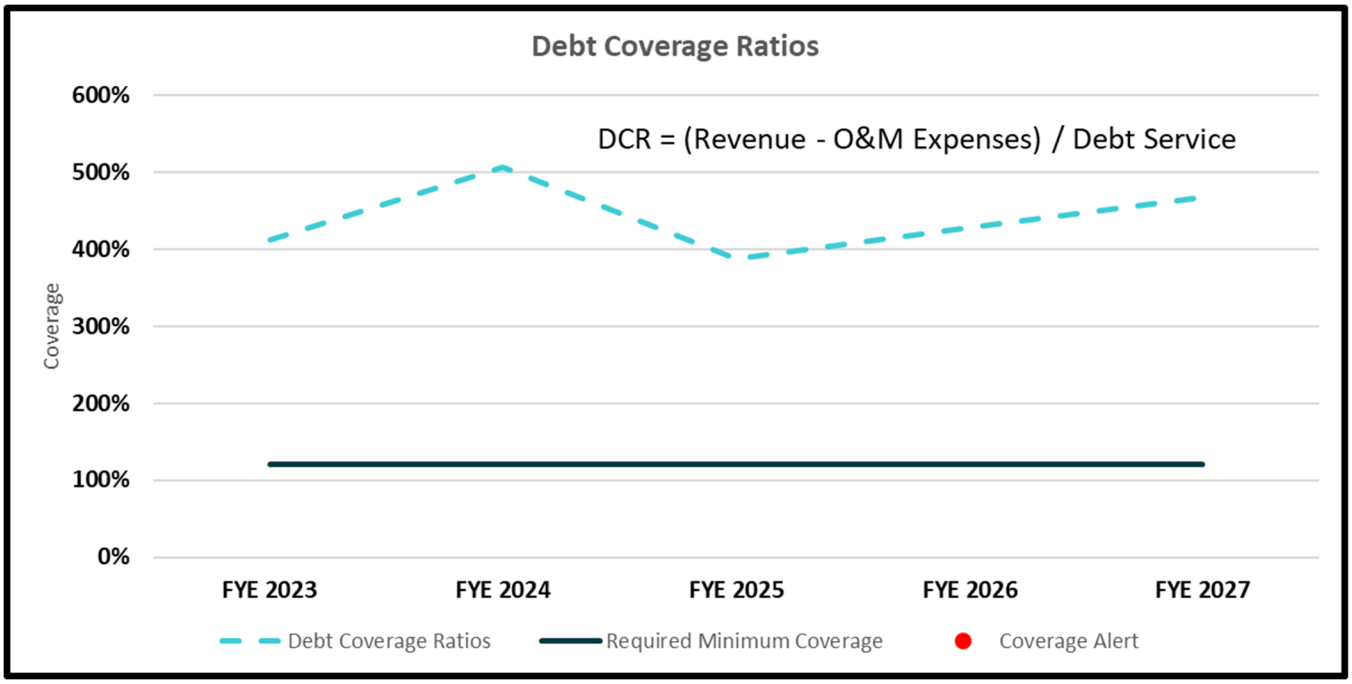
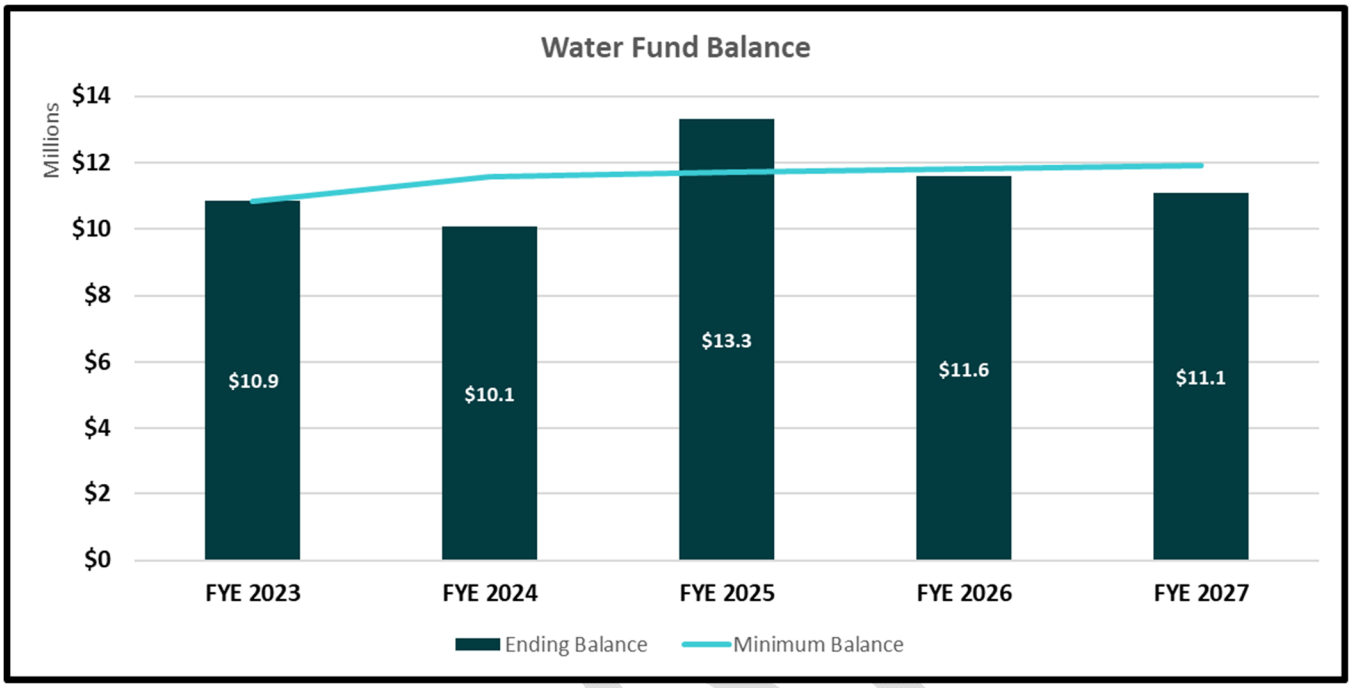


Figure 2-6 shows the projected combined fund balances with the proposed adjustments in **Table 2-18** applied over a 5-year period. The District's water fund expected to meet or almost meet its reserve target from FY 2023 through FY 2027.

Figure 2-6: Proposed Ending Fund Balances



3. Proposed Rates

This section of the report details the calculation of the proposed water rates that were developed in the study. Numbers shown in the tables of this section are rounded. Therefore, hand calculations based on the displayed numbers, such as summing or multiplying, may not equal the exact results shown in this Report. All rates shown in this section are rounded up to the nearest cent.

3.1. Proposed Adjustments

Table 3-1 shows the proposed revenue adjustments from the financial plan. Revenue adjustments in each year are applied across all charges, classes, and tiers proportional to the current rates.

Table 3-1: Proposed Revenue Adjustments

	A	B	C
Line	Revenue Adjustment	FY 2023	FY 2024
1	Effective Month	January	January
2	Percent Adjustment	6.0%	6.0%

3.2. Proposed Rate Schedule

The rates shown in this subsection are increased for FY 2023 and beyond based on the proposed revenue adjustments shown in **Table 3-1**. The proposed water rates are reflective of an across-the-board increase based on the District's existing water rate structure, developed in the 2018 Water Cost of Service and Rate Study. **Table 3-2** shows the two-year rate schedule for the proposed monthly base charges. **Table 3-3** shows the two-year rate schedule for monthly fire service charges. **Table 3-4** shows the two-year rate schedule for quantity charges.

Table 3-2: Proposed Monthly Base Charges

	A	B	C	D
Line	Meter Size	Current FY 2022	Proposed FY 2023	Proposed FY 2024
1	5/8"	$31.87	$33.78	$35.81
2	3/4"	$47.09	$49.92	$52.92
3	1"	$77.52	$82.17	$87.10
4	1 1/2"	$153.60	$162.82	$172.59
5	2"	$244.91	$259.60	$275.18
6	3"	$534.02	$566.06	$600.02
7	4"	$960.12	$1,017.73	$1,078.79

Table 3-3: Proposed Monthly Fire Service Charges

Line	A Fire Line Size	B Current FY 2022	C Proposed FY 2023	D Proposed FY 2024
1	3/4"	$5.35	$5.67	$6.01
2	1"	$7.13	$7.56	$8.01
3	1 1/2"	$10.70	$11.34	$12.02
4	2"	$14.26	$15.12	$16.03
5	3"	$21.39	$22.67	$24.03
6	4"	$28.52	$30.23	$32.04
7	6"	$42.78	$45.35	$48.07
8	8"	$57.04	$60.46	$64.09
9	10"	$71.30	$75.58	$80.11

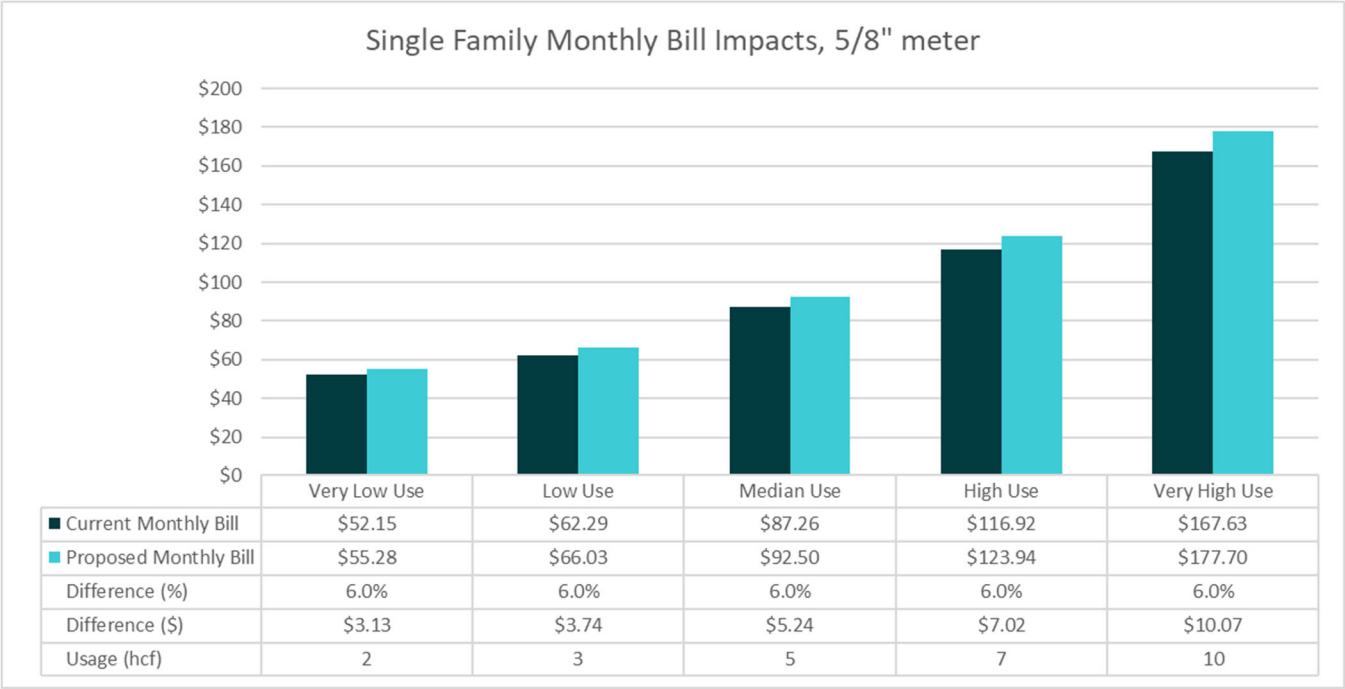
Table 3-4: Proposed Quantity Charges

Line	A Customer Class	B Current FY 2022	C Proposed FY 2023	D Proposed FY 2024
1	Single Family			
2	Tier 1	$10.14	$10.75	$11.40
3	Tier 2	$14.83	$15.72	$16.66
4	Tier 3	$17.94	$19.02	$20.16
5	Multi-Family	$13.52	$14.33	$15.19
6	Non-Residential	$14.41	$15.27	$16.19

3.3. Customer Impacts

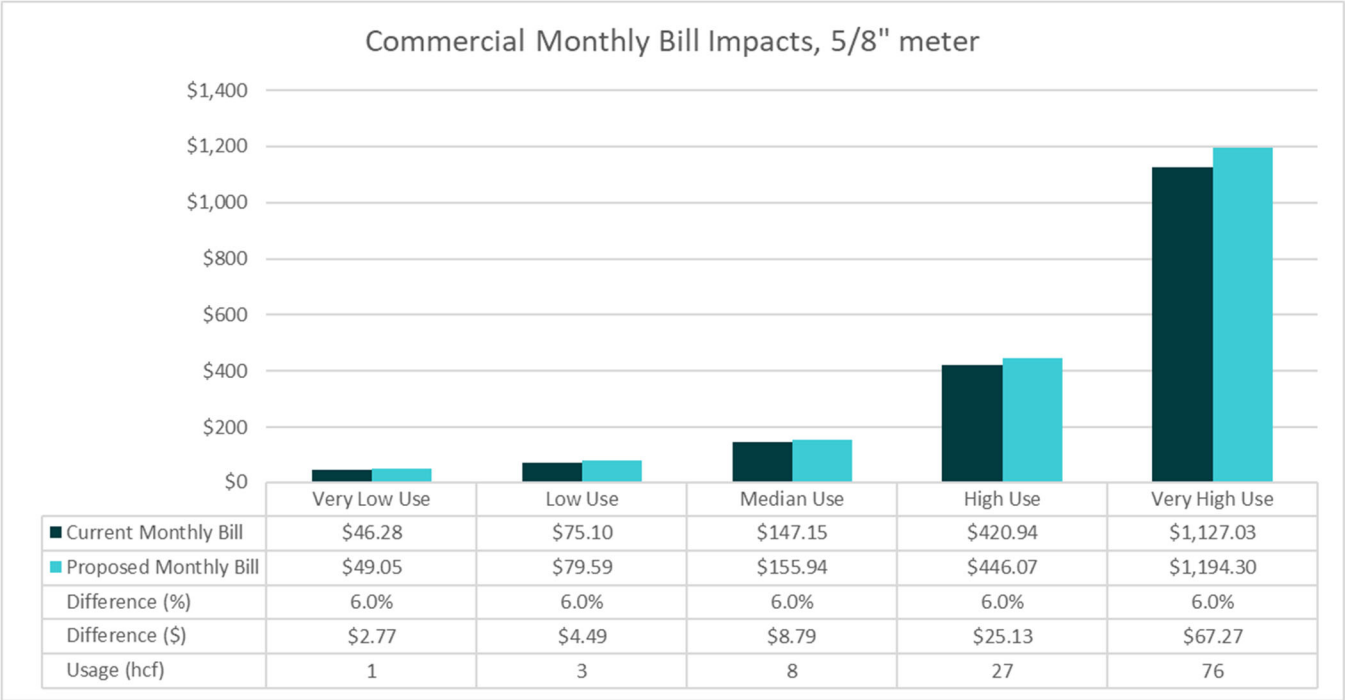
Figure 3-1 through Error! Reference source not found.**Figure 3-3** show the impacts for Single Family Residential, Commercial, and Multi-Family Residential customers, respectively. The monthly bills are calculated using the most common meter size for each customer class at various levels of usage.

Figure 3-1: Single Family Residential Bill Impacts



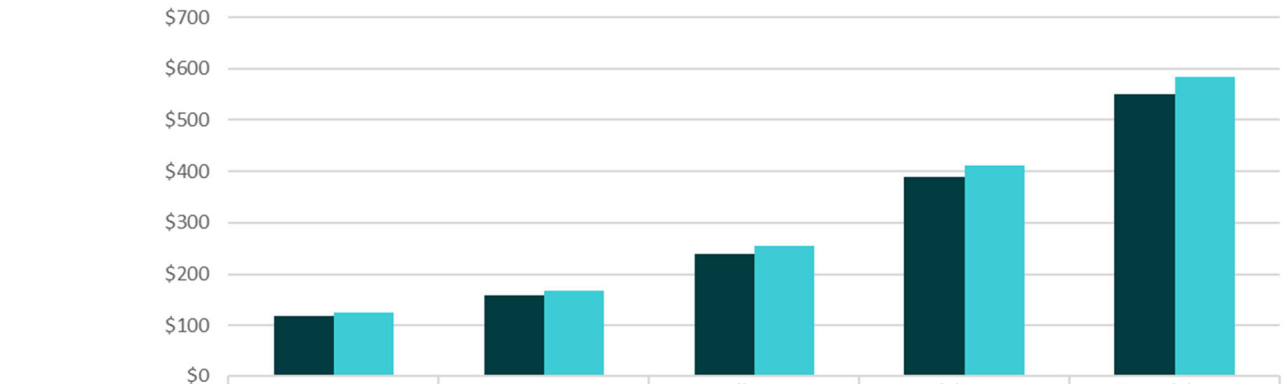
	Very Low Use	Low Use	Median Use	High Use	Very High Use
Current Monthly Bill	$52.15	$62.29	$87.26	$116.92	$167.63
Proposed Monthly Bill	$55.28	$66.03	$92.50	$123.94	$177.70
Difference (%)	6.0%	6.0%	6.0%	6.0%	6.0%
Difference ($)	$3.13	$3.74	$5.24	$7.02	$10.07
Usage (hcf)	2	3	5	7	10

Figure 3-2: Commercial Bill Impacts



	Very Low Use	Low Use	Median Use	High Use	Very High Use
Current Monthly Bill	$46.28	$75.10	$147.15	$420.94	$1,127.03
Proposed Monthly Bill	$49.05	$79.59	$155.94	$446.07	$1,194.30
Difference (%)	6.0%	6.0%	6.0%	6.0%	6.0%
Difference ($)	$2.77	$4.49	$8.79	$25.13	$67.27
Usage (hcf)	1	3	8	27	76

Figure 3-3: Multi-Family Residential Bill Impacts



	Very Low Use	Low Use	Median Use	High Use	Very High Use
Current Monthly Bill	$118.08	$158.64	$239.76	$388.48	$550.72
Proposed Monthly Bill	$125.16	$168.15	$254.13	$411.76	$583.72
Difference (%)	6.0%	6.0%	6.0%	6.0%	6.0%
Difference ($)	$7.08	$9.51	$14.37	$23.28	$33.00
Usage (hcf)	3	6	12	23	35

4. Water Shortage Rates

This section details the methodology used to calculate the District's proposed water shortage rates. Numbers shown in the tables of this section are rounded. Therefore, hand calculations based on the displayed numbers such as summing or multiplying, may not equal the exact results shown in this report.

4.1. Overview

The District engaged Raftelis to update water shortage rates as part of the Water Rate Study. The District adopted its latest Water Shortage Contingency Plan in June of 2021, which details the six drought stages and the corresponding water usage reductions. The resulting water shortage rates align with Proposition 218 requirements and allow the District to reliably recover the necessary revenue to fully fund the water system in times of reduction in water demand. The water shortage rate methodology is based on the prior January 2022 rate study.

The major objectives when developing water shortage rates include:

- Determine water allocations for each customer class during each drought stage based on the 2021 Water Shortage Contingency Plan
- Calculate the financial impacts of reduced water sales and changes to water supply sources
- Evaluate various rate structures to determine the structure best suited to meet the District's needs
- Develop water shortage rates that recover the financial impacts of each drought stage based on the cost of providing service

4.2. Process and Approach

Water shortage rates are governed by the requirements of Proposition 218 and Article X of the California Constitution. The development of water shortage rates must show the nexus between the costs of providing water service and the rates charged to customers, should maximize the beneficial use of water (often defined as indoor use for health and hygiene), and should encourage conservation.

Water shortage rates are designed to recover lost revenue due to reduction in water use during each stage, to incorporate the potential changes to the District's water supply sources and their corresponding costs, to align with specific drought stages outlined in the 2020 Water Shortage Contingency Plan, and to provide financial flexibility for the District when declaring drought stages and implementing the appropriate water shortage rates. The proposed rates are based on the District's proposed water rates for FY 2023, which will go into effect January 1, 2023.

There are four steps to conducting a water shortage rate study, which include:

1. Allocating water reductions between various customer classes based on defined drought stages
2. Calculating financial impacts to the District in each stage
3. Determining the most appropriate drought cost recovery mechanism (rate structure)
4. Evaluating financial impacts to customers

4.3. Drought Allocations and Costs

This subsection details the water usage allocations and financial impacts of each drought stage, which results in the total amount of revenue to be collected from water shortage rates in each stage.

4.3.1. WATER ALLOCATIONS

The first step in the development of water shortage rates involves allocating water usage reductions between the District's customer classes based on the drought stages defined in the Water Shortage Contingency Plan. **Table 4-1** shows the overall reduction targets for the entire water system and for each customer class.

Table 4-1: Drought Stages and Reduction

	A	B	C	D	E	F	G	H
Line	Customer Class	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
1	Single Family Residential	0%	15%	21%	30%	36%	41%	52%
2	Multi-Family Residential	0%	14%	21%	30%	35%	41%	52%
3	Non-Residential	0%	5%	21%	30%	43%	62%	88%
4								
5	Target Reduction Goal	0%	≤10%	20%	30%	40%	50%	>50%

Water usage by customer class for each drought stage is calculated once the water reductions are determined. **Table 4-2** shows the estimated water usage in ccf for each stage of drought that align with the percent reduction targets for the system (**Table 4-1**). Baseline use (Column B) is equal to the estimated water demand determined as the "new normal" based on FY 2025 usage, as directed by District Staff. The percent reduction from Baseline (Line 8) is the difference between the total usage in Stages 1 through 6 compared to the Baseline scenario. Note that the percent reduction from Baseline is about equal to the target reduction for the system. The usage reductions for Single Family Residential customers are assumed to reduce from the highest tiers first, which provides the most conservative revenue projections and shows the prioritization for beneficial water use for indoor health and hygiene based on the guidance in Article X of the California Constitution.

Table 4-2: Estimated Water Usage by Stage

Line	A Customer Class	B Baseline	C Stage 1	D Stage 2	E Stage 3	F Stage 4	G Stage 5	H Stage 6
1	Single Family Residential							
2	Tier 1	257,312	257,312	257,312	257,312	257,312	254,822	207,313
3	Tier 2	115,357	109,804	83,890	45,019	19,105	0	0
4	Tier 3	59,232	0	0	0	0	0	0
5	Multi-Family Residential	43,899	37,753	34,680	30,729	28,534	25,900	21,072
6	Non-Residential	361,042	342,990	285,223	252,729	205,794	137,196	43,325
7	**Total (ccf)**	**836,842**	**747,859**	**661,106**	**585,790**	**510,745**	**417,918**	**271,709**
8	% Reduction from Baseline	0%	11%	21%	30%	39%	50%	68%

4.3.2. FINANCIAL IMPACTS

The next step is to determine the financial impacts to the District during each stage of drought. The cost implications of drought consider the following:

- Lost commodity charge revenue due to water usage reductions in each drought stage
- Potential changes to operating costs, which include water supply sources and their associated costs

For the District, the most significant financial consequence is the loss of consumption-based revenue, the severity of which depends on the drought stage. Drought conditions will also require more staff to be hired to handle conservation efforts and respond to an increase in customer service requests. Additionally, water shortage conditions impact the District's access to local water sources, which necessitates purchasing more expensive imported water from SFPUC to meet customer demands.

