COASTSIDE COUNTY WATER DISTRICT

766 MAIN STREET

HALF MOON BAY, CA 94019

REGULAR MEETING OF THE BOARD OF DIRECTORS

Tuesday, August 11, 2020 - 7:00 p.m.

AGENDA

On March 17, 2020, the Governor issued Executive Order N-29-20 suspending certain provisions of the Ralph M. Brown Act in order to allow for local legislative bodies to conduct their meetings telephonically or by other electronic means. Pursuant to the Shelter-in-Place Order issued by the San Mateo County Health Officer on March 16, 2020, as revised on March 31, 2020, the statewide Shelter-in-Place Order issued by the Governor in Executive Order N-33-20 on March 19, 2020, and the CDC's social distancing guidelines which discourage large public gatherings, the Boardroom will not be open for the August 11, 2020 Regular Meeting of the Coastside County Water District. This meeting will be conducted remotely via teleconference.

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.

ONLINE:

Join Zoom Meeting
https://zoom.us/j/93778260596?pwd=aEpRcFlnaHdQM21PSEJQWjNiN09TQT09

Meeting ID: 937 7826 0596
Passcode: 184355

One tap mobile
+16699006833,,93778260596#,,,,,,0#,,184355# US (San Jose)

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

Meeting ID: 937 7826 0596
Passcode: 184355

Find your local number: https://zoom.us/u/adZt3d9LjB

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 proceed to the podium, give their name and address and provide their comments to the Board.

4) 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 July 31, 2020:
Claims: $1,720,488.25; Payroll: $173,589.31 for a total of $1,894,077.56 (attachment)
- *July 2020 Monthly Financial Claims reviewed by and approved by Director Larimer*

B. Acceptance of Financial Reports (attachment)
C. Approval of Minutes of July 14, 2020 Regular Board of Directors Meeting (attachment)
D. Installed Water Connection Capacity and Water Meters Report (attachment)
E. Total CCWD Production Report (attachment)
F. CCWD Monthly Sales by Category Report-July 2020 (attachment)
G. Monthly Planned Plant or Tank Discharge and New Water Line Flushing Report (attachment)
H. Monthly Rainfall Reports (attachment)
I. SFPUC Hydrological Report for the Month of July 2020 (attachment)
J. Notice of Completion – District Office Fascia Board Replacement Project (attachment)
K. Notice of Completion-Garcia Avenue Emergency Water Main Replacement Project (attachment)
L. Water Service Connection Transfer Report for July 2020 (attachment)
M. Notice of Non-Complex Pipeline Extension Project-555 Obispo Road, El Granada-Coastside Fire Protection District (attachment)

5) MEETINGS ATTENDED / DIRECTOR COMMENTS

6) GENERAL BUSINESS

A. Fiscal Year 2020/21 and Draft Fiscal Year 2021/22 Operations Budgets; Fiscal Year 2020/21 to 2029/30 Capital Improvement Program (CIP); Draft Fiscal Year 2020/21 to 2024/25 Financial Plan; Proposed Rate Increases for Fiscal Years 2020/21 and 2021/22; Draft Water Financial Plan and Rate Update Study Report (attachment)
B. Fiscal Years 2020-2021 and 2021-2022 Budget Process Timeline (attachment)
C. Schedule a Public Hearing on Proposed Rate Increases for Fiscal Years 2020-2021 and 2021-2022 and Authorize Issuance of a Notice of Public Hearing and Proposed Rate Increases to be effective January 1, 2021 and January 1, 2022 (attachment)
D. Authorize the GM to Procure Replacement Turbidimeters for the Denniston and Nunes Water Treatment Plants (attachment)
E. Approval of Professional Services with EKI Environment and Water, Inc. for Capital Project Management Support and As-Needed Engineering Services (attachment)

7) **MONTHLY INFORMATIONAL REPORTS**

A. Superintendent of Operations Report (attachment)

8) **DIRECTOR AGENDA ITEMS – REQUESTS FOR FUTURE BOARD MEETINGS**

9) **ADJOURNMENT**

COASTSIDE COUNTY WATER DISTRICT
CLAIMS FOR JULY 2020

CHECKS				
CHECK DATE	**CHECK NO.**	**VENDOR**		**AMOUNT**
07/14/2020	28427	A-1 SEPTIC TANK SERVICE	$	650.00
07/14/2020	28428	ASSOC. CALIF. WATER AGENCY	$	17,605.47
07/14/2020	28429	AT&T LONG DISTANCE	$	869.16
07/14/2020	28430	BFI OF CALIFORNIA, INC.	$	1,344.53
07/14/2020	28431	DAVID PEREIRA	$	614.44
07/14/2020	28432	CALIFORNIA C.A.D. SOLUTIONS, INC	$	8,160.00
07/14/2020	28433	CDW-GOVERNMENT, INC.	$	105.07
07/14/2020	28434	CEL ANALYTICAL INC.	$	1,440.00
07/14/2020	28435	CENTRAL ROOFING, INC.	$	92,394.00
07/14/2020	28436	CUMMINS, INC	$	3,321.41
07/14/2020	28437	DEL GAVIO GROUP	$	3,099.12
07/14/2020	28438	SEAN DONOVAN	$	89.43
07/14/2020	28439	EKI INC.	$	20,896.53
07/14/2020	28440	FEDAK & BROWN LLP	$	4,138.00
07/14/2020	28441	HASSETT HARDWARE	$	1,531.57
07/14/2020	28442	HERC RENTALS, INC.	$	983.07
07/14/2020	28443	DUSTIN JAHNS	$	64.97
07/14/2020	28444	FRANK LOZANO	$	45.00
07/14/2020	28445	MIKE MCDERMOTT	$	20.20
07/14/2020	28446	PACIFIC GAS & ELECTRIC CO.	$	68,795.71
07/14/2020	28447	REPUBLIC SERVICES	$	562.20
07/14/2020	28448	TRI COUNTIES BANK	$	3,385.63
07/14/2020	28449	UNITED PARCEL SERVICE INC.	$	2.58
07/14/2020	28450	US BANK NA	$	1,595.54
07/14/2020	28451	SWIFTCOMPLY US OPCO, INC	$	1,796.00
07/14/2020	28452	HEALTH BENEFITS ACWA-JPIA	$	43,470.89
07/14/2020	28453	ACWA/JPIA	$	25,568.56
07/14/2020	28454	AT&T	$	5,210.41
07/14/2020	28455	COMCAST	$	222.30
07/14/2020	28456	JAMES COZZOLINO, TRUSTEE	$	200.00
07/14/2020	28457	HUE & CRY, INC.	$	24.00
07/14/2020	28458	MASS MUTUAL FINANCIAL GROUP	$	1,050.00
07/14/2020	28459	CHRIS MICKELSEN	$	274.05
07/14/2020	28460	CalPERS FISCAL SERVICES DIVISION	$	248,383.00
07/14/2020	28461	STATE WATER RESOURCES CONTROL BD	$	105.00
07/14/2020	28462	STANDARD INSURANCE COMPANY	$	574.34
07/14/2020	28463	TPX COMMUNICATIONS	$	1,991.05
07/14/2020	28464	TYLER TECHNOLOGIES, INC	$	26,577.52
07/14/2020	28465	U.S. BANK GLOBAL CORP TRUST SERVICES	$	268,811.13
07/14/2020	28466	U.S. BANK GLOBAL CORP TRUST SERVICES	$	234,969.04
07/14/2020	28467	VALIC	$	3,630.00
07/27/2020	28468	ADP, INC.	$	901.15

07/27/2020	28469	ANALYTICAL ENVIRONMENTAL SERVICES	$	23,736.48
07/27/2020	28470	ANDREINI BROS. INC.	$	66,834.25
07/27/2020	28471	AZTEC GARDENS, INC.	$	218.00
07/27/2020	28472	BADGER METER, INC.	$	66.00
07/27/2020	28473	BALANCE HYDROLOGICS, INC	$	5,654.89
07/27/2020	28474	BAY AREA WATER SUPPLY &	$	245.86
07/27/2020	28475	CALCON SYSTEMS, INC.	$	9,912.79
07/27/2020	28476	DATAPROSE, LLC	$	4,058.24
07/27/2020	28477	HMB BLDG. & GARDEN INC.	$	339.19
07/27/2020	28478	HANSONBRIDGETT. LLP	$	5,403.00
07/27/2020	28479	HYDROSCIENCE ENGINEERS, INC.	$	8,660.74
07/27/2020	28480	IRON MOUNTAIN	$	102.02
07/27/2020	28481	IRVINE CONSULTING SERVICES, INC.	$	3,916.37
07/27/2020	28482	IRVINE CONSULTING SERVICES, INC.	$	280.22
07/27/2020	28483	NATIONAL DEMOGRAPHICS, INC.	$	24,500.00
07/27/2020	28484	VERIZON CONNECT NWF, INC.	$	247.00
07/27/2020	28485	OFFICE DEPOT	$	39.32
07/27/2020	28486	ACI PAYMENTS, INC.	$	150.00
07/27/2020	28487	PACIFICA COMMUNITY TV	$	300.00
07/27/2020	28488	RAFTELIS FINANCIAL CONSULTANTS, INC.	$	4,072.50
07/27/2020	28489	RBS GLOBAL, INC.	$	414.30
07/27/2020	28490	ROBERTS & BRUNE CO.	$	2,106.75
07/27/2020	28491	ROGUE WEB WORKS, LLC	$	660.00
07/27/2020	28492	SAN FRANCISCO WATER DEPT.	$	321,324.32
07/27/2020	28493	SAN MATEO CTY PUBLIC HEALTH LAB	$	66.00
07/27/2020	28494	STETSON ENGINEERS, INC.	$	1,423.20
07/27/2020	28495	TJC AND ASSOCIATES, INC	$	2,153.00
07/27/2020	28496	TYLER TECHNOLOGIES, INC	$	2,408.75
07/27/2020	28497	UNIVAR SOLUTIONS USA INC.	$	1,870.00
07/27/2020	28498	UPS STORE	$	132.36
07/27/2020	28499	USA BLUE BOOK	$	481.56
07/27/2020	28500	WRA, INC.	$	2,099.25
07/27/2020	28501	ANDREINI BROS. INC.	$	1,886.50
07/27/2020	28502	AT&T	$	698.93
07/27/2020	28503	BAY AREA WATER SUPPLY &	$	8,162.00
07/27/2020	28504	BAY ALARM COMPANY	$	574.59
07/27/2020	28505	CALCON SYSTEMS, INC.	$	163.88
07/27/2020	28506	CITY OF HALF MOON BAY	$	50.00
07/27/2020	28507	PETTY CASH	$	213.79
07/27/2020	28508	COASTSIDE ESTATES LLC	$	3,443.00
07/27/2020	28509	COASTSIDE ESTATES LLC	$	640.50
07/27/2020	28510	RECORDER'S OFFICE	$	95.00
07/27/2020	28511	RECORDER'S OFFICE	$	95.00
07/27/2020	28512	DE LAGE LANDEN FINANCIAL SERVICES, INC.	$	876.14
07/27/2020	28513	MICHAEL DE MEO	$	427.06
07/27/2020	28514	GRAINGER, INC.	$	536.71
07/27/2020	28515	GRISWOLD INDUSTRIES	$	801.40

07/27/2020	28516	HMB BLDG. & GARDEN INC.	$	382.05
07/27/2020	28517	IRON MOUNTAIN	$	789.66
07/27/2020	28518	IRVINE CONSULTING SERVICES, INC.	$	3,557.55
07/27/2020	28519	IRVINE CONSULTING SERVICES, INC.	$	1,049.98
07/27/2020	28520	DUSTIN JAHNS	$	123.94
07/27/2020	28521	JAMES FORD, INC.	$	147.65
07/27/2020	28522	GLENNA LOMBARDI	$	108.00
07/27/2020	28523	MASS MUTUAL FINANCIAL GROUP	$	1,050.00
07/27/2020	28524	MTA PARTS, INC.	$	133.83
07/27/2020	28525	OFFICE DEPOT	$	219.73
07/27/2020	28526	PAULO'S AUTO CARE	$	103.11
07/27/2020	28527	FERGUSON ENTERPRISES, INC.	$	3,189.94
07/27/2020	28528	ROBERTS & BRUNE CO.	$	37,625.73
07/27/2020	28529	TEAMSTERS LOCAL UNION #856	$	1,277.00
07/27/2020	28530	JAMES TETER	$	1,663.00
07/27/2020	28531	UNDERGROUND SERVICE ALERT	$	1,139.54
07/27/2020	28532	UNIVAR SOLUTIONS USA INC.	$	1,970.00
07/27/2020	28533	UPS STORE	$	136.39
07/27/2020	28534	VALIC	$	3,630.00
07/27/2020	28535	VERIZON WIRELESS	$	7,934.50
07/27/2020	28536	MAURIE BENNETT	$	16.16
07/27/2020	28537	NICOLE OSMANSKI	$	28.16
07/27/2020	28538	TOM WATSON	$	15.70
		SUBTOTAL CLAIMS FOR MONTH	$	1,674,304.55

WIRE PAYMENTS

MONTH		VENDOR		AMOUNT
07/10/2020	DFT0000307	PUB. EMP. RETIRE SYSTEM	$	15,532.51
07/06/2020	DFT0000308	CalPERS FISCAL SERVICES DIVISION	$	1,946.00
07/06/2020	DFT0000309	CalPERS FISCAL SERVICES DIVISION	$	7,100.00
07/24/2020	DFT0000311	PUB. EMP. RETIRE SYSTEM	$	14,333.21
7/31/2020		BANK AND CREDIT CARD FEES	$	7,271.98
		SUBTOTAL WIRE PAYMENTS FOR MONTH	$	46,183.70

TOTAL CLAIMS FOR THE MONTH $ 1,720,488.25

Coastside County Water District

Monthly Budget Report

Account Summary

For Fiscal: 2020-2021 Period Ending: 07/31/2020

		July Budget	July 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	1,264,819.00	1,361,314.32	96,495.32	7.63 %	1,264,819.00	1,361,314.32	96,495.32	7.63 %	12,096,000.00
	Total RevType: 1 - Operating:	**1,264,819.00**	**1,361,314.32**	**96,495.32**	**7.63 %**	**1,264,819.00**	**1,361,314.32**	**96,495.32**	**7.63 %**	**12,096,000.00**
RevType: 2 - Non-Operating										
1-4170-00	Water Taken From Hydrants	4,165.00	7,109.76	2,944.76	70.70 %	4,165.00	7,109.76	2,944.76	70.70 %	50,000.00
1-4180-00	Late Notice - 10% Penalty	0.00	-2.89	-2.89	0.00 %	0.00	-2.89	-2.89	0.00 %	25,000.00
1-4230-00	Service Connections	833.00	681.88	-151.12	-18.14 %	833.00	681.88	-151.12	-18.14 %	10,000.00
1-4920-00	Interest Earned	4,688.00	4,000.17	-687.83	-14.67 %	4,688.00	4,000.17	-687.83	-14.67 %	56,250.00
1-4930-00	Tax Apportionments/County Checks	0.00	7,206.52	7,206.52	0.00 %	0.00	7,206.52	7,206.52	0.00 %	750,000.00
1-4950-00	Miscellaneous Income	0.00	96.78	96.78	0.00 %	0.00	96.78	96.78	0.00 %	7,000.00
1-4955-00	Cell Site Lease Income	14,500.00	14,722.07	222.07	1.53 %	14,500.00	14,722.07	222.07	1.53 %	179,000.00
1-4965-00	ERAF Refund - County Taxes	0.00	0.00	0.00	0.00 %	0.00	0.00	0.00	0.00 %	375,000.00
	Total RevType: 2 - Non-Operating:	**24,186.00**	**33,814.29**	**9,628.29**	**39.81 %**	**24,186.00**	**33,814.29**	**9,628.29**	**39.81 %**	**1,452,250.00**
	Total Revenue:	**1,289,005.00**	**1,395,128.61**	**106,123.61**	**8.23 %**	**1,289,005.00**	**1,395,128.61**	**106,123.61**	**8.23 %**	**13,548,250.00**
Expense										
ExpType: 1 - Operating										
1-5130-00	Water Purchased	353,020.00	344,773.32	8,246.68	2.34 %	353,020.00	344,773.32	8,246.68	2.34 %	2,341,560.00
1-5230-00	Nunes T P Pump Expense	3,416.00	3,964.00	-548.00	-16.04 %	3,416.00	3,964.00	-548.00	-16.04 %	41,000.00
1-5231-00	CSP Pump Station Pump Expense	60,000.00	48,387.00	11,613.00	19.36 %	60,000.00	48,387.00	11,613.00	19.36 %	350,000.00
1-5232-00	Other Trans. & Dist Pump Expense	1,750.00	2,657.00	-907.00	-51.83 %	1,750.00	2,657.00	-907.00	-51.83 %	21,000.00
1-5233-00	Pilarcitos Canyon Pump Expense	700.00	146.00	554.00	79.14 %	700.00	146.00	554.00	79.14 %	43,000.00
1-5234-00	Denniston T P Pump Expense	6,800.00	1,354.00	5,446.00	80.09 %	6,800.00	1,354.00	5,446.00	80.09 %	110,000.00
1-5242-00	CSP Pump Station Operations	1,375.00	1,012.00	363.00	26.40 %	1,375.00	1,012.00	363.00	26.40 %	16,500.00
1-5243-00	CSP Pump Station Maintenance	3,083.00	1,209.97	1,873.03	60.75 %	3,083.00	1,209.97	1,873.03	60.75 %	37,000.00
1-5246-00	Nunes T P Operations - General	7,500.00	10,320.99	-2,820.99	-37.61 %	7,500.00	10,320.99	-2,820.99	-37.61 %	90,000.00
1-5247-00	Nunes T P Maintenance	10,416.00	5,652.36	4,763.64	45.73 %	10,416.00	5,652.36	4,763.64	45.73 %	125,000.00
1-5248-00	Denniston T P Operations-General	4,584.00	3,845.02	738.98	16.12 %	4,584.00	3,845.02	738.98	16.12 %	55,000.00
1-5249-00	Denniston T.P. Maintenance	9,000.00	4,713.01	4,286.99	47.63 %	9,000.00	4,713.01	4,286.99	47.63 %	132,000.00
1-5250-00	Laboratory Expenses	6,250.00	5,376.13	873.87	13.98 %	6,250.00	5,376.13	873.87	13.98 %	75,000.00
1-5260-00	Maintenance - General	30,000.00	28,173.88	1,826.12	6.09 %	30,000.00	28,173.88	1,826.12	6.09 %	348,500.00
1-5261-00	Maintenance - Well Fields	1,000.00	0.00	1,000.00	100.00 %	1,000.00	0.00	1,000.00	100.00 %	30,000.00
1-5263-00	Uniforms	0.00	0.00	0.00	0.00 %	0.00	0.00	0.00	0.00 %	10,000.00
1-5318-00	Studies/Surveys/Consulting	10,000.00	8,000.00	2,000.00	20.00 %	10,000.00	8,000.00	2,000.00	20.00 %	150,000.00
1-5321-00	Water Resources	2,166.00	110.26	2,055.74	94.91 %	2,166.00	110.26	2,055.74	94.91 %	26,000.00