Table 4-3 shows the quantity charge revenue for Stages 1 through 6 compared to baseline excluding revenues collected from allotment usage. This is calculated based on the proposed FY 2023 commodity charges (**Table 3-4**) multiplied by the estimated water usage by drought stage for each customer class (**Table 4-2**). The difference in commodity charge revenue (Line 9) is equal to the difference between the Baseline revenue and the estimated revenue for Stages 1 through 6, which represents the amount of lost quantity charge revenue in each stage.

Table 4-4 shows the additional staffing costs associated with each stage of drought. Additional staff are required to manage a combination of increased water conservation efforts and customer service requirements.

Table 4-5 shows the percentage of water supplied by local water and imported water from SFPUC. A significant portion of demand is met using local water during normal conditions. However, under water shortage conditions, the availability of local water is reduced. Beginning in Stage 2, local water sources are depleted, and the District is fully reliant on imported water from SFPUC.

Table 4-6 shows the water produced from both sources during each stage of water shortage. Water demand (Line 1) is equal to the total estimated water usage for all classes in each stage (**Table 4-2**, Line 7). Water production (Line 3) is equal to water demand plus a portion of system water loss (Line 2). The amount of water produced from each source is based on the percentages from **Table 4-5**.

Although total water production in Stages 1 through 3 is less than Baseline, the amount of water purchased from SFPUC in those stages is greater than the amount purchased in the Baseline scenario due to the shifts in water supply availability by source. The District is expected to purchase less water from SFPUC in Stages 4 through 6 compared to the Baseline scenario.

Table 4-7 shows the estimated water purchase costs from SFPUC for each water shortage stage. The District purchases raw water from SFPUC, which is reflected in the variable rate per ccf of water (Line 1). The amount of water purchased (Line 3) is based on the amount of water produced from SFPUC (**Table 4-6**, Line 6). The water purchase costs (Line 4) are calculated by multiplying the variable rate by the amount of water purchased. The difference in water purchase costs (Line 6) is equal to the difference between the water purchase costs from SFPUC in Stages 1 through 6 compared to the Baseline scenario.

Table 4-8 shows the total cost of drought at Stages 1 through 6, which includes the lost commodity revenue (**Table 4-3**, Line 9), one-time increases to operating costs (**Table 4-4**, Line 1), and changes to SFPUC water purchase costs (**Table 4-7**, Line 6).

Table 4-3: Expected Revenue Loss by Stage

Line	A Customer Class	B Baseline	C Stage 1	D Stage 2	E Stage 3	F Stage 4	G Stage 5	H Stage 6
1	Single Family Residential							
2	Tier 1	$2,766,106	$2,766,106	$2,766,106	$2,766,106	$2,766,106	$2,739,336	$2,228,612
3	Tier 2	$1,813,419	$1,726,120	$1,318,751	$707,697	$300,327	$0	$0
4	Tier 3	$1,126,591	$0	$0	$0	$0	$0	$0
5	Multi-Family Residential	$629,072	$541,002	$496,967	$440,351	$408,897	$371,153	$301,955
6	Non-Residential	$5,513,110	$5,237,455	$4,355,357	$3,859,177	$3,142,473	$2,094,982	$661,573
7	**Total**	**$11,848,298**	**$10,270,684**	**$8,937,181**	**$7,773,331**	**$6,617,803**	**$5,205,470**	**$3,192,140**
8								
9	Change in Quantity Charge Revenue		($1,577,615)	($2,911,117)	($4,074,968)	($5,230,495)	($6,642,828)	($8,656,159)
10	Difference (%)	-13%	-25%	-34%	-44%	-56%	-73%	-73%

Table 4-4: Additional O&M Costs by Stage

Line	A One Time Expenses	B Baseline	C Stage 1	D Stage 2	E Stage 3	F Stage 4	G Stage 5	H Stage 6
1	Conservation Outreach	$0	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000

Table 4-5: Water Supply Sources

Line	A Water Supply Mix	B Baseline	C Stage 1	D Stage 2	E Stage 3	F Stage 4	G Stage 5	H Stage 6
1	CCWD Sources	38%	10%	0%	0%	0%	0%	0%
2	SFPUC Sources	62%	90%	100%	100%	100%	100%	100%

Table 4-6: Water Production by Source

Line	A Water Production/Purchase	B Baseline	C Stage 1	D Stage 2	E Stage 3	F Stage 4	G Stage 5	H Stage 6
1	Water Demand (ccf)	836,842	747,859	661,106	585,790	510,745	417,918	271,709
2	System Water Loss	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
3	Water Production (ccf)	909,611	812,891	718,593	636,728	555,158	454,259	295,336
4								
5	CCWD Sources	345,652	81,289	0	0	0	0	0
6	SFPUC Sources	563,959	731,601	718,593	636,728	555,158	454,259	295,336
7	**Total Production (ccf)**	**909,611**	**812,891**	**718,593**	**636,728**	**555,158**	**454,259**	**295,336**

Table 4-7: SFPUC Water Purchase Costs

Line	A Water Purchase Costs	B Baseline	C Stage 1	D Stage 2	E Stage 3	F Stage 4	G Stage 5	H Stage 6
1	SFPUC Variable Rate ($/ccf)	$4.32	$4.32	$4.32	$4.32	$4.32	$4.32	$4.32
2								
3	Water Purchased (ccf)	909,611	812,891	718,593	636,728	555,158	454,259	295,336
4	Water Purchase Costs from SFPUC	$2,436,303	$3,160,518	$3,104,322	$2,750,665	$2,398,282	$1,962,399	$1,275,852
5								
6	Difference in Water Purchase Costs		$724,215	$668,019	$314,362	($38,021)	($473,904)	($1,160,451)

Table 4-8: Total Drought Costs by Stage

Line	A Drought Revenue Requirement	B Stage 1	C Stage 2	D Stage 3	E Stage 4	F Stage 5	G Stage 6
1	Lost Revenue	$1,577,615	$2,911,117	$4,074,968	$5,230,495	$6,642,828	$8,656,159
2	Water Purchases	$724,215	$668,019	$314,362	($38,021)	($473,904)	($1,160,451)
3	One Time Expenses	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
4	**Total**	**$2,351,830**	**$3,629,136**	**$4,439,329**	**$5,242,474**	**$6,218,924**	**$7,545,708**

4.4. Water Shortage Rates

The next step after determining the drought costs by stage is evaluating the drought cost recovery mechanism, or water shortage rate structure, that best meets the needs of the District and its customers. Based on direction provided by District staff, the water shortage rates were developed as a proportional commodity charge increase to the proposed commodity charges for FY 2023, which allows for the ability of customers to change their water bill, encourages conservation, and promotes affordability.

4.4.1. PROPOSED WATER SHORTAGE RATES

Table 4-9 shows the water shortage rate percentage calculation. This is calculated by dividing the total drought cost (Line 2) by the total expected commodity revenue (Line 1). This water shortage rate percentage is then multiplied with the proposed FY 2023 commodity rates (**Table 3-4**) to obtain the proposed water shortage rates shown in **Table 4-10**. It is important to note that the water shortage rates are rounded to the nearest cent and therefore may not match hand calculations.

Table 4-9: Water Shortage Rate Percentage Calcuation

Line	A	B Baseline	C Stage 1	D Stage 2	E Stage 3	F Stage 4	G Stage 5	H Stage 6
1	Expected Revenue	$11,848,298	$10,270,684	$8,937,181	$7,773,331	$6,617,803	$5,205,470	$3,192,140
2	Total Drought Cost		$2,351,830	$3,629,136	$4,439,329	$5,242,474	$6,218,924	$7,545,708
3	% Increase		23%	41%	57%	79%	119%	236%

Table 4-10: Proposed FY 2023 Water Shortage Rates

Line	A Customer Class	B Baseline	C Stage 1	D Stage 2	E Stage 3	F Stage 4	G Stage 5	H Stage 6
1	Drought Increase (%)		23%	41%	57%	79%	119%	236%
2								
3	**Proposed Water Shortage Rates**							
4	Single Family							
5	Tier 1	$0.00	$2.47	$4.37	$6.14	$8.52	$12.85	$25.42
6	Tier 2	$0.00	$3.60	$6.39	$8.98	$12.46	$18.79	$37.16
7	Tier 3	$0.00	$4.36	$7.73	$10.87	$15.07	$22.73	$44.97
8	Multi-Family	$0.00	$3.29	$5.82	$8.19	$11.36	$17.12	$33.88
9	Non-Residential	$0.00	$3.50	$6.21	$8.73	$12.10	$18.25	$36.10
10								
11	**Combined Quantity Rates**							
12	Single Family							
13	Tier 1	$10.75	$13.22	$15.12	$16.89	$19.27	$23.60	$36.17
14	Tier 2	$15.72	$19.32	$22.11	$24.70	$28.18	$34.51	$52.88
15	Tier 3	$19.02	$23.38	$26.75	$29.89	$34.09	$41.75	$63.99
16	Multi-Family	$14.33	$17.62	$20.15	$22.52	$25.69	$31.45	$48.21
17	Non-Residential	$15.27	$18.77	$21.48	$24.00	$27.37	$33.52	$51.37

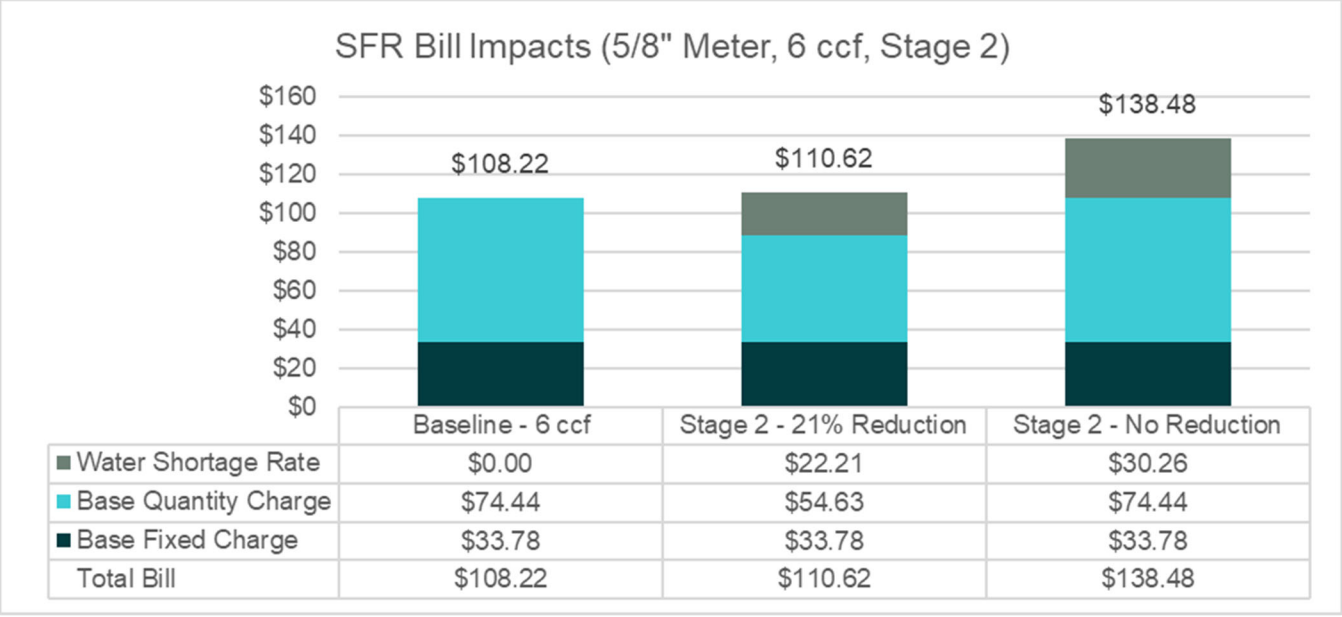
4.4.2. CUSTOMER IMPACTS

Figure 4-1 through **Figure 4-3** show the bill impacts at Stage 2 water shortage for Single Family, Multi-Family, and Non-Residential customers, respectively. Each graph shows bills using the most common meter size and the median usage for that customer class.

The figures show the impacts in each stage based on the components of the customer bill, which includes the base charge by meter size, the quantity charge per ccf of use, and the water shortage rate per ccf of use. The base charge by meter size does not change based on drought stages or water usage. The three stacked bars in each figure show the difference between the baseline scenario (no drought), the drought scenario with commensurate reduction in water use (meaning the customer reduces their water based on the declared drought stage), and the drought scenario without reduction in water use (meaning the customer does not reduce their water use even when a drought stage has been declared).

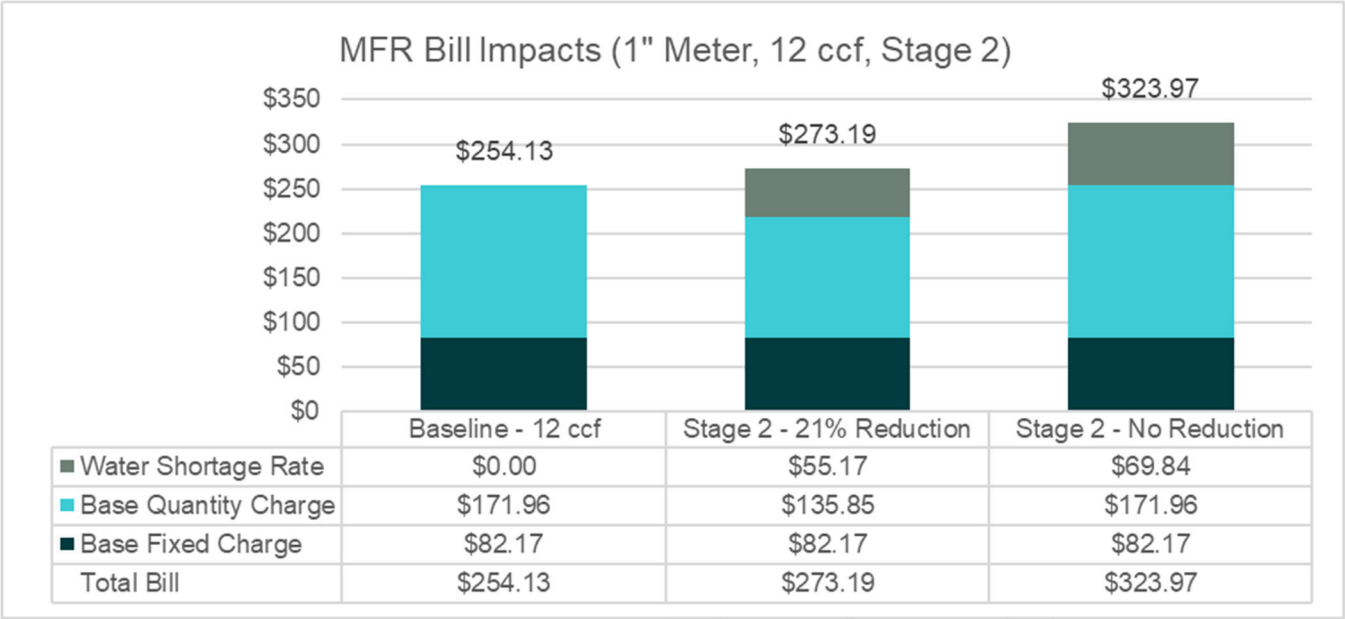
The figures demonstrate that when the District's customers comply with the recommended water usage reductions as defined by the Water Shortage Contingency Plan, the customer's water bill impact will be significantly smaller than if they did not reduce their water consumption.

Figure 4-1: Single Family Residential Bill Impacts



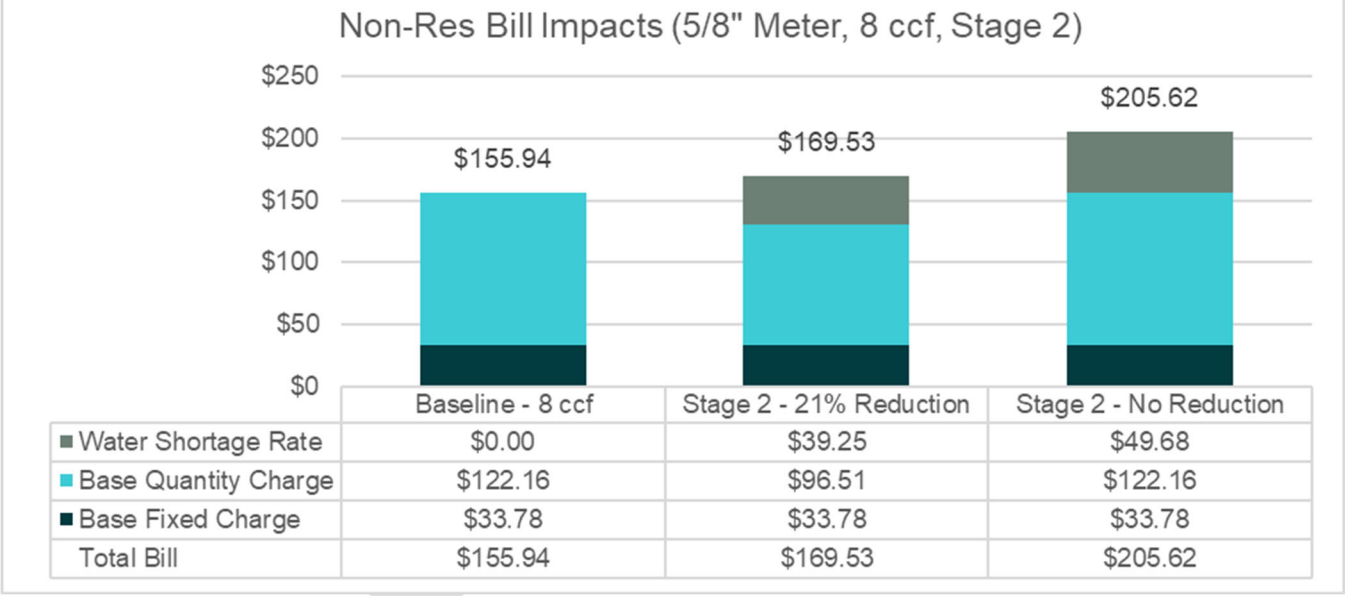
	Baseline - 6 ccf	Stage 2 - 21% Reduction	Stage 2 - No Reduction
Water Shortage Rate	$0.00	$22.21	$30.26
Base Quantity Charge	$74.44	$54.63	$74.44
Base Fixed Charge	$33.78	$33.78	$33.78
Total Bill	$108.22	$110.62	$138.48

Figure 4-2: Multi-Family Residential Bill Impacts



	Baseline - 12 ccf	Stage 2 - 21% Reduction	Stage 2 - No Reduction
Water Shortage Rate	$0.00	$55.17	$69.84
Base Quantity Charge	$171.96	$135.85	$171.96
Base Fixed Charge	$82.17	$82.17	$82.17
Total Bill	$254.13	$273.19	$323.97

Figure 4-3: Commercial Bill Impacts



	Baseline - 8 ccf	Stage 2 - 21% Reduction	Stage 2 - No Reduction
Water Shortage Rate	$0.00	$39.25	$49.68
Base Quantity Charge	$122.16	$96.51	$122.16
Base Fixed Charge	$33.78	$33.78	$33.78
Total Bill	$155.94	$169.53	$205.62

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Exhibit B

Coastside County Water District

Coastside County Water District is committed to providing our customers with reliable, high-quality drinking water and services, while maintaining its facilities and infrastructure. The District's capital improvement program ($68 Million planned for 2023-2032) provides that the District's infrastructure is replaced at the end of its life cycle and upgraded to meet current seismic standards.

Notice of Public Hearing

Proposed Amendments to the Rate and Fee Schedule Effective January 19, 2023 and January 18, 2024

The Coastside County Water District ("District") Board of Directors will hold a Public Hearing at 7:00 PM on Tuesday, December 13, 2022, during a regular Board of Director's meeting.

The Board of Directors will consider adoption of the proposed water rates effective January 19, 2023, and January 18, 2024, affecting all water customers. Interested persons are encouraged to attend and comment. This meeting will be conducted by teleconference. Board members and members of the public may also attend this meeting in person at the District Office located at 766 Main Street, Half Moon Bay. **The public may watch and/or participate by joining the Zoom Video conference link provided on page 6 of this notice**.

The District is proposing two years of rate increases for water services, as shown on pages 2 and 3 of this notice. If approved, a proposed increase of up to 6% (maximum 6%) will become effective on and after January 19, 2023, for year 1, and a proposed increase of up to 6% (maximum 6%) will become effective on and after January 18, 2024, for year 2.

In addition, the District is proposing adjustments to its Water Shortage Rates (Water Shortage Rates were formerly called Water Shortage Contingency Stage Rates) to be effective January 19, 2023, for Year 1 and January 18, 2024, for year 2 as shown on pages 3, 4, and 5.

All references to "rates" in this notice include both rates for Water Services and Water Shortage Rates.

Basis for Proposed Adjustments to All Rates

The basis for the proposed increase in rates is described in the Water Financial Plan and Rate Study Update Report, dated October 5, 2022, prepared by the District's water rate consultant Raftelis Financial Consultants, Inc. Copies of the Water Financial Plan and Rate Study Update Report, Operations Budget for FY2022-2023, and the FY 2023-2024 to FY 2032-FY2033 Capital Improvement Program are available online at https://coastsidewater.org/resources/reports-and-studies/ .

Adjustments to Rates for Water Services

The proposed adjustments to rates for water services are necessitated due to inflationary adjustments in operating expenses; funding of the District's Capital Improvement Program; and maintaining the District's reserves. As of January 19, 2023, a typical single-family residential customer using 6 units monthly will pay an additional $6.13 per month. Table 1 shows examples of the impact of residential bills at various levels of water usage.

Table 1

Example of Single Family Residential Monthly Water Bills With 6% Adjustment

Units of Water Billed	Current Bill Amount	Effective January 19, 2023 Proposed Bill Amount	Additional Monthly Cost	Effective January 18, 2024 Proposed Bill Amount
2	$52.15	$55.28	$3.13	$58.61
4	$72.43	$76.78	$4.35	$81.41
6	**$102.09**	**$108.22**	**$6.13**	**$114.73**
9	$149.69	$158.68	$8.99	$168.21
12	$203.51	$215.74	$12.23	$228.69

Note: Bill amount includes base charge plus consumption (quantity) charge.