		July Budget	July Activity	Variance Favorable (Unfavorable)	Percent Variance	YTD Budget	YTD Activity	Variance Favorable (Unfavorable)	Percent Variance	Total Budget
1-5322-00	Community Outreach	1,000.00	0.00	1,000.00	100.00 %	1,000.00	0.00	1,000.00	100.00 %	58,400.00
1-5381-00	Legal	8,333.00	8,000.00	333.00	4.00 %	8,333.00	8,000.00	333.00	4.00 %	100,000.00
1-5382-00	Engineering	5,500.00	5,480.00	20.00	0.36 %	5,500.00	5,480.00	20.00	0.36 %	66,000.00
1-5383-00	Financial Services	0.00	1,805.00	-1,805.00	0.00 %	0.00	1,805.00	-1,805.00	0.00 %	22,000.00
1-5384-00	Computer Services	17,625.00	18,497.28	-872.28	-4.95 %	17,625.00	18,497.28	-872.28	-4.95 %	211,500.00
1-5410-00	Salaries/Wages-Administration	101,942.00	82,240.23	19,701.77	19.33 %	101,942.00	82,240.23	19,701.77	19.33 %	1,223,311.00
1-5411-00	Salaries & Wages - Field	125,117.00	121,774.24	3,342.76	2.67 %	125,117.00	121,774.24	3,342.76	2.67 %	1,501,399.00
1-5420-00	Payroll Tax Expense	15,975.00	13,604.80	2,370.20	14.84 %	15,975.00	13,604.80	2,370.20	14.84 %	191,701.00
1-5435-00	Employee Medical Insurance	41,645.00	39,098.24	2,546.76	6.12 %	41,645.00	39,098.24	2,546.76	6.12 %	511,400.00
1-5436-00	Retiree Medical Insurance	5,661.00	5,750.12	-89.12	-1.57 %	5,661.00	5,750.12	-89.12	-1.57 %	69,562.00
1-5440-00	Employees Retirement Plan	41,353.00	36,366.39	4,986.61	12.06 %	41,353.00	36,366.39	4,986.61	12.06 %	496,240.00
1-5445-00	Supplemental Retirement 401a	0.00	0.00	0.00	0.00 %	0.00	0.00	0.00	0.00 %	35,000.00
1-5510-00	Motor Vehicle Expense	6,250.00	4,187.31	2,062.69	33.00 %	6,250.00	4,187.31	2,062.69	33.00 %	75,000.00
1-5620-00	Office & Billing Expenses	31,791.00	22,584.53	9,206.47	28.96 %	31,791.00	22,584.53	9,206.47	28.96 %	363,500.00
1-5620-60	Office Supplies - COVID	0.00	2,267.50	-2,267.50	0.00 %	0.00	2,267.50	-2,267.50	0.00 %	0.00
1-5625-00	Meetings / Training / Seminars	2,750.00	105.00	2,645.00	96.18 %	2,750.00	105.00	2,645.00	96.18 %	33,000.00
1-5630-00	Insurance	13,250.00	12,387.96	862.04	6.51 %	13,250.00	12,387.96	862.04	6.51 %	159,000.00
1-5687-00	Membership, Dues, Subscript.	7,091.00	12,637.92	-5,546.92	-78.22 %	7,091.00	12,637.92	-5,546.92	-78.22 %	85,100.00
1-5688-00	Election Expenses	0.00	0.00	0.00	0.00 %	0.00	0.00	0.00	0.00 %	30,000.00
1-5689-00	Labor Relations	500.00	0.00	500.00	100.00 %	500.00	0.00	500.00	100.00 %	6,000.00
1-5700-00	San Mateo County Fees	2,000.00	0.00	2,000.00	100.00 %	2,000.00	0.00	2,000.00	100.00 %	25,000.00
1-5705-00	State Fees	3,000.00	0.00	3,000.00	100.00 %	3,000.00	0.00	3,000.00	100.00 %	36,500.00
	Total ExpType: 1 - Operating:	**941,843.00**	**856,481.46**	**85,361.54**	**9.06 %**	**941,843.00**	**856,481.46**	**85,361.54**	**9.06 %**	**9,301,173.00**
ExpType: 4 - Capital Related										
1-5715-00	Debt Service/CIEDB 11-099	268,811.00	268,811.40	-0.40	0.00 %	268,811.00	268,811.40	-0.40	0.00 %	335,825.00
1-5716-00	Debt Service/CIEDB 2016	234,969.00	234,968.81	0.19	0.00 %	234,969.00	234,968.81	0.19	0.00 %	323,357.00
1-5717-00	Chase Bank - 2018 Loan	0.00	0.00	0.00	0.00 %	0.00	0.00	0.00	0.00 %	433,567.00
	Total ExpType: 4 - Capital Related:	**503,780.00**	**503,780.21**	**-0.21**	**0.00 %**	**503,780.00**	**503,780.21**	**-0.21**	**0.00 %**	**1,092,749.00**
	Total Expense:	**1,445,623.00**	**1,360,261.67**	**85,361.33**	**5.90 %**	**1,445,623.00**	**1,360,261.67**	**85,361.33**	**5.90 %**	**10,393,922.00**
	Report Total:	**-156,618.00**	**34,866.94**	**191,484.94**		**-156,618.00**	**34,866.94**	**191,484.94**		**3,154,328.00**

COASTSIDE COUNTY WATER DISTRICT
MONTHLY INVESTMENT REPORT
July 31, 2020

RESERVE BALANCES	**Current Year as of 7/31/2020**	**Prior Year as of 7/31/2019**
CAPITAL AND OPERATING RESERVE	$8,484,828.20	$8,516,239.76
RATE STABILIZATION RESERVE	$250,000.00	$250,000.00
TOTAL DISTRICT RESERVES	**$8,734,828.20**	**$8,766,239.76**

ACCOUNT DETAIL

ACCOUNTS WITH TRI COUNTIES BANK		
CHECKING ACCOUNT	$3,353,053.60	$3,547,168.92
CSP T & S ACCOUNT	$120,601.54	$64,411.69
MONEY MARKET GEN. FUND (Opened 7/20/17)	$19,447.36	$19,440.22
LOCAL AGENCY INVESTMENT FUND (LAIF) BALANCE	$5,240,925.70	$5,134,418.93
DISTRICT CASH ON HAND	$800.00	$800.00
TOTAL ACCOUNT BALANCES	**$8,734,828.20**	**$8,766,239.76**

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

COASTSIDE COUNTY WATER DISTRICT
CAPITAL IMPROVEMENT PROJECTS - STATUS REPORT
FISCAL YEAR 2020/2021

* Approved June 2020

7/31/2020

		Status	Approved* CIP Budget FY 20/21	Actual To Date FY 20/21	Projected Year-End FY20/21	Variance vs. Budget	% Completed	Project Status/ Comments
Equipment Purchases & Replacement								
06-03	SCADA/Telemetry/Electrical Controls Replacement	ongoing	$ 50,000		$ 50,000	$ -	0%	
19-04	Valve truck	open	$ 225,000		$ 225,000	$ -	0%	
22-05	Planning Software	open	$ 60,000		$ 60,000	$ -	0%	
Facilities & Maintenance								
99-01	Meter Change Program	ongoing	$ 20,000		$ 20,000	$ -	0%	
Pipeline Projects								
13-02	Pipeline Replacement Under Creek at Pilarcitos Ave (Strawflower)	In design	$ 750,000		$ 750,000	$ -	0%	
14-01	Highway 92 - Replacement of Welded Steel Line	Open	$ 100,000		$ 100,000	$ -	0%	for design only
22-04	El Granada Tank #2 Pipeline Replacement	Open	$ 500,000		$ 500,000	$ -	n/a	
Pump Stations / Tanks / Wells								
21-07	District-Wide Tank Improvement Project	Open	$ 600,000		$ 600,000	$ -	n/a	
21-02	Pilarcitos Reservoir Spillway-Pump/Emergency Generator	Open	$ 100,000		$ 100,000		0%	
19-05	Tanks - THM Control	Ongoing	$ 60,000		$ 60,000		0%	
22-03	Tank Cathodic Protection Project	Open	$ 40,000		$ 40,000	$ -	0%	
Water Supply Development								
14-25	Denniston/San Vicente Water Supply Development	ongoing	$ 300,000	$ 30,000	$ 300,000	$ -	10%	
Water Treatment Plants								
20-14	Nunes Water Treatment Plant Improvement Project	In Design	$ 700,000	$ 75,000	$ 700,000	$ -	15%	
21-04	Nunes/Denniston Turbidimeter Replacement	Open	$ 35,000		$ 35,000	$ -	0%	
UNSCHEDULED/NEW CIP ITEMS FOR CURRENT FISCAL YEAR 2020/2021								
NN-00	Unscheduled CIP		$ 100,000		$ 100,000	$ -	0%	
	NEW FY2020/2021 CIP TOTAL		**$ 3,640,000**	**$ 105,000**	**$ 3,640,000**	**$ -**		
FY2019/2020 CIP Carryover Projects								
21-08	Asset Management/GIS software	in process	$ 60,000	15,000	$ 60,000	$ -	50%	
20-07	District Office Improvements	in process	$ 60,000	5,702	$ 60,000	$ -	60%	
18-13	Denniston WTP and Tank Road Repairs and Paving	in process	$ 400,000		$ 400,000	$ -	0%	
14-01	Highway 92 - Replacement of Welded Steel Line-Phase 1	open	$ 700,000		$ 700,000	$ -	0%	

COASTSIDE COUNTY WATER DISTRICT
CAPITAL IMPROVEMENT PROJECTS - STATUS REPORT
FISCAL YEAR 2020/2021

7/31/2020

* Approved June 2020

		Status	Approved* CIP Budget FY 20/21	Actual To Date FY 20/21	Projected Year-End FY20/21	Variance vs. Budget	% Completed	Project Status/ Comments
20-08	Highway 1 Crossings (Silver/Terrace/Grandview/Spindrift)	pre-design	$ 30,000		$ 30,000	$ -	15%	
13-05	Denniston WTP and Booster Station Standby Power	in process	$ 300,000	30,000	$ 300,000	$ -	10%	
30-00	Computer Software upgrades	ongoing		3,110	$ 3,110			
08-08	PRV Replacment Program	in process		1,433	$ 1,433			
20-17	Patch pave - Garcia Street	closed		343	$ 343		100%	
	FY2019/2020 CARRYOVER PROJECTS		**$ 1,550,000**	**$ 55,588**	**$ 1,554,886**	**$ -**		

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
Jul-19	4,321			834		335				5,490
Aug-19	5,535			496						6,031
Sep-19	4,090					455				4,545
Oct-19	3,360				840		4,612			8,812
Nov-19	3,948						6,905		665	11,518
Dec-19	3,801			365			2,814			6,980
Jan-20	12,289						8,071			20,360
Feb-20	4,256	1,855		245			2,527			8,883
Mar-20	3,990	1,295				1,050	840			7,175
Apr-20	6,353	1,085				665				8,103
May-20	4,011					840				4,851
Jun-20	4,248			70		1,085				
TOTAL	**60,200**	**4,235**	**0**	**2,010**	**840**	**4,430**	**25,769**	**0**	**665**	**92,746**

Engineer Cost Tracking Report
12 Months At-A-Glance

Acct. No. 5682
JAMES TETER
Engineer

Month	Admin & Retainer	CIP	Studies & Projects	TOTAL	Reimburseable from Projects
Jul-19	480	2,539	676	**3,695**	676
Aug-19	480	10,152	2,891	**13,523**	2,891
Sep-19	480	676	1,268	**2,424**	1,268
Oct-19	480	845	507	**1,832**	507
Nov-19	480	676		**1,156**	
Dec-19	480	676	254	**1,410**	254
Jan-20	480	4,344	2,197	**7,021**	2,197
Feb-20	480	4,563		**5,043**	
Mar-20	480			**480**	
Apr-20	480			**480**	
May-20	480		1,268	**1,748**	1,268
Jun-20	480		1,183	**1,663**	1,183
TOTAL	**5,760**	**24,471**	**10,243**	**40,474**	**10,243**

Calcon T&M Projects Tracking

6/30/2020

Project No.	Name	Status	Proposal Date	Approved Date	Project Budget	Project Actual thru 6/30/19	Project Billings FY2019-20
Closed Projects:							
CAL-13-01	EG Tank 2 Recoating Project	Closed	9/30/13	10/8/13	$8,220.00	$ 8,837.50	
CAL-13-02	Nunes Control System Upgrades	Closed	9/30/13	10/8/13	$46,141.00	$ 55,363.60	
CAL-13-03	Win 911 and PLC Software	Closed	9/30/13	10/8/13	$9,717.00	$ 12,231.74	
CAL-13-04	Crystal Springs Surge Tank Retrofit	Closed	11/26/13	11/27/13	$31,912.21	$ 66,572.54	
CAL-13-06	Nunes Legacy Backwash System Removal	Closed	11/25/13	11/26/13	$6,516.75	$ 6,455.00	
CAL-13-07	Denniston Backwash FTW Valves	Closed	11/26/13	11/27/13	$6,914.21	$ 9,518.28	
CAL-14-01	Denniston Wash Water Return Retrofit	Closed	1/28/14	2/14/14	$13,607.00	$ 13,591.60	
CAL-14-02	Denniston Calrifier SCADA Data	Closed	4/2/14	4/7/14	$4,125.00	$ 4,077.50	
CAL-14-03	Nunes Surface Scatter Turbidimeter	Closed	4/2/14	4/7/14	$2,009.50	$ -	
CAL-14-04	Phase I Control System Upgrade	Closed	4/2/14	4/7/14	$75,905.56	$ 44,459.14	
CAL-14-06	Miramar Control Panel	Closed	8/28/14	8/28/14	$37,953.00	$ 27,980.71	
CAL-14-08	SFWater Flow & Data Logger/Cahill Tank	Closed	8/20/2014	8/20/2014	$1,370.00	$ 1,372.00	
CAL-15-01	Main Street Monitors	Closed				$ 6,779.42	
CAL-15-02	Dennistion To Do List	Closed				$ 2,930.00	
CAL-15-03	Nunes & Denniston Turbidity Meters	Closed			$6,612.50	$ 12,536.12	
CAL-15-04	Phase II Control System Upgrade	Closed	6/23/2015	8/11/2015	$195,000.00	$ 202,227.50	
CAL-15-05	Permanganate Water Flow	Closed				$ 1,567.15	
CAL-16-04	Radio Network	Closed	12/9/2016	1/10/2017	$126,246.11	$ 139,200.68	
CAL-16-05	El Granada Tank No. 3 Recoating	Closed	12/16/2016		$6,904.50	$ 6,845.00	
CAL-17-03	Nunes Valve Control	Closed	6/29/2017	7/11/2017	$73,281.80	$ 79,034.35	
CAL-17-04	Denniston Booster Pump Station	Closed	7/27/2017	8/8/2017	$21,643.75	$ 29,760.00	
CAL-17-05	Crystal Springs Pump Station #3 Soft Start	Closed	7/27/2017	8/8/2017	$12,213.53	$ 12,178.13	
CAL-18-04	Tank Levels Calibration Special	Closed	3/5/2018	3/5/2018	$8,388.75	$ 10,700.00	
CAL-18-05	Pilarcitos Stream Flow Gauge -Well 1 120 Service Power	Closed	3/22/2018	3/22/2018	$3,558.13	$ 3,997.40	
CAL-17-06	Nunes Flocculartor & Rapid Mix VFD Panels	Closed	12/6/2017	12/12/2017	$29,250.75	$ 30,695.66	
CAL-17-01	Crystal Springs Leak Valve Control	Closed	2/8/2017	2/14/2017	$8,701.29	$ 18,055.88	
CAL-17-02	Crystal Springs Requirements & Addtl Controls	Closed	2/8/2017	2/14/2017	$38,839.50	$ 41,172.06	
CAL-18-02	Nunes Plant HMI V2	Closed	11/12/2018		$10,913.14	$ 9,434.90	
CAL-18-03	CSP Breakers & Handles		3/7/2018	3/7/2018	$25,471.47	$ 49,837.52	
CAL-18-06	Nunes VFD Project		9/6/2018	9/6/2018	$2,381.51	$ 895.50	
		Closed Projects - Subtotal (pre FY2019-2021)			$813,797.96	$908,306.88	
FY 2019-20 Open Projects:							
CAL-19-01	CSP Cla-Val Power Checks		2/4/2019	2/4/2019	$15,067.91	$ 17,852.94	$ 22,623.00
CAL-19-02	CSP Wet Well		4/1/2019	4/1/2019	$12,960.24	$ 12,853.20	
CAL-19-03	Pilarcitos Flow Meter Project		4/1/2019	4/1/2019	$14,493.75	$ 16,241.84	$ 1,375.00
CAL-19-04	SCADA Systems		10/15/2019	10/15/2019	$104,000.00		$ 114,250.00
	Spare 350/500 Pumps						$ 3,327.09
	CSP Main Breaker						$ 5,220.00
	Additional Software						$ 7,500.00
		Open Projects - Subtotal			$146,521.90	$46,947.98	$146,795.09
Other: Maintenance							
	Tanks						
	Crystal Springs Maintenance						$ 1,966.56
	Nunes Maintenance						$ 34,550.79
	Denniston Maintenance						$ 59,662.15
	Distribution System						$ 50,729.82
	Wells						$ 8,245.16
		Subtotal Maintenance					$ 155,154.48
		TOTAL FY 2019/20					$ 301,949.57

EKI Environment & Water
Engineering Services Billed Through July 31, 2020

		Contract Date	Not to Exceed Budget	Status	FY 2018-2019	FY 2019-2020	FY2020-2021
CIP Project Management							
Fiscal Year 2018-2019		10.19.2018	$ 25,000.00	Complete			
Fiscal Year 2018-2019		1.14.2019	$ 40,000.00	Complete			
Fiscal Year 2018-2019		3.12.2019	$ 75,000.00	Complete			
Fiscal Year 2019-2020		7.29.2019	$ 180,000.00	Open	$ 123,410.00	$ 104,108.97	
Pipeline Projects (Ferdinand) - T2			$ 2,000.00		$ 18,220.42	$ 13,476.55	
Tank Seismic Projects - T3					$ 16,676.92	$ 19,249.53	
Hydraulic Modeling - T4					$ (4,385.04)	$ 20,570.20	
Sub Total - CIP Project Management Services			$ 322,000.00		$ 163,452.66	$ 157,405.25	$ -
Highway 1 South Pipeline Replacement Project	**16-02**	9.20.2018	$ 25,000.00	Complete	$ 17,680.45		
Ferdinand Avenue Pipeline Replacement Design	**14-31**	2.12.2019	$ 29,000.00	Complete	$ 27,824.37	$ 1,169.10	
Casa Del Mar Main Replacement (Phase 1) and Grand Boulevard Pipeline/PRV Loop Design	**14-32**	2.12.2019	$ 28,500.00	Complete	$ 27,297.34	$ 1,195.22	
Denniston Culvert Replacement and Paving Project Design	**18-13**	7.1.2019	$ 16,400.00	Open	$ 804.96	$ 21,296.34	
Construction Inspection Services for Ferdinand Avenue Water Main Replacement Project	**14-31**	7.1.2019	$ 32,300.00	Complete		$ 32,300.00	
Pine Willow Oak Water Main Replacement Project	**18-01**	7.29.2019	$ 69,700.00	Open		$ 49,906.63	
Grandview Water Main Replacement Project (Design, Bid Support, construction support)	**14-27**	7.29.2019	$ 56,100.00	Open		$ 42,095.19	
Pilarcitos Creek Crossing Water Main Replacement Preliminary Design	**13-02**	8.27.2019	$ 104,600.00	Open		$ 95,332.59	
Pilarcitos Creek Crossing Water Main Replacement Design	**13-02**	7.14.2020	$ 82,900.00	Open			
Grandview/Silver/Terrace/Spindrift Under Hwy 1 PreDesign	**20-08**	10.15.2019	$ 45,600.00	Open		$ 18,217.30	
Total - All Services			**$ 812,100.00**		**$ 237,059.78**	**$ 418,917.62**	**$ -**

COASTSIDE COUNTY WATER DISTRICT

766 MAIN STREET

HALF MOON BAY, CA 94019

MINUTES OF THE REGULAR MEETING OF THE BOARD OF DIRECTORS

July 14, 2020

On March 17, 2020, the Governor issued Executive Order N-29-20 suspending certain provisions of the Ralph M. Brown Act in order to allow for local legislative bodies to conduct their meetings telephonically or by other electronic means. Pursuant to the Shelter-in-Place Order issued by the San Mateo County Health Officer on March 16, 2020, as revised on March 31, 2020, the statewide Shelter-in-Place Order issued by the Governor in Executive Order N-33-20 on March 19, 2020, and the CDC's social distancing guidelines which discourage large public gatherings, the Boardroom was not open for the July 14, 2020 Regular Meeting of the Coastside County Water District. The Regular 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 Chris Mickelsen called the meeting to order at 7:00 p.m. participating in roll call via Zoom Video Conference: Directors Jim Larimer, Ken Coverdell, Bob Feldman, and Vice-President Glenn Reynolds.

Also present: Mary Rogren, General Manager, Patrick Miyaki, Legal Counsel; James Derbin, Superintendent of Operations; Cathleen Brennan, Water Resource Analyst; Gina Brazil, Office Manager, Denise Ford, Administrative Assistant/Recording Secretary, and Nancy Trujillo, Accounting Manager.

Sanjay Gaur, Vice President and Lauren Demine, Consultant with Raftelis Financial Consultants, Inc. and Jonathan Sutter, Project Manager, with EKI Environment and Water, Inc. were identified as participants in the meeting.

Members of the public: Dave Dickson and Steve Tarantino were also in attendance.

2) **PLEDGE OF ALLEGIANCE**

3) PUBLIC COMMENT – There were no public comments.

4) CONSENT CALENDAR

A. Approval of disbursements for the month ending June 30, 2020:
   Claims: $847,875.78; Payroll: $190,676.55 for a total of $1,038,552.33
B. Acceptance of Financial Reports
C. Approval of Minutes of June 9, 2020 Regular Board of Directors Meeting
D. Installed Water Connection Capacity and Water Meters Report
E. Total CCWD Production Report
F. CCWD Monthly Sales by Category Report-June 2020
G. Monthly Planned Plant or Tank Discharge and New Water Line Flushing Report
H. Monthly Rainfall Reports
I. SFPUC Hydrological Report for the Month of June 2020

Director Coverdell reported that he had reviewed the monthly financial claims and found all to be in order.

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

Director Larimer	**Aye**
Vice-President Reynolds	**Aye**
Director Coverdell	**Aye**
Director Feldman	**Aye**
President Mickelsen	**Aye**

5) MEETINGS ATTENDED/DIRECTOR COMMENTS

There were no reports of meetings attended or Director comments expressed.

6) GENERAL BUSINESS

A. <u>Second Financial Planning and Rate Update Workshop with Raftelis Financial Consultants, Inc.</u>

Ms. Rogren introduced the District's rate consultants, Sanjay Gaur and Lauren Demine with Raftelis Financial Consultants, Inc. In 2018, Raftelis prepared a Cost of Service Analysis and Rate Study to develop cost of service-based water rates which would meet the requirements of Proposition 218 and the 2015 Appellate Court decision in Capistrano Taxpayers Association, Inc. v. City of San Juan Capistrano. The Study was used to set the District's rates for FY2019 and FY2020.

At the December, 2019 Board of Directors' meeting, the Board approved engaging Raftelis to develop a Financial Plan and prepare an Updated Rate Study report, based upon the 2018 Cost of Service Analysis that would be used to set the District's rates for FY20-21 and FY21-22.

At the March 10, 2020 Board meeting, Mr. Gaur, conducted a Financial Planning and Rate Update Workshop, and Staff was directed to prepare a Proposition 218 notice to be reviewed at the April 14, 2020 Board Meeting for purposes of setting a date for a public hearing for a proposed increase to be effective July 1, 2020. At a Special Meeting on April 3, 2020, the Board

voted to table discussion of the proposed rate increase for three months to the July 2020 Board Meeting due to the COVID-19 pandemic and the uncertainty of the current economic situation.

At this second Rate Update Workshop, Mr. Gaur presented a proposed updated financial planning model and reserve policy needed to meet the District's revenue requirements and the bill impacts. Ms. Rogren asked Mr. Gaur to focus on two scenarios. The first scenario was a 6.5% annual increase with no loans or financing and the second scenario was a 5% annual increase with financing.

Board discussion ensued with respect to the next steps in planning for rate adjustments for Fiscal Years 2020-2021 and 2021-2022, and President Mickelsen noted that he was opposed to any financing.

At the close of the discussion, Staff and Mr. Gaur were directed to use "up to a 5%" rate increases to be effective January 1, 2021 and January 1, 2022 in a draft Proposition 218 notice and the "Water Financial Plan and Rate Update Study " that will be reviewed at the August 11, 2020 Board of Directors Meeting when the Board plans to consider setting a date for a public hearing and authorizing the issuance of the Proposition 218 notice.

B. <u>Approval of Fiscal Year 2020/21 to 2029/30 Capital Improvement Program</u>

Ms. Rogren reviewed the Draft Fiscal Year 2020/21 to 2029/30 Capital Improvement Program (CIP) which provides a planning framework in managing capital projects for the next two fiscal years. The CIP will be used in the District's Water Financial Plan and Rate Update Study being prepared by the District's Rate Consultants, Raftelis Financial Consultants, Inc.

The CIP includes two important infrastructure improvement projects, the Nunes Water Treatment Plant Improvement Project, and the District-Wide Tank Improvement Project. Both projects will significantly enhance the resiliency of the District's infrastructure for the next generation. Ms. Rogren introduced Jonathan Sutter, Project Manager, of EKI Environment and Water Inc. (EKI) who presented an overview of the District-Wide Tank Improvement Project.

ON MOTION BY Director Vice-President Reynolds and seconded by Director Coverdell, the Board voted by roll call vote to Approve Fiscal Year 2020/21 to 2029/30 Capital Improvement Program (Exhibit A):

Director Larimer	**Aye**
Vice-President Reynolds	**Aye**
Director Coverdell	**Aye**
Director Feldman	**Aye**
President Mickelsen	**Aye**

C. <u>Pilarcitos Creek Crossing Water Main Replacement Project Award of Contract for Detailed Design and Engineering Support Services with EKI Environment and Water, Inc.</u>

Mr. Derbin reviewed the background of this project which includes the replacement of a section of 8"cast iron main which crosses under Pilarcitos Creek between Pilarcitos Avenue and Strawflower Shopping Center at an unknown location. Mr. Derbin explained the importance of this project being completed due to the challenges involved in repairing the water main if it should fail and the reliable delivery of water to Districts customers.

ON MOTION BY Vice-President Coverdell and seconded by Vice-President Reynolds, the Board voted by roll call vote to authorize the General Manager to execute a professional services agreement with EKI Environment and Water Inc. (EKI) for detailed design and engineering support services during construction for the Pilarcitos Creek Crossing Water Main Replacement project for a not to exceed amount of $82,900:

Director Larimer	**Aye**
Vice-President Reynolds	**Aye**
Director Coverdell	**Aye**
Director Feldman	**Aye**
President Mickelsen	**Aye**

D. <u>Approval of Professional Services Agreement with Stetson Engineers for Survey and Design Work for the Denniston/San Vicente Water Supply Project</u>

Ms. Rogren explained that in January 2020, the District received an extension of its Water Right Permit with the State Water Resources Control Board, and the District has until December 2026 to perfect its water rights on Denniston and San Vicente Creeks. In order to divert water from San Vicente Creek, the District must construct a new diversion structure on San Vicente and a pipeline extending from the structure at the Denniston Water Treatment Plant (DWTP) pump station. The District has taken the first steps toward permitting and designing the San Vicente improvements and Stetson Engineers has completed a conceptual design of the diversion structure. In the next phase of work, Stetson will coordinate surveys of the current pipeline and the proposed alignment of the new pipeline and will prepare a preliminary pipeline design.

ON MOTION BY Director Coverdell and seconded by Director Feldman, the Board voted by roll call vote to authorize the General Manager to execute a Professional Services Agreement with Stetson Engineers for survey and design work related to the San Vicente Creek Diversion and Pipeline Project, for a time and materials amount not to exceed $100,439:

Director Larimer	**Aye**
Vice-President Reynolds	**Aye**
Director Coverdell	**Aye**
Director Feldman	**Aye**
President Mickelsen	**Aye**

E. Fiscal 2019-2020 Year-End Financial Results – Preliminary

Ms. Rogren summarized the preliminary results for the Fiscal Year ending June 30, 2020, noting that the year-end results were significantly better than plan. She reviewed key revenue and expense highlights, capital improvement plan spending, and cash reserve balances.

F. Consider Approval of Resolution 2020-03 Establishing Appropriations Limit Applicable to District During Fiscal Year 2020/2021

Article XIIIB of the California Constitution, and its implementing legislation, requires each local agency to review the appropriations limit applicable to it annually. The appropriations limit is the maximum amount of proceeds of taxes which the District can appropriate during the fiscal year.

ON MOTION BY Vice-President Reynolds seconded by and Director Feldman, the Board voted by roll call vote to adopt resolution establishing appropriations limit applicable to District during Fiscal Year 2020/2021:

Director Larimer	**Aye**
Vice-President Reynolds	**Aye**
Director Coverdell	**Aye**
Director Feldman	**Aye**
President Mickelsen	**Aye**

7) **MONTHLY INFORMATION REPORTS**

A. Superintendent of Operations Report

Mr. Derbin reviewed the operations highlights for the month of June 2020.

B. Water Resources Report

Ms. Brennan reported on the 2019 Consumer Confidence Report (CCR) Annual Water Quality Report.

8) DIRECTOR AGENDA ITEMS-REQUESTS FOR FUTURE BOARD MEETINGS

A. Director Larimer presented two topics to be included on future agenda items. The first requested agenda item is for a discussion on the possibility of approaching the Coastal Commission with suggestions on changing the restrictions that prevent the District from selling more water connections. The second requested agenda item is for a discussion on the possibility for the District to charge owners of uninstalled water connections maintenance fees to contribute to the costs of maintaining the District's water infrastructure. All Board of Directors were in favor of having these items on future agendas.

9) ADJOURNMENT-The Board Meeting was adjourned at 9:04 p.m.

Respectfully submitted,

_____
Mary Rogren, General Manager
Secretary to the District

_____
Chris Mickelsen, President
Board of Directors

COASTSIDE COUNTY WATER DISTRICT

Installed Water Connection Capacity & Water Meters

FY 2021 Meters

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**
3/4" meter													
1" meter													
1 1/2" meter													
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	1												**1**
3/4" meter													
1" meter													
County Priority													
5/8" meter													
3/4" meter													
1" meter													
1.5" meter													
Totals	2												**2**

5/8" meter = 1 connection
3/4" meter = 1.5 connections
1" meter = 2.5 connections
1.5" meter = 5 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												**1**
HMB Priority													
County Non-Priority	1												**1**
County Priority													
Total	2												**2**

TOTAL CCWD PRODUCTION (MG) ALL SOURCES- FY 2021

	CCWD Sources			SFPUC Sources				
	DENNISTON WELLS	DENNISTON RESERVOIR	PILARCITOS WELLS	PILARCITOS LAKE	CRYSTAL SPRINGS RESERVOIR	RAW WATER TOTAL	UNMETERED WATER	TREATED TOTAL
JUL	0.02	2.83	0.00	28.80	36.06	67.71	2.35	65.36
AUG								
SEPT								
OCT								
NOV								
DEC								
JAN								
FEB								
MAR								
APR								
MAY								
JUN								
TOTAL	0.02	2.83	0.00	28.80	36.06	67.71	2.35	65.36
% MONTHLY TOTAL	0.0%	4.2%	0.0%	42.5%	53.3%	100.0%	3.5%	96.5%
% ANNUAL TO DATE TOTAL	0.0%	4.2%	0.0%	42.5%	53.3%	100.0%	3.5%	96.5%

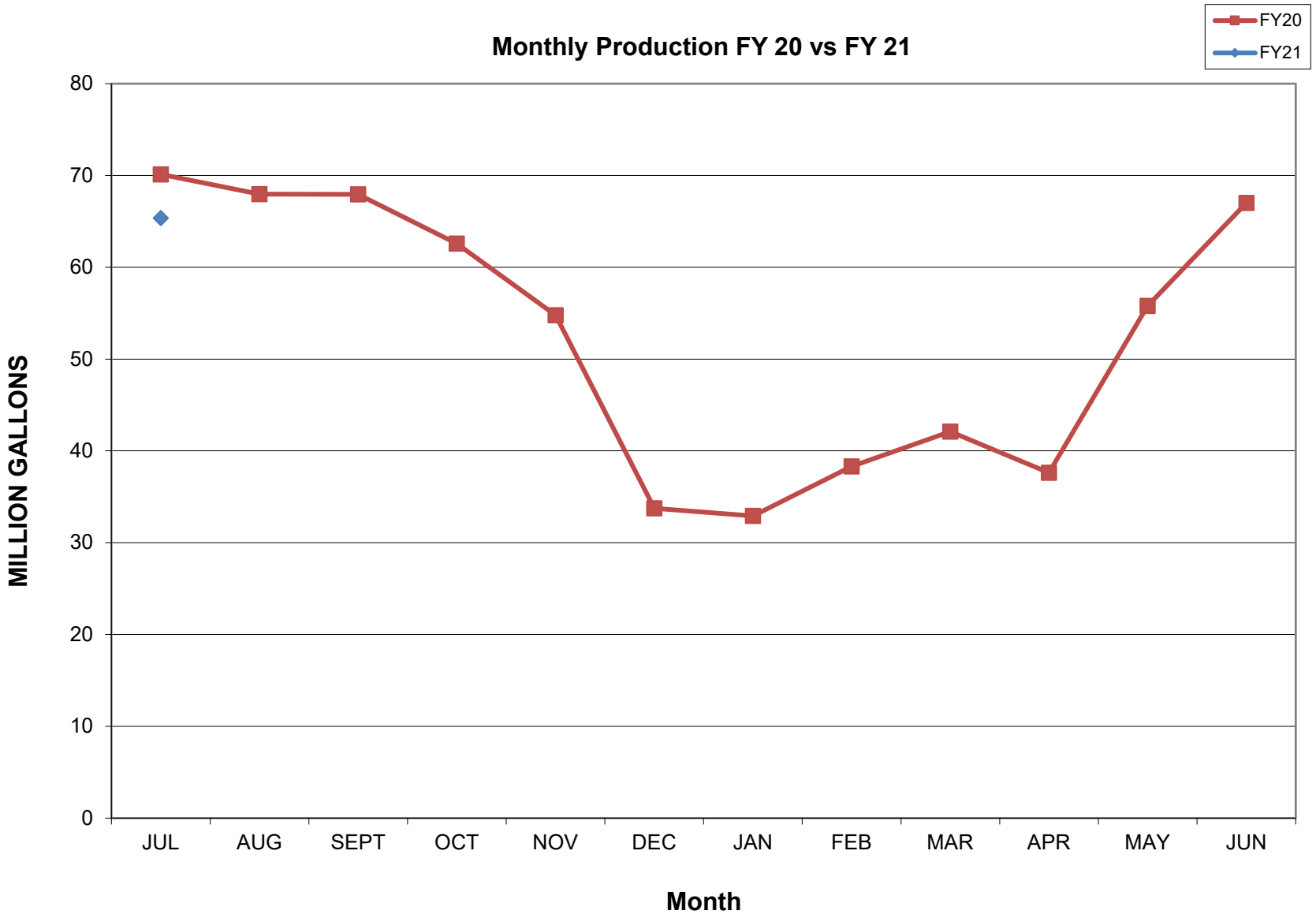
CCWD vs SFPUC- month 4.2%

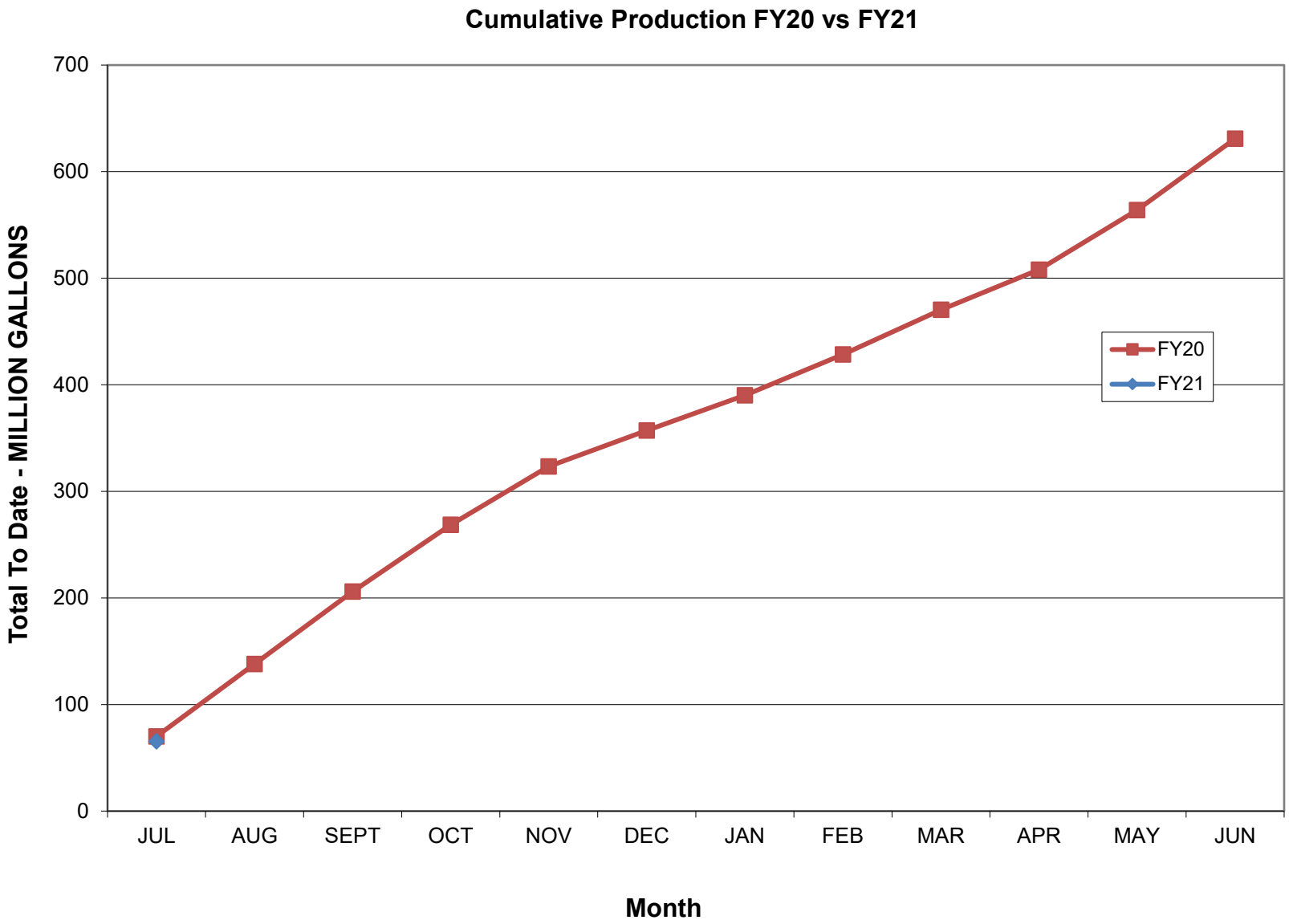
CCWD vs SFPUC- annual 4.2%

12 Month Running Treated Total **626.15**

TOTAL CCWD PRODUCTION (MG) ALL SOURCES- FY 2020

	CCWD Sources			SFPUC Sources				
	DENNISTON WELLS	DENNISTON RESERVOIR	PILARCITOS WELLS	PILARCITOS LAKE	CRYSTAL SPRINGS RESERVOIR	RAW WATER TOTAL	UNMETERED WATER	TREATED TOTAL
JUL	1.61	28.25	0.00	22.27	20.58	72.71	2.58	70.13
AUG	1.44	22.18	0.00	20.20	26.36	70.18	2.21	67.97
SEPT	1.43	19.67	0.00	19.19	30.98	71.27	3.32	67.95
OCT	0.27	5.45	0.00	9.91	48.70	64.33	1.74	62.59
NOV	0.17	19.16	8.61	0.00	29.39	57.33	2.56	54.77
DEC	0.02	18.87	13.91	0.00	4.10	36.90	3.16	33.74
JAN	0.00	18.92	14.65	0.00	1.79	35.36	2.45	32.92
FEB	1.69	27.02	12.07	1.73	0.23	42.74	4.44	38.30
MAR	0.89	18.88	13.07	3.63	8.30	44.77	2.66	42.11
APR	0.07	16.42	0.00	14.09	10.06	40.64	3.01	37.63
MAY	0.24	18.20	0.00	0.00	41.16	59.60	3.82	55.79
JUN	1.35	10.60	0.00	0.00	58.81	70.76	3.74	67.02
TOTAL	9.18	223.62	62.31	91.02	280.46	666.59	35.68	630.92
% TOTAL	1.4%	33.5%	9.3%	13.7%	42.1%	100.0%	5.35%	0.0%


Monthly Production FY 20 vs FY 21
FY20
FY21
MILLION GALLONS
80
70
60
50
40
30
20
10
0
JUL
AUG
SEPT
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
Month


Cumulative Production FY20 vs FY21
Total To Date - MILLION GALLONS
700
600
500
400
300
200
100
0
JUL
AUG
SEPT
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
Month
FY20
FY21

Coastside County Water District Monthly Sales By Category (MG)
FY2021

	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	MG to Date
RESIDENTIAL	34.24												**34.24**
COMMERCIAL	2.86												**2.86**
RESTAURANT	1.01												**1.01**
HOTELS/MOTELS	2.19												**2.19**
SCHOOLS	0.76												**0.76**
MULTI DWELL	3.14												**3.14**
BEACHES/PARKS	0.76												**0.76**
AGRICULTURE	5.31												**5.31**
RECREATIONAL	0.24												**0.24**
MARINE	0.64												**0.64**
RES. IRRIGATION	1.70												**1.70**
DETECTOR CHECKS	0.01												**0.01**
NON-RES. IRRIGATION	6.73												**6.73**
RAW WATER	7.92												**7.92**
PORTABLE METERS	0.53												**7.92**
CONSTRUCTION	0.38												**0.53**
TOTAL - MG	**68.05**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**68.05**
Non Residential Usage	33.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Running 12 Month Total	**639.86**												
12 mo Residential	**343.29**											**34.24**	
12 mo Non Residential	**296.57**											**33.81**	