1 unit = 748 gallons = 100 cubic feet = 1 ccf

Table 2

MONTHLY BASE CHARGE

Meter Size	Current	Proposed Effective January 19, 2023	Proposed Effective January 18, 2024
5/8 inch	$31.87	**$33.78**	**$35.81**
3/4 inch	$47.09	**$49.92**	**$52.92**
1.0 inch	$77.52	**$82.17**	**$87.10**
1.5 inch	$153.60	**$162.82**	**$172.59**
2.0 inch	$244.91	**$259.60**	**$275.18**
3.0 inch	$534.02	**$566.06**	**$600.02**
4.0 inch	$960.12	**$1,017.73**	**$1,078.79**

Table 3

SINGLE FAMILY RESIDENTIAL MONTHLY QUANTITY CHARGE PER UNIT

Tier	Current Tiers Monthly	Current Charge Per Unit	Proposed Charge Per Unit Effective January 19, 2023	Proposed Charge Per Unit Effective January 18, 2024
1	1 - 4 Units	$10.14	**$10.75**	**$11.40**
2	5 - 8 Units	$14.83	**$15.72**	**$16.66**
3	9+ Units	$17.94	**$19.02**	**$20.16**

Table 4			
WATER RATE QUANTITY CHARGE PER UNIT OF WATER			
Customer Type	Current	Proposed Effective January 19, 2023	Proposed Effective January 18, 2024
Multi-Family	$13.52	$14.33	$15.19
All Other Customers	$14.41	$15.27	$16.19

Table 5		
Fire (MONTHLY SERVICE CHARGE (Service Line Size)		
Current	Proposed Effective January 19, 2023	Proposed Effective January 18, 2024
Per Inch	Per Inch	Per Inch
$7.13	$7.56	$8.01

Table 6			
Portable (Hydrant) Meters			
	Current	Proposed Effective January 19, 2023	Proposed Effective January 18, 2024
Monthly Rental Charge	$100.00	$106.00	$112.36
Quantity Charge Per Unit	$14.41	$15.27	$16.19

Adjustments for Water Shortage Rates

Living in California means that Californians are faced with water shortages during drought conditions, natural disasters, or catastrophic infrastructure failures. In its current Water Shortage Contingency Plan (required by California Water Code Section 10632), District staff outlined recommended actions and procedures for managing water supply and demand during water shortages with six water shortage levels described as stages. These stages are:

1) Water Shortage Advisory | Up to 10% water shortage
2) Water Shortage Emergency Warning | Up to a 20% water shortage
3) Water Shortage Emergency | Up to 30% water shortage
4) Water Shortage Severe Emergency | Up to 40% water shortage
5) Water Shortage Extreme Emergency | Up to 50% water shortage
6) Water Shortage Catastrophic Emergency | > 50% water shortage

Successful water rationing programs result in reduced water sales and increased costs to incorporate changes to the District's water supply sources. Expenditures do not decline in proportion to reduced sales because a large part of expenditures are related to fixed capital costs, maintenance, and operations.

The District is proposing to adjust its Water Shortage Rates (that correspond to the six water shortage stages listed above and that are included in the District's current Rate and Fee Schedule) to incorporate the update to rates for water services proposed in this public notice.

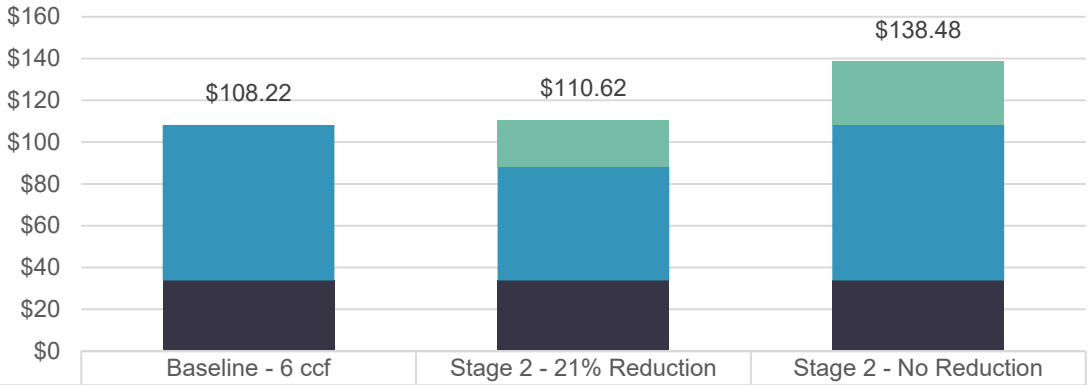
The basis for the proposed adjustment to the Water Shortage Rates is described in the Water Financial Plan and Rate Update Study Report dated October 5, 2022, prepared by Raftelis Financial Consultants, Inc.

The Water Shortage Rates allow for the District to reliably recover the necessary revenue to fully fund the water system in times of requested and mandated reductions in water use.

An example of the impact of Water Shortage Rates is shown in table 7. A typical single family residential customer in normal water years uses 6 units of water per month. In a Stage 2 Water Shortage, if this customer reduces water consumption by the required 21%, the customer will see a similar bill as in normal water years. If the customer does not reduce consumption, then this customer would pay an additional $30.26 for water service.

Table 7

Single Family Residential (5/8"Meter, 6ccf, Stage 2 Water Shortage)



	Baseline - 6 ccf	Stage 2 - 21% Reduction	Stage 2 - No Reduction
Stage Charge	$0.00	$22.21	$30.26
Commodity Charge	$74.44	$54.63	$74.44
Fixed Charge	$33.78	$33.78	$33.78
Total Bill	$108.22	$110.62	$138.48

Implementation of Water Shortage Rates

Water Shortage Rates are not automatically applied during a water shortage or drought. The decision to implement Water Shortage Rates is discretionary and made by the Board of Directors.

The Water Shortage Rates show the maximum rate levels that could be charged per unit during the six Water Shortage Emergency Levels. The decision to implement Water Shortage Rates is discretionary by the District's Board of Directors. Water Shortage Rates could be implemented upon 30 day written notice to all customers prior to the effective date during water shortage emergency situations including drought, natural disasters, and other water supply interruptions.

The six stages of water shortage emergencies are described in more detail in the District's Water Shortage Contingency Plan which can be found in the District's Urban Water Management Plan. Both plans can be found on the District's website at https://coastsidewater.org/resources/reports-and-studies/ .

"Baseline" for tables 8 through10 is defined as the quantity charge per unit before the Water Shortage Rate is added to each tier at the water shortage stages of 1 through 6.

Table 8

Current
Water Shortage Rates
In Effect 1/12/2022
MONTHLY QUANTITY CHARGE PER UNIT – at each Water Shortage Stage

Customer Type	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Single Family							
Tier 1 1-4 units	$10.14	$12.38	$14.15	$15.84	$18.10	$22.23	$34.18
Tier 2 5-8 units	$14.83	$18.10	$20.70	$23.17	$26.47	$32.51	$49.98
Tier 3 9+ units	$17.94	$21.89	$25.03	$28.03	$32.02	$39.32	$60.46
Multi-Family:	$13.52	$16.50	$18.87	$21.12	$24.13	$29.63	$45.57
Non-Residential:	$14.41	$17.58	$20.11	$22.51	$25.72	$31.58	$48.57

Note: The stage rate for the six stages above equals baseline plus Water Shortage Rate

Table 9

Proposed
Water Shortage Rates
To Be Effective 1/19/2023
MONTHLY QUANTITY CHARGE PER UNIT – at each Water Shortage Stage

Customer Type	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Single Family							
Tier 1 1-4 units	$10.75	$13.22	$15.12	$16.89	$19.27	$23.60	$36.17
Tier 2 5-8 units	$15.72	$19.32	$22.11	$24.70	$28.18	$34.51	$52.88
Tier 3 9+ units	$19.02	$23.38	$26.75	$29.89	$34.09	$41.75	$63.99
Multi-Family:	$14.33	$17.62	$20.15	$22.52	$25.69	$31.45	$48.21
Non-Residential:	$15.27	$18.77	$21.48	$24.00	$27.37	$33.52	$51.37

Note: The stage rate for the six stages above equals baseline plus Water Shortage Rate

Table 10

Proposed
Water Shortage Rates
To Be Effective 1/18/2024
MONTHLY QUANTITY CHARGE PER UNIT – at each Water Shortage Stage

Customer Type	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Single Family							
Tier 1 1-4 units	$11.40	$13.97	$15.98	$17.88	$20.43	$25.07	$38.57
Tier 2 5-8 units	$16.66	$20.41	$23.35	$26.13	$29.86	$36.64	$56.37
Tier 3 9+ units	$20.16	$24.69	$28.26	$31.62	$36.13	$44.34	$68.21
Multi-Family:	$15.19	$18.61	$21.29	$23.83	$27.22	$33.41	$51.39
Non-Residential:	$16.19	$19.83	$22.69	$25.40	$29.02	$35.61	$54.78

Note: The stage rate for the six stages above equals baseline plus Water Shortage Rate

How to Protest

Proposition 218 allows a property owner/customer responsible for paying the water bill to respond to proposed rate increases prior to the close of the public hearing. If you wish to protest the proposed rate changes, the District must receive your **written** protest prior to the close of, or during, the public hearing on **Tuesday, December 13, 2022**, at 7:00pm. You may deliver the protest in advance of the public hearing by first class mail or deliver it to the District's payment drop box to:

General Manager
Coastside County Water District
766 Main Street, Half Moon Bay, CA 94019

Email protests will not be accepted. For your protest to be counted, please include one of the following; address(es), Assessor Parcel Number(s) of the property(ies) you own, or the utility account number(s) for active utility accounts that are subject to the proposed rate adjustments. Protests are limited to one per parcel. If written protests are submitted by a majority of the District's property owners/customers, the proposed rate increases shall not be imposed.

Statute of Limitations for Challenging Proposed Rates

Pursuant to California Government Code section 53759, there is a 120-day statute of limitations for challenging all rates set forth in this notice from the date the Board of Directors adopts the resolution approving these rates.

Public Hearing

Due to the Covid-19 pandemic, and in accordance with Assembly Bill 361, which modifies California Government Code Section 54953, this meeting will be conducted by teleconference. Board members and members of the public also may attend this meeting in person at the District Office located at 766 Main Street, Half Moon Bay.

The public may watch and/or participate in the public meeting by joining the meeting through the Zoom Videoconference link provided below. The public may also join the meeting by calling the below listed teleconference phone number.

Whether you participate online or by telephone, you may wish to "arrive" early so that staff can address any technology questions prior to the start of the meeting.

Join Zoom Meeting
https://us06web.zoom.us/j/88691894625?pwd=UFBnaVYrSUNtUTE3NHlRZDFrVDhnZz09
Meeting ID: 886 9189 4625
Passcode: 182549
One tap mobile
+16699006833,,88691894625#,,,,*182549# US (San Jose)

Dial by your location
+1 669 900 6833 US (San Jose)
Meeting ID: 886 9189 4625
Passcode: 182549
Find your local number: https://us06web.zoom.us/u/kbyQAbTp4H

Coastside County Water District

Proposed Water Rates and Water Shortage Rates

Board Meeting

October 11, 2022

RAFTELIS

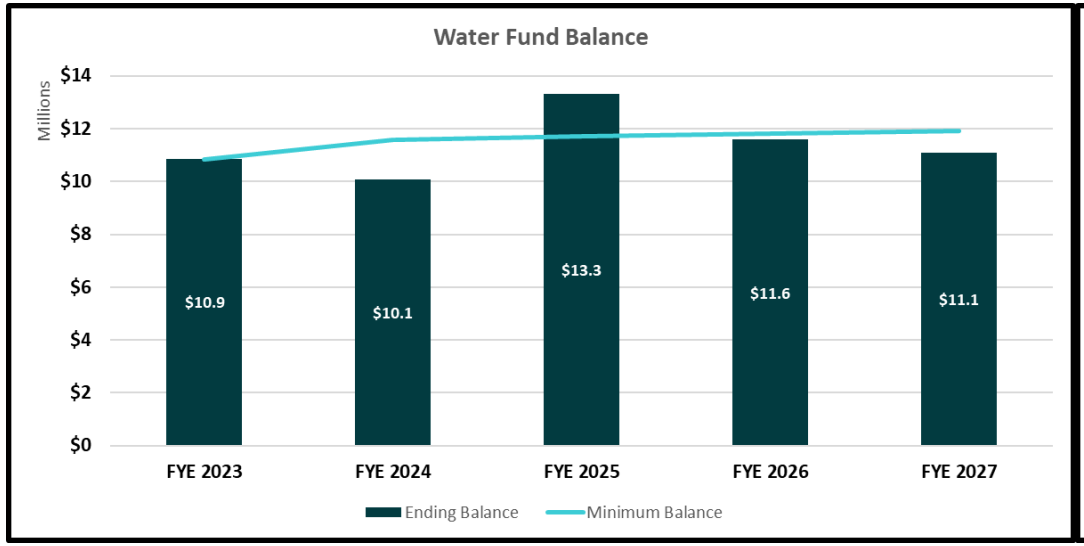
Agenda

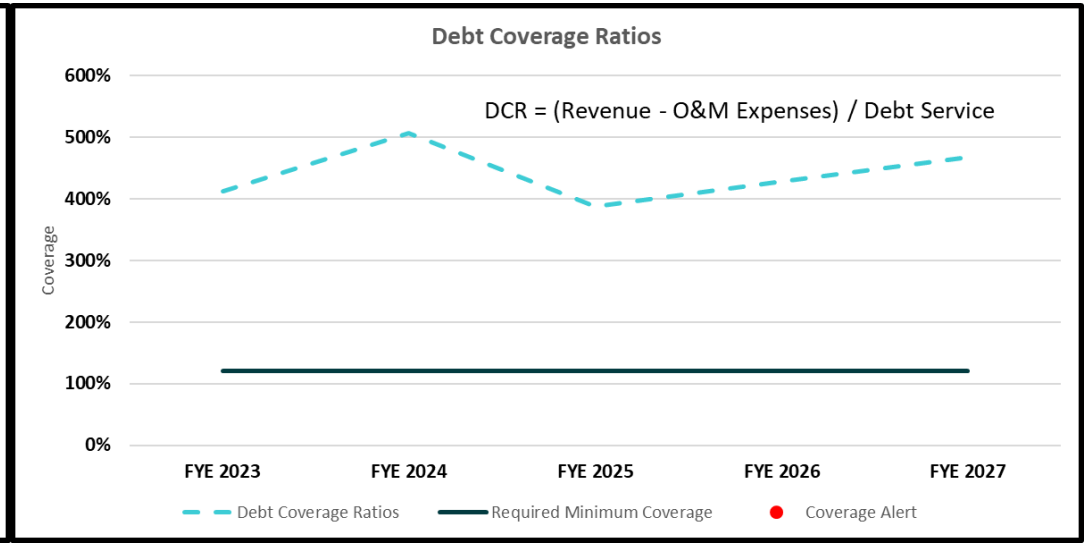
1. Financial Plan Results
2. Proposed Water Rates
3. Water Shortage Rates
4. Next Steps

Financial Plan and Proposed Rates

Financial Plan Results

Revenue Adjustment	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Effective Month	January	January	January	January	January
Percent Adjustment	6.0%	6.0%	6.0%	6.0%	6.0%
Debt Proceeds	$0	$0	$7,000,000	$0	$0





- Implementing 2 years of 6% annual rate adjustments
- Assume $7M in debt proceeds in FY 2025

Proposed Rate Schedule

Base Charge	Current FY 2022	Proposed FY 2023	Proposed FY 2024
5/8"	$31.87	$33.78	$35.81
3/4"	$47.09	$49.92	$52.92
1"	$77.52	$82.17	$87.10
1 1/2"	$153.60	$162.82	$172.59
2"	$244.91	$259.60	$275.18
3"	$534.02	$566.06	$600.02
4"	$960.12	$1,017.73	$1,078.79

Fire Service Charge	Current FY 2022	Proposed FY 2023	Proposed FY 2024
3/4"	$5.35	$5.67	$6.01
1"	$7.13	$7.56	$8.01
1 1/2"	$10.70	$11.34	$12.02
2"	$14.26	$15.12	$16.03
3"	$21.39	$22.67	$24.03
4"	$28.52	$30.23	$32.04
6"	$42.78	$45.35	$48.07
8"	$57.04	$60.46	$64.09
10"	$71.30	$75.58	$80.11

Quantity Charge	Current FY 2022	Proposed FY 2023	Proposed FY 2024
Single Family			
Tier 1	$10.14	$10.75	$11.40
Tier 2	$14.83	$15.72	$16.66
Tier 3	$17.94	$19.02	$20.16
Multi-Family	$13.52	$14.33	$15.19
Non-Residential	$14.41	$15.27	$16.19

- Current rates are inflated 6% across the board for FY 2023 and FY 2024
- Rate structure developed in the 2018 COS study

Water Shortage Rates

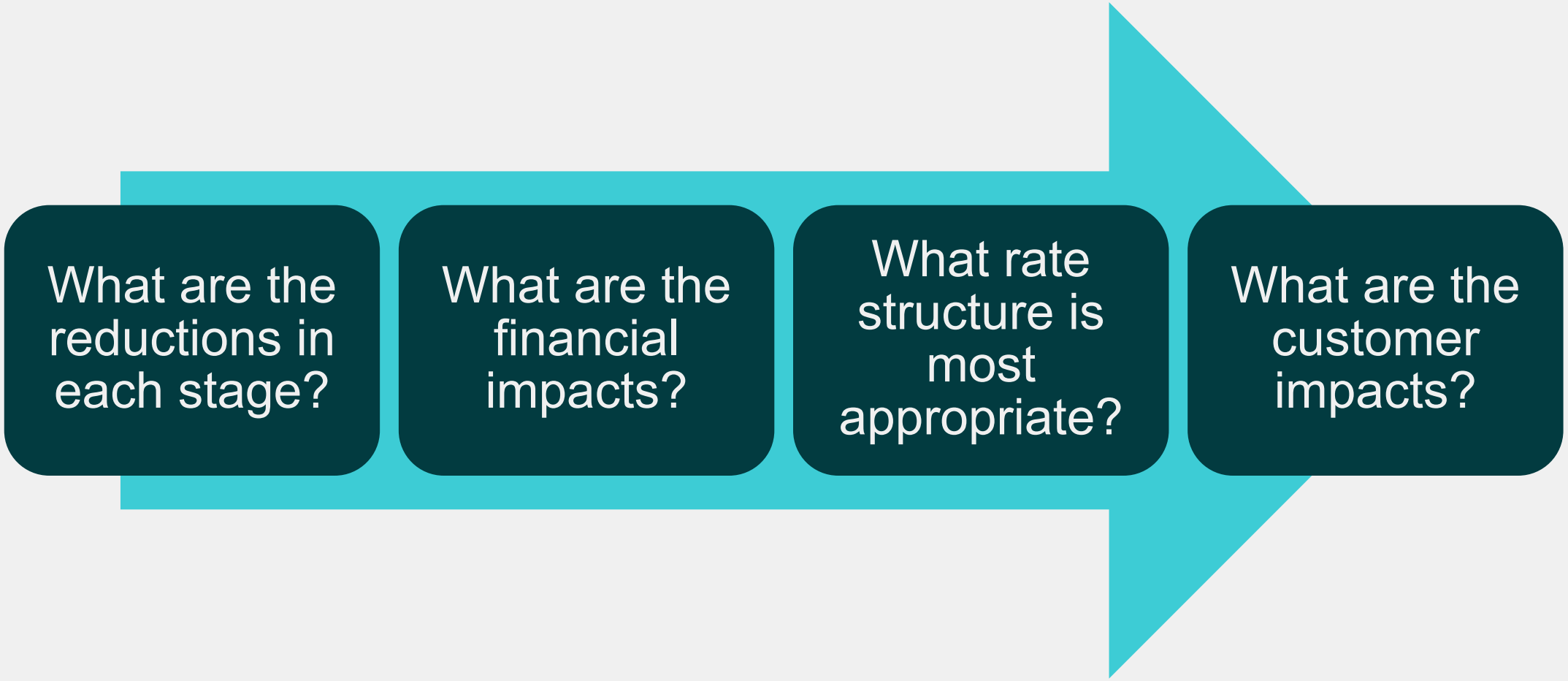
Rates or Penalties?

Water Shortage Rates	Water Shortage Penalties
Recover the financial impacts of having a drought	Utilize price signal to enforce water rationing
Are a revenue-generating mechanism	Are not revenue generating and strictly punitive
Require a nexus between the cost of providing service and associated rates (Prop 218)	Are violations not based on cost of service

What are Water Shortage Rates?

- Given Proposition 218 requirements, water shortage rates:
  - Are designed to recover lost revenue due to reduction in water usage and difference in water purchase costs
  - Are surcharges tied to specific drought stages, as defined by CCWD's 2020 Water Shortage Contingency Plan
  - Provide financial flexibility for CCWD in implementing the appropriate water shortage rates

Steps to Develop Water Shortage Rates



Step 1: What are the reductions in each stage?

Based on the 2020 Water Shortage Contingency Plan

Drought Stages and Reduction

Customer Class	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Single Family	85%	79%	70%	64%	59%	48%
Multi-Family	86%	79%	70%	65%	59%	48%
Non-Residential	95%	79%	70%	57%	38%	12%
Target Reduction Goal	**≤10%**	**20%**	**30%**	**40%**	**50%**	**>50%**

Based on the 2020 Water Shortage Contingency Plan

Estimated Water Sales by Stage

Customer Class	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Water Sales (ccf)							
Single Family	431,902	367,116	341,202	302,331	276,417	254,822	207,313
Multi-Family	43,899	37,753	34,680	30,729	28,534	25,900	21,072
Non-Residential	361,042	342,990	285,223	252,729	205,794	137,196	43,325
Total (ccf)	**836,842**	**747,859**	**661,106**	**585,790**	**510,745**	**417,918**	**271,709**
Water Sales (MG)							
Single Family	323	275	255	226	207	191	155
Multi-Family	33	28	26	23	21	19	16
Non-Residential	270	257	213	189	154	103	32
Total (MG)	**626**	**559**	**495**	**438**	**382**	**313**	**203**

Step 2: What are the financial impacts?

Drought Implications

- Some questions to consider:
  - How much lost commodity revenue is expected due to cutbacks?
  - How will this change our water supply mix (and the costs associated with each source)?
  - How will this change our operating costs (if at all)?
- For CCWD, the financial consequences include:
  - Reduced commodity revenue (severity is dependent on drought stage)
  - Changes in water purchase costs from SFPUC (shift in supply mix from less expensive local water to more expensive SFPUC water)

Financial Impacts

Supply Mix	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
CCWD Sources	318,000	74,786	0	0	0	0	0
SFPUC Sources	518,842	673,073	661,106	585,790	510,745	417,918	271,709
Total (ccf)	**836,842**	**747,859**	**661,106**	**585,790**	**510,745**	**417,918**	**271,709**

Drought Costs	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Lost Commodity Revenue	$1,577,857	$2,911,967	$4,076,183	$5,232,201	$6,645,247	$8,659,564
SFPUC Water Purchase Cost*	$725,003	$668,745	$314,704	($38,063)	($474,420)	($1,161,714)
One-Time Expenses	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
Total	**$2,352,860**	**$3,630,713**	**$4,440,886**	**$5,244,139**	**$6,220,827**	**$7,547,850**

*Additional drought-related SFPUC costs can be passed through

Step 3: What rate structure is most appropriate?

Water Shortage Rate Structure

- Following the same rate structure as prior year's water shortage rates
- Uniform percentage increase
  - All customers will see the same percentage increase for the water shortage rate

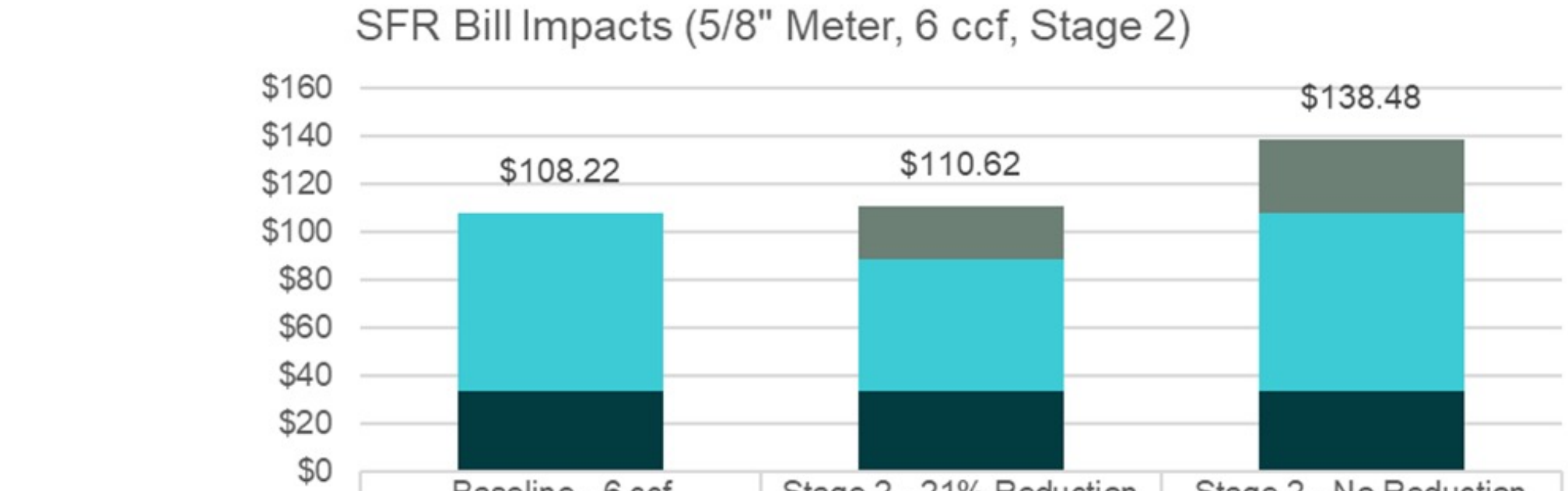
Proposed Water Shortage Rates

Water Shortage Rates	Baseline*	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Proposed Water Shortage Rates							
Single Family							
Tier 1	$0.00	$2.47	$4.37	$6.14	$8.52	$12.85	$25.42
Tier 2	$0.00	$3.60	$6.39	$8.98	$12.46	$18.79	$37.16
Tier 3	$0.00	$4.36	$7.73	$10.87	$15.07	$22.73	$44.97
Multi-Family	$0.00	$3.29	$5.82	$8.19	$11.36	$17.12	$33.88
Non-Residential	$0.00	$3.50	$6.21	$8.73	$12.10	$18.25	$36.10
Combined Commodity Rates							
Single Family							
Tier 1	$10.75	$13.22	$15.12	$16.89	$19.27	$23.60	$36.17
Tier 2	$15.72	$19.32	$22.11	$24.70	$28.18	$34.51	$52.88
Tier 3	$19.02	$23.38	$26.75	$29.89	$34.09	$41.75	$63.99
Multi-Family	$14.33	$17.62	$20.15	$22.52	$25.69	$31.45	$48.21
Non-Residential	$15.27	$18.77	$21.48	$24.00	$27.37	$33.52	$51.37

*Baseline rates effective 1/1/2023 with a 6% across-the-board increase

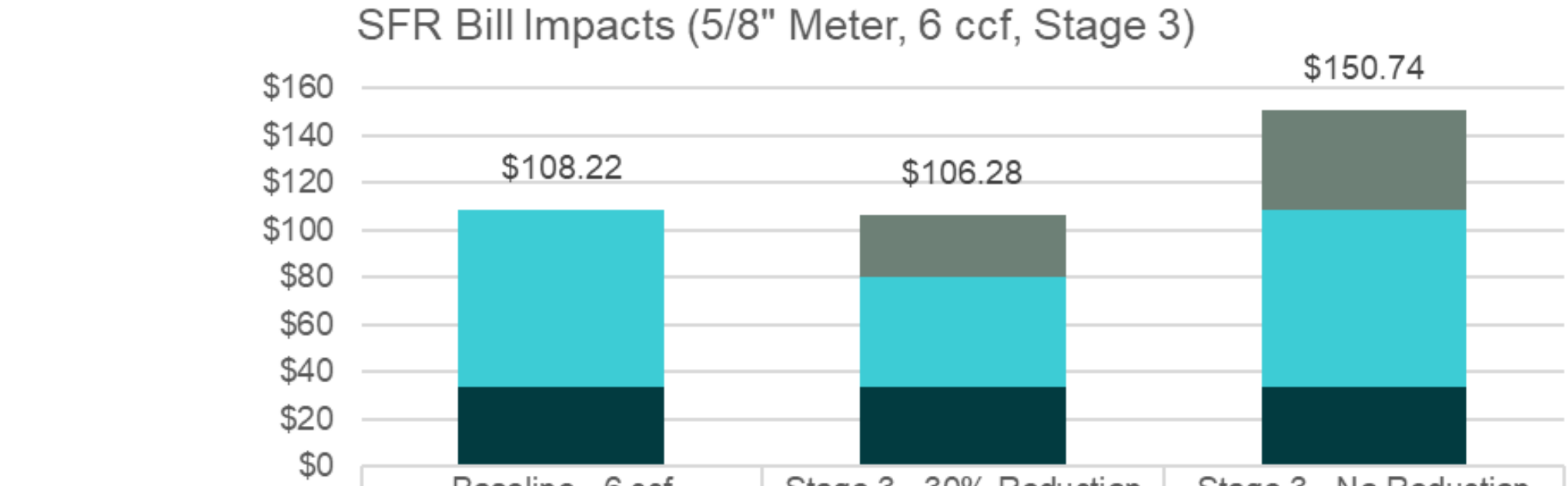
Step 4: What are the customer impacts?

Single Family Residential (SFR) Impacts – Stage 2



	Baseline - 6 ccf	Stage 2 - 21% Reduction	Stage 2 - No Reduction
Water Shortage Rate	$0.00	$22.21	$30.26
Base Quantity Charge	$74.44	$54.63	$74.44
Base Fixed Charge	$33.78	$33.78	$33.78
Total Bill	$108.22	$110.62	$138.48

Single Family Residential (SFR) Impacts – Stage 3



	Baseline - 6 ccf	Stage 3 - 30% Reduction	Stage 3 - No Reduction
Water Shortage Rate	$0.00	$26.36	$42.52
Base Quantity Charge	$74.44	$46.14	$74.44
Base Fixed Charge	$33.78	$33.78	$33.78
Total Bill	$108.22	$106.28	$150.74

Water Shortage Rate Implementation

- Based on Proposition 218 requirements, the water shortage rates shown are the **maximum** that the Board can implement
  - Additional drought-related SFPUC costs could be passed through
- Board has the discretion to:
  - Implement a lower water shortage rate
  - Use reserves
  - Defer capital projects
  - Any combination of the above

Next Steps

- Board to authorize:
  - Proposed water rates
  - Proposed water shortage rates
- Report and Proposition 218 notice preparation
- Public Hearing is scheduled for December 13, 2022

RAFTELIS

Thank you!

Contact:

Kevin Kostiuk
213-262-9309 / kkostiuk@raftelis.com

Nancy Phan
626-236-0600 / nphan@raftelis.com

Lindsay Roth
213-262-9313 / lroth@raftelis.com

STAFF REPORT

To: **Coastside County Water District Board of Directors**

From: **Mary Rogren, General Manager**

Agenda: **October 11, 2022**

Report Date: **October 7, 2022**

Subject: **Approval of Coastside County Water District Response to San Mateo County Civil Grand Jury Report: "The Other Water Worry: Is Your Water Provider Prepared for the Big One?"**

Recommendation:

Approve the Coastside County Water District Response to San Mateo County Civil Grand Jury Report: "The Other Water Worry: Is Your Water Provider Prepared for the Big One?"

Background:

At the September 13, 2022 Board of Directors Meeting, staff provided an overview of the August 5, 2022 San Mateo County Civil Grand Jury report addressing the issue "to what extent are water providers in San Mateo County prepared to supply water to customers in the event of a major seismic catastrophe?"

In February 2022, the Civil Grand Jury conducted 27 interviews and made document requests to the County of San Mateo, the San Francisco Public Utilities Commission, and 10 water providers in the County. The Grand Jury's key recommendations include:

- By March 31, 2023, county water providers perform emergency preparedness exercises consistent with their emergency response plans.
- By March 31, 2023, county water providers perform an analysis and document an after-action report consistent with their emergency response plans
- County water providers develop plans to increase emergency water storage sufficient to provide emergency water for a period of at least three days. *(Note – not applicable to Coastside County Water District as the District already complies with this recommendation.)*
- County water providers develop plans to increase emergency fuel storage sufficient to provide emergency fuel for a period of at least three days. *(Note – not applicable to Coastside County Water District as the District already complies with this recommendation.)*

- County Department of Emergency Management develop a plan to bring its policy in line with EPA recommendations to coordinate disaster response with County water providers. *(Note – this item only applies to the County of San Mateo.)*

District staff welcomes the fact that the San Mateo County Civil Grand Jury took an interest in understanding emergency preparedness of water providers in the County. And certainly, as the water provider and first responders in water related emergencies for a population of 19,000 on the San Mateo Coastside, District staff continually considers emergency preparedness in day-to-day activities as well as in future planning.

District Response to the Grand Jury Report

The District is required to respond to the Grand Jury no later than November 4, 2022. Attached is a draft letter (Exhibit A) to the Grand Jury for the Board to review and approve.

Attachments
Exhibit A – Draft Response Letter
Exhibit B – San Mateo County Civil Grand Jury Report dated August 5, 2022 - "The Other Water Worry: Is Your Water Provider Prepared for the Big One?"

EXHIBIT A
DRAFT 10.7.2022

October XX, 2022

The Honorable Amarra A. Lee
Judge of the Superior Court
c/o Jenarda Dubois
Civil Grand Jury Coordinator
Hall of Justice
400 County Center, 8th Floor
Redwood City, CA 94063-1655

Subject: Coastside County Water District Response to Grand Jury Report Entitled "The Other Water Worry: Is your Water Provider Prepared for the Big One?"

Dear Judge Lee,

The Coastside County Water District (District) received the August 5, 2022 Grand Jury report entitled "The Other Water Worry: Is Your Water Provider Prepared for the Big One?" The District's Board of Directors reviewed the report and approved this response at the October 11, 2022 regular Board meeting. This letter responds to the Civil Grand Jury's findings and recommendations in the report.

Findings:

F1. The water provider was unable to demonstrate that it conducts the emergency exercises specified in its ERP, which may compromise its ability to supply water following a catastrophic interruption in water distribution service.

Response:

The District disagrees partially with the finding. In 2021, District staff spent over 250 hours along with 350 consulting hours to prepare a Risk and Resilience Assessment of the District and an updated Emergency Response Plan (ERP) in accordance with the American Water Infrastructure Act (AWIA). The ERP preparation included conducting (6) Workshops to formulate Incident Action Checklists for priority emergencies including earthquakes with key emergency management staff. The District's ERP was completed in December 2021 and certified with the US Environmental Protection Agency on December 20, 2021.

The District was interviewed by the Civil Grand Jury just 2 months after the comprehensive update of the District's ERP, so the District was unable to demonstrate that it had conducted tabletop or operations-based exercises as recommended by the ERP certified in December 2021. As of this writing, key District emergency management staff are in the process of taking the recommended SEMS and ICS (FEMA) courses. In accordance with conducting annual training per the ERP for calendar year 2022, District staff have planned four exercises, including interagency exercises. On October 5, 2022, eight District emergency staff participated in the San Mateo County Department of Emergency Management Tsunami Tabletop exercise. (The exercise included ap. 70 participants from multiple County and State agencies.)

The District's staff and Board of Directors take seriously its responsibility as the water provider and first responder in water emergencies for a population of 19,000 on the San Mateo coast. Although conducting interagency exercises was limited over the last few years due to COVID, emergency preparedness is a

foremost and ever-present priority for Coastside County Water District staff and the Board in day-to-day activities. These efforts include:

- On average, District operations staff responds to 10-12 after hours emergencies annually (including storm damage, lightning strikes, and main breaks) and staff routinely review such events after the fact in weekly staff meetings for emergency response improvements. The PG&E PSPS events and the CZU fire also presented valuable hands-on learning experiences in recent years.

- District operations staff maintain Distribution and Water Treatment professional certifications along with ongoing continuing education requirements. Staff regularly conduct safety tailgate activities; CPR and AED training; backflow; fire extinguisher and prevention training for example. In addition, staff frequently work with vendors to exercise equipment including pumps and alarm systems. Generators are exercised monthly and serviced/load bank tested annually.

- In January 2021, the District performed an emergency pump test exercise with Coastside Fire Protection District which provided District and Fire Staff with hands-on experience working together utilizing emergency equipment.

- In the summer of 2021, the District staff spent 40+ hours completing the San Mateo County Local Hazard Mitigation Annex Plan (approved by FEMA in December 2021.) The District is also an active member of California Water/Wastewater Agency Response Network (CalWARN) and California Utilities Emergency Association (CUEA). District staff also attends the monthly Coastal Emergency Action Plan (CEAP) meetings.

- The District's 10-year Capital Improvement Program includes $68 Million in infrastructure spending to improve the District's resiliency and seismic vulnerabilities, including replacement of three aging water tanks and many aging pipelines. In 2021-2022, the District implemented Cityworks Asset Management System and accompanying workflows to allow for tracking of the condition of the District's infrastructure.

- Over the last 5 years alone, the District has invested $1.7M in equipment targeting emergency preparedness including generators, emergency response vehicles, and spare parts inventories for emergency repairs. In 2022, the District received a $200K grant from Cal-OES and purchased an above-ground split fuel tank with the capacity to hold 5,000 gallons of diesel and 1,000 gallons of unleaded. This tank provides 15-20 days of emergency fuel storage for generators and vehicles.

In summary, the outlined emergency efforts noted above go beyond tabletop exercises. The District does not agree that the absence of recent formal tabletop exercises as specified in the ERP compromises or reduces the District's ability to supply water or effectively respond to a catastrophic interruption in water distribution service.

F2. The water provider was not able to produce documentation analyzing past exercises to test readiness and improve their performance, which may compromise its ability to supply water following a catastrophic interruption in water distribution service.

Response:

The District disagrees partially with the finding. The District's formal documentation is limited and has historically not been in the recommended FEMA format noted in the ERP certified as of December 2021.

The District does not agree that the lack of this documentation compromises or reduces the District's ability to supply water or effectively respond to a catastrophic interruption in water distribution service.

The December 2021 updated ERP recommends the FEMA format: "Training documentation, such as class rosters, syllabus, evaluation checklists and copies of certificates, are kept on file. Exercise documentation includes an After Action Report (AAR) that encompasses a scenario synopsis, list of participants, best practices and lessons learned."

District staff are in the process of implementing the recommended documentation including an After Action Report format to be used to document future exercises.

Responses to Recommendations:

R1: The Grand Jury recommends that by March 31, 2023, the water service provider performs emergency preparedness exercises consistent with its emergency response plan.

Response:

The District has not yet fully implemented this recommendation but as stated in the response to F1 above, the District has started to implement it and it will be fully implemented by March 31, 2023.

R2: The Grand Jury recommends that, by March 31, 2023, the water provider perform an analysis and document an After Action Report consistent with its emergency response plan.

Response:

The District has not yet implemented this recommendation but it will be implemented by March 31, 2023.

On behalf of the District's Board of Directors and staff, I would like to extend the District's appreciation to the Civil Grand Jury for their efforts and interest in better understanding the emergency preparedness of water providers in the County. As first responders, water providers can never be too prepared for earthquakes and other emergencies, and we welcome the Grand Jury's insights for improvements. We also welcome the opportunity to work closer with the County of San Mateo and other agencies in planning coordinated responses for emergencies.

Please let us know if the District can provide additional information.

Very truly yours,

Robert Feldman
President, Board of Directors
Coastside County Water District

cc: Board of Directors
Mary Rogren, General Manager

EXHIBIT B

Superior Court of California, County of San Mateo
Hall of Justice and Records
400 County Center
Redwood City, CA 94063-1655

NEAL TANIGUCHI
COURT EXECUTIVE OFFICER
CLERK & JURY COMMISSIONER

(650) 261-5066
www.sanmateocourt.org

August 5, 2022

Mary Rogren
General Manager
Coastside County Water District
766 Main Street
Half Moon Bay, CA 94019

Re: Grand Jury Report: "The *Other* Water Worry: Is Your Water Provider Prepared for the Big One?"

Dear Ms. Rogren:

The 2021-2022 San Mateo County Civil Grand Jury filed the above-titled report on August 5, 2022, which contains findings and recommendations pertaining to your agency. Your agency must respond, within 90 days, to the Hon. Amarra A. Lee. Your agency's response is due no later than November 4, 2022.

There are several requirements for **the content of** your response. The response should indicate that it was approved by your governing body at a public meeting. In addition, please be aware that your agency is expected to adhere to the wording, as instructed below, when responding to the findings and recommendations of the Grand Jury report.

For each Grand Jury finding, your agency **must indicate** one of the following:

1. The respondent **agrees** with the finding; or

2. The respondent **disagrees wholly** or **partially with the finding,** specifying the portion of the finding that is disputed and including an explanation of the reasons therefor.

For each Grand Jury recommendation, your agency **must indicate** one of the following actions:

1. The recommendation **has been implemented**, with a summary of the implemented action;

2. The recommendation **has not yet been implemented**, but will be implemented in the future, with an **estimated date** for implementation;

3. The recommendation **requires further analysis**, with an explanation and the scope and parameters of an analysis or study, and an estimated date (**no later than six months from the publication date of the report**) for the matter to be prepared for discussion by the officer or director of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable; or

4. The **recommendation will not be implemented** because it is not warranted or reasonable, with an explanation therefor.

Kindly submit your responses in ALL the following formats.

1. **Responses to be placed on file with the Clerk of the Court by the Court Executive Office:**

   - **Prepare original on your agency's letterhead, indicate the date of the public meeting that your governing body approved the response address, and mail to:**

Hon. Amarra A. Lee
Judge of the Superior Court
c/o Jenarda Dubois
Civil Grand Jury Coordinator
Hall of Justice
400 County Center; 2nd Floor
Redwood City, CA 94063-1655.

2. **Responses to be placed at the Grand Jury website:**

   - **Scan response and send by e-mail to: grandjury@sanmateocourt.org. (Insert agency name at the top of your response if it is not indicated.)**

3. **Responses to be placed with the clerk of your agency:**

   - **File a copy of the response directly with the clerk of your agency. Do not send this copy to the Court.**

The 2021-22 Grand Jury foreperson is available to clarify the recommendations of the Grand Jury report until August 15, 2022. To reach the foreperson, please contact Jenarda Dubois, Civil Grand Jury Coordinator, at (650) 261-5066.

If you have any questions regarding these procedures, please do not hesitate to contact David Silberman, Chief Deputy County Counsel, at (650) 363-4749.

Very truly yours,

Neal Taniguchi
Court Executive Officer

Enclosure

cc: Hon. Amarra A. Lee
David Silberman

The *Other* Water Worry: Is Your Water Provider Prepared for the Big One?

Release Date: August 5, 2022

ISSUE

To what extent are water providers in San Mateo County prepared to supply water to customers in the event of a major seismic catastrophe?

SUMMARY

Along with the danger of drought, San Mateo County faces the likelihood of a powerful earthquake that could disrupt our supply of drinking water. Most of the water consumed in San Mateo County is sourced from the Hetch Hetchy Water System operated by the San Francisco Public Utilities Commission. In the event of a major earthquake, County water providers expect to regain access to this water supply within 72 hours after a catastrophic seismic event. However, some of those same water providers lack sufficient water reserve capacity to keep their customers' taps flowing for a three-day period without access to Hetch Hetchy water.

The Grand Jury found that the challenges of the County's aging water infrastructure are exacerbated by the diffuse patchwork of 16 water providers, each with its own pipes, tanks, management, and business model. Each of the 12 water providers the Grand Jury investigated had adopted a formal emergency response plan (ERP) as required by the Environmental Protection Agency (EPA). Nearly all the ERPs reviewed include provisions for exercises and after-action reports to identify problems. Some of those water providers indicated they had attended emergency response exercises run by other organizations, but none provided documentation that they had performed the emergency exercises specified by their ERPs. None of those water providers produced any after-action reports consistent with their ERPs.

Electric power is critical to the basic functioning of water providers' service, so back-up generators with sufficient fuel are needed in the event of an electrical power loss. Only about half of the water providers interviewed by the Grand Jury maintain a three-day supply of fuel for their emergency needs.

The County Department of Emergency Management is responsible for coordinating countywide emergency preparedness. The Grand Jury found that this department has had limited contact with water providers and could not produce a current list of emergency contacts.
Based on its investigation, the Grand Jury recommends that:

- County water providers perform emergency preparedness exercises consistent with their emergency response plans;
- County water providers perform an analysis and document an after-action report consistent with their emergency response plans;

- County water providers develop plans to increase emergency water storage sufficient to provide emergency water for a period of at least three days;
- County water providers develop plans to increase emergency fuel storage sufficient to provide emergency fuel for a period of at least three days; and
- County Department of Emergency Management develop a plan to bring its policy in line with EPA recommendations to coordinate disaster response with County water providers.

GLOSSARY

After-Action Report – An After-Action Report is an evaluation of an emergency response exercise designed to assess performance of exercise objectives and capabilities by documenting strengths, weaknesses, and corrective actions.

BAWSCA – The Bay Area Water Supply and Conservation Agency is a consortium formed by the State of California and major water providers in the San Francisco Bay area for the purpose of negotiating water purchases to buy water from the Hetch Hetchy Regional Water System.

SFPUC – The San Francisco Public Utilities Commission owns and controls the water that flows from the Hetch Hetchy Regional Water System to water providers.

BACKGROUND

Water Matters

Access to clean drinking water is widely recognized as an essential public service. The current drought is now the most visible challenge to our water supply service, but there is another dangerous, and likely inevitable threat to the local water delivery infrastructure in San Mateo County.