FY2020

	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	MG to Date
RESIDENTIAL	21.973	44.430	30.293	31.108	27.585	22.403	22.196	20.322	23.925	25.079	28.618	33.083	**331.01**
COMMERCIAL	3.668	3.290	3.330	3.339	3.071	2.968	2.793	2.699	2.810	2.131	2.271	2.461	**34.83**
RESTAURANT	1.821	1.710	1.574	1.671	1.382	1.233	1.432	1.251	1.183	0.478	0.566	0.800	**15.10**
HOTELS/MOTELS	2.736	2.620	2.700	2.786	2.257	1.927	1.949	1.860	1.780	0.474	0.783	1.427	**23.30**
SCHOOLS	0.615	0.600	0.770	0.939	0.595	0.325	0.161	0.303	0.510	0.311	0.229	0.518	**5.88**
MULTI DWELL	2.743	3.020	2.790	2.892	2.530	2.358	2.512	2.366	2.510	2.652	2.737	2.839	**31.95**
BEACHES/PARKS	0.649	0.900	0.809	0.697	0.604	0.241	0.218	0.195	0.301	0.082	0.092	0.322	**5.11**
AGRICULTURE	6.570	6.340	7.374	9.898	7.570	3.857	3.253	4.348	5.841	4.499	6.843	5.903	**72.30**
RECREATIONAL	0.334	0.260	0.252	0.201	0.208	0.184	0.177	0.169	0.175	0.175	0.187	0.231	**2.55**
MARINE	0.658	0.650	0.649	0.519	0.530	0.426	0.572	0.466	0.428	0.323	0.418	0.536	**6.18**
RES. IRRIGATION	1.408	1.930	1.824	1.539	1.431	0.599	0.402	0.412	1.118	0.630	1.315	1.624	**14.23**
NON-RES. IRRIGATION	4.191	4.970	2.457	2.125	2.166	0.097	0.006	0.086	0.139	0.093	0.279	5.663	**22.27**
DETECTOR CHECKS	0.011	0.010	0.006	0.018	0.025	0.013	0.068	0.004	0.006	0.006	0.005	0.004	**0.18**
RAW WATER	7.063	8.620	9.081	8.090	6.007	1.527	0.000	0.000	1.990	2.085	5.617	7.284	**57.36**
PORTABLE METERS	0.255	0.400	0.295	0.263	0.337	0.107	0.019	0.067	0.144	0.049	0.260	0.027	**2.22**
CONSTRUCTION	0.065	0.110	0.143	0.132	0.117	0.082	0.087	0.243	0.255	0.224	0.275	0.364	**2.10**
TOTAL - MG	**54.76**	**79.86**	**64.35**	**66.22**	**56.42**	**38.35**	**35.84**	**34.79**	**43.12**	**39.29**	**50.49**	**63.09**	**626.57**

MONTH **Jul-20**

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	**7/8/2020**	**7/8/20**	**Miramontes Point Road**	**Main**	**10" DI**	**0.060**
2	**7/12/2020**	**7/14/2020**	**Valdez X Potter**	**Main**	**6" DI**	**0.002**
3						
4						
5						
6						
7						
8						
					Totals	**0.062**

OTHER DISCHARGES

Total Volumes (MG)	
Flushing Program	0.032
Reservoir Cleaning	
Automatic Blowoffs	0.054
Dewatering Operations	
Other (includes flow testing)	0.000

PLANNED DISCHARGES GRAND TOTAL (MG)

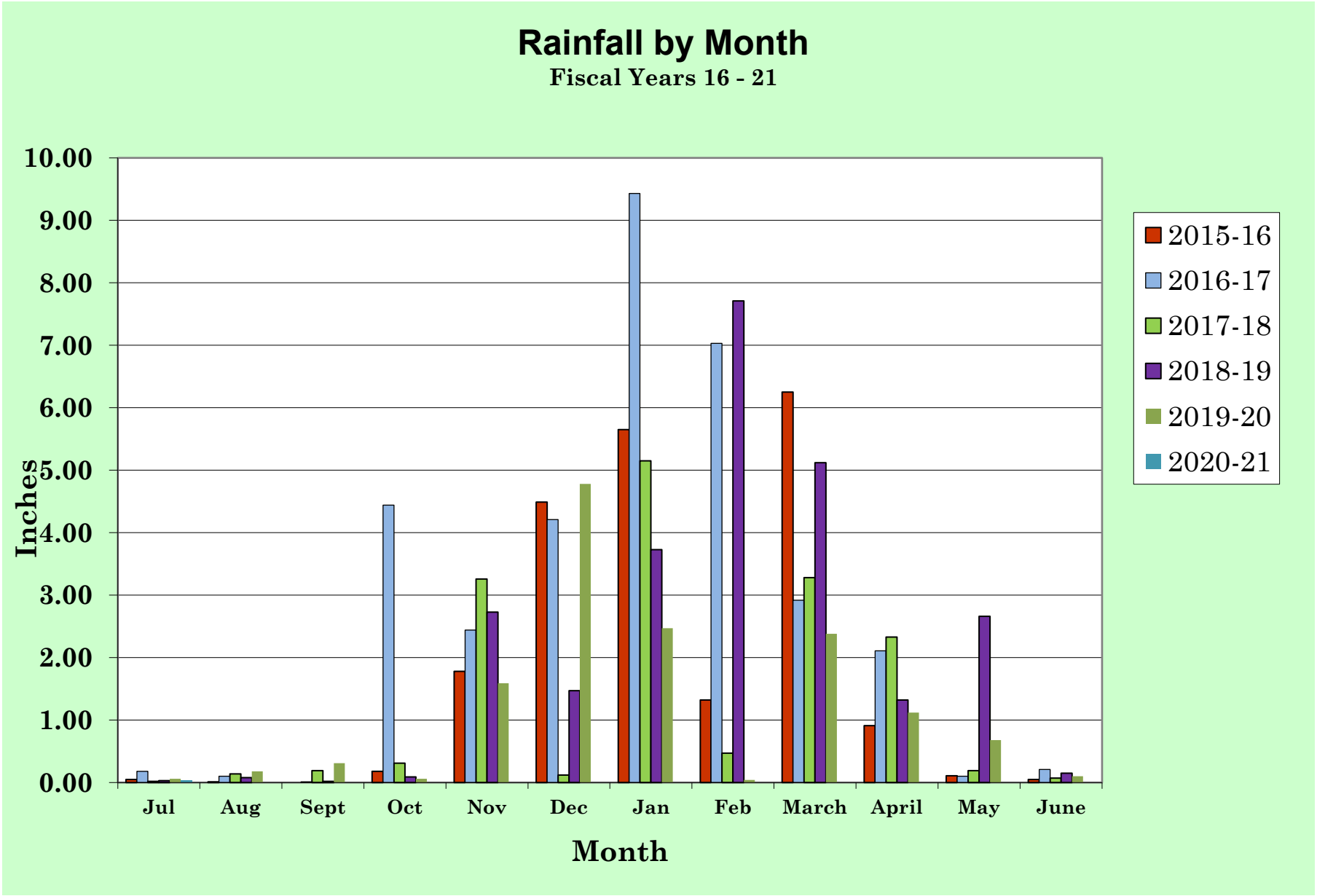
0.086

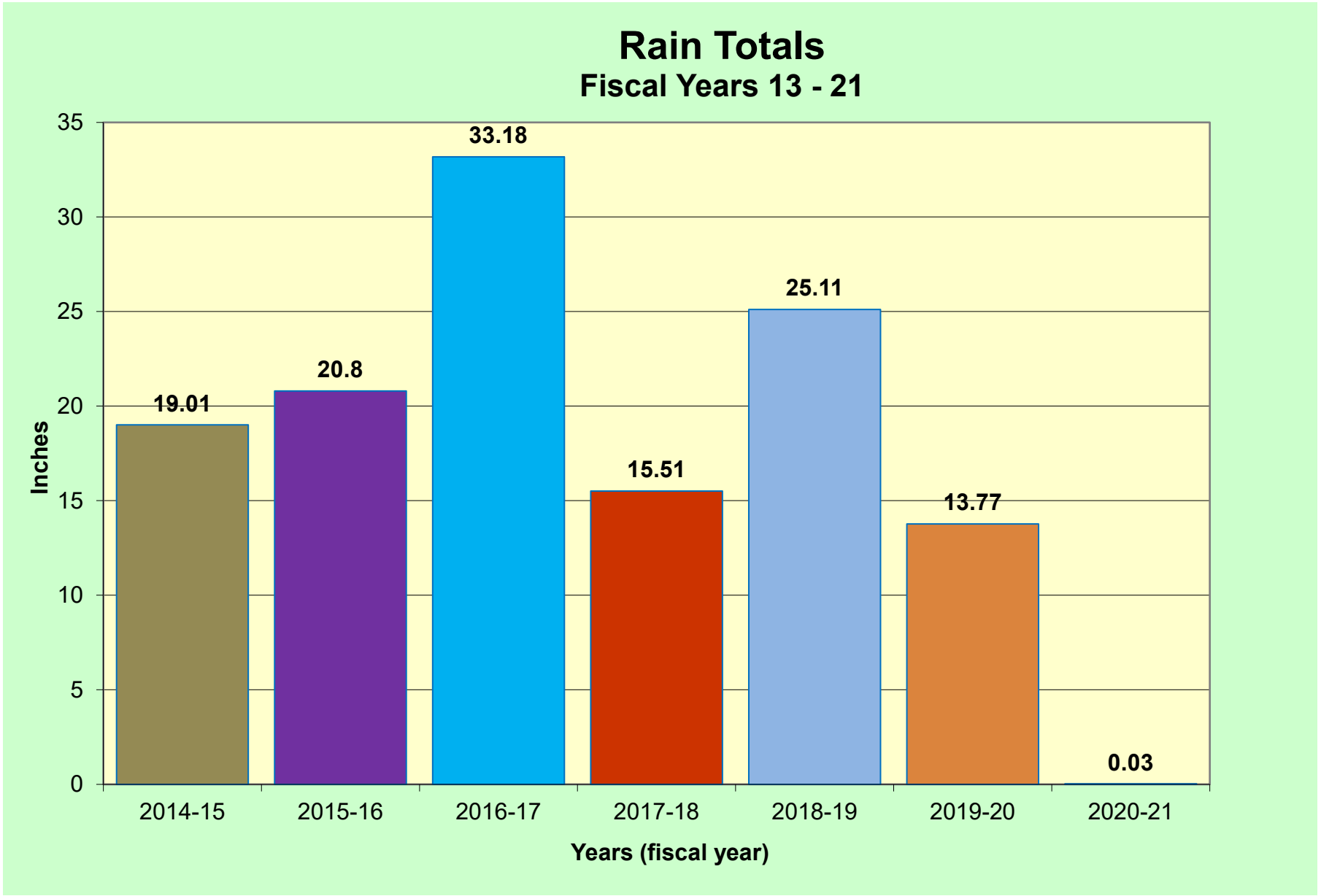
Coastside County Water District
766 Main Street
July 2020 - June 2021

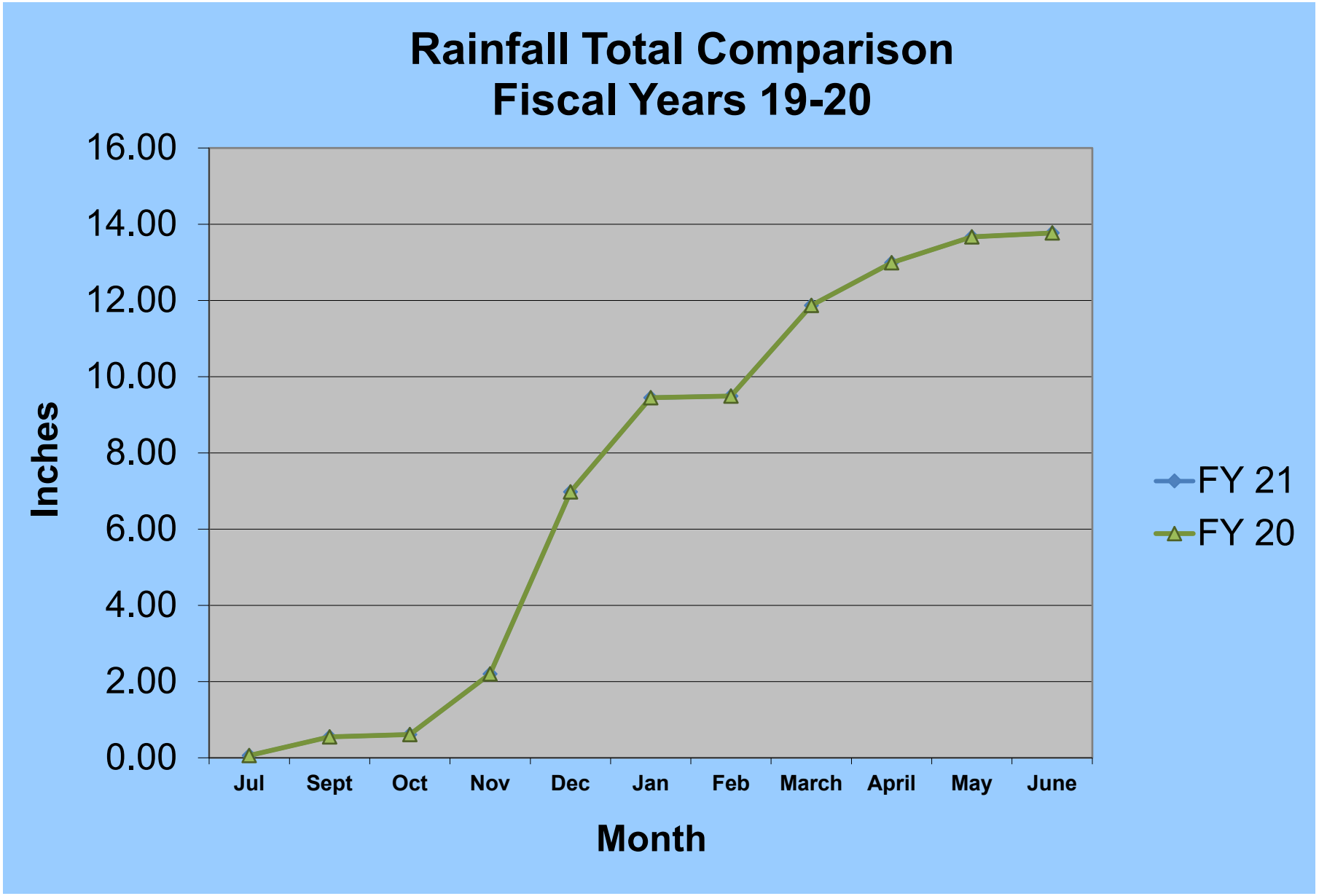
District Office
Rainfall in Inches

	2020					2021						
	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June
1	0											
2	0											
3	0											
4	0											
5	0											
6	0											
7	0											
8	0											
9	0											
10	0											
11	0											
12	0											
13	0											
14	0											
15	0											
16	0											
17	0											
18	0											
19	0											
20	0.01											
21	0											
22	0											
23	0.02											
24	0											
25	0											
26	0											
27	0											
28	0											
29	0											
30	0											
31	0											
Mon.Total	0.03											
Year Total	0.03											

Coastside County Water District




Rain Totals
Fiscal Years 13 - 21
Inches
35
30
25
20
15
10
5
0
19.01
20.8
33.18
15.51
25.11
13.77
0.03
2014-15
2015-16
2016-17
2017-18
2018-19
2019-20
2020-21
Years (fiscal year)


Rainfall Total Comparison
Fiscal Years 19-20
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Inches
Jul
Sept
Oct
Nov
Dec
Jan
Feb
March
April
May
June
Month
FY 21
FY 20

San Francisco Public Utilities Commission
Hydrological Conditions Report
July 2020

J. Chester, C. Graham, N. Waelty, August 5, 2020

Hetch Hetchy Water and Power (HHWP) Power System Operators (PSO) make adjustments to the Moccasin Powerhouse tailrace gates (lower left) and monitor system conditions (lower right). PSOs staff the Moccasin Control Center 24 hours a day, seven days a week. PSOs are responsible for monitoring all upcountry and Central Valley water and power systems, spanning all 100 miles from O'Shaughnessy Dam to the Tesla UV valve house.

System Storage

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

Table 1
Current System Storage
as of August 1, 2020

	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]	333,706		360,360		26,654		93%
Cherry Reservoir[2]	251,758		273,340		21,582		92%
Lake Eleanor[3]	24,379		27,100		2,721		90%
Water Bank	461,872		570,000		108,128		81%
Tuolumne Storage	1,071,715		1,230,800		159,085		87%
Local Bay Area Storage							
Calaveras Reservoir	62,517	20,371	96,824	31,550	34,307	11,179	65%
San Antonio Reservoir	43,840	14,285	50,496	16,454	6,656	2,169	87%
Crystal Springs Reservoir	53,882	17,558	58,377	19,022	4,494	1,464	92%
San Andreas Reservoir	16,270	5,302	18,996	6,190	2,727	888	86%
Pilarcitos Reservoir	2,258	736	2,995	976	737	240	75%
Total Local Storage	178,767	58,251	227,688	74,192	48,921	15,941	79%
Total System	1,250,482		1,458,488		208,006		86%

[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.

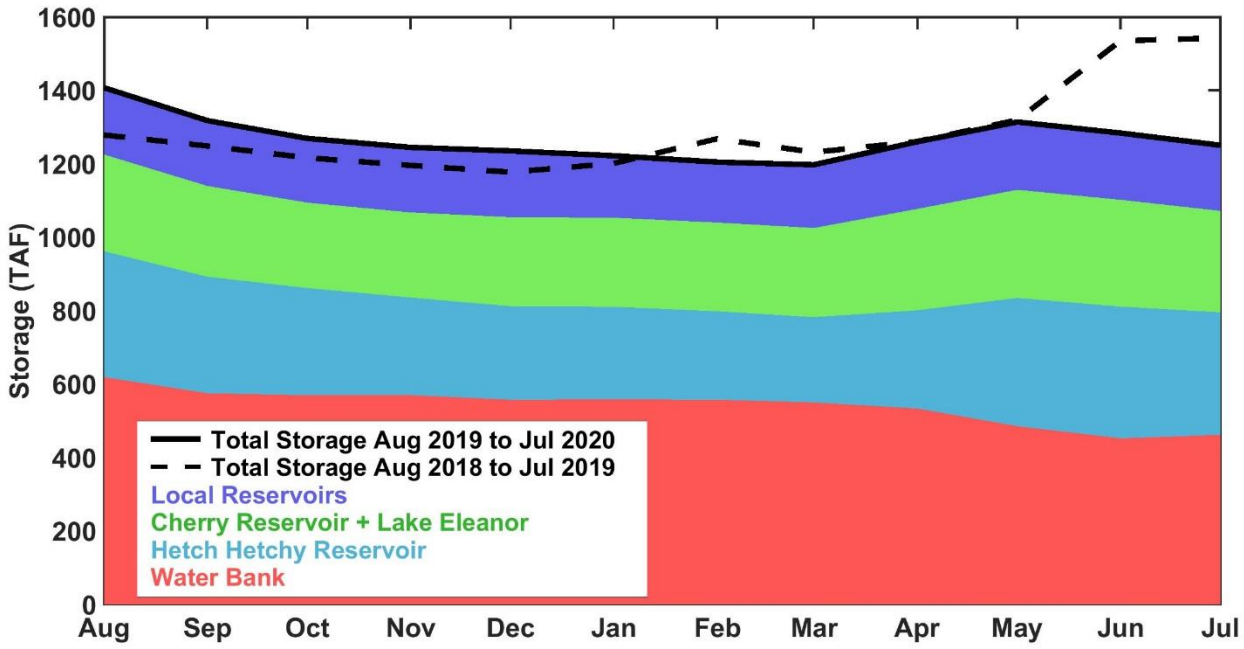


Figure 1: Monthly system storage for past 12 months in thousand acre-feet (TAF). Color bands show contributions to total system storage. Solid black line shows total system storage for the past 12 months. Dashed black line shows total system storage the previous 12 months.

Hetch Hetchy System Precipitation Index

Current Month: The July 2020 six-station precipitation index reported 0 inches of precipitation for the month. The precipitation index is computed as the average of six Sierra precipitation stations and is an indicator of the overall basin wetness.