Earthquakes (Will) Happen

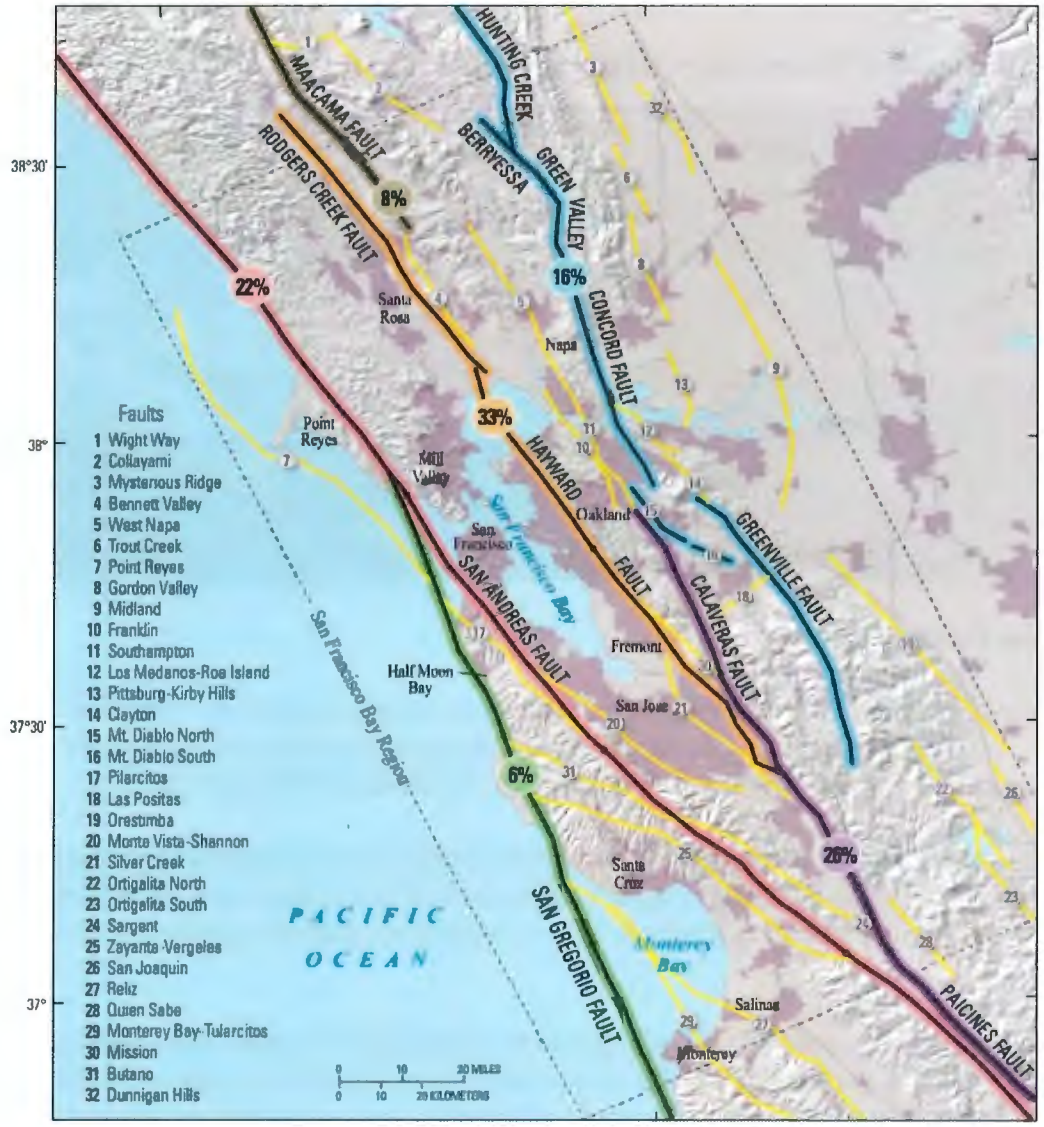
The U.S. Geological Survey estimates that the San Francisco Bay area faces a 72% probability of a magnitude 6.7 earthquake sometime in the next 30 years.[1] The San Andreas Fault, which triggered the devastating 1906 San Francisco earthquake (magnitude 7.8), runs straight through San Mateo County. The Hayward Fault, which geologists say is overdue for a major earthquake that may destroy important infrastructure, runs through the East Bay.[2] In Figure 1, the percentage shown in the colored circles on each named fault represents the probability that a magnitude 6.7 or greater earthquake will occur somewhere on that fault by the year 2043. The

[1] USGS, "What is the probability that an earthquake will occur in the Los Angeles Area? In the San Francisco Bay area?", accessed June 4, 2022, https://www.usgs.gov/faqs/what-probability-earthquake-will-occur-los-angeles-area-san-francisco-bay-area

[2] USGS, "Earthquake outlook for the San Francisco Bay region 2014–2043 - Fact Sheet", accessed June 4, 2022, https://pubs.er.usgs.gov/publication/fs20163020

dark lines outlined in various colors represent major plate boundary faults; the thinner, yellow lines mark smaller and lesser-known faults.

Figure 1: Map of Earthquake Outlook for the San Francisco Bay region 2014–2043[3]



[3] https://www.usgs.gov/faqs/what-probability-earthquake-will-occur-los-angeles-area-san-francisco-bay-area, June 13, 2022

A large earthquake along any of the major faults in the area could cause land displacement and related damage. For example, the images in Figure 2 show the damage to large water mains caused by the 1906 San Francisco earthquake on the San Andreas Fault.[4] Most of the damage done to San Francisco as a result of the earthquake was attributable to lack of water to fight the fire.

Figure 2: Water Mains Damaged by the 1906 San Francisco Earthquake

Shaking Up the Water System

"The water system is the utility most vulnerable to earthquake damage, and that damage could be the largest cause of economic disruption following an earthquake."
- Los Angeles Mayor's Office, *Resilience By Design* (2015) [5]

Water systems, relying as they do on underground pipes, are susceptible to damage and failure in the event of earthquakes. This problem is compounded by the fact that County water providers are operating with components that are up to a century old and nearing the end of their useful lives.[6]

Potential pipe failures are not the only points of vulnerability to earthquake damage. The County's many water systems – with networks of dams, aqueducts, pump stations, valves, storage tanks, above-ground water mains, and tunnels – are susceptible to damage from earth movement or loss of pumping power. Damage to the electrical grid, phone systems, and transportation infrastructure are also likely obstacles to rapid earthquake response.
In August 2014, a magnitude 6.0 earthquake occurred in Napa County. Aftershocks causing earth movement and further damage continued for months. As many as 163 water pipeline breaks were

[4] Water Mains Damaged in 1906 San Andreas Fault Earthquake www.geengineeringsystems.com/ewExternalFiles/1906-2006.pdf, accessed June 2, 2022 and J.B. Macelwane archives, St. Louis University

[5] Los Angeles Mayor's Office, "Resilience by Design" 2015, accessed June 4, 2022, https://www.usrc.org/wp-content/uploads/LA-Resilient-by-Design.pdf

[6] Grand Jury interview

reported and service to some customers was disrupted for weeks.[7] In 2011, more than two million Japanese households were without water service following the magnitude 9.1 Tohoku earthquake. Over a million households remained without water service for two weeks.[8]

The California Governor's Office of Emergency Services has published a warning to Californians that they should be self-sufficient for at least three days after a major earthquake.[9] The Centers for Disease Control recommends that households keep on hand at least a gallon of water per day for each person in the household, with sufficient water for three days for drinking and sanitation.[10] The East Bay Municipal Utility District recommends two gallons of water per day for at least seven days for each person in the household.[11]

So, Who Will Keep Your Taps Flowing?

The County's drinking water is almost entirely sourced from the Hetch Hetchy Regional Water System, including the Hetch Hetchy reservoir impounded behind the O'Shaughnessy Dam in Yosemite National Park, over 130 miles away and administered by the San Francisco Public Utilities Commission (SFPUC). The Bay Area Water Supply and Conservation Agency (BAWSCA) was formed in 2003 to represent 26 cities, water districts, and private utilities that purchase water from the SFPUC.[12]

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[7] Pacific Earthquake Engineering Research Center, University of California Berkeley, "The M_w 6.0 South Napa Earthquake of August 24, 2014", June 2016, https://peer.berkeley.edu/sites/default/files/cssc1603-peer201604_final_7.20.16.pdf

[8] T. Okamoto, Y. Kuwata, "Influence to Water Outage due to Damage to Regional Water Supply during the 2011 off the Pacific Coast of Tohoku Earthquake", 2012, https://www.iitk.ac.in/nicee/wcee/article/WCEE2012_1681.pdf

[9] "Community members are expected to be self-sufficient up to 3 days after a major earthquake without government response agencies, utilities, private-sector services, and infrastructure components. Education programs are currently in place to facilitate development of individual, family, neighborhood, and business earthquake preparedness." California Governor's Office of Emergency Services, "Earth Quake, Can You Go It Alone For Three Days", accessed June 10, 2022, https://www.ucop.edu/risk-services/_files/bsas/safetymeetings/oesearthquakebrochure.pdf

[10] CDC, "Creating and Storing an Emergency Water Supply", accessed June 4, 2022, https://www.cdc.gov/healthywater/emergency/creating-storing-emergency-water-supply.html/

[11] East Bay Municipal District (EBMUD), accessed June 14, 2022, https://www.ebmud.com/about-us/construction-and-maintenance/fire-safety-and-suppression/emergency-preparedness

[12] Two small water providers do not get their water from SFPUC -- they are County Service Area 7, with 70 customers, in La Honda, and County Service Area 11, with 90 customers in Pescadero.

Sixteen water providers in the County deliver water purchased from SFPUC to residential and business customers in their territories, as shown in Figure 3.[13]

Figure 3: Water Providers in San Mateo County

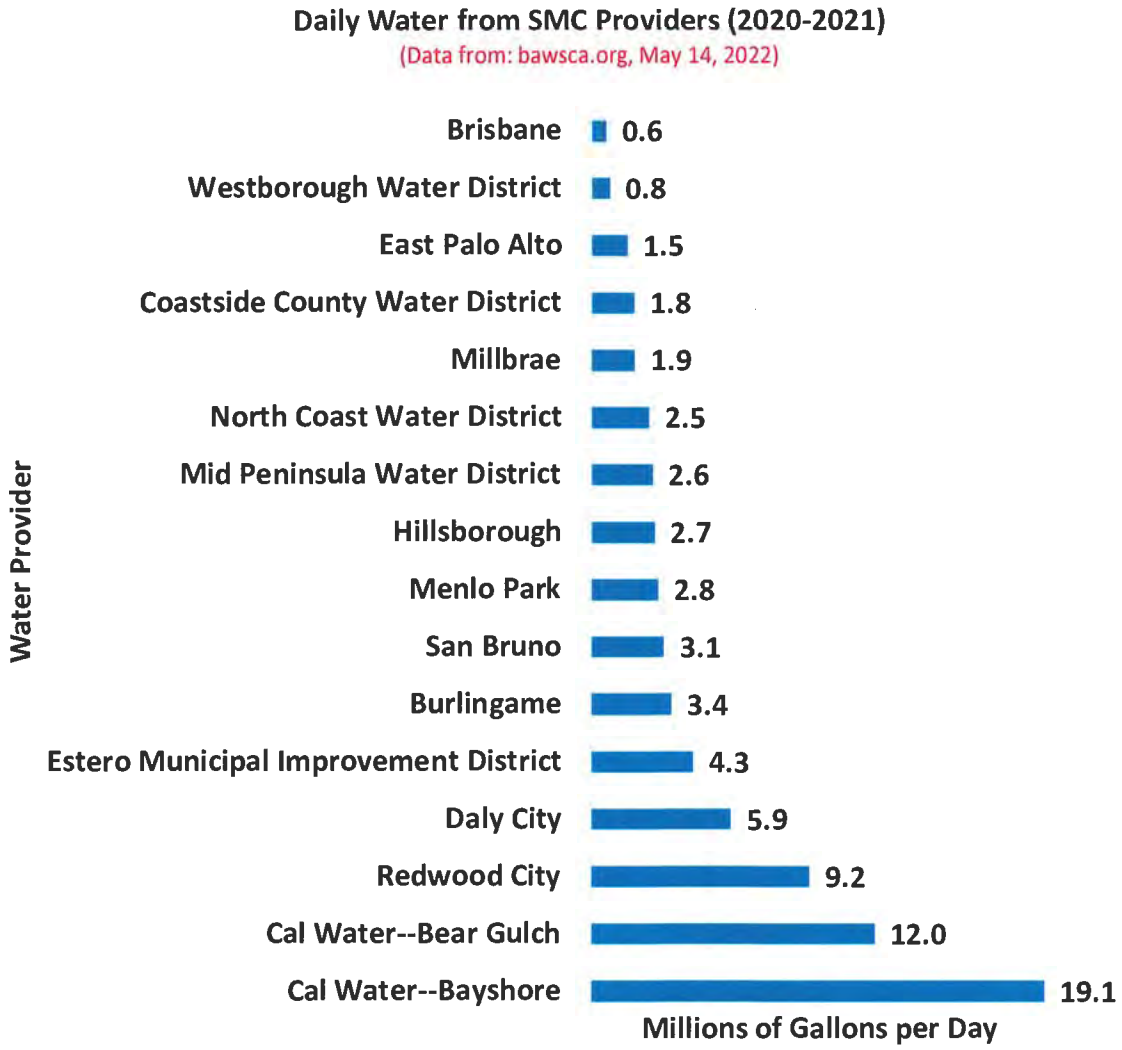
1 Westborough Water District
2 Brisbane/Guadalupe Valley
3 City of Burlingame
4a Cal Water Bear Gulch
4b Cal Water Bayshore
5 Coastside Water District
6 City of Daly City
7 City of East Palo Alto
8 Estero Municipal Improvement District
9 City of San Bruno
10 City of Redwood City
11 Town of Hillsborough
12 City of Menlo Park
13 Mid-Peninsula Water District
14 City of Millbrae
15 North Coast County Water District

Those water providers vary significantly in size of area served, number of customers, water capacity, and form of ownership and control. Some water providers are municipal water districts managed by individual cities; some are special districts run by an elected board; and still others are investor-owned utilities regulated by the California Public Utilities Commission. The areas served by water providers generally do not conform to city boundaries. A single city may be served by several water providers, and one water provider may serve residents in different cities.

[13] Based on User Survey 2014-2015, bawsca.org, accessed June 13, 2022

Although water providers are independently managed, most of their systems include physical linkages – known as "interties" – that allow them to share water supplies with another provider. Figure 4 shows the daily water usage by each water provider in San Mateo County.

Figure 4: Daily Water Usage (in Millions of Gallons) from County Water Providers



Securing the Source

The SFPUC has almost completed a ten-year water system improvement project on the Hetch Hetchy Water System. The work included earthquake-hardening construction on dams, aqueducts, underground tunnels, and 280 miles of large diameter pipes that span three major faults (Calaveras, Hayward, and San Andreas) and many secondary faults.

Figure 5: Hetch Hetchy Regional Water System

Prior to a recent Water System Improvement Program, BAWSCA estimated that the water delivery system was at significant seismic risk for outages of 20 - 30 days or more following an earthquake.[14] The design criteria for the Hetch Hetchy System seismic upgrade included the goal that most of the water network managed by SFPUC will be restored to 70% of water providers within 24 hours after a major earthquake.[15]

Hardening and modernizing vulnerable water infrastructure against a major earthquake is costly, disruptive, and impractical for individual water providers. Therefore, much of the local distribution system, between the SFPUC "turnout" to the water provider and the water providers' customers' taps, is likely to be older and more vulnerable to earthquake damage.[16]

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[14] BAWSCA, "Water System Improvement Program", accessed June 5, 2022, https://bawsca.org/water/supply/improvement

[15] https://ssc.ca.gov/wp-content/uploads/sites/9/2020/08/sfpuc_final_version_12_4-19-06.pdf

[16] Grand Jury interview

Federal Oversight

Several federal agencies share responsibility for regulation and oversight of water providers in San Mateo County.[17]

Of primary importance to this investigation is oversight administered through the Environmental Protection Agency (EPA). It implements the America's Water Infrastructure Act of 2018 (AWIA). AWIA requires water providers serving more than 3,300 people to develop a Risk and Resilience Assessment (Resiliency Assessment) that addresses risks from both natural hazards and malevolent actors. It includes an assessment of the resilience of water system infrastructure and operations, including cybersecurity. AWIA also requires providers to develop an Emergency Response Plan (ERP) that includes plans, procedures, and strategies to prepare for and respond to threats identified in their Resiliency Assessment. Water providers were required to self-certify and submit their ERPs to the EPA by December 31, 2021.[18] The AWIA requirements for a compliant ERP are shown in Appendix A.

The EPA offers online tools and other resources to help water providers prepare and comply with their AWIA requirements.[19] The EPA also encourages utilities to conduct tabletop emergency preparedness exercises as part of their emergency preparedness.[20]

State Oversight

The State of California has numerous departments, councils, agencies, and commissions involved with water service in one way or another. With respect to emergency preparedness in particular, the California Water Code requires each provider serving more than 3,000 customers to prepare, and submit to Department of Water Resources, an Urban Water Management Plan outlining plans for a diminished water supply. This plan should include planning for water shortages in the event of a natural disaster, and is required to be updated every five years.[21]

Some water providers are investor-owned companies. These providers are regulated as public utilities by the California Public Utilities Commission, which oversees their rates and operations. The California Water Service Company, an investor-owned company, is the single largest provider in San Mateo County (see Appendix B).

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[17] E.g., Department of Homeland Security, Department of Defense, Department of the Interior, Department of Agriculture, Department of Energy, and Department of Health and Human Services. Cody, Schneider, Tiemann, *Selected Federal Water Activities: Agencies, Authorities, and Congressional Committees*, Congressional Research Service, 2017

[18] EPA, "America's Water Infrastructure Act: Risk Assessments and Emergency Response Plans", accessed June 9, 2022, https://www.epa.gov/waterresilience/awia-section-2013

[19] EPA, "Vulnerability Self-Assessment Tool (VSAT): Protect Your Community From Risk", accessed June 14, 2022

[20] EPA, "Tabletop Exercise Tool for Water Utilities", accessed June 9, https://www.epa.gov/waterresiliencetraining/tabletop-exercise-tool-water-utilities-emergency-preparedness-response-and Climate Resiliency

[21] 2022, California Department of Water Resources, "Urban Water Management Plans", accessed June 9, 2022, https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management Plans#:~:text=The%20requirements%20for%20UWMPs%20are,required%20to%20submit%20an%20UWMP

County Oversight

No County agency is specifically assigned responsibility for regulation of water providers.

COVID-19 Considerations

Beginning in 2020, the COVID-19 pandemic dramatically impacted every aspect of life, including how public agencies delivered their services. Supply chain disruptions, staffing dislocation, and pandemic restrictions had significant impact on these agencies.

The Role of Readiness: Plan, Practice, Evaluate

> *"The water system's training program should ... include routine training drills, tabletop exercises and possibly functional exercises, depending on the utilities[']resources. ...The water system should include all the key players in the training exercises, so everyone is familiar with emergency policies and procedures."*[22]
>
> *"Train as you fight; fight as you train – keep the training and exercises close to real as possible because the skills and muscle memory developed is what will be called upon in the face of a real incident."*[23]
>
> -California State Water Board

[22] 2015, *State Water Resources Control Board Division of Drinking Water Emergency Response Plan Guidance for Public Drinking Water Systems Serving a population of 3,300 or more (approximately 1,000 SC or more*, accessed June 9, 2022, https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/security/ddw_emergency_guidelines_0215.pdf

[23] California Water Boards, "Water Resiliency", accessed June 9, 2022, https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/water_resiliency/

Water service interruptions in the event of an earthquake may be inevitable, but the extent and duration of those interruptions will largely depend on preparedness of water providers and emergency managers. How do water providers anticipate and plan for the potential chaos, obstacles, hazards, and contingencies that an actual catastrophe may bring?

The EPA and the Federal Emergency Management Agency (FEMA), a major agency of the Department of Homeland Security, both play significant roles in helping water providers prepare for water emergencies.

The EPA provides tools for agencies to help them prepare their ERPs, including:

- Tools on how to train and perform exercises for their personnel and response partners on the contents of their ERPs, including the roles and responsibilities of specific parties.[24]
- Resources on how to plan for an emergency and how to practice and evaluate those plans before they're needed. Those resources include videos, detailed checklists, interactive maps, and mitigation and funding recommendations.[25]
- An online guide, titled "Tabletop Exercise Tool for Drinking Water and Wastewater Utilities," that offers a comprehensive program to assist managers in developing and customizing exercise scenarios with unique local elements and challenges.[26]

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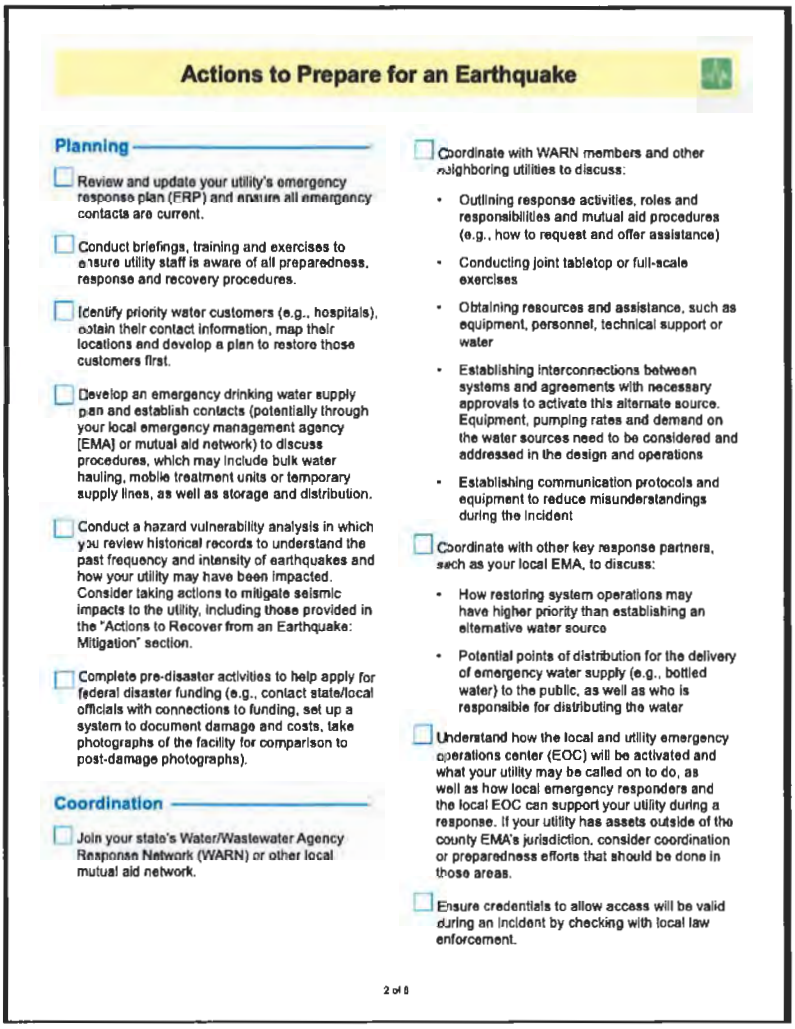
[24] EPA, "Developing Emergency Response Plans with the Drinking Water State Revolving Fund", accessed June 9, 2020, https://www.epa.gov/sites/default/files/2021-06/documents/emergency_response_plan-final.pdf

[25] EPA, "The Earthquake Resilience Guide for Water and Wastewater Utilities", accessed June 9, 2022, https://www.epa.gov/sites/default/files/2018-02/documents/180112-earthquakeresilienceguide.pdf

[26] EPA, "Tabletop Exercise Tool for Water Utilities: Emergency Preparedness, Response and Climate Resiliency", accessed June 14, 2022, https://www.epa.gov/waterresiliencetraining/tabletop-exercise-tool-water-utilities-emergency-preparedness-response-and

- An interactive, user-friendly Earthquake Resiliency Guide that helps water and wastewater utilities be more resilient to earthquakes.[27]
- A Water Sector Utility Incident Action Checklist (excerpt reproduced in Figure 6).[28]

Figure 6: EPA - Actions to Prepare for an Earthquake[29]



Actions to Prepare for an Earthquake

Planning

- ☐ Review and update your utility's emergency response plan (ERP) and ensure all emergency contacts are current.
- ☐ Conduct briefings, training and exercises to ensure utility staff is aware of all preparedness, response and recovery procedures.
- ☐ Identify priority water customers (e.g., hospitals), obtain their contact information, map their locations and develop a plan to restore those customers first.
- ☐ Develop an emergency drinking water supply plan and establish contacts (potentially through your local emergency management agency [EMA] or mutual aid network) to discuss procedures, which may include bulk water hauling, mobile treatment units or temporary supply lines, as well as storage and distribution.
- ☐ Conduct a hazard vulnerability analysis in which you review historical records to understand the past frequency and intensity of earthquakes and how your utility may have been impacted. Consider taking actions to mitigate seismic impacts to the utility, including those provided in the "Actions to Recover from an Earthquake: Mitigation" section.
- ☐ Complete pre-disaster activities to help apply for federal disaster funding (e.g., contact state/local officials with connections to funding, set up a system to document damage and costs, take photographs of the facility for comparison to post-damage photographs).