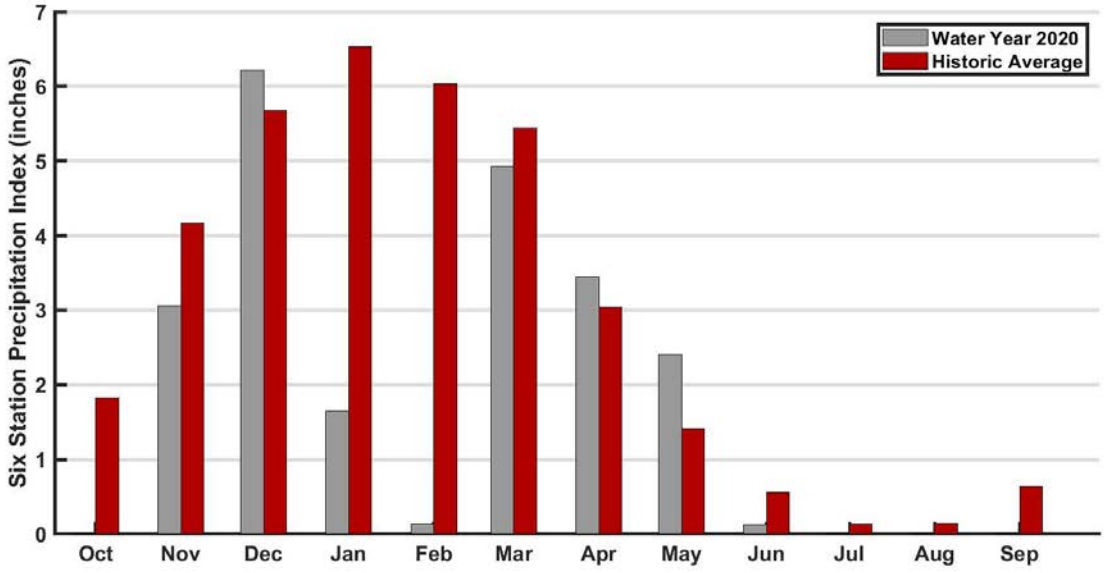


Figure 2: Monthly distribution of the six-station precipitation index relative to the monthly precipitation averages. The precipitation index is computed as the average of six Sierra precipitation stations and is an indicator of the overall basin wetness.

Cumulative Precipitation to Date: As of August 1, the six-station precipitation index for water year (WY) 2020 was 22.00 inches, which is 62% of the average annual water year total. Hetch Hetchy received no precipitation in July for a total of 21.08 inches for WY 2020, or 60% of average to-date. The cumulative Hetch Hetchy precipitation is shown in Figure 3 in red.

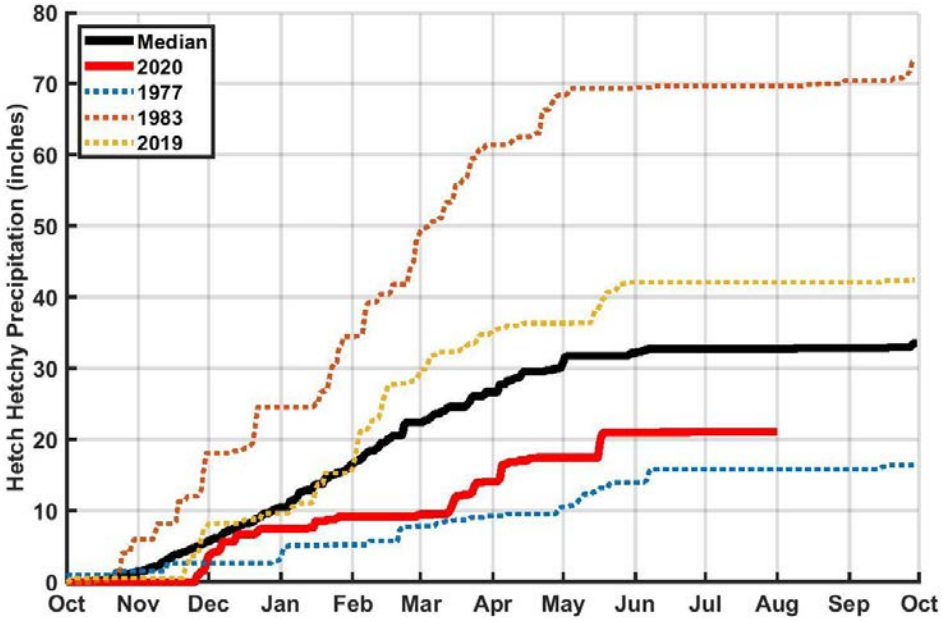


Figure 3: Water Year 2020 cumulative precipitation measured at Hetch Hetchy Weather Station. Median cumulative precipitation measured at Hetch Hetchy Weather Station and example wet and dry years are included with Water Year 2020 for comparison purposes.

Tuolumne Basin Unimpaired Inflow

Unimpaired inflow to SFPUC reservoirs and the Tuolumne River at La Grange for July 2020 and the 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	July 2020				October 1, 2019 through August 1, 2020			
	Observed Flow	Median[1]	Mean[1]	Percent of Mean	Observed Flow	Median[1]	Mean[1]	Percent of Mean
Inflow to Hetch Hetchy Reservoir	5,772	39,814	74,169	8%	346,748	690,063	718,523	48%
Inflow to Cherry Reservoir and Lake Eleanor	0	11,494	25,282	0%	250,502	439,143	446,920	56%
Tuolumne River at La Grange	21,138	66,625	118,761	18%	955,701	1,653,667	1,778,630	54%
Water Available to City	0	820	46,132	0%	170,302	579,119	762,517	22%

[1]Hydrologic Record: 1919-2015

Hetch Hetchy System Operations

Hetch Hetchy Reservoir power draft and stream releases during the month totaled 30,645 acre-feet. Hetch Hetchy Reservoir minimum instream release requirements for July were 75 cfs. Total precipitation and inflows thus far for Water Year 2020 have resulted in a Water Year Type C (dry) for Hetch Hetchy Reservoir. Instream release requirements for August remain at 75 cfs.

Cherry Reservoir valve and power draft releases totaled 12,834 acre-feet for the month and were used to maintain seasonal target elevations. The required minimum instream release from Cherry Reservoir for July was 15 cfs and remain at 15 cfs for August. Lake Eleanor required minimum instream release are 20 cfs for April 15 through September 15.

Regional System Treatment Plant Production

The Harry Tracy Water Treatment Plant average production rate for July was 32 MGD. The Sunol Valley Water Treatment Plant was in standby status for the month, the average production rate was 0 MGD.

Local System Water Delivery

The average July delivery rate was 240 MGD, which is a 3% increase above the June delivery rate of 233 MGD.

Local Precipitation

The rainfall summary for July 2020 is presented in Table 3.

Table 3
Precipitation Totals at Three Local Area Reservoirs

Weather Station Location	June		Water Year 2020	
	Total (inches)	Percent of Mean for the Month	Total (inches)	Percent of Mean for the Year-To-Date
Pilarcitos Reservoir	0.00	0 %	23.97	64 %
Lower Crystal Springs Reservoir	0.00	0 %	14.97	57 %
Calaveras Reservoir	0.00	0 %	13.37	63 %

Water Supply and Planned Water Supply Management

The upcountry system as of August 1 is 87% full, as reservoirs have been managed through the summer to maximize storage. SJPL1 is out of service for repairs through March 2021. Deliveries remain at 249 MGD for July. Hetch Hetchy Reservoir storage is expected to continue to decrease as power generation, deliveries and stream releases exceed inflows. Cherry / Eleanor Pumps are currently off. Cherry Reservoir is dropping as recreational releases and instream minimum releases exceed inflows. The calculated unimpaired flow at La Grange and the allocation of flows between the Districts and the City are shown in Figure 4. As of August 1 there has been a total of 170,302 acre-feet available to the City in Water Year 2020

Inflows to the reservoirs have reached summer baseflow and Water Bank has begun crediting as Holm Powerhouse powerdraft and reservoir releases exceed inflows.

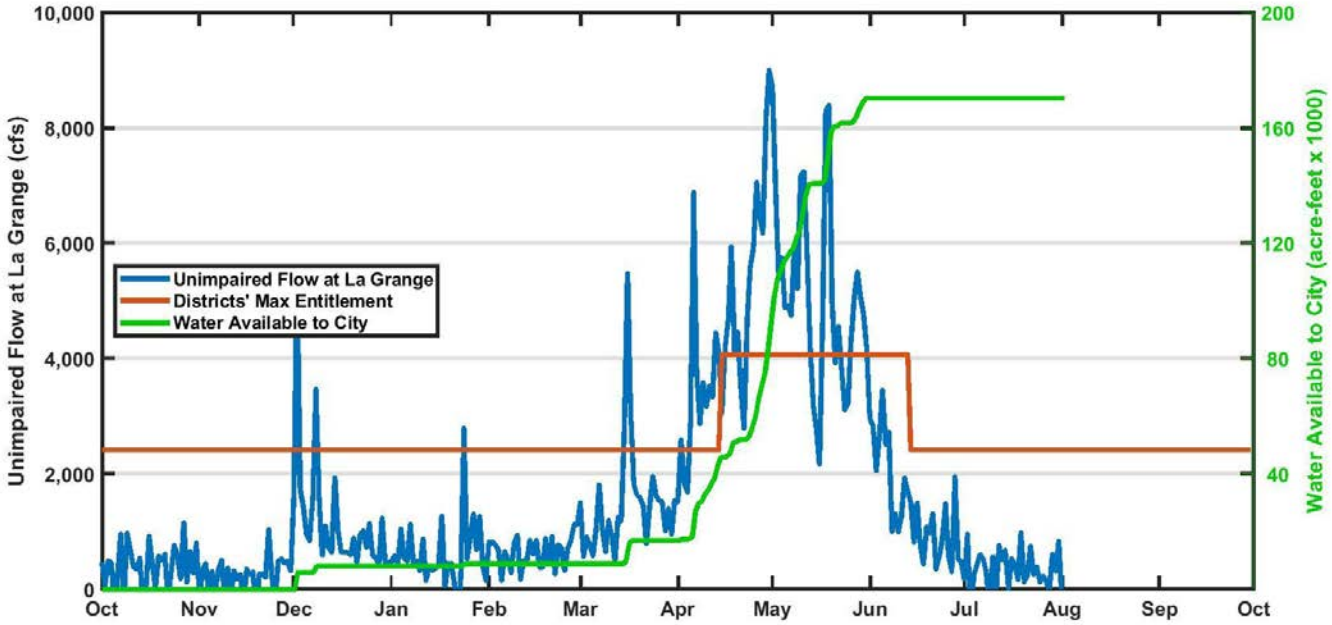


Figure 4: Calculated unimpaired flow at La Grange and the allocation of flows between the Districts and the City.

STAFF REPORT

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

From: **Mary Rogren, General Manager**

Agenda: **August 11, 2020**

Date: **August 4, 2020**

Subject: **Notice of Completion – District Office Fascia Board Replacement Project**

Recommendation:

That the Board of Directors take the following actions:

(1) Accept the District Office Fascia Board Replacement Project as complete.

(2) Authorize the Notice of Completion to be filed with the County of San Mateo.

(3) Authorize the release of the retention funds when the Notice of Completion has been recorded and returned to the District.

Background

Coastside County Water District entered into a contract with Falco Construction Co. Inc. on April 22, 2020 the District Office Fascia Board Replacement Project.

The work consisted of removing and replacing damaged fascia board around the District Office. All work was located within the District owned property situated at 766 Main Street, Half Moon Bay, California, Assessor Parcel Number (APN) 056-191-190.

Work was completed on July 24, 2020. The project was constructed according to District specifications.

Fiscal Impact: None.

RECORDING REQUESTED BY

AND WHEN RECORDED MAIL TO

Name
Street Address
City & State

COASTSIDE COUNTY WATER DISTRICT
766 MAIN STREET
HALF MOON BAY, CA 94019

SPACE ABOVE THIS LINE FOR RECORDER'S USE

RECORD WITHOUT FEE Govt. Code § 6103 & 27383

NOTICE OF COMPLETION

1. The undersigned is an owner of an interest or estate in the hereafter described real property, the nature of which is: Fee Title

2. The full name and address of the undersigned is:

COASTSIDE COUNTY WATER DISTRICT
766 MAIN STREET
HALF MOON BAY, CALIFORNIA 94019

3. On August 11, 2020 there was completed upon the hereinafter described real property a work of improvement as a whole named District Office Fascia Board Replacement Project. The work consisted of removing and replacing the fascia around the building of the District Office.

4. The name of the original contractor for the work of improvement as a whole was: FALCO Construction Co., Inc., P. O. Box 2263, El Granada, CA 94018

5. The real property herein referred to is situated in the City of Half Moon Bay, County of San Mateo, State of California, and described as follows:

All work was located within the District owned property situated at 766 Main Street, Half Moon Bay, California, Assessor Parcel Number (APN) 056-191-190.

.

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

COASTSIDE COUNTY WATER DISTRICT

BY: _____
Mary Rogren, Secretary

VERIFICATION

I, Mary Rogren, declare that I am the Secretary of the Coastside County Water District and am authorized to make this verification for that reason. I have read said Notice of Completion and know the contents thereof to be true and correct.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 11, 2020, at Half Moon Bay, California
(Date) (Place where signed)

By: _____
Mary Rogren
Secretary of the District

STAFF REPORT

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

From: **Mary Rogren, General Manager**

Agenda: **August 11, 2020**

Date: **August 5, 2020**

Subject: **Notice of Completion – Garcia Avenue Emergency Water Main Replacement Project**

Recommendation:

That the Board of Directors take the following actions:

(1) Accept the Garcia Avenue Emergency Water Main Replacement Project as complete.

(2) Authorize the Notice of Completion to be filed with the County of San Mateo.

(3) Authorize the release of the retention funds when the Notice of Completion has been recorded and returned to the District.

Background

Coastside County Water District entered into a contract with Andreini Bros., Inc. on May 29, 2020 for the Garcia Avenue Emergency Water Main Replacement Project.

The work consisted of approximately 400 feet of 6-inch diameter pipeline, replacement of one fire hydrant and four gate valves, abandonment of existing pipelines, reconnection of 11 customer water service connections, and asphalt concrete repaving. The site of the work is located in Half Moon Bay, California. All work was within the existing street right of way areas.

The work was completed on July 9, 2020. The project was constructed according to District specifications.

Fiscal Impact: None.

RECORDING REQUESTED BY

AND WHEN RECORDED MAIL TO

Name
Street Address
City & State

COASTSIDE COUNTY WATER DISTRICT
766 MAIN STREET
HALF MOON BAY, CA 94019

SPACE ABOVE THIS LINE FOR RECORDER'S USE

RECORD WITHOUT FEE Govt. Code § 6103 & 27383

NOTICE OF COMPLETION

1. The undersigned is an owner of an interest or estate in the hereafter described real property, the nature of which is: Fee

2. The full name and address of the undersigned is:

COASTSIDE COUNTY WATER DISTRICT
766 MAIN STREET
HALF MOON BAY, CALIFORNIA 94019

3. On August 11, 2020 there was completed upon the hereinafter described real property a work of improvement as a whole named Garcia Avenue Emergency Water Main Replacement Project. The work consisted of approximately 400 feet of 6-inch diameter pipeline, replacement of one fire hydrant and four gate valves, abandonment of existing pipelines, reconnection of 11 customer water service connections, and asphalt concrete repaving.

4. The name of the original contractor for the work of improvement as a whole was: Andreini Bros. Inc., 151 Main Street, Half Moon Bay, CA 94019.

5. The real property herein referred to is situated in Half Moon Bay, County of San Mateo, State of California, and described as follows:

The site of the work was in Half Moon Bay, California, San Mateo County. All work was completed within existing street right-of-way.

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

COASTSIDE COUNTY WATER DISTRICT

BY: _____
Mary Rogren, Secretary

VERIFICATION

I, David R. Dickson, declare that I am the Secretary of the Coastside County Water District and am authorized to make this verification for that reason. I have read said Notice of Completion and know the contents thereof to be true and correct.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 11, 2020 at Half Moon Bay, California
(Date) (Place where signed)

By: _____
Mary Rogren
Secretary of the District

WATER SERVICE CONNECTION TRANSFER REPORT
TRANSFERS APPROVED FOR THE MONTH OF JULY 2020

DONATING APN	PROPERTY OWNER(S)	RECIPIENT APN	PROPERTY OWNER(S)	# OF CONNECTIONS	DATE
047-144-460	Hugh Doherty	047-271-190	Hugh Doherty	one -- 5/8"	July 14, 2020
047-152-010	Hugh Doherty	047-271-190	Hugh Doherty	one -- 5/8"	July 14, 2020

STAFF REPORT

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

From: **Mary Rogren, General Manager**

Agenda: **August 11, 2020**

Date: **August 3, 2020**

Subject: **Acceptance of Non-Complex Pipeline Extension Project**
555 Obispo Road, El Granada
Coastside Fire Protection District

Recommendation:

Accept the water system improvements for the Non-Complex Pipeline Extension Project at 555 Obispo Road, El Granada as complete.

Background:

A non-complex pipeline extension project for 555 Obispo Road, El Granada was completed in June 2020.

The District accepts the project utility system according to the conditions listed below:

- √ That the Project Utility System was constructed in accordance with the district regulations.

- √ All costs for the construction of the Project have been borne by the applicant. No outstanding fees are due at this time.

Fiscal Impact: None.


K5-6
K5-5
K5-15
K5-14*33
K5-13
K6-107
K6-108
K6-44
K6-45
K6-48
K6-23*7
K6-86*6
K6-123*8
Obispo Rd
Ave Alhambra
Ave Cabrillo
Coronado St
Cabrillo Hwy
Cabrillo Hwy N
6" DI
531
20
536
570
555
582
586
590
598
606
110
522
530
573-575
195
205
615
610
625
638

STAFF REPORT

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

From: **Mary Rogren, General Manager**

Agenda: **August 11, 2020**

Report Date: **August 7, 2020**

Subject: **Fiscal Year 2020/21 and Draft Fiscal Year 2021/22 Operations Budgets; Fiscal Year 2020/21 to 2029/30 Capital Improvement Program (CIP); Draft Fiscal Year 2020/21 to 2024/25 Financial Plan; Proposed Rate Increases for Fiscal Years 2020/21 and 2021/22; Draft Water Financial Plan and Rate Update Study Report**

Recommendation:

No Board action required at this time.

Background:

At the June 9, 2020 Regular Board of Directors' Meeting, the Board approved the Fiscal Year 2020/21 Operations (O&M) Budget and at the July 14, 2020 Regular Board meeting, the Board approved the Fiscal Year 2020/21 to 2029/30 Capital Improvement Program (CIP). Both of these plans were approved with a rate adjustment still to be determined. Leading up to the approvals, drafts of the FY2020/21 O&M Budget and CIP were reviewed in (4) Finance Committee meetings and in (4) Facilities Committee meetings held between January to June 2020, as well in numerous Regular Board meetings as outlined in the Budget Process Timeline (see Agenda Item B.) A summary of the Fiscal Year 2020/21 O&M Budget and the CIP follows below. In addition, at the August 11, 2020 meeting, Staff will present the Draft Fiscal Year 2021/22 O&M Budget for review.

At the March 10, 2020 Regular Board of Directors' Meeting, the District's Rate Consultants, Raftelis Financial Consultants, Inc. ("Raftelis") conducted a Financial Planning and Rate Update Workshop and introduced a Draft Fiscal Year 2020/21 to 2024/25 Financial Plan. At that meeting, given the results of the Financial Planning model, the Board directed Staff to prepare a Proposition 218 notice to be reviewed at the April 14, 2020 meeting for purposes of setting a public hearing for a proposed two year rate increase of 6.5% for each year to be effective July 1, 2020 and July 1, 2021. However, at a Special Meeting on April 3, the District Board voted to table the discussion of the proposed rate increase for three months to the July 2020 Board meeting due to the COVID-19 and the uncertainty of the current economic situation and impact on the District's Coastside customers.

At the July 14, 2020 Regular Board Meeting, Raftelis returned and conducted a second Financial Planning and Rate Update Workshop, utilizing the approved (and updated) Fiscal Year 2020/21 O&M Budget and CIP. At the meeting, Staff was directed to prepare a notice for public hearing (to be reviewed at the August 11, 2020 meeting) for "up to 5%" rate increases for the current and the next fiscal years to be effective January 1, 2021 and January 1, 2022 based up the results of the financial model, assuming the District would take on some financing in the next two years. Raftelis has prepared a draft "Water Financial Plan and Rate Update Study" report (See Exhibit A) discussed below.

Fiscal Years 2020/21 and 2021/22 Operations (O&M) Budgets:

Staff has prepared two years of Operations Budgets, Fiscal Year 2020/21 (Exhibit B – approved June 9, 2020) and Draft Fiscal Year 2021/22 (Exhibit C). Two years of budgets are included as Staff recommends that the Board approve two years of rate increases.

Below is a recap of the projected budgets for the next two fiscal years, without consideration of any rate increases.

	FY 2019/20 Approved Budget	FY 2020/21 Approved Budget	% Change from Prior Budget	FY 2021/22 Draft Budget	% Change from Prior Budget
REVENUE					
Water Sales in Million Gallons	***598 MG***	***580 MG***		***603 MG***	
Water Revenue (1)	$ 12,300,000	$ 12,096,000	-1.7%	$ 12,464,294	3.0%
Non-Operating Revenue	$ 1,385,570	$ 1,452,250	4.8%	$ 1,539,250	6.0%
Total Revenue	$ 13,685,570	$ 13,548,250	-1.0%	$ 14,003,544	3.4%
OPERATING EXPENSES	$ 8,630,824	$ 9,301,174	7.8%	$ 9,396,221	1.0%
DEBT SERVICE	$ 1,144,611	$ 1,092,748	-4.5%	$ 1,093,888	0.1%
CONTRIBUTION TO CIP AND RESERVES	$ 3,910,135	$ 3,154,327	-19.3%	$ 3,513,435	11.4%

1) FY 2020/21 and FY 2021/22 Water Revenue does not include a rate increase - still to be determined

The Fiscal Year 2020/21 O&M Budget includes the following changes from the FY2019/2020 budget:

- $200,000 gross revenue reduction or 18 Million Gallons assuming a 25% decrease in commercial/visitor serving revenue and partial loss of revenue from a major agricultural customer
- $400,000 increases in purchased water costs due to the inability to use local sources water for the July-December 2020 timeframe
- $50,000 estimated increase in COVID related bad debt

- $100,000 increases in other costs including personnel, operations and maintenance and administration.

The draft Fiscal Year 2021/22 O&M Budget reflects the assumptions used in the Raftelis Draft Financial Plan and Rate Update Study Report, including:

- Recovery of Water Consumption to 603 MG post COVID-19
- Inflationary adjustments as outlined in the Raftelis report.

Capital Improvement Program (CIP) (Exhibit D):

- $44,930,000 total 10-year CIP (FY2021 dollars)
- $24,825,000 total 5-year CIP (average of $4,965,000 per year)

Coastside County Water District
FY20/21 to FY29/30 Capital Improvement Plan vs. FY18/19 to FY27/28 Plan

Category:	FY20/21 to FY29/30 (approved July 2020)	FY18/19 to FY27/28 (approved June 2018)	Budget Changes
Equipment Purchase & Replacement	$ 1,605,000	$ 1,885,000	$ (280,000)
Facilities and Maintenance	$ 1,460,000	$ 4,550,000	$ (3,090,000)
Pipeline Projects	$ 14,050,000	$ 14,445,000	$ (395,000)
Pipeline Projects Placeholder - Unscheduled CIP in out years	$ 3,800,000	$ 1,000,000	$ 2,800,000
Tanks/Pump Stations/Wells	$ 12,280,000	$ 6,690,000	$ 5,590,000
Water Supply Development	$ 4,000,000	$ 3,400,000	$ 600,000
Water Treatment Plants	$ 7,735,000	$ 990,000	$ 6,745,000
GRAND TOTAL	$ 44,930,000	$ 32,960,000	$ 11,970,000

The Fiscal Year 2020/21 to 2029/30 Capital Improvement Program includes two new significant infrastructure improvement projects (not included in the June 2018 CIP): the District-wide Tank Improvement Project and the Nunes Water Treatment Plant Improvement Project. These projects will significantly enhance the resiliency of the District's infrastructure for the next generation. The result is an increase in the 10 Year CIP of $12M.

Financial Plan, Proposed Rate Increases for Fiscal Years 2020/21 and 2021/22 and Draft Water Financial Plan and Rate Update Study Report (Exhibit A)

In 2018, Raftelis Financial Consultants, Inc. ("Raftelis") prepared a Cost of Service Analysis and Rate Study 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 December 2019, the District engaged Raftelis to provide the analytical support necessary to conduct an updated Study which began a new two-year rate adoption cycle with an updated financial plan and corresponding rates based on the 2018 Cost of Service and Rate Study. The 2020 Study encompasses a five-year financial planning horizon with two years of proposed rates for Fiscal Years 2020/21 and 2021/22.

As noted above, Raftelis initially held a Financial Planning and Rate Update Workshop with the District Board at the March 10, 2020 Regular Board Meeting. Utilizing the results of the Raftelis Financial Planning model (which is supported by the 2018 Cost of Service Analysis), the Board directed Staff to prepare noticing to plan for a 6.5% rate increase to be effective July 1, 2020, and a year 2 increase of 6.5% to be effective July 1, 2021. Also as noted above, out of concern for the community as the pandemic quickly escalated, on April 3, in a Special Meeting, the Board voted to delay discussions on a rate increase for three months to the July 14, 2020 Board Meeting.

At the July 14, 2020, Raftelis held a second Financial Planning and Rate Update Workshop and presented rate increase scenarios of 6.5% per year for the next two years without financing, or 5% per year with financing of capital projects in year 2. Both options can be supported by the Financial Planning model. The Board also asked Raftelis to model the rate increase with a 6-month delay to January 1, 2021 (originally planned for July 1, 2020) and January 1, 2022 (originally planned for July 1, 2021) in order to provide some relief to the District's customers.

At the conclusion of the meeting, the Board directed Staff to prepare noticing for a public hearing for "up to 5%" rate increases to be effective January 1, 2021 and January 1, 2022. Please reference the backup for the rate increase recommendation in the Draft "Water Financial Plan and Rate Study Update" included as Exhibit A.

Please note that due to the volume of paper the individual detailed sheets for the CIP and Operations Budgets are not included in this agenda packet. The study and budget sheets are available in electronic form on the District's website at www.coastsidewater.org or hard copies may be obtained at the District's office.

Exhibit A

Coastside County Water District

Water Financial Plan and Rate Update Study

Draft Report / August 3, 2020

RAFTELIS

COASTSIDE COUNTY WATER DISTRICT

RAFTELIS

August 3, 2020

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

Subject: 2020 Water Financial Plan & Rate Update Study

Dear Ms. Rogren,

Raftelis is pleased to provide this Water Financial Plan and Rate Update Study Report (Report) for Coastside County Water District (District). The Study develops a financial plan for the District's General Fund and calculates water rates for Fiscal Year End (FYE) 2021 through FYE 2025 (Study period).

The major objectives of the study include the following:

1. Develop a financial plan to ensure financial sufficiency, meet operation and maintenance (O&M) costs, and ensure sufficient funding for debt obligations and capital repair and replacement (R&R) needs.
2. Calculate water rates.
3. Conduct a customer impact analysis for the proposed rates.

This report details changes to the Water financial plan that include an updated capital improvement plan, operating budgets, customer billing and water demand data, and future growth and inflationary assumptions for the Study period. This Report summarizes the key findings and recommendations related to the development of the financial plan, the resulting proposed rates, and the customer impact analysis.

It has been a pleasure working with you and we thank you and District staff for the support provided during the course of this study.

Sincerely,

Sanjay Gaur
Vice President

Lauren Demine
Consultant

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

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1. Executive Summary

1.1. STUDY BACKGROUND

The District provides treated water service to the City of Half Moon Bay and the communities of Princeton, Miramar, and El Granada. The service area is approximately 14 square miles with service provided to roughly 6,400 connections across a population of 17,000. The service area is predominantly residential with other customers including commercial and governmental users, landscape irrigators, and agricultural users.

Raw water is provided from two sources: a mix of local surface water and groundwater and imported water purchased from the San Francisco Public Utility Commission (SFPUC). The long term water supply mix is projected to be comprised of approximately 35 percent local source water and 65 percent purchased water. Raw water from 20 miles of transmission pipelines is treated at one of two treatment plants before distribution through the District's 83 miles of pipeline.

Raftelis conducted the last Cost of Service and Water Rate Study in 2018, included in Appendix A, which resulted in proposed and approved rates for Fiscal Year End (FYE) 2019 and 2020. The District engaged Raftelis to provide the analytical support necessary to conduct the current Study which begins a new two-year rate adoption cycle with an updated financial plan and corresponding rates, based on the 2018 Cost of Service and Rate Study. The 2020 Study encompasses a five-year financial planning horizon with two years of proposed rates in FYE 2021 and 2022.

The major objectives of the study include the following:

1. Develop a financial plan to ensure financial sufficiency, meet operation and maintenance (O&M) costs, and ensure sufficient funding for debt obligations and capital repair and replacement (R&R) needs.
2. Calculate water rates.
3. Conduct a customer impact analysis for the proposed rates.

Findings from the analysis were presented to the District Board of Directors Board Meeting held on July 14, 2020. This Report provides an overview of the study and includes findings and recommendations for the District's financial plan and water rates. This Report incorporates input provided by the District Board of Directors at the July 14, 2020 meeting.

1.2. FINANCIAL PLAN DEVELOPMENT

In this Study, a financial plan model was developed by Raftelis using current financial plan information including: the FYE 2020 and FYE 2021 Operating Budgets, the 10-year Capital Improvement Plan (CIP), updated water supply costs, assumptions associated with cost escalations, available fund balances, and current reserve targets. Use of the financial plan model enables the District to set rates and charges to generate sufficient water revenues to meet the District's short-term and long-term obligations. It also shows the level of revenues that will maintain appropriate reserves and provide adequate debt service coverage.

Raftelis and District staff initially presented three financial plan scenarios to the District Board at a meeting held on March 10, 2020. The financial plan scenarios outlined varying annual increases, CIP expenditures, and debt issuance and Raftelis utilized the financial plan model to illustrate the financial impact for each corresponding scenario to the District Board. At the conclusion of the meeting, the Board gave direction to District staff for water rates based on a 5-year financial plan with revenue adjustments of 6.5 percent in FYE 2021 and FYE 2022 and 7 percent in FYE 2023

through FYE 2025. However, at a special meeting on April 3, 2020, the Board decided to delay discussions of a rate increase until July of 2020 due to the unforeseen circumstances brought upon by the COVID-19 pandemic.

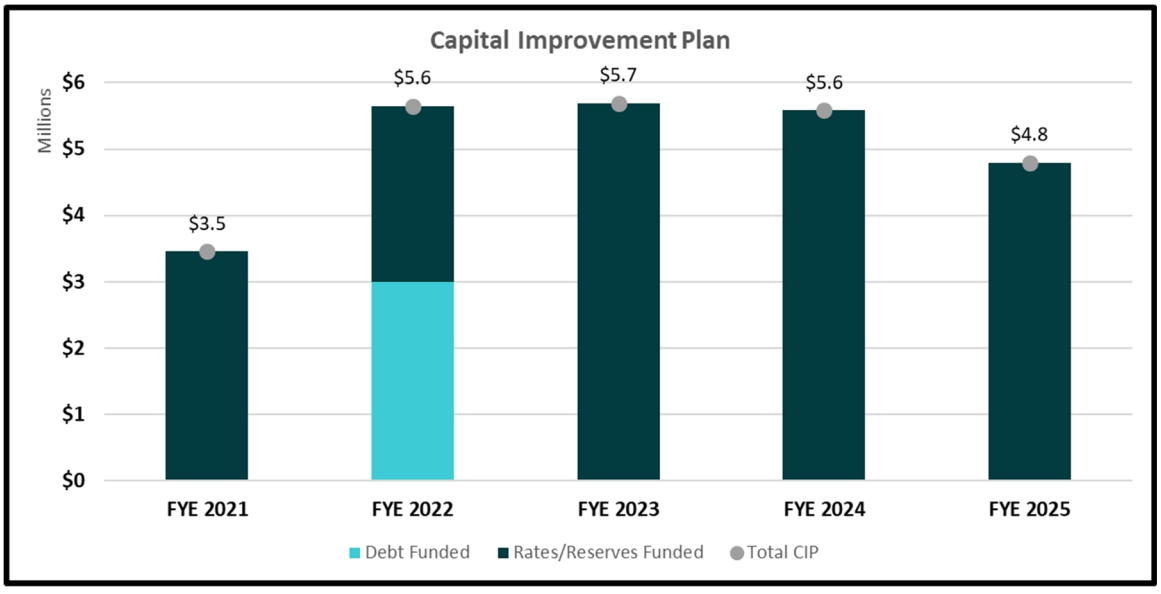
In July of 2020, the District provided Raftelis with an updated FYE 2021 Operating Budget, 10-year CIP, and updated water supply assumptions. Raftelis and District staff presented two revised financial plan scenarios to the District Board at a Board meeting held on July 14, 2020 and utilized the financial plan model to illustrate the financial impact for each corresponding scenario. The revised financial plans aimed to minimize the increase to rate payers while maintaining the financial health of the District. The District Board elected to delay a rate increase until January of 2021, allowing rate payers to recover from the impacts of the COVID-19 pandemic. At the conclusion of the meeting, the Board gave direction to District staff for water rates based on a 5-year financial plan with revenue adjustments of 5 percent in January of FYE 2021 and FYE 2022 and 5 percent in July of FYE 2023 through FYE 2025, as shown in Table 1-1. Details of the financial plan and the District's revenue needs for the next two years are presented in Section 4 of this report.

Table 1-1: Proposed Revenue Adjustments

	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Effective Month	January	January	July	July	July
Revenue Adjustment	5.0%	5.0%	5.0%	5.0%	5.0%

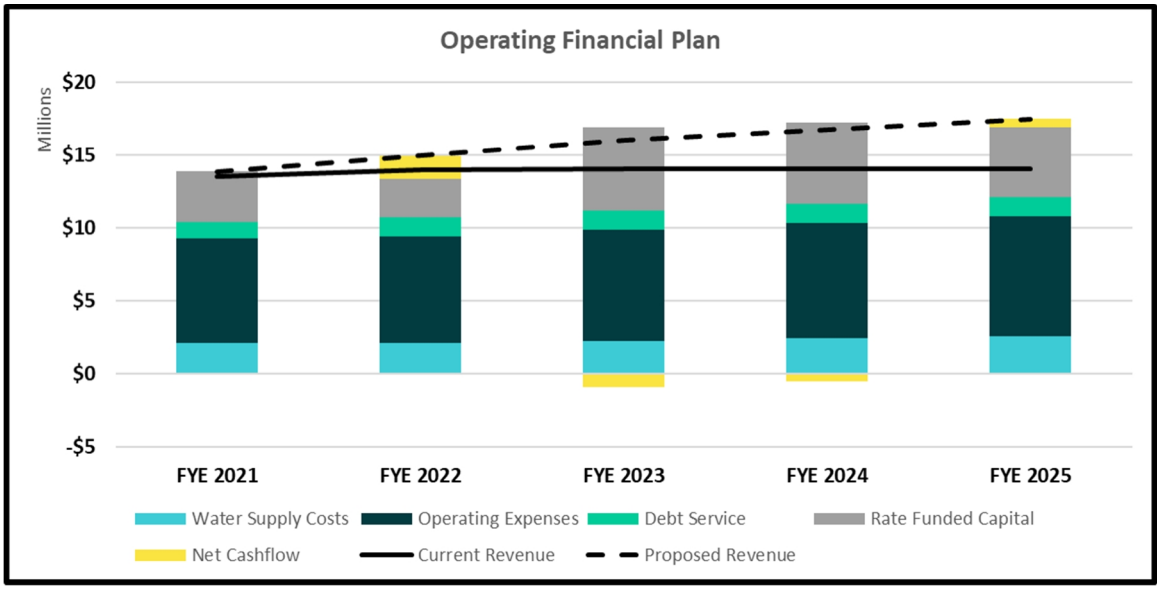
Figure 1-1 shows the District's five-year capital improvement plan (CIP). The average annual CIP is approximately $5 million. The CIP shown in Figure 1-1 is 95 percent of the District's planned CIP for each fiscal year. The District decided to fund less than 100 percent of its CIP because, historically, the District has experienced some carry over of its planned capital projects each year.. Planned capital projects are anticipated to be funded through a combination of cash reserves from rates and the issuance of new debt. The proposed $3 million debt issuance to be used to finance capital projects in FYE 2022 is denoted by the light blue bar in Figure 1-1.

Figure 1-1: Capital Improvement Plan



The proposed 5-year revenue adjustments will help to ensure that the District can cover its operating and capital expenditures. Figure 1-2 shows that the proposed operating financial plan will adequately fund O&M expenses, debt service, and capital improvements, while funding reserves. Current and proposed revenues are indicated by the solid and dashed lines, respectively.

Figure 1-2: Projected Operating Financial Plan



With the proposed financial plan, the District will maintain a debt coverage ratio[1] greater than 120%, which will help the District to maintain its credit rating, as shown in Figure 1-3

Figure 1-3: Projected Water Debt Coverage Ratios

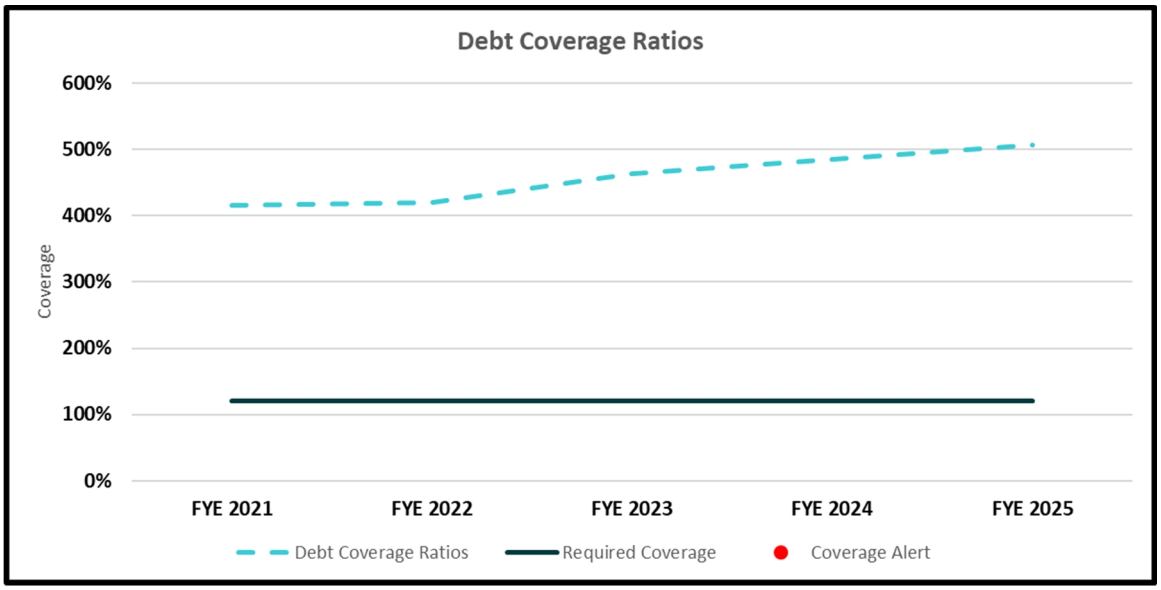
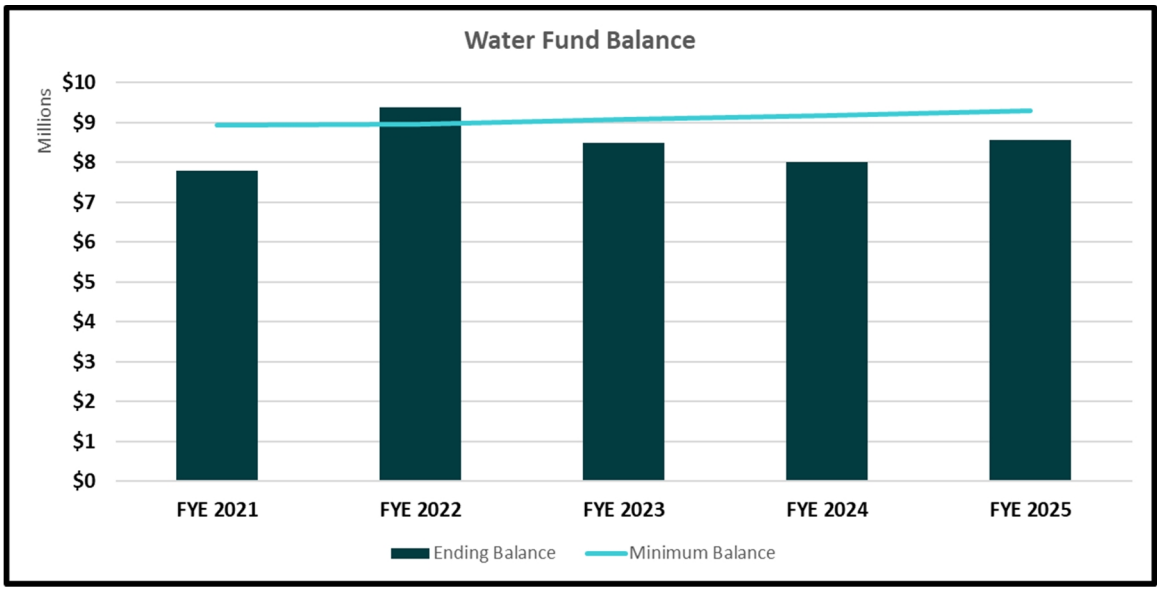


Figure 1-4 shows the projected water fund ending balances, represented by dark blue columns, for each fiscal year of the Study period. Reserve balances are expected to grow during the Study period to meet reserve targets[2], shown by the light blue line.

[1] Debt coverage = (Total Revenues – Total O&M expenses) / Total debt service
[2] Established by the District's current financial policy.