Coordination

- ☐ Join your state's Water/Wastewater Agency Response Network (WARN) or other local mutual aid network.
- ☐ Coordinate with WARN members and other neighboring utilities to discuss:
  - Outlining response activities, roles and responsibilities and mutual aid procedures (e.g., how to request and offer assistance)
  - Conducting joint tabletop or full-scale exercises
  - Obtaining resources and assistance, such as equipment, personnel, technical support or water
  - Establishing interconnections between systems and agreements with necessary approvals to activate this alternate source. Equipment, pumping rates and demand on the water sources need to be considered and addressed in the design and operations
  - Establishing communication protocols and equipment to reduce misunderstandings during the incident
- ☐ Coordinate with other key response partners, such as your local EMA, to discuss:
  - How restoring system operations may have higher priority than establishing an alternative water source
  - Potential points of distribution for the delivery of emergency water supply (e.g., bottled water) to the public, as well as who is responsible for distributing the water
- ☐ Understand how the local and utility emergency operations center (EOC) will be activated and what your utility may be called on to do, as well as how local emergency responders and the local EOC can support your utility during a response. If your utility has assets outside of the county EMA's jurisdiction, consider coordination or preparedness efforts that should be done in those areas.
- ☐ Ensure credentials to allow access will be valid during an incident by checking with local law enforcement.

2 of 8

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[27] EPA, "Earthquake Resiliency Guide" (updated February 2022), https://www.epa.gov/waterutilityresponse/earthquake-resilience-guide, accessed June 15, 2022. This resource can be found at Appendix C.

[28] EPA, "Water Sector Utility Incident Action Checklist," https://www.epa.gov/system/files/documents/2021-10/incident-action-checklist-earthquakes_508c-final.pdf, accessed June 19, 2022

[29] See Appendix D

According to the EPA, "… [t]he water sector should be engaged in a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective actions to achieve and maintain readiness to respond to, and reduce impacts from, emergencies. Preparedness also leads to increased resiliency, which is a key component of a utility's ability to provide critical services under adverse conditions."[30] That preparedness cycle is illustrated in Figure 7.

Figure 7: EPA Preparedness Cycle

FEMA has long recognized that well-designed practice sessions or tabletop exercises are a cost-effective, low risk mechanism for training staff, promoting communication across organizations and validating plans, procedures, equipment, systems, tools, facilities, and training for emergency management.[31] There have been extensive government efforts to support that goal. For example, the Department of Homeland Security created The Homeland Security Exercise and Evaluation Program (HSEEP) to train stakeholders like water and sanitation systems in developing and implementing essential readiness components.[32]

An "After-Action Report" is a formal review of an emergency preparedness exercise, such as a tabletop exercise, that is designed to identify what worked and what needs to be improved. It converts lessons learned from the exercise into concrete, measurable steps to improve response capabilities. It specifically details the actions to take to address recommendations presented, who will be responsible for taking the action, and the timeline for completion.[33]

Experience gained from both the 1991 Oakland Hills fire and the 1989 Loma Prieta earthquake highlighted the importance of mutual aid among water providers. The California

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[30] EPA, "How to Develop a Multi-Year Training and Exercise (T&E) Plan", accessed June 14, 2022, https://www.epa.gov/sites/default/files/2015-05/documents/how_to_develop_a_multi-year_training_and_exercise_plan_a_tool_for_the_water_sector.pdf
See also NIH, "Use of After-Action Reports (AARs) to Promote Organizational and Systems Learning in Emergency Preparedness", accessed June 14, 2022, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3447598/

[31] The White House archives, President George Bush, "Katrina Lessons Learned", accessed June 9, 2022, https://georgewbush-whitehouse.archives.gov/reports/katrina-lessons-learned/appendix-a.html

[32] FEMA, "Homeland Security Exercise ad Evaluation Program (HSEEP)", accessed June 9, 2022, https://www.fema.gov/emergency-managers/national-preparedness/exercises/hseep

[33] San Francisco Department of Emergency Management, "Phase 4: After Action Report and Improvement Planning,"accessed June 14, 2022, https://sfdem.org/phase-4-after-action-report-and-improvement-planning-0

Water/Wastewater Agency Response Network (CalWARN) was formed and membership eventually expanded to include over 190 utilities across the state. "The mission of CalWARN is to support and promote statewide emergency preparedness, disaster response, and mutual assistance processes for public and private water and wastewater utilities."[34] Its network enables agencies to locate and share vital resources, including both equipment and personnel during emergencies. The EPA recommends that water providers participate in mutual aid activities.[35]

The County Executive's Office describes the responsibility of the Department of Emergency Management (County DEM) as "alerting and notifying appropriate agencies within the county's 20 cities when disaster strikes; coordinating all agencies that respond; ensuring resources are available and mobilized in times of disaster; developing plans and procedures in response to and recovery from disasters; and developing and providing preparedness materials for our residents."[36] Formerly operated by the County Sherriff's Office as the Office of Emergency Services, County DEM came under the authority of the County Executive's Office in 2021 and later became a stand-alone County department.

The Grand Jury investigated the degree to which water providers in the County are preparing for potential difficulties in restoring water to customers in the event of an abrupt service interruption.

DISCUSSION

While the SFPUC is nearing completion of its upgrade to the seismic resilience of the Hetch Hetchy Regional Water System, County water providers have managed their infrastructure upgrade programs in diverse ways. Some water providers reported that they can only afford enough capital outlay to replace about 2% of aging components per year without severely increasing water rates.[37] History suggests they could face crippling pipeline breaks, equipment damage, and fuel shortages during the aftermath of a major seismic event.

Mitigating an earthquake's impact requires the ability to:

- Quickly identify and repair damage, much of it underground and invisible;
- Coordinate and communicate with scattered staff in a chaotic post-quake environment;
- Locate and transport emergency equipment and supplies;

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[34] CalWARN Mission Statement, accessed June 14, 2022. https://www.calwarn.org

[35] EPA, "Water Sector Utility Incident Action Checklist," accessed June 19, 2022, https://www.epa.gov/system/files/documents/2021-10/incident-action-checklist-earthquakes_508c-final.pdf

[36] County of San Mateo, Department of Emergency Management, accessed June 9, 2022, https://www.smcgov.org/ceo/department-emergency-management

[37] Grand Jury interviews

- Quickly react and adapt to both likely and unpredictable challenges in a stressful environment; and
- Coordinate response with emergency agencies and other water providers.[38]

Federal and State regulations and guidelines require water providers to document the adequacy of emergency preparation measures, including an ERP. The Grand Jury sought to verify that the individual water providers were in compliance with provisions of their ERPs.[39] We also sought to assess emergency preparedness, and potential improvements to the emergency response planning of County water providers.

The Grand Jury selected 12 of the 16 major County water providers, representing a cross-section of populations served and types of providers (municipal water districts, special districts, and public utilities). We reviewed documents and conducted interviews with representatives from each of these water providers listed in Figure 8.

Figure 8: Water Providers Investigated

Water Provider	Provider Type[40]	Population Served (2021)[41]
Brisbane	Municipal Water District	4,657
Hillsborough	Municipal Water District	10,869
Westborough Water District	Special District	12,703
Coastside County Water District	Special District	18,738
East Palo Alto	Municipal Water District	26,181
Mid-Peninsula Water District	Special District	26,924
Estero Municipal Improvement District	Special District	37,687
North Coast County Water District	Special District	38,546
Cal Water Bear Gulch	Public Utility	60,827
Redwood City	Municipal Water District	90,518
Daly City	Municipal Water District	106,638
Cal Water Bayshore	Public Utility	200,111

As required by the America's Water Infrastructure Act (AWIA), each of these providers has prepared, self-certified, and submitted to the EPA a Resiliency Assessment and an ERP.[42] Brisbane was not required by AWIA to submit an ERP specifically, but has an equivalent document titled an Emergency Operations Plan.

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[38] EPA, March 2018, "Connecting Water Utilities and Emergency Management Agencies", accessed June 10, 2022, https://www.epa.gov/sites/default/files/2018-05/documents/water_emaconnection.pdf/

[39] Grand Jury interviews/correspondences

[40] Grand Jury interviews

[41] BAWSCA.org member agency profiles

[42] EPA, "America's Water Infrastructure Act: Risk Assessments and Emergency Response Plans", accessed June 10, 2022, https://www.epa.gov/waterresilience/awia-section-2013

Emergency Response Plans: Promise, Performance, Documentation

The ERPs of all water providers the Grand Jury investigated included provisions for emergency readiness exercises. Only seven specified that these exercises would be performed at least annually. Others contained no commitment about the frequency of exercises. Some water providers we investigated indicated that the COVID-19 pandemic hampered their capacity to perform the exercises required by their ERPs.

The SFPUC invites most County water providers to attend its annual emergency preparedness exercises. Several water providers told us they attend these exercises. Two water providers (Westborough Water District and East Palo Alto) indicated that they did not participate and they did not receive invitations.[43] In addition, several water providers informed us that they had participated in general emergency preparedness exercises organized by local public safety and similar agencies in the past.

The Grand Jury was unable to determine whether the SFPUC exercises, or local emergency response planning exercises, satisfied the specific requirements described in the water districts' respective ERPs, as submitted to EPA.

None of the water districts investigated was able to present to the Grand Jury any documentation showing that they had conducted the water district readiness exercises described in their respective ERPs. In addition, no water provider was able to present to the Grand Jury any After-Action Report related to its ERP requirements.

Backup Water and Fuel

The SFPUC publication on seismic design criteria states that their performance goal for the Hetch Hetchy's Water System Improvement Program is to restore winter demand volume to 70% of their customer turnouts within 24 hours of a major earthquake.[44] The Grand Jury noted that County water providers are reasonably confident the improved SFPUC system will be functioning within three days.[45]

Grand Jury interviews and BAWSCA data indicate that only seven of the 12 water providers investigated by the Grand Jury had back-up water storage sufficient for three days of normal usage. Several water providers informed the Grand Jury that they should also maintain a three-day back-up storage of fuel to keep generators operating to run the water delivery system during an emergency.

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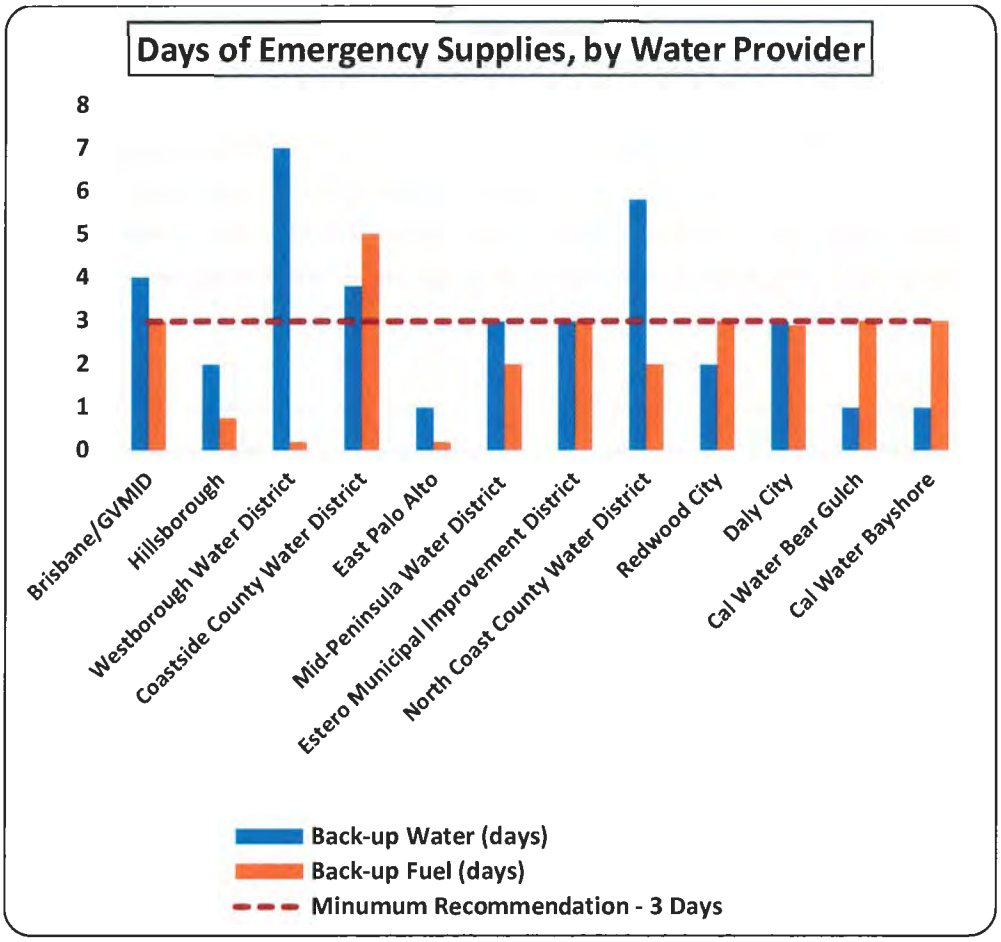
[43] Grand Jury interview

[44] https://ssc.ca.gov/wp-content/uploads/sites/9/2020/08/sfpuc_final_version_12_4-19-06.pdf

[45] Grand Jury interview

Only seven of the water providers we investigated had a three-day back-up fuel supply. Only four had a three-day back-up supply of both water and fuel, as shown in Figure 9.

Figure 9: Days of Emergency Supplies, by Water Provider[46]



County Responsibilities

In a catastrophic event, County DEM is responsible for alerting and coordinating agencies' responses, ensuring availability of resources, and developing plans for response and recovery.

The EPA has published guidance for cooperation that is needed between local emergency management agencies, such as County DEM, and the water providers serving the local communities. Its recommendations include:

- Sharing contact information between the agencies and water providers;
- Joint training and exercises and mutual facilities tours;

[46] Grand Jury interviews; BAWSCA, "Member Agency Profiles", accessed June 11, 2022, https://bawsca.org/members/profiles

- Creating a "water desk" at the emergency agency; and
- Coordinating public messaging during a water emergency.[47]

The Grand Jury found a gap between these recommendations and County DEM practices. County DEM informed us that it had no water desk, had not conducted emergency water interruption exercises, had not developed a coordination plan for emergency water interruption, and did not have a current list of emergency contacts for County water providers.

Several water providers informed the Grand Jury that they had, had no recent contact with the County DEM. Several informed us that they believe the County should be responsible for countywide water disaster exercises. To date, County DEM has conducted emergency preparedness exercises, but none addressing catastrophic water interruption.

FINDINGS

The following findings apply to the specific governing bodies identified under "Request For Responses" below:

F1. The water provider was unable to demonstrate that it conducts the emergency exercises specified by its ERP, which may compromise its ability to supply water following a catastrophic interruption in water distribution service.

F2. The water provider was not able to produce documentation analyzing past exercises to test readiness and improve their performance, which may compromise its ability to supply water following a catastrophic interruption in water distribution service.

F3. The water provider does not have three days of emergency water storage, which may compromise its ability to supply water following a catastrophic interruption in water distribution service.

F4. The water provider does not have three days of emergency fuel storage, which may compromise its ability to supply water following a catastrophic interruption in water distribution service.

F5. The County Department of Emergency Management has not followed EPA recommendations that it coordinate disaster response with County water providers, which may compromise its ability to coordinate a response to a catastrophic interruption in water distribution service.

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[47] EPA, "*Connecting Water Utilities and Emergency Management Agencies*", accessed June 10, 2022, https://www.epa.gov/sites/default/files/2018-05/documents/water_emaconnection.pdf

RECOMMENDATIONS

The following recommendations apply to the specific governing bodies identified under "Request for Responses" below:

R1. The Grand Jury recommends that, by March 31, 2023, the water provider perform emergency preparedness exercises consistent with its emergency response plan.

R2. The Grand Jury recommends that, by March 31, 2023, the water provider perform an analysis and document an After-Action Report consistent with its emergency response plan.

R3. The Grand Jury recommends that, by March 31, 2023, the water provider develop plans to increase emergency water storage sufficient to provide emergency water for a period of at least three days.

R4. The Grand Jury recommends that, by March 31, 2023, the water provider develop plans to increase emergency fuel storage sufficient to provide emergency fuel for a period of at least three days.

R5. The Grand Jury recommends that, by December 31, 2022, the County Department of Emergency Management develop a plan to bring its policy in line with EPA recommendations to coordinate disaster response with County water providers.

REQUEST FOR RESPONSES

Pursuant to Penal Code Section 933.05, the Grand Jury requests responses from the following governing bodies:

Water Provider	F1	F2	F3	F4	F5	R1	R2	R3	R4	R5
Brisbane/GV Municipal Improvement District	X	X				X	X			
Hillsborough	X	X	X	X		X	X	X	X	
Westborough Water District	X	X		X		X	X		X	
Coastside County Water District	X	X				X	X			
East Palo Alto	X	X	X	X		X	X	X	X	
Mid-Peninsula Water District	X	X		X		X	X		X	
Estero Municipal Improvement District	X	X				X	X			
North Coast County Water District	X	X		X		X	X		X	
Redwood City	X	X	X			X	X	X		
Daly City	X	X				X	X			
San Mateo County					X					X

The governing bodies indicated above should be aware that the comment or response of the governing body must be conducted subject to the notice, agenda, and open meeting requirements of the Brown Act.

RESPONSE REQUIREMENTS

California Penal Code Section 933.05, provides (emphasis added):

(a) For purposes of subdivision (b) of Section 933, as to each grand jury finding, the responding person or entity shall report one of the following:

(1) The respondent **agrees** with the finding.

(2) The respondent **disagrees** wholly or partially with the finding; in which case the response shall **specify the portion of the finding that is disputed and shall include an explanation of the reasons therefor**.

(b) For purposes of subdivision (b) of Section 933, as to each grand jury recommendation, the responding person or entity shall report one of the following actions:

(1) The recommendation has been implemented, **with a summary regarding the implemented action**.

(2) The recommendation has not yet been implemented, but will be implemented in the future, **with a timeframe for implementation**.

(3) The recommendation requires further analysis, **with an explanation and the scope and parameters of an analysis or study, and a timeframe for the matter to be prepared for**

discussion by the officer or head of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This timeframe shall not exceed six months from the date of publication of the grand jury report.

(4) The recommendation will not be implemented because it is not warranted or is not reasonable, **with an explanation therefor.**

METHODOLOGY

Preliminary Research

The Grand Jury reviewed many news articles and many publicly-available materials that described how water is distributed to San Mateo County and damage that may be caused by catastrophic earthquakes. We also researched which Federal, State, and local agencies help regulate water in San Mateo County. The sources of such documents included various departments of San Mateo County government, LAFCO, Federal and State agencies (including EPA, FEMA, DHS, and USGS), BAWSCA, and others.

Interviews and Document Requests

The Grand Jury conducted 27 interviews of public officials representing San Mateo County government departments, the San Francisco Public Utilities Commission, and water providers serving customers across San Mateo County. These included individuals that had general and specific knowledge regarding emergency services, water provision, and water ecosystems in San Mateo County. The Grand Jury also reviewed a multitude of documents provided by these agencies in response to document requests.

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List of Appendices

APPENDIX A

SELECT FEDERAL AND STATE LAW AFFECTING WATER PROVIDERS

America's Water Infrastructure Act of 2018

Section 2013 of the law requires providers serving more than 3,300 people to develop and submit to the EPA a Risk and Resilience Assessment (Resiliency Assessment) as well as an Emergency Response Plan (ERP). The law requires that both documents include specific information.

Risk and Resilience Assessment (Section 2013)

1) "...[t]he risk to the system from malevolent acts and natural hazards;
2) the resilience of the pipes and constructed conveyances, physical barriers, source water, water collection and intake, pretreatment, treatment, storage and distribution facilities, electronic, computer, or other automated systems (including the security of such systems) which are utilized by the system;
3) the monitoring practices of the system;
4) the financial infrastructure of the system;
5) the use, storage, or handling of various chemicals by the system; and
6) the operation and maintenance of the system."

Emergency Response Plan (Section 2013)

1. "...strategies and resources to improve the resilience of the system, including the physical security and cybersecurity of the system;
2. plans and procedures that can be implemented, and identification of equipment that can be utilized, in the event of a malevolent act or natural hazard that threatens the ability of the community water system to deliver safe drinking water;
3. actions, procedures and equipment which can obviate or significantly lessen the impact of a malevolent act or natural hazard on the public health and the safety and supply of drinking water provided to communities and individuals, including the development of alternative source water options, relocation of water intakes and construction of flood protection barriers; and
4. strategies that can be used to aid in the detection of malevolent acts or natural hazards that threaten the security or resilience of the system."