Figure 1-4: Projected Water Fund Ending Balances



1.3. PROPOSED TWO-YEAR RATES

Government Code §54999.7(c) requires that water and wastewater agencies must conduct a cost-of-service study a minimum of every 10 years. The District conducted a comprehensive cost-of-service rate study for its water service in 2018 and documented the results and findings in the "CCWD Cost of Service and Rate Study Report" dated May 15, 2018 (Appendix A). This Study focuses on updating the financial plan to incorporate the latest financial information and cost projections for the next five years. The proposed revenue adjustments of 5% for January of FYE 2021 and FYE 2022 recommended in the financial plan were applied across current rates proportionately to calculate the proposed rates for FYE 2021 and FYE 2022.

1.3.1. FIXED MONTHLY SERVICE CHARGES

Table 1-2 shows the current and proposed charges for meter-based monthly fixed charges and Table 1-3 shows the current and proposed fire service charges. The proposed fire service charges apply to all customers with private fire service. The rates for the current and proposed monthly service charges and fire service charges are calculated based on the meter size and diameter of the fireline serving a property, respectively. All rates are rounded up to the nearest whole penny.

Table 1-2: Proposed FYE 2021-2022 Monthly Service Charges

Meter Size	Current	FYE 2021 January	FYE 2022 January
5/8"	$28.90	$30.35	$31.87
3/4"	$42.70	$44.84	$47.09
1"	$70.30	$73.82	$77.52
1 1/2"	$139.31	$146.28	$153.60
2"	$222.13	$233.24	$244.91
3"	$484.37	$508.59	$534.02
4"	$870.85	$914.40	$960.12

Table 1-3: Proposed FYE 2021-2022 Fire Service Charges

Fire Line Size	Current	FYE 2020 January	FYE 2021 January
3/4"	$4.85	$5.09	$5.35
1"	$6.46	$6.79	$7.13
1 1/2"	$9.69	$10.18	$10.69
2"	$12.92	$13.57	$14.25
3"	$19.38	$20.35	$21.37
4"	$25.84	$27.14	$28.50
6"	$38.76	$40.70	$42.74
8"	$51.68	$54.27	$56.99
10"	$64.60	$67.83	$71.23

1.3.2. COMMODITY RATES

Two years of variable commodity, or volumetric, water rates are shown in Table 1-4. All rates are rounded up to the nearest whole penny.

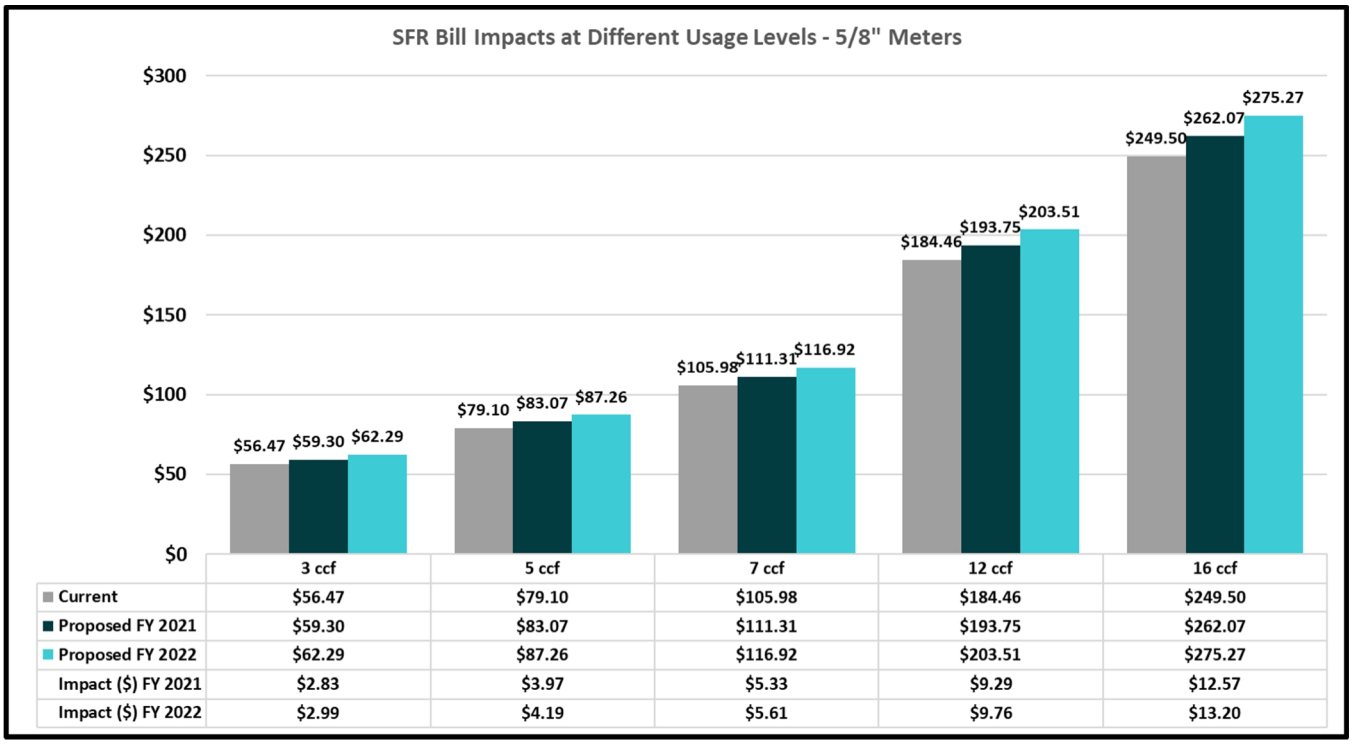
Table 1-4: Proposed FYE 2021-2022 Commodity Rates

Customer Class	Tier Width (hcf)	Current	FYE 2020 January	FYE 2021 January
Single Family Residential				
Tier 1	0 - 4	$9.19	$9.65	$10.14
Tier 2	5 - 8	$13.44	$14.12	$14.83
Tier 3	9+	$16.26	$17.08	$17.94
Multi-Family Residential	Uniform	$12.25	$12.87	$13.52
Non-Residential	Uniform	$13.06	$13.72	$14.41

1.4. CUSTOMER IMPACT ANALYSIS

It is important to understand how the proposed rates would impact the District's customers. Figure 1-5 shows the water bills of typical Single Family Residential (SFR) customers with ⅝" meter for a monthly billing period at various water consumption levels under current and proposed rates. The monthly water bills under the current rates are illustrated by the gray bars and the monthly water bills assuming the proposed rates are shown by the dark blue bars for FYE 2021 and light blue bars for FYE 2022.

Figure 1-5: Single Family Residential Customer Bill Impacts



	3 ccf	5 ccf	7 ccf	12 ccf	16 ccf
Current	$56.47	$79.10	$105.98	$184.46	$249.50
Proposed FY 2021	$59.30	$83.07	$111.31	$193.75	$262.07
Proposed FY 2022	$62.29	$87.26	$116.92	$203.51	$275.27
Impact ($) FY 2021	$2.83	$3.97	$5.33	$9.29	$12.57
Impact ($) FY 2022	$2.99	$4.19	$5.61	$9.76	$13.20

2. Introduction

2.1. STUDY BACKGROUND

The District provides treated water service to the City of Half Moon Bay and the communities of Princeton, Miramar, and El Granada. The service area is approximately 14 square miles with service provided to roughly 6,400 connections across a population of 17,000. The service area is predominantly residential with other customers including commercial and governmental users, landscape irrigators, and agricultural users.

Raw water is provided from two sources: a mix of local surface water and groundwater and imported water purchased from the San Francisco Public Utility Commission (SFPUC). The long term water supply mix is projected to be comprised of approximately 35 percent locally sourced water and 65 percent purchased water. Raw water from 20 miles of transmission pipelines is treated at one of two treatment plants before distribution through the District's 83 miles of pipeline.

Raftelis conducted the last Cost of Service and Water Rate Study in 2018, included in Appendix A, which resulted in proposed and approved rates for FYE 2019 and FYE 2020. The District engaged Raftelis to provide the analytical support necessary to conduct the current study which begins a new two-year rate adoption cycle with an updated financial plan and corresponding rates, based on the 2018 Cost of Service and Rate Study. The 2020 Study encompasses a five-year financial planning horizon with two years of proposed rates in FYE 2021 and FYE 2022.

The major objectives of the study include the following:

1. Develop a financial plan to ensure financial sufficiency, meet operation and maintenance (O&M) costs, and ensure sufficient funding for debt obligations and capital repair and replacement (R&R) needs.
2. Calculate water rates.
3. Conduct a customer impact analysis for the proposed rates.

Findings from the initial analysis were presented to the District Board of Directors Board Meeting held on March 10, 2020. However, at a special meeting on April 3, 2020, the Board decided to delay discussions of a rate increase until July of 2020 due to the unforeseen circumstances brought upon by the COVID-19 pandemic.

In July of 2020, the District provided Raftelis with an updated FYE 2021 Operating Budget, 10-year CIP, and updated water supply assumptions. Findings from the updated analysis were presented to the District Board of Directors Board Meeting held on July 14, 2020. This Report provides an overview of the study and includes findings and recommendations for the District's financial plan and water rates. This Report incorporates input provided by the District Board of Directors at the July 14, 2020 meeting.

2.2. KEY INFORMATION USED IN THE STUDY

The Study utilized the following key information provided by the District:

1. FYE 2020 and FYE 2021 budgets provided by District staff
2. Current reserve policies provided by District staff
3. 10-year CIP provided by District staff
4. Water supply mix and cost projections provided by District staff
5. Beginning fund balances as of July 1, 2019 provided by District staff
6. Required debt coverage assumptions
7. Adjustments to costs and revenue based on updated information

Raftelis used the District's FYE 2020 and FYE 2021 budgets as the baseline for future projections, consistent with best practices. Additional current data[3] concerning water demand, water supply costs, and development activity are also included in the baseline.

2.3. KEY ASSUMPTIONS USED IN THE STUDY

The Study period is from FYE 2021 to FYE 2025. Various types of assumptions and inputs were incorporated into the Study based on directions from District staff. The cost escalation factors utilized in the Study are shown in Table 2-1.

Table 2-1: Cost Escalation Factors

Escalation Factor	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
General	2.7%	2.7%	2.7%	2.7%	2.7%
Salary	4.5%	4.5%	4.5%	4.5%	4.5%
Benefits	6.0%	6.0%	6.0%	6.0%	6.0%
Energy	5.0%	5.0%	5.0%	5.0%	5.0%
SFPUC Water Purchases	0.0%	0.0%	7.1%	7.7%	6.8%
Capital	0.0%	3.2%	3.2%	3.2%	3.2%
Interest	1.5%	1.5%	1.5%	1.5%	1.5%
Non-Rate Revenues	2.0%	2.0%	2.0%	2.0%	2.0%

The general inflation rate of 2.7 percent is based on a 20-year historical average of the Consumer Price Index (CPI) for all urban consumers in San Francisco, Oakland, and Hayward. A salary inflation rate of 4.5 percent, benefits inflation rate of 6 percent, and an energy inflation rate of 5 percent are based on District estimates. SFPUC water cost increases are based on SFPUC's FYE 2019 projections and input from District staff. The capital inflation rate of 3.2 percent is based on a 20-year historical average of the Engineering News Record (ENR) Construction Cost Indices (CCI) for 20 cities. Conservative inflationary factors were applied to non-rate revenues and reserve interest earnings to ensure the District is not relying on these other revenues to occur to meet its revenue requirements. An interest rate of 1.5 percent was used based on District estimates and an inflation rate of 2 percent was used for non-rate revenues since these include property taxes.

2.4. ACCOUNTS AND GROWTH ASSUMPTIONS

To estimate future water rate revenue two factors are used – new connection growth and changes in annual water demand. As shown in Table 2-2, the financial plan projects no growth in new water service connections for the Study period. This is a reasonable assumption given the District is nearly built out with only small in-fill developments remaining.

Table 2-2 also shows the 5-year water demand forecast provided by District staff. District staff projects water sales to decrease to 580 MG in FYE 2021. A portion of this decrease in water demand is due to an anticipated reduction in water sales to the District's Non-residential customer class due to the COVID-19 pandemic. Water sales are projected to increase to approximately 603 MG beginning in FYE 2022. Water demand estimates are based on changes experienced in FYE 2020 and best estimates on per capita demand in coming years.

[3] Based on data available to the District as of July 2020.

Table 2-2: Growth and Demand Assumptions

	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Account Growth (%)	0.0%	0.0%	0.0%	0.0%	0.0%
Water Sales (MG)	580	603	603	603	603

3. Legal Framework

3.1. CALIFORNIA CONSTITUTION – ARTICLE XIII D, SECTION 6 (PROP 218)

Proposition 218, reflected in the California Constitution as Article XIII D, was enacted in 1996 to ensure that rates and fees are proportional to the cost of providing service. The principal requirements for fairness of the fees, as they relate to public water service, are as follows:

1. A property-related charge (such as water and recycled water rates) imposed by a public agency on a parcel shall not exceed the costs required to provide the property related service.
2. Revenues derived by the charge shall not be used for any purpose other than that for which the charge was imposed.
3. The amount of the charge imposed upon any parcel shall not exceed the proportional cost of service attributable to the parcel.
4. No 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 charge shall be mailed to the record owner of each parcel at least 45 days prior to the public hearing, when the agency considers all written protests against the charge.

As stated in AWWA's Principles of Water Rates, Fees, and Charges: Manual of Water Supply Practices M1, 6th edition (M1 Manual), "water rates and charges should be recovered from classes of customers in proportion to the cost of serving those customers." Proposition 218 requires that water rates cannot be "arbitrary and capricious," meaning that the rate-setting methodology must be sound and that there must be a nexus between the costs and the rates charged. This study follows industry-standard rate-setting methodologies set forth by the M1 Manual, adhering to Proposition 218 requirements by developing rates that do not exceed the proportionate cost of providing water services.

3.2. CALIFORNIA CONSTITUTION – ARTICLE X, SECTION 2

Article X, Section 2 of the California Constitution (established in 1976) 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."*

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

3.3. COST-BASED RATE-SETTING METHODOLOGY

As stated in the M1 Manual, "the costs of water rates and charges should be recovered from classes of customers in proportion to the cost of serving those customers." The four major steps to develop utility rates that comply with Proposition 218 and industry standards, while meeting other emerging goals and objectives of the utility, are discussed below.

Calculate Revenue Requirement

The rate-making process starts by determining the test year (rate-setting year) revenue requirement. The revenue requirement should sufficiently fund the utility's O&M, debt service, capital expenses, and other identified costs with funding to reserves (positive cash) or using reserves (negative cash), all based on a long-term financial plan.

Cost-of-Service Analysis (COS)

The annual cost of providing water service is distributed among customer classes commensurate with their service requirements. A COS analysis involves the following:

1. Functionalize costs. Examples of functions include storage, treatment, and distribution.
2. Allocate functionalized costs to cost components. Examples of cost components include supply, base delivery, peaking, and meter servicing.
3. Distribute the cost components. Distribute cost components, using unit costs, to customer classes in proportion to their burden on the water system.

Rate Design and Calculations

Rates do more than simply recover costs. Within the legal framework and industry standards, properly designed rates should support and optimize a blend of various utility objectives, such as promoting water conservation, affordability for essential needs, and revenue stability, among other objectives. Rates may also act as a public information tool in communicating these objectives to customers.

Rate Adoption

Rate adoption is the last step of the rate-making process and is part of the procedural requirements of Proposition 218. Raftelis documents the rate study results in this Report to serve as the utility's administrative record and a public education tool about the proposed changes, the rationale and justifications behind the changes, and their anticipated financial impacts.

Government Code §54999.7(c) requires that water and wastewater agencies must conduct a cost-of-service study a minimum of every 10 years. Raftelis conducted a comprehensive cost-of-service rate study for its water service in 2018 and documented the results and findings in the "CCWD Cost of Service and Rate Study Report" dated May 15, 2018 (Appendix A). As the District is retaining the same rate structure and because a cost-of-service study was conducted for the District so recently, an updated cost-of-service study is not needed at this time. Rather, this Study focuses on financial plan development to incorporate the latest financial information and cost projections for the next five years and uses the methodology developed in the 2018 Cost of Service and Rate Study Report as the basis for the proposed rate and charge increases. The proposed revenue adjustments resulting from the financial plan will be applied across all categories of the current rates to calculate the proposed rates for FYE 2021 and FYE 2022.

4. Financial Plan

This section describes the assumptions used in projecting operating and capital expenses as well as reserve policies and debt coverage requirements that determine the overall revenue adjustments required to ensure the financial stability of the District. Revenue adjustments represent the average increase in rates for the District as a whole.

4.1. REVENUES FROM CURRENT RATES

The current water rates were last approved in June 2018 and went into effect in July 2018 and in July 2019. The current rates were originally developed in the 2018 Cost of Service and Rate Study. The District's rate structure has two components – a fixed service charge (monthly service charge) by meter size and a variable volumetric charge for water consumption. The revenues generated from existing rates and charges are assessed for the ability to meet the District's projected revenue requirements. This serves as the basis for any required revenue adjustments.

The District charges customers a monthly service charge based on the customer's meter size. The current charges for FYE 2020 are listed in Table 4-1.

Table 4-1: Current Monthly Service Charges

Meter Size	Current Charge
5/8"	$28.90
3/4"	$42.70
1"	$70.30
1 1/2"	$139.31
2"	$222.13
3"	$484.37
4"	$870.85

Some customers pay a monthly fire line charge for private fire protection. The rates for the monthly fire service charge are calculated to recover the costs associated with private fire service capacity in the water distribution system. The current rates for the fire service charge for private fire lines are shown in Table 4-2.

Table 4-2: Current Monthly Fire Service Charges

Fire Line Size	Current Charge
3/4"	$4.85
1"	$6.46
1 1/2"	$9.69
2"	$12.92
3"	$19.38
4"	$25.84
6"	$38.76
8"	$51.68
10"	$64.60

The District charges customers per hundred cubic feet (hcf) of water consumption. For all Single Family Residential customers, the District employs an inclining 3-tiered rate structure. Multi-Family Residential and Non-Residential customers are charged a uniform rate, by class, for all water use. Volumetric rates are shown in Table 4-3.

Table 4-3: Current Commodity Tiers and Rates

Customer Class	Tier Width (hcf)	Rate
Single Family Residential		
Tier 1	0 - 4	$9.19
Tier 2	5 - 8	$13.44
Tier 3	9+	$16.26
Multi-Family Residential	Uniform	$12.25
Non-Residential	Uniform	$13.06

Table 4-4 shows the projected number of water connections by meter size for each fiscal year of the Study period. The number of connections each year remains the same based on the assumption that the District will experience no growth in new water service connections for the Study period, as discussed in Section 2.4 and Table 2-2. Similarly, Table 4-5 shows the projected number of private fire lines using a zero percent growth assumption. The number of accounts by meter size and fire line size are used to forecast the fixed revenue from monthly service charges.

Table 4-4: Current and Projected Water Accounts

Meter Size	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
5/8"	6,033	6,033	6,033	6,033	6,033
3/4"	197	197	197	197	197
1"	178	178	178	178	178
1 1/2"	28	28	28	28	28
2"	34	34	34	34	34
3"	5	5	5	5	5
4"	2	2	2	2	2
Total	**6,477**	**6,477**	**6,477**	**6,477**	**6,477**

Table 4-5: Current and Projected Private Fire Lines

Fire Line Size	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
3/4"	10	10	10	10	10
1"	677	677	677	677	677
1 1/2"	50	50	50	50	50
2"	88	88	88	88	88
3"	4	4	4	4	4
4"	122	122	122	122	122
6"	59	59	59	59	59
8"	15	15	15	15	15
10"	1	1	1	1	1
Total	**1,026**	**1,026**	**1,026**	**1,026**	**1,026**

As previously shown in Table 2-2, the projected water sales are lower in FYE 2021, but increase beginning in FYE 2022. The total estimated annual usage, measured in hcf, is shown on the last line of Table 4-6.

Table 4-6: Projected Water Usage by Customer Class and Tiers

Class	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Single Family Residential					
Tier 1	232,876	242,191	242,191	242,191	242,191
Tier 2	108,558	112,900	112,900	112,900	112,900
Tier 3	57,204	59,492	59,492	59,492	59,492
Multi-Family Residential	40,069	41,671	41,671	41,671	41,671
Non-Residential	336,009	349,450	349,450	349,450	349,450
Total Water Sales (hcf)	**774,716**	**805,705**	**805,705**	**805,705**	**805,705**

Table 4-7 summarizes the projected revenues from current rates. Annual service charge revenues are calculated by multiplying the current monthly service charge (shown in Table 4-1) and the number of accounts (shown in Table 4-4) by twelve billing periods. The calculation for service charge revenues for ⅝" meters is shown below:

$$\text{M hl s cha} \times \text{m o a w h ⅝" me} \times 12 \text{ b p p y}$$
$$\$28.90 \times 6{,}033 \text{ a} \times 12 \text{ b p} = \$2{,}092{,}244$$

This calculation is repeated for all meter sizes and then summed to arrive at the total meter service charge revenues, as shown in Table 4-7. The same process is used to calculate annual fire service charge revenues using the current monthly fire service charges shown in Table 4-2 and the number of private fire line accounts shown in Table 4-5.