California Water Code

At the State level, California Water Code California Water Code, §10610-10656 and §10608 specify that water providers serving more than 3,000 connections develop and submit an Urban Water Management Plan.

Urban Water Management Plan (UWMP)

The UWMP is largely focused on the need for providers to develop measures to reduce demand and to design sets of mitigation measures for possible implementation in the event of drought conditions or emergency loss of water service resulting from natural disaster. The UWMP is required to:

(1) Assess the reliability of water sources over a 20-year planning time frame.
(2) Describe demand management measures and water shortage contingency plans.
(3) Report progress toward meeting a targeted 20 percent reduction in per-capita (per-person) urban water consumption by the year 2020.
(4) Discuss the use and planned use of recycled water.

APPENDIX B

CALIFORNIA WATER SERVICE, AREAS SERVED

Bayshore District - services the cities of

- San Carlos
- San Mateo
- South San Francisco
- Colma

Bear Gulch District – services the cities of

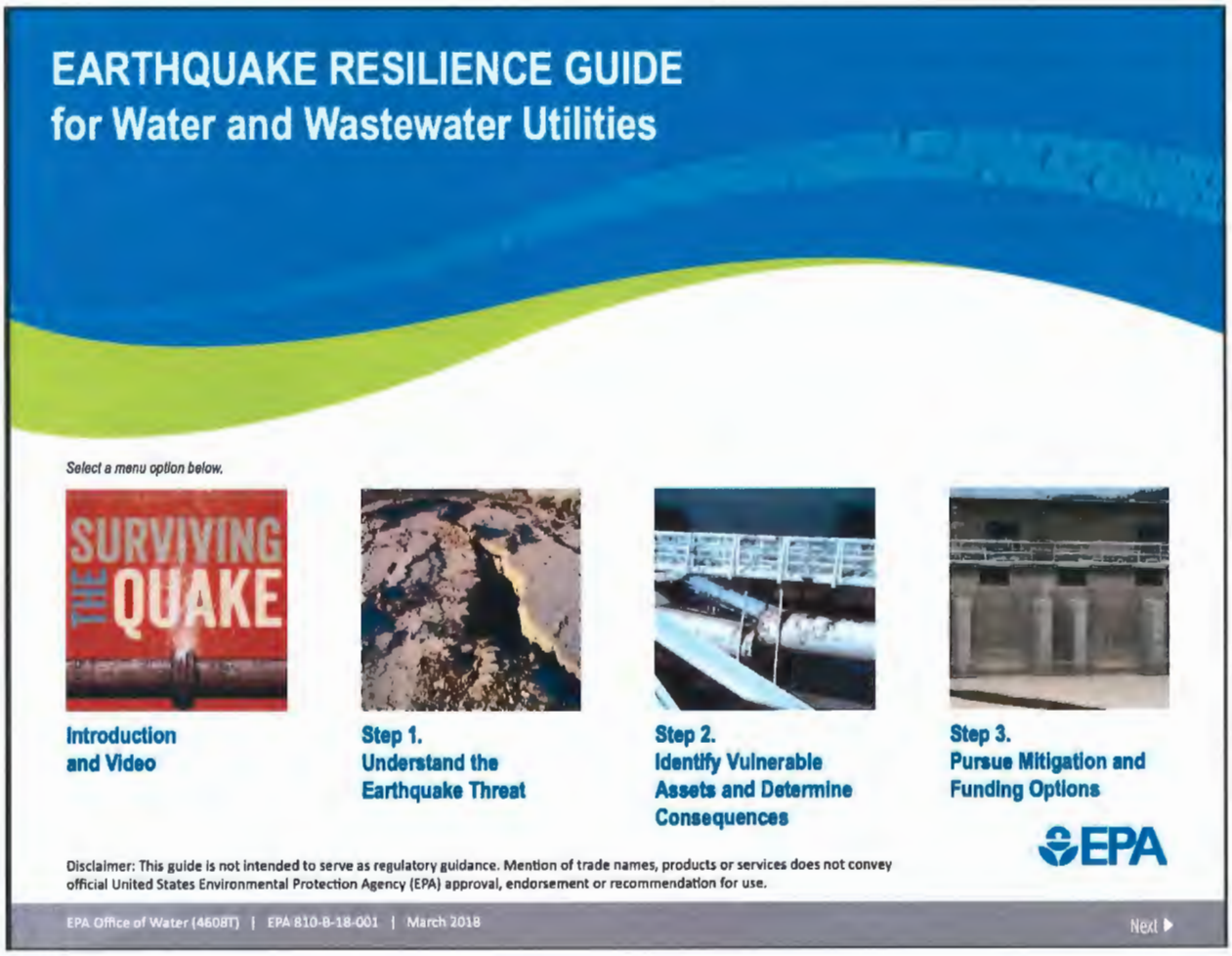
- Portola Valley
- Woodside
- Atherton
- Menlo Park
- Unincorporated Portions of San Mateo County

California Water Service (an investor-owned water provider) provides water to residents in these cities through its Bayshore and Bear Gulch districts. California Water Service rates and operations are regulated by the California Public Utility Commission.

APPENDIX C

EPA, "Earthquake Resiliency Guide" (2018)

https://www.epa.gov/waterutilityresponse/earthquake-resilience-guide (accessed June 15, 2022).



APPENDIX D

EPA Incident Action Checklist – Earthquake

x

EPA

Incident Action Checklist – Earthquake

[redacted]

Earthquake Impacts on Water and Wastewater Utilities

An earthquake is caused by the shifting of tectonic plates beneath the Earth's surface. Ground shaking from moving geologic plates collapses buildings and bridges, and sometimes triggers landslides, avalanches, flah flods, fire and tsunamis. The strong ground motion of earthquakes has the potential to cause a great deal of damage to drinking water and wastewater utilities, particularly since most utility components are constructed from inflexible materials (e.g., concrete, metal pipes). Earthquakes create many cascading and secondary impacts that may include, but are not limited to:

FEMA

- Structural damage to facility infrastructure and equipment
- Water tank damage or collapse
- Water source transmission line realignment or damage
- Damage to distribution lines due to shifting ground and soil liquefaction, resulting in potential water loss, water service interruptions, low pressure, contamination and sinkholes and/or large pools of water throughout the service area
- Loss of power and communication infrastructure
- Restricted access to facilities due to debris and damage to roadways

The following sections outline actions water and wastewater utilities can take to prepare for, respond to and recover from an earthquake.

[redacted]

1 of 8

STAFF REPORT

To: **Coastside County Water District Board of Directors**

From: **Mary Rogren, General Manager**

Agenda: **October 11, 2022**

Report Date: **October 5, 2022**

Subject: **Approval of Professional Services Agreement with Balance Hydrologics, Inc. for Denniston/San Vicente Stream Gaging, Groundwater Monitoring, and Data Collection**

Recommendation:

Authorize the General Manager to enter into a Professional Services Agreement with Balance Hydrologics, Inc. for Water Year 2023 stream gaging, groundwater monitoring, and data analysis for the Denniston Creek and San Vicente Creek watersheds for an estimated time-and-materials cost of $92,516.

Background:

Quantifying the amount of water available for diversion from Denniston and San Vicente Creeks is vitally important to the District's efforts to secure its water rights on those streams. Balance Hydrologics (Balance) has provided stream gaging, monitoring, and analysis services to the District starting with Water Year 2011 (WY11 - October 1, 2010 to September 30, 2011). Balance's proposal dated October 4, 2022 (Attachment A) covers WY23 continuation of gaging services for stations on Denniston and San Vicente Creeks, and groundwater monitoring. Staff has recently requested Balance propose a reduced scope that focuses on data collection rather than producing an annual study report summarizing and interpreting the data. This focused data collection effort has helped keep the cost of this work below the expenditures of the previous water year.

Fiscal Impact:

Cost of $92,516 is included in the Capital Improvement Program for Denniston/San Vicente. (For comparison purposes, the Water Year 2022 agreement was approved for $99,412 in October 2021.)

Balance Hydrologics

800 Bancroft Way • Suite 101 • Berkeley, CA 94710 • (510) 704-1000
224 Walnut Avenue • Suite E • Santa Cruz, CA 95060 • (831) 457-9900
12020 Donner Pass Road • Unit B1 • Truckee, CA 96161 • (530) 550-9776
www.balancehydro.com • email: office@balancehydro.com

October 4, 2022

Mary Rogren, General Manager
Coastside County Water District
766 Main Street
Half Moon Bay, California 94019-1995

RE: Proposal to Gage Denniston Creek, San Vicente Creek and Monitor Inactive Wells and Hydrologic Conditions, Water Year 2023

Dear Ms. Rogren:

It is our pleasure to provide you with this letter proposal containing our recommended scope to continue surface-water monitoring in Denniston and San Vicente Creeks, and nearby unconsolidated aquifers. This proposal encompasses continuation of the water year[1] 2011 (WY2011) through WY2022 into WY2023 of baseline stream gaging. Results will extend the flow record, which will help the Coastside County Water District (CCWD) evaluate (a) streamflow availability and (b) meet regulatory-staff expectations. Extending the monitoring period for basic streamflow and geomorphic observations will facilitate CCWD's environmental and permitting process and will be beneficial for assessing diversion strategies that meet your expectations for yield and for site-appropriate watershed protection.

During WY2022 we (a) continued monitoring five stream gages and (b) concurrently monitored water levels (and spot observations of salinities) in three wells, plus three piezometers, and the three multi-level piezometers beneath Pillar Point Marsh. Please see attached Figure 1 that shows past and current monitoring locations.

In WY2023 we propose to (a) continue monitoring five stream gages, (b) and concurrently monitoring water levels in three wells, three piezometers, and in Pillar Point Marsh (See Work Scope, below).

[1] A "water year" (WY) is defined as the period from October 1st of the preceding year through September 30th of the named year. For example, water year 2023 (WY2023) starts October 1, 2022, and ends September 30, 2023.

To address the objectives of this work, we present a technical scope of work outlined under the following tasks:

1. *Water year 2023 stream gaging and monitoring*
2. *Draft and final water year 2023 data presentation technical memorandum*
3. *Golden Gate National Recreation Area (GGNRA) permit compliance reporting*
4. *Other studies not presently part of the scope of work which you may request and authorize.*
5. *Project administration*

The next several paragraphs elaborate on this proposed approach.

Work Scope

Task 1. Water year 2023 monitoring

The water year 2023 monitoring effort will include (a) approximately monthly site visits to the five gaging locations, SVAD, SVAE, SVCA, DCAD, and DCBC to collect baseline data, (b) approximately quarterly visits to monitor groundwater levels (and salinities) at three wells, three piezometers, and in the Pillar Point Marsh, and (c) up to 3-4 visits during storms.

Monthly Streamflow Measurements

To the extent possible under dynamic field conditions, measurements conform with the standard of care for the California Division of Water Rights. Monthly visits allow us to calibrate flow measurement at stations by performing a flow (discharge) measurement and staff plate (gage height) readings. During quarterly visits we will also download data from the Solinst Leveloggers® (San Vicente above diversion) and make channel observations (such as new high-water marks, bed conditions, and changes in the riffles and/or logs which control flow at the various gages), plus perform maintenance and calibration. During winter storms when flows are elevated, we will endeavor to make supplemental field visits to measure flow and other observations (i.e., identify high-water marks, field-meter and qualitative observations of water quality, when and where logjams form and dissipate, etc.). These visits are used to complete the stage-to-discharge rating curve(s) through the highest flows observed. In the office, we will calculate the flow, enter the information into the station log, plot the data on a stage-to-discharge rating curve, add the downloaded data to the station spreadsheet, and reduce the data to daily mean flow values. We also check, maintain, and service the field equipment owned by CCWD.

We recommend continuation of the low-flow synoptic measurements at both the station in Denniston Canyon just downstream of the Canyon Field diversion (DCAAD) and the former DCBD location to characterize potential gains and losses between the reservoir and mouth of Denniston Creek at station DCAD (above Denniston Reservoir, at the water treatment plant bridge).

Presently, the preliminary station data are made available via our real-time system on the Balance Hydrologics website for the four real-time stations, SVAE, SVCA, DCAD and DCBC. This feature provides real-time information to both the CCWD staff and Balance staff. You have chosen to make the

highlights of the information collected at DCBC available to the community at large, such that GGNRA and resource-agency staff as well as residents of the area can come to better understand the local streams. Finally, in addition to CCWD uses of the real-time data portal, having this information available remotely will continue to improve the efficiency of winter storm monitoring, and allows us to continue to monitor in a more cost-effective manner.

Storm Streamflow Measurements

Due to the highly mobile sandy beds on both Denniston Creek and San Vicente Creek, gaging these creeks is particularly challenging relative to channels that have more stable bedrock, cobble-boulder, or even gravel beds. To meet this challenge, we will continue to regularly visit the sites, particularly during high-flow events. During WY2023 we will continue to refine the low end of the rating curves, but also refine the high end of the rating curves, getting better estimates of flow during storm or post-storm runoff, when diversions can most easily be accommodated with minimal environmental effects. As such, we will continue to make regular site visits are intervals of about a month throughout the year, in addition to a number of planned storm visits.

Measuring Shallow Groundwater and Surface-Groundwater Interaction

Each of the three monitoring wells (Inactive wells 4, 7, and 9) is currently equipped with a Solinst Levelogger® that records water level and temperature every hour. In addition, we are proposing to continue to monitor the three-piezometer nest (three co-located piezometers screened at staggered depths) located at the north flank of West Avenue at Pillar Point Marsh. The three piezometers, initially constructed in 1989, are instrumented. These data help us to identify the lower boundary condition for the shallow aquifer system adjacent to San Vicente and Denniston Creeks, an anticipated contentious issue with both the Coastal Commission and the Division of Water Rights.

This task provides time for us to measure depth-to-water and specific conductance in the three monitoring wells and three Pillar Point Marsh piezometers and download data during four quarterly site visits. In the office, we will enter the information into the station log, add the downloaded data to the station spreadsheet, calibrate and plot the hourly data. We will develop graphics comparing the water levels in each of the wells, and rate at which the water table is recharged during storm the winter or falls during the late summer months.

Deliverables: Raw real-time data describing current; these same data are also used to develop a record of daily mean flow and temperature for each of the six stations and posted near-real-time to public and/or operational websites; as well as raw data that may be used to develop a record of daily mean water level and temperature for each of three CCWD monitoring wells and Pillar Point Marsh piezometers.

Task 2. Draft and final water year 2023 reporting

It is our understanding that CCWD would like to reduce the amount of interpretation previously scoped. We have reduced the budget to support preparation of a brief technical memorandum that will present the

flow forms, figures tables, and will summarize precipitation, flow metrics for the water year, and a summary of important maintenance events or changes to the gaging program that occurred during the year (if any). Data interpretation will not be included, but should the need arise to interpret collected data to answer questions related to CCWD operations, we can assist with those under separate authorization. The written memo will include a summary form for each station tabulating the daily mean discharge data and identifying station descriptors, plots of the data, and water-surface elevation time series data for the monitoring wells, piezometers and Pillar Point Marsh water level gage. We will submit the draft report to you, and then prepare a final report responding to your comments.

Deliverables: Draft technical memorandum in pdf and Microsoft Word formats, presenting the finalized water level and flow records for WY2023. Final report in pdf format.

Task 3. Permit compliance reporting

Since 2016, GGNRA manages much of San Vicente and Denniston Creek watersheds. CCWD is now required to submit data reports as part of the scientific sampling permit which GGNRA has issued to you. The data reports are submitted for one gage on San Vicente Creek (SVAD) and one gage on Denniston Creek (DCAD), all of which are within or adjacent to GGNRA jurisdiction. We will prepare the annual data forms for submittal by CCWD.

Deliverable: Draft cover letter for the permit compliance submittal with forms and table attachments.

Task 4. Tasks to be authorized during the year, if any.

It is possible that other work may be needed during the course of the water year. This work may include as-needed assistance with regulatory work, purchasing additional equipment on behalf of CCWD, etc. Should CCWD-owned equipment currently in the field be damaged or vandalized, Balance would purchase replacement equipment under this task after written authorization from CCWD. You may wish to request additional site or storm visits following a future earthquake swarm or watershed-disturbing rainfall or windstorms. If and as you ask for additional services, we will track these as tasks 4a, 4b, etc., so that you have clarity on what these additional assignments may cost.

Task 5. Project administration

This task provides time to help schedule and administer the project in a way that best helps you and us regularly track schedule and budget. We aspire to re-invigorate our check-in process to share our observations and listen to your observations and questions. We will endeavor to schedule these calls on a 6-month recurring schedule.

Anticipated Costs

Our estimates of staff assignments and level of effort for each task are shown in Table 1. The estimated total costs to complete this work are shown at the bottom of Table 2. In addition, Table 2 covers expenses not allocated to individual tasks, such as mileage. The rental fees include modem line fees and travel and equipment fees, and the occasional purchase of hardware to repair gaging stations damaged by floods, winds, or wildlife. As you may recall, we released our new real-time system over the course of the last water year. We hope that the new, more secure, mobile-friendly, reliable, and more user-friendly interface serves your monitoring and management goals. As part of this service, we are now charging $110 per month for a single station, with reductions in the per-month price for additional stations under the same client; in your case this fee comes out to $360/month. The new real-time interface allows for more customization; please reach out if you think we may be able to improve your experience.

As is customary for field-related jobs, our costs also include a 5% contingency allowance. The contingency allows for a smoother absorption of additional costs beyond our control (or yours) which inhibit the efficient completion of our work. Examples of situations that might require use of the contingency allowance are labor and materials associated with repair and/or replacement of hydrologic equipment or data damaged by high flows, earthquakes or other “Acts of God”, changes requested by your staff or a landowner, a very wet year requiring additional visits, or shifts in regulatory requirements and lost samples due to lab or shipping company errors. We have decreased the recommended contingency from 10 to 5 percent, as the monitoring stations and procedures have become progressively more robust. Also, a breakdown of rental costs associated with this project is available upon request. We have also assumed that CCWD will continue to help obtain ready access to the gages and wells.

We have made every effort to minimize the impact of these changes by allocated staff hours in a prudent, technically sound, but cost-effective manner. The monitoring assignment has been spread to more junior staff to conserve costs, while also maintaining sufficient senior staff involvement to maintain quality and sustain professional registration. The spread amongst our staff allows work to be mobilized either from Berkeley or Santa Cruz as conditions dictate.

Although we have made out best effort to provide an accurate estimate to you, our work is done on a time-and-expense basis, so costs could be somewhat higher or lower than these estimates.

Anticipated Schedule

We will begin drawing from this budget after WY2022 ends (Sept. 30, 2022) to cover our preparations already undertaken for the beginning of the 2023 water year and bill you once it has been approved by your Board of Directors. We will conclude monitoring on or about September 30, 2023. We will provide a completed draft report to the District in a timely manner. If needed earlier for regulatory purposes, we will attempt to adjust the timeline accordingly.

Proposed Project Staff

Barry Hecht will continue as the Principal-in-charge, and act as senior reviewer. Eric Donaldson will serve as project manager. John Hardy will serve as deputy project manager. Field hydrologists Emma Goodwin, and Mark Woyshner (from Balance's Berkeley office), and John Hardy, Jason Parke, and Chelsea Neill (Santa Cruz office) have been servicing the stream gaging stations and wells and working with the data; they will continue to do so. Other staff may be called upon during winter storm flow monitoring. We have assigned more field staff to this project than usual, so that storm assignments can be discharged either from Berkeley or Santa Cruz, since access to this part of San Mateo County can be problematic during winter weather.

Registration

Work will be conducted under active State of California professional registration, as required under the State's Business and Professional Code. The Division of Water Rights has recently tightened its enforcement of active registration for hydrological reports.

Closing

Thank you for asking that we prepare this proposal. We appreciate the opportunity to continue the streamflow gaging and monitoring groundwater through the next water year and look forward to supporting your water information needs through the ongoing and future work.

Please let us know if you have questions, or suggestions, or if your needs and schedule differ from our assumptions, above.

Sincerely,

BALANCE HYDROLOGICS, INC.

John Hardy
Project Hydrologist

Eric Donaldson, P.G.
Project Manager

Barry Hecht, CEG, CHg
Senior Principal

Enclosures: Figure 1. Site map: Past and current gaging locations
Budget Tables 1 and 2 for WY2023

Table 1. Anticipated Staff Hours by Task

223057 Coastside County Water District Hydrologic Monitoring, WY2023

Task Number and Description	Sr. Principal	Principal II	Principal I	Senior Professional	Project Professional	Sr. Staff Professional	Staff Professional	Assistant Professional	Junior Professional	GIS/CADD Senior Analyst	GIS/CADD Analyst	GIS/CADD Assistant Analyst	Sr. Proj Admin	Sr. Report Specialist	Report Specialist	Hydrologic Tech	Labor Costs For Task
Hourly Rate	*$245*	*$230*	*$220*	*$195*	*$185*	*$175*	*$150*	*$140*	*$130*	*$145*	*$130*	*$115*	*$130*	*$105*	*$98*	*$95*	
Task 1. Water Year 2023 monitoring	10	20		30		140	180										$64,400.00
Task 2. Draft and final water year 2023 reporting	4			10		32	12			4				8			$11,750.00
Task 3. Permit compliance reporting	1			3										1			$935.00
Task 4. Tasks to be authorized during the year, if any							No work presently authorized										
Task 5. Project administration	1			10			2						12				$4,055.00
Subtotal Hours	16	20		53		172	194			4			12	9			
Total Hours	**480**																

Notes:

Total Labor	**$81,140.00**
Expenses from Table 2	***$6,376.00***
Contingency	***$5,000.00***
GRAND TOTAL	***$92,516.00***

Table 2. Estimated Costs

223057 Coastside County Water District Hydrologic Monitoring, WY2023

Professional Fees	**Rate**	**Hours**	**Allocation**
Sr. Principal	$245	16	$3,920.00
Principal	$230	20	$4,600.00
Associate Principal	$220	0	$0.00
Senior Professional	$195	53	$10,335.00
Project Professional	$185	0	$0.00
Senior Staff Professional	$175	172	$30,100.00
Staff Professional	$150	194	$29,100.00
Assistant Professional	$140	0	$0.00
Junior Professional	$130	0	$0.00
GIS/CADD Senior Analyst	$145	4	$580.00
GIS/CADD Analyst	$130	0	$0.00
GIS/CADD Assistant Analyst	$115	0	$0.00
Senior Project Administrator	$130	12	$1,560.00
Senior Report Specialist	$105	9	$945.00
Report Specialist	$98	0	$0.00
Hydrologic Technician	$95	0	$0.00
		Labor Subtotal (Table 1)	$81,140.00

Expenses

Direct Expenses

Mileage	**1700**	miles @	$0.68	$1,156.00
Mileage, 4-Wheel Drive*		miles @	$0.71	$0.00
Vehicle Rental				$0.00
Equipment Costs (Samplng gear during site visits, e.g, flow meter, etc.)				$800.00
Cell modem + real-time data access	4 realtime sites @ $90/mo each			$4,320.00

Reimbursable Costs

Other Travel, Subsistence		trips @		$0.00
Express Mail, Deliveries				$0.00
Maps and Aerial Photos				$0.00
Outside Copying, Blueprint				$0.00
Outside Consultants				$0.00
Analytical Laboratory Fees				$0.00
Materials and Supplies				$100.00
Permits, Licenses or Agency Inspection fees	***client responsibility***			$0.00
Printing+				$0.00
Other				$0.00
			Expenses Subtotal (without Optional Task 6)	$6,376.00

Notes

* 4WD rates apply only if required by site conditions. See Balance policy re 4WD.

+Plotting costs vary according to complexity of design

Project-related expenses will be bill at cost plus 10%; including work by outside consultants and analytical or testing laboratories.

Balance Hydrologics

222057 Figure 1.mxd

Figure 1. Hydrologic setting and monitoring locations within the Airport Aquifer, Coastside County Water District, San Mateo County, California.

STAFF REPORT

To: **Coastside County Water District Board of Directors**

From: **Mary Rogren, General Manager**

Agenda: **October 11, 2022**

Report Date: **October 7, 2022**

Subject: **Consider Resolution 2022-11 Authorizing the Grant Application, Acceptance, and Execution of the Financial Assistance Agreement for the Coastside County Water District Recycled Water Feasibility Study**

Recommendation:

Approve Resolution 2022-11 authorizing the grant application, acceptance, and execution of the Financial Assistance Agreement with the State Water Resources Control Board for the Coastside County Water District Recycled Water Feasibility Study.

Background:

The District has engaged EKI Environment and Water, Inc. to prepare a grant application to the State Water Resources Control Board on behalf of Coastside County Water District for a Recycled Water Feasibility Study.

The State Water Resources Control Board offers grant money for feasibility studies up to 50% of $150,000 for the study, or $75,000.

As part of the application, the District must include the attached Resolution 2022-11.

Financial Impact: If the grant application is accepted, $75,000 funds could become available to the District to fund a Recycled Water Feasibility Study. The District's CIP includes $100,000 for a water reuse/recycled water study.

RESOLUTION NO. 2022-11

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE COASTSIDE COUNTY WATER DISTRICT AUTHORIZING THE GRANT APPLICATION, ACCEPTANCE, AND EXECUTION OF THE FINANCIAL ASSISTANCE AGREEMENT FOR THE COASTSIDE COUNTY WATER DISTRICT RECYCLED WATER FEASIBILITY STUDY

WHEREAS, Coastside County Water District (the "Entity") proposes to implement a Recycled Water Feasibility Study; and

WHEREAS, Coastside County Water District has the legal authority and is authorized to enter into a funding agreement with the State of California; and

WHEREAS, Coastside County Water District intends to apply for grant funding through the California State Water Resources Control Board's Clean Water State Revolving Fund recycled water planning program.; and

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Coastside County Water District as follows:

The Coastside County Water District's General Manager (the "Authorized Representative") or designee is hereby authorized and directed to sign and file, for and on behalf of the Entity, a Financial Assistance Application for a grant agreement from the State Water Resources Control Board for the planning, design, and preparation of a Recycled Water Feasibility Study (the "Project").

This Authorized Representative, or his/her designee, is designated to provide the assurances, certifications, and commitments required for the financial assistance application, including executing a financial assistance agreement from the State Water Resources Control Board and any amendments or changes thereto.

The Authorized Representative, or his/her designee, is designated to represent the Entity in carrying out the Entity's responsibilities under the grant agreement, including certifying disbursement requests on behalf of the Entity and compliance with applicable state and federal laws.

PASSED AND ADOPTED THIS 11th day of October, 2022, by the following vote of the Board:

AYES:

NOES:

ABSENT:

.

_____

Robert Feldman, President
Board of Directors

ATTEST:

_____

Mary Rogren, General Manager
Secretary of the District

CERTIFICATION

I do here by certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at the meeting of the Coastside County Water District Board of Directors held on October 11, 2022.

ATTEST:

_____

Mary Rogren, General Manager
Secretary of the District

STAFF REPORT

To: **Coastside County Water District Board of Directors**

From: **Mary Rogren, General Manager**

Agenda: **October 11, 2022**

Report Date: **October 7, 2022**

Subject: **Quarterly Financial Review**

Recommendation:
Information Only.

Background:

Period Budget Analysis
The attached Period Budget Analysis summarizes year-to-date revenue and expenses for the first three months of Fiscal Year 2022-2023. Key highlights include:

- Year-to-date operating revenue is $274,000 below budget due to lower Water Revenue than planned due to the conservation efforts by the District's customers during the drought.

- Year-to-date non-operating revenue is $68,000 above budget due to receiving a larger ERAF Refund than plan by $48,000; higher interest earnings by $12,000; and the application of late penalties by $8,000.

- Year-to-date expenses are $460,000 under budget due to:
    - $254,000 in lower SFPUC water purchases than plan. (The District was able to use Denniston local source water periodically in the summer due to the fall/winter rains in the local watershed.)
    - $82,000 in lower electricity due to limited use of Crystal Springs Pump Station.
    - $60,000 in salary and benefit savings
    - $64,000 savings due to timing differences of expenses as the District is only three months into the new fiscal year.

Capital Improvement Program (CIP)
The District spent $987,000 during the first quarter on CIP. Key projects included the Nunes Water Treatment Plant Improvement Project ($493,000) and the Pipeline Replacement Under Pilarcitos Creek at Strawflower/Pilarcitos Avenue.

Cash Reserves
The District's cash balance on September 30 was $14,871,000.

COASTSIDE COUNTY WATER DISTRICT - PERIOD BUDGET ANALYSIS

Quarter Ending September 30, 2022

ACCOUNT	DESCRIPTION	YTD BUDGET	YTD ACTUAL	Variance Favorable (Unfavorable)	% Variance	Comments
OPERATING REVENUE						
1-0-4120-00	Water Revenue -All Areas	3,797,300.00	3,513,344.75	(283,955.25)	-7.48%	lower water sales due to conservation
1-0-4170-00	Water Taken From Hydrants	12,000.00	22,408.79	10,408.79	86.74%	
TOTAL OPERATING REVENUE		**3,809,300.00**	**3,535,753.54**	**(273,546.46)**	**-7.18%**	
NON-OPERATING REVENUE						
1-0-4180-00	Late Notice -10% Penalty	12,300.00	20,221.44	7,921.44	64.40%	re-established late fees 7/1/2022
1-0-4230-00	Service Connections	3,000.00	3,318.59	318.59	10.62%	
1-0-4920-00	Interest Earned	7,800.00	19,611.89	11,811.89	151.43%	reflects higher LAIF interest
1-0-4930-00	Tax Apportionments/Cnty Checks	0.00	871.07	871.07	0.00%	
1-0-4950-00	Miscellaneous Income	2,000.00	700.00	(1,300.00)	-65.00%	
1-0-4955-00	Cell Site Lease Income	48,000.00	48,267.58	267.58	0.56%	
1-0-4965-00	ERAF REFUND -County Taxes	250,000.00	298,227.24	48,227.24	19.29%	reflects higher ERAF Refund than plan
TOTAL NON-OPERATING REVENUE		**323,100.00**	**391,217.81**	**68,117.81**	**21.08%**	
TOTAL REVENUES		**4,132,400.00**	**3,926,971.35**	**(205,428.65)**	**-4.97%**	
OPERATING EXPENSES						
1-1-5130-00	Water Purchased	1,124,254.00	870,601.56	253,652.44	22.56%	Reflects lower water sales and use of local sources (Denniston)
1-1-5230-00	Pump Exp, Nunes T P	12,000.00	14,565.34	(2,565.34)	-21.38%	
1-1-5231-00	Pump Exp, CSP Pump Station	150,000.00	68,050.25	81,949.75	54.63%	Reflects electricity savings due to lower use of SFPUC Crystal Springs source
1-1-5232-00	Pump Exp, Trans. & Dist.	6,300.00	7,214.43	(914.43)	-14.51%	
1-1-5233-00	Pump Exp, Pilarcitos Canyon	1,800.00	1,796.09	3.91	0.22%	
1-1-5234-00	Pump Exp. Denniston	3,000.00	22,490.93	(19,490.93)	-649.70%	Reflects use of local sources vs. Crystal Springs
1-1-5242-00	CSP Pump Station Operations	3,000.00	4,016.55	(1,016.55)	-33.89%	
1-1-5243-00	CSP Pump Station Maintenance	9,000.00	1,634.45	7,365.55	81.84%	
1-1-5246-00	Nunes T P Operations	24,000.00	38,574.33	(14,574.33)	-60.73%	Includes installation of security cameras
1-1-5247-00	Nunes T P Maintenance	29,000.00	11,877.18	17,122.82	59.04%	
1-1-5248-00	Denniston T.P. Operations	6,000.00	7,168.21	(1,168.21)	-19.47%	
1-1-5249-00	Denniston T.P. Maintenance	42,000.00	33,143.75	8,856.25	21.09%	
1-1-5250-00	Laboratory Services	19,000.00	14,360.50	4,639.50	24.42%	
1-1-5260-00	Maintenance -General	93,000.00	100,561.96	(7,561.96)	-8.13%	
1-1-5261-00	Maintenance -Well Fields	8,000.00	0.00	8,000.00	100.00%	
1-1-5263-00	Uniforms	0.00	298.71	(298.71)	0.00%	

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ACCOUNT	DESCRIPTION	YTD BUDGET	YTD ACTUAL	Variance Favorable (Unfavorable)	% Variance	Comments
1-1-5318-00	Studies/Surveys/Consulting	40,000.00	35,231.84	4,768.16	11.92%	
1-1-5321-00	Water Resources	6,800.00	842.80	5,957.20	87.61%	
1-1-5322-00	Community Outreach	14,000.00	9,662.38	4,337.62	30.98%	
1-1-5325-00	Water Shortage Program	24,000.00	0.00	24,000.00	100.00%	Timing
1-1-5381-00	Legal	27,000.00	24,755.00	2,245.00	8.31%	
1-1-5382-00	Engineering	18,900.00	13,631.00	5,269.00	27.88%	
1-1-5383-00	Financial Services	9,000.00	7,710.00	1,290.00	14.33%	
1-1-5384-00	Computer Services	75,000.00	61,558.05	13,441.95	17.92%	Timing
1-1-5410-00	Salaries/Wages-Administration	313,258.00	265,419.92	47,838.08	15.27%	Reflects open AGM position
1-1-5411-00	Salaries & Wages -Field	436,016.00	433,818.66	2,197.34	0.50%	
1-1-5420-00	Payroll Tax Expense	55,435.00	49,627.76	5,807.24	10.48%	
1-1-5435-00	Employee Medical Insurance	123,000.00	118,834.03	4,165.97	3.39%	
1-1-5436-00	Retiree Medical Insurance	12,500.00	11,878.01	621.99	4.98%	
1-1-5440-00	Employees Retirement Plan	148,388.00	149,520.13	(1,132.13)	-0.76%	
1-1-5445-00	Supplemental Retirement 401a	0.00	0.00	0.00	0.00%	
1-1-5510-00	Motor Vehicle Expense	19,500.00	19,192.04	307.96	1.58%	
1-1-5620-00	Office Supplies & Expense	96,000.00	91,719.10	4,280.90	4.46%	
1-1-5625-00	Meetings / Training / Seminars	17,000.00	18,114.40	(1,114.40)	-6.56%	
1-1-5630-00	Insurance	36,000.00	37,714.91	(1,714.91)	-4.76%	
1-1-5687-00	Membership, Dues, Subscript.	24,000.00	23,771.90	228.10	0.95%	
1-1-5688-00	Election Expenses	0.00	0.00	0.00	0.00%	
1-1-5689-00	Labor Relations	0.00	0.00	0.00	0.00%	
1-1-5700-00	San Mateo County Fees	6,000.00	4,421.51	1,578.49	26.31%	
1-1-5705-00	State Fees	2,000.00	566.00	1,434.00	71.70%	
TOTAL OPERATING EXPENSES		**3,034,151.00**	**2,574,343.68**	**459,807.32**	**15.15%**	
CAPITAL ACCOUNTS						
1-1-5715-00	Debt Srvc/CIEDB 11-099 (I-BANK)	273,341.00	273,340.92	0.08	0.00%	
1-1-5716-00	Debt Srvc/CIEDB 2016 (I-BANK)	238,683.00	238,683.17	(0.17)	0.00%	
1-1-5717-00	Chase Bank - 2018 Loan	382,128.00	382,127.53	0.47	0.00%	
1-1-5718-00	First Foundation Bank - 2022	420,517.00	420,517.07	(0.07)	0.00%	
TOTAL CAPITAL ACCOUNTS		**1,314,669.00**	**1,314,668.69**	**0.31**	**0.00%**	
TOTAL EXPENSES		**4,348,820.00**	**3,889,012.37**	**459,807.63**	**10.57%**	
	CONTRIBUTION TO CIP/RESERVES	**(216,420.00)**	**37,958.98**			

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STAFF REPORT

To: **Coastside County Water District Board of Directors**

From: **Mary Rogren, General Manager**

Agenda: **October 11, 2022**

Report Date: **October 7, 2022**

Subject: **General Manager's Report**

Recommendation:
Information Only.

Governor Signs AB 2449 Legislation – Amendment to Brown Act Teleconferencing Procedures

On September 13, 2022, the Governor signed into law Assembly Bill 2449 which amends the Brown Act teleconferencing procedures.

As noted in the attached write-up from Hanson-Bridgett, AB 2449 goes into effect on January 1, 2023 and provides for new alternative teleconferencing procedures which allows a member of the Board to teleconference remotely only under "just cause" or in "emergency circumstances" approved by the legislative body. A member may only teleconference for a limited number of meetings in a calendar year, and a quorum of the members must participate in person from a single physical location. A two-way audiovisual platform or two-way telephonic service and a live webcasting of the meeting must be provided to allow the public to remotely hear and visually observe the meeting, and remotely address the legislative body.

Note however, that AB 2449, which enacts an updated version of Government Code section 54953, includes the AB 361 wording AND the new AB 2449 provisions. Therefore the District can still use the AB 361 process until January 1, 2024 (when AB 361 sunsets) as long as the District is still (1) in a proclaimed state of emergency and (2) state or local officials have imposed or recommended social distancing measures (or the legislative body has determined that meeting in person would present imminent risks to health and safety of attendees).

Governor Signs AB 2449: The Latest Development to the Brown Act in a Post-Pandemic World

by Allison C. Schutte & Julian A. Viksman & Julie A. Sherman & Steven D. Miller

Key Points

- AB 2449 provides complex and restrictive alternative teleconference procedures:
  - At least a quorum of the members of the legislative body must participate in person from a singular physical location identified on the agenda, which location will be open to the public and within the boundaries of the local agency;
  - A member may only teleconference for publicly disclosed "just cause" or in "emergency circumstances" approved by the legislative body; and
  - A member may only teleconference for a limited number of meetings.
- The new provisions are in addition to those allowed by AB 361 (so long as there is a state of emergency) and those allowed by traditional teleconferencing rules.
- The new provisions are likely so onerous that they may not be a practical alternative for most local agency officials or for agencies that would like to meet virtually as a matter of practice.

On September 13, 2022, California Governor Gavin Newsom signed into law Assembly Bill (AB) 2449 (Rubio), marking the latest development of the Brown Act in a post-pandemic world. The new amendments to the Brown Act go into effect on January 1, 2023. AB 2449 provides complex alternative teleconference procedures to allow members of a legislative body to participate remotely, the application of which turns on individual facts and circumstances. Notably, the bill sets rules for a Board member's remote participation, but agencies may continue to hold zoom meetings at which the public participates remotely.

AB 2449 allows the legislative body of a local agency to use teleconferencing without complying with the traditional Brown Act teleconferencing rules or the modified AB 361 rules in certain circumstances. To do so, however, at least a quorum of the members of the legislative body must participate in person from a singular physical location identified on the agenda, which location will be open to the public and within the boundaries of the local agency. The legislative body must also provide either a two-way audiovisual platform or two-way telephonic service and a live

webcasting of the meeting to allow the public to remotely hear and visually observe the meeting, and remotely address the legislative body. The agenda must identify and include an opportunity for all persons to attend via a call-in option, internet-based service option, and at the in-person location of the meeting.

In addition to the above prerequisites, AB 2449 also contains a number of provisions that may make the ability to participate remotely difficult for many public officials. The new provisions only allow a member of the legislative body to participate remotely if one of the following are met:

1. the member notifies the legislative body at the earliest opportunity possible, including at the start of a regular meeting, of their need to participate remotely for "just cause" (as defined by AB 2449), including a general description of the circumstances relating to their need to appear remotely at the given meeting; or
2. the member requests the legislative body to allow them to participate in the meeting remotely due to "emergency circumstances" and the legislative body takes action to approve the request. The legislative body must request a general description (generally not exceeding 20 words) of the circumstances relating to their need to appear remotely at the given meeting.

The bill defines "just cause" and "emergency circumstances" for the purposes of teleconferencing. "Just cause" is limited to one or more of the following: (i) a childcare or caregiving need of a child, parent, grandparent, grandchild, sibling, spouse, or domestic partner that requires them to participate remotely; (ii) a contagious illness that prevents a member from attending in person; (iii) a need related to a physical or mental disability as defined by statute; or (iv) travel while on official business of the legislative body or another state or local agency. "Emergency circumstances" means a physical or family medical emergency that prevents a member from attending in person.

In practice, the similarities between "just cause" and "emergency circumstances" makes it difficult to determine when each category should be used and which facts lead to one or the other. These practical implications are further obscured by AB 2449's limitations on how frequently a member can teleconference under the statute.

AB 2449's teleconference procedures may not be used by a member of the legislative body to teleconference for a period of more than three consecutive months or 20% of the regular meetings within a calendar year, or more than two meetings if the legislative body meets fewer than 10 times per calendar year. Members participating remotely must do so through both audio and visual technology and must publicly disclose whether any individual over the age of 18 is present at the remote location with the member.

AB 2449 also adds new requirements for legislative bodies. Legislative bodies must implement procedures for receiving and swiftly resolving requests for reasonable accommodations for individuals with disabilities, consistent with applicable civil rights and nondiscrimination laws. Further, no action can be taken if a disruption event prevents the legislative body from broadcasting the meeting. Lastly, a legislative body may take action on items of business not appearing on the posted agenda if the request to consider action was for a member to participate in a meeting remotely due to emergency circumstances and the request does not allow sufficient time to place the proposed action on the posted agenda for the meeting for which the request is made. The legislative body may approve such a request by a majority vote.

AB 2449 does not amend the Brown Act's emergency teleconference procedures under AB 361. Rather, it offers an alternative teleconferencing option that allows a legislative body to use teleconferencing procedures without complying with the traditional teleconference agenda requirements in certain

circumstances. However, the complexity of AB 2449's teleconference scheme will make it difficult to administer.

The remote meeting rules enacted in AB 361 will expire on January 1, 2024. AB 2449's rules remain in effect through 2025. After January 1, 2026, unless further legislation is adopted, only the pre-pandemic, traditional Brown Act rules will remain in effect.

For more information, please contact:

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MONTHLY REPORT

To: **Mary Rogren, General Manager**

From: **James Derbin, Superintendent of Operations**

Agenda: **October 11, 2022**

Report Date: **October 5, 2022**

Monthly Highlights

- Denniston Water Treatment Plant ran during the week most of September.
- Carson now has a Class B license. Darin, Chris and Mike are working on the written and driving exam preparation.
- Installed new CCTV cameras at Main Street, CSP, and Nunes

September Sources: Pilarcitos Lake, Denniston Reservoir/Wells, Crystal Springs

Projects

Nunes Water Treatment Plant Improvement Project. Ranger work is paused due to supply chain issues. Progress since last board meeting:

- Contractor is awaiting materials deliveries onsite.
- There has been no work performed by Ranger onsite at Nunes since the September Board meeting.
- Awaiting knife gate valve and sludge valves. Once the valves arrive, Ranger will work on valve installation.
- While Ranger does not have firm commitments from suppliers on the Motor Control Center (MCC) and Variable Frequency Drives (VFDs) due to supply chain issues, Ranger anticipates being able to complete the project by the end of January 2024.

- EKI
  - Grandview/Hwy 1 Crossing and Main Replacement project - Construction started on 10/3/22. Estimated completion is December 2022
  - Pilarcitos Crossing – Golden Bay Construction has completed construction. Pilarcitos Crossing is in use. EKI and Jim Steele are working on a punchlist.
  - Miramontes Point Road – Design expected Fall 2022

- HDR
  - Half Moon Bay Tank replacement project – HDR is engineering a design to replace HMB tanks 1&2 first. 90% design comments submitted. 100% design expected soon.

STAFF REPORT

To: **Board of Directors**

From: **Cathleen Brennan, Water Resources Analyst**

Agenda: **October 11, 2022**

Report: **October 6, 2022**

Subject: **Water Resources Informational Report**

Attachments:
(A) Advertisement Half Moon Bay Review – Water Conservation
(B) Advertisement Coastside Magazine – Water Conservation
(C) Advertisement Pumpkin Festival Pull Out – Water Conservation
(D) Advertisement Half Moon Bay Review - Emergency Preparedness

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Senate Bill 1157 (Herzberg)

Gov. Newsom signed into law SB 1157. This legislation reduces the standard for indoor residential water use to 47 gallons per capita per day (RGPCD) by 2025 and 42 RGPCD by 2030. The current standard until 2025 is 55 RGPCD.

Water Shortage Emergency

The Board of Directors adopted Ordinance No. 2022-01 declaring a Water Shortage Emergency under Stage 2 of the District's Water Shortage Contingency Plan on March 24, 2022. Drought and water shortage conditions remain unchanged. Less than normal precipitation is predicted to continue through the month of October.

SFPUC will be evaluating water storage in the regional water system in November and will determine if additional actions are required to reduce water usage. Around the same time, the state will also be evaluating water storage in the state water project to determine if additional mandatory water conservation regulations are needed.

Outreach Water Shortage

A. During the month of October in the Half Moon Bay Review, the District will run an advertisement reminding customers that starting October 1st, they should set their automatic sprinklers to run a maximum of once per week between 5pm and 8am. Even addresses are allowed use their spray irrigation systems on Monday and odd addresses are allowed to use their spray irrigation systems on Thursday.

B. The October Coastside Magazine will have full page advertisement encouraging customers to save water and consider turning off their automatic irrigation systems and water their plants, as needed.

C. The Pumpkin Festival pull-out in the Half Moon Bay Review will have an infographic from the saveourwater.com campaign.

Outreach Emergency Response Preparedness

In the September 30th edition of the Half Moon Bay Review the District ran an advertisement promoting emergency preparedness.

Attachment A

Attachment B

Attachment C

Attachment D