Revenues from consumption charges are calculated by multiplying the current consumption charge (shown in Table 4-3) by the projected water use in hcf (shown in Table 4-6). This calculation is repeated for all customer classes and tiers and then summed to arrive at the total commodity rate revenues shown in Table 4-7. The overall adequacy of water revenues is measured by comparing the total projected annual revenue required from rates with projected revenues from the existing rates.

Table 4-7: Projected Revenues from Current Rates

Revenue Source	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Meter Service Charges	$2,530,748	$2,530,748	$2,530,748	$2,530,748	$2,530,748
Fire Service Charges	$148,800	$148,800	$148,800	$148,800	$148,800
Commodity Charges	$9,408,411	$9,784,747	$9,784,747	$9,784,747	$9,784,747
Total Rate Revenue	**$12,087,958**	**$12,464,294**	**$12,464,294**	**$12,464,294**	**$12,464,294**

4.2. MISCELLANEOUS REVENUES

In addition to revenue from rates, the District also receives miscellaneous revenues from different sources such as property taxes, other revenues (including other service charges such as late fees), interest revenues, etc. to offset the water operating costs. These revenues are shown in Table 4-8.

Table 4-8: Projected Miscellaneous Revenues

Revenue Source	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Fees	$35,000	$35,000	$35,000	$35,000	$35,000
Interest	$56,250	$95,391	$59,207	$16,405	$0
Taxes	$750,000	$765,000	$780,300	$795,906	$811,824
Other	$611,000	$611,000	$611,000	$611,000	$611,000
Total Miscellaneous Revenues	**$1,452,250**	**$1,506,391**	**$1,485,507**	**$1,458,311**	**$1,457,824**

4.3. OPERATING AND MAINTENANCE EXPENSES

4.3.1. WATER SUPPLY COSTS

Table 4-9 shows the total water demand (sales) estimated in each year of the Study period (from Table 4-6). Water is lost in the transmission and distribution of water due to a variety of factors, such as real losses from leaks in distribution pipelines and paper losses from meter reading and billing errors. The District must account for this loss in estimating the supply needed to meet its customers' demand. The District has an approximate 8.1 percent water loss on average. To project the required water supply (Line 3), the following equation is used to calculate water production:

Total Water Sales (Line 1) / [1 - Water Loss (Line 2)] = Total Water Production (Line 3)

Table 4-9: Projected Water Supply and Demand (hcf)

Line #		FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
1	Total Water Sales (hcf)	774,716	805,705	805,705	805,705	805,705
2	Water Loss	8.1%	8.1%	8.1%	8.1%	8.1%
3	**Total Water Production (hcf)**	**842,999**	**876,719**	**876,719**	**876,719**	**876,719**

The District currently has two primary sources of water supply to meet customers' demand:

- Local surface water and groundwater
- Purchased water from San Francisco Public Utilities Commission (SFPUC)

Based on projections and inputs from District staff, it is anticipated that the water supply mix for the Study period will consist of 35 to 38 percent of local District water sources and 62 to 65 percent of SFPUC water sources. Table 4-10 shows the supply mix required to meet the projected demand from Table 4-9 over the Study period. The amount for each water source is calculated by multiplying the percent available from each source times the total water production shown in Line 3 of Table 4-9.

Table 4-10: Projected Water Supply by Source

Line #		FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
1	Water Supply to Meet Demand (%)					
2	District Sources	35%	38%	38%	38%	38%
3	SFPUC Sources	65%	62%	62%	62%	62%
4	Water Supply to Meet Demand (hcf)					
5	District Sources	295,050	333,153	333,153	333,153	333,153
6	SFPUC Sources	547,949	543,566	543,566	543,566	543,566
7	**Total Water Production (hcf)**	**842,999**	**876,719**	**876,719**	**876,719**	**876,719**

Table 4-11 shows the fixed and volumetric unit costs associated with the District's water purchases from SFPUC. The unit costs for FYE 2023 and beyond are escalated based on the SFPUC water purchases inflationary assumptions shown in Table 2-1.

Table 4-11: Purchased Water Supply Unit Costs

Line #		FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
1	SFPUC Fixed Monthly Charge	$6,782	$6,782	$7,264	$7,823	$8,355
2	SFPUC Variable Rate ($/hcf)	$3.71	$3.71	$3.97	$4.28	$4.57

Table 4-12 shows the total estimated costs associated with the District's water purchases from SFPUC. The fixed charges are calculated by multiplying the fixed monthly charge in Line 1 of Table 4-11 by twelve billing periods. The variable charges are calculated by multiplying the unit price in Line 2 of Table 4-11 by the quantity of SFPUC water purchases shown in Line 6 of Table 4-10. For the purposes of these calculations, District staff assumes that there will be sufficient water supply from existing sources and, therefore, no supply reduction during the Study period.

Table 4-12: Purchased Water Costs

Line #		FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
1	**SFPUC Fixed Charge**	$81,384	$81,384	$87,162	$93,874	$100,257
2	**SFPUC Variable Charges**	$2,032,892	$2,016,629	$2,159,809	$2,326,114	$2,484,290
3	**Total Purchased Water Supply Costs**	**$2,114,276**	**$2,098,013**	**$2,246,971**	**$2,419,988**	**$2,584,547**

4.3.2. O&M EXPENSES

Using the District's FYE 2021 budget values and inflation factors from Table 2-1, future operations and maintenance (O&M) costs are forecast. Table 4-13 summarizes budgeted and projected O&M expenses during the Study period. Water supply costs are those derived in Table 4-12.

Table 4-13: Budgeted and Projected O&M Expenses[4]

O&M Expense	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Purchased Water Supply Costs	$2,114,276	$2,098,013	$2,246,971	$2,419,988	$2,584,547
Salary	$3,220,950	$3,365,893	$3,517,358	$3,675,639	$3,841,043
Benefits	$580,963	$615,820	$652,770	$691,936	$733,452
Energy	$565,000	$509,780	$535,269	$562,032	$590,134
Other O&M Costs	$2,819,321	$2,806,963	$2,906,451	$2,947,836	$3,051,170
Total Operating Expenses	**$9,300,510**	**$9,396,469**	**$9,858,819**	**$10,297,431**	**$10,800,346**

4.4. DEBT SERVICE

The District currently has existing debt service payments for three revenue bonds:

- CIEDB 11-099
- CIEDB 16-111
- Chase – 2018 Loan (Refunding of 2006B Bonds)

The existing annual debt service schedule for each is shown in Table 4-14.

Table 4-14: Existing Debt Service

Debt Service	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Existing Bond-CIEDB 11-099	$335,825	$335,669	$335,508	$335,343	$335,173
CIEDB 16-111	$323,357	$322,895	$322,417	$321,923	$321,412
Chase - 2018 Loan (Refunding of 2006B Bonds)	$433,567	$435,168	$436,027	$437,233	$432,821
Total Existing Debt Service	**$1,092,748**	**$1,093,732**	**$1,093,952**	**$1,094,498**	**$1,089,406**

[4] The amounts in this table are rounded to the nearest dollar.

The District is considering a new debt issuance to fund a total of $3 million in capital expenditures in FYE 2022 and to mitigate rate increases to customers. The proposed new debt incorporates the proposed debt and financing assumptions shown in Table 4-15.

Table 4-15: Proposed Debt

	FYE 2022
Debt Assumptions	
Interest	3.5%
Term (# of Years)	20
Issuance Cost	1.5%
Debt Reserve Requirement	7.0%
Proposed Debt Issue	$3,279,983
Debt Proceeds for CIP	$3,000,000
Proposed Annual Debt Service	$230,783

The proposed debt issuance balances rate adjustments and moderate debt obligations. Issuing debt not only allows the District to provide a more immediate response to infrastructure needs, but also stabilizes the financial impact of such expenses. Rather than requiring larger rate increases in the short term in order to pay as they go (PAYGO), loan repayments are equally spread over a longer period and thereby spread costs amongst future users. This supports the District's ability to provide a more stable rate schedule with generally lower rate increases. This is the only additional debt issuance assumed in the analysis at this time. The Board of Directors will review the need to issue additional debt in FYE 2022.

4.5. CAPITAL IMPROVEMENT PLAN

The District has proposed approximately $25.2 million in capital expenditures over the Study period. These capital expenditures are shown in Table 4-16. The CIP shown below represents 95 percent of the District's planned CIP for each fiscal year. The District decided to fund less than 100 percent of its CIP because, historically, the District has experienced some carry over of its planned capital projects each year. Table 4-16 shows the total anticipated CIP for each fiscal year, the cumulative inflationary factor[5], and the resulting total anticipated CIP costs. Raftelis indexed the capital expenditures by the compounding inflationary rate shown in Table 2-1 to account for increased construction costs in future years.

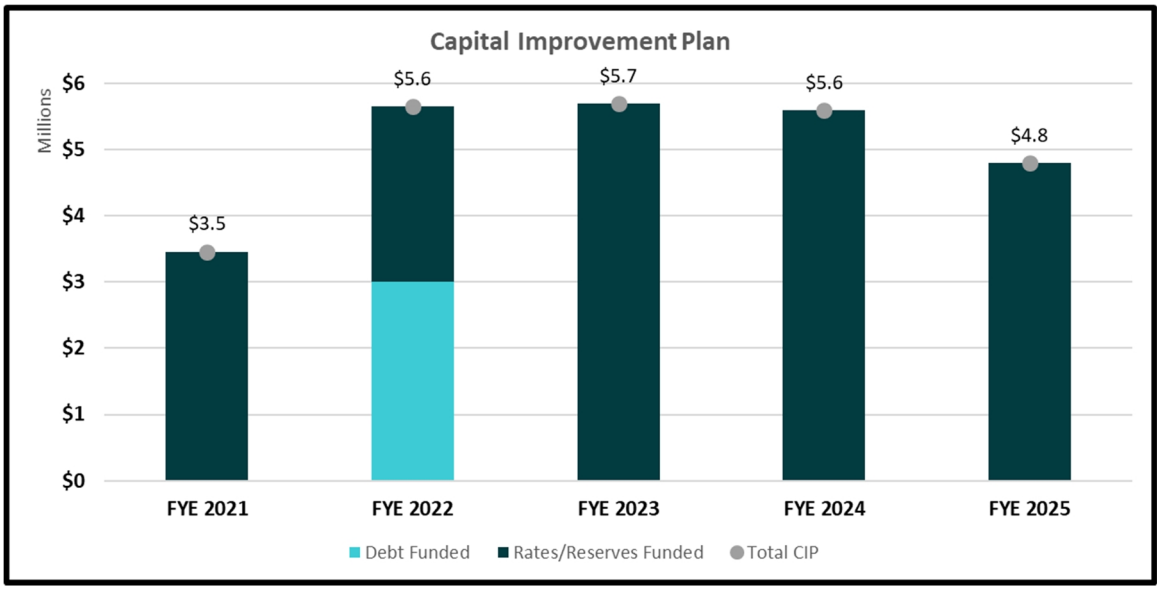
[5] Note that the cumulative inflationary factors used in the financial plan model were determined based on an annual inflationary factor of 3.2% and were not rounded to the nearest whole percentage. There may be differences due to rounding.

Table 4-16: Projected Capital Improvement Plan

CIP Expense	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Equipment Purchase & Replacement	$318,250	$47,500	$85,500	$85,500	$85,500
Facilities & Maintenance	$19,000	$152,000	$152,000	$152,000	$152,000
Pipeline Projects	$1,377,500	$1,662,500	$688,750	$95,000	$95,000
Pump Stations/Tanks/Wells	$722,000	$570,000	$237,500	$3,800,000	$1,995,000
Water Supply Development	$285,000	$285,000	$285,000	$950,000	$1,900,000
Water Treatment Plants	$736,250	$2,755,000	$3,895,000	$0	$0
Total CIP	**$3,458,000**	**$5,472,000**	**$5,343,750**	**$5,082,500**	**$4,227,500**
Cumulative Inflationary Factor	100.0%	103.2%	106.5%	109.9%	113.4%
Inflated CIP	**$3,458,000**	**$5,647,104**	**$5,691,222**	**$5,586,200**	**$4,795,152**

Figure 4-1 summarizes the projected capital expenditures during the Study period. The District plans to fund its CIP through a combination of cash reserves from rates and the issuance of new debt. The proposed $3 million debt issuance to be used to finance capital projects in FYE 2022 is denoted by the light blue bar in Figure 4-1.

Figure 4-1: Projected CIP and Funding Sources



4.6. FINANCIAL RESERVES POLICY TARGETS

The target reserves for the District are summarized below in Table 4-17. The current reserve targets consist of four components: an operating reserve to provide working capital for routine expenses; a rate stabilization reserve to guard against periods of reduced demand or mandatory water conservation; a capital reserve to provide funds for planned capital expenditures; and a debt service reserve for repaying previously issued bonds.

Table 4-17: Reserve Policies

Reserve	Policy	Reserve Target FYE 2021
Operating Reserve	25% of Annual O&M expenses	$2.33 million
Rate Stabilization Reserve	$250,000	$250,000
Capital Reserve	Average Annual CIP over 5 years	$5.04 million
Debt Service Reserve	Following Year's Debt Service	$1.32 million
Total Reserves		**$8.94 million**

4.7. STATUS QUO FINANCIAL PLAN (NO REVENUE INCREASE)

Table 4-18 displays the operating cash flow detail for the District from current rates over the Study period. The cash flow incorporates the revenues from current rates (Table 4-7), miscellaneous revenues (Table 4-8), O&M expenses (Table 4-13), existing annual debt service payments (Table 4-14) and capital improvement projects (Table 4-16) for the District to project the debt coverage ratio and projected ending balances for the Study period. All projections shown in the table are based upon the District's current rate structure and do not include rate adjustments. Under the "status-quo" financial plan scenario, the District will face negative net income[6] starting in FYE 2021. Revenues generated from rates and other miscellaneous revenues will be inadequate to sufficiently recover operating expenses, capital expenditures, debt obligations, and to maintain adequate reserves throughout the Study period, as shown by negative net cash balance in Table 4-18. The District will be unable to maintain fiscal sustainability and solvency under the current rates.

[6] Net Income = Total Revenues – Total Expenses

Table 4-18: Status Quo Financial Plan

	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Revenues					
Revenue from Existing Rates	$12,087,958	$12,464,294	$12,464,294	$12,464,294	$12,464,294
Total Revenue Adjustments	$0	$0	$0	$0	$0
Fees	$35,000	$35,000	$35,000	$35,000	$35,000
Interest Income	$56,250	$95,391	$59,207	$16,405	$0
Taxes	$750,000	$765,000	$780,300	$795,906	$811,824
Other Revenue	$611,000	$611,000	$611,000	$611,000	$611,000
Total Revenues	**$13,540,208**	**$13,970,686**	**$13,949,801**	**$13,922,605**	**$13,922,119**
Expenses					
Water Purchases	$2,114,276	$2,098,013	$2,246,971	$2,419,988	$2,584,547
Other O&M Expenses	$7,186,234	$7,298,456	$7,611,847	$7,877,443	$8,215,798
Existing Debt Service	$1,092,748	$1,093,732	$1,093,952	$1,094,498	$1,089,406
Proposed Debt Service	$0	$0	$0	$0	$0
CIP Expenditures (Rate Funded)	$3,458,000	$5,647,104	$5,691,222	$5,586,200	$4,795,152
Total Expenses	**$13,851,258**	**$16,137,304**	**$16,643,992**	**$16,978,130**	**$16,684,904**
Net Cash Balance (Net Income)	**($311,050)**	**($2,166,618)**	**($2,694,191)**	**($3,055,524)**	**($2,762,785)**
Beginning Balance	$7,801,475	$7,490,425	$5,323,806	$2,629,615	($425,909)
Net Cashflow	($311,050)	($2,166,618)	($2,694,191)	($3,055,524)	($2,762,785)
Ending Balance	**$7,490,425**	**$5,323,806**	**$2,629,615**	**($425,909)**	**($3,188,695)**
Target Balance[7]	*$8,704,395*	*$8,728,605*	*$8,844,739*	*$8,949,299*	*$9,074,384*
Calculated Debt Coverage Ratio[8]	**388%**	**418%**	**374%**	**331%**	**287%**
Required Debt Coverage Ratio	120%	120%	120%	120%	120%

4.8. PROPOSED FINANCIAL PLAN

The proposed financial plan calls for the adoption of 5 percent revenue adjustments to be implemented in January of the first two fiscal years (FYE 2021 and FYE 2022), with corresponding 5 percent rate increases. The District Board elected to delay the rate increase in until January of the first two fiscal years to allow rate payers to recover from the impact of the COVID-19 pandemic. For the remaining fiscal years (FYE 2023 through FYE 2025), 5 percent revenue adjustments are proposed to be implemented in July of each fiscal year. The use of the financial plan model enables the District to set rates and charges to generate sufficient water revenues to meet the District's short-term and long-term obligations and to avoid significant rate fluctuations. It also shows the level of revenues that will maintain appropriate reserves and provide adequate debt service coverage. During the Board Meeting, the Board directed District staff and Raftelis to proceed with the Proposition 218 rate adoption process necessary to adopt the two-year rates consistent with the financial plan for the five-year revenue adjustments shown below in Table 4-19. The revenue adjustments shown for FYE 2023 through FYE 2025 are for planning purposes only and are subject to the District Board's approval in future years.

Table 4-19: Proposed Revenue Adjustments

	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Effective Month	January	January	July	July	July
Revenue Adjustment	5.0%	5.0%	5.0%	5.0%	5.0%

[7] Based on the District's current reserve policies.
[8] Debt coverage = (Total Revenues – Total O&M Expenses) / Total Debt Service

Similar to the Status Quo Financial Plan (Table 4-18), Table 4-20 shows the proposed financial plan but with the revenue adjustments shown in Table 4-19. The cash flow incorporates the revenues from current rates (Table 4-7), the revenue from increases in rates consistent with the proposed adjustments (Table 4-19), miscellaneous revenues (Table 4-8), O&M expenses (Table 4-13), existing and proposed annual debt service payments (Table 4-14 and Table 4-15), and capital improvement projects (Table 4-16) for the District to project the debt coverage ratio and projected ending balances for the Study period.

Although the net cash balance shows a deficit in FYE 2021, FYE 2023, and FYE 2024 due to the planned expenditures in capital facilities during those years, the overall reserve account balance will remain within a fiscally healthy range. Additionally, the debt coverage ratio exceeds the target debt coverage ratio of 120%, allowing the District to maintain its financial bond rating. In summary, the proposed financial plan ensures financial sufficiency and solvency for the District to meet projected expenditures and financial obligations including debt service, debt coverage, and reserve targets while funding CIP projects.

Table 4-20: Proposed Financial Plan

	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Revenues					
Revenue from Existing Rates	$12,087,958	$12,464,294	$12,464,294	$12,464,294	$12,464,294
Total Revenue Adjustments	$302,199	$950,402	$1,964,684	$2,686,133	$3,443,655
Fees	$35,000	$35,000	$35,000	$35,000	$35,000
Interest Income	$56,250	$127,821	$133,025	$122,749	$123,342
Taxes	$750,000	$765,000	$780,300	$795,906	$811,824
Other Revenue	$611,000	$611,000	$611,000	$611,000	$611,000
Total Revenues	**$13,842,407**	**$14,953,518**	**$15,988,303**	**$16,715,083**	**$17,489,115**
Expenses					
Water Purchases	$2,114,276	$2,098,013	$2,246,971	$2,419,988	$2,584,547
Other O&M Expenses	$7,186,234	$7,298,456	$7,611,847	$7,877,443	$8,215,798
Existing Debt Service	$1,092,748	$1,093,732	$1,093,952	$1,094,498	$1,089,406
Proposed Debt Service	$0	$230,783	$230,783	$230,783	$230,783
CIP Expenditures (Rate Funded)	$3,458,000	$2,647,104	$5,691,222	$5,586,200	$4,795,152
Total Expenses	**$13,851,258**	**$13,368,087**	**$16,874,776**	**$17,208,913**	**$16,915,687**
Net Cash Balance (Net Income)	**($8,851)**	**$1,585,431**	**($886,472)**	**($493,830)**	**$573,428**
Beginning Balance	$7,801,475	$7,792,624	$9,378,055	$8,491,583	$7,997,753
Net Cashflow	($8,851)	$1,585,431	($886,472)	($493,830)	$573,428
Ending Balance	**$7,792,624**	**$9,378,055**	**$8,491,583**	**$7,997,753**	**$8,571,181**
Target Balance[9]	*$8,935,178*	*$8,959,388*	*$9,075,522*	*$9,180,083*	*$9,305,167*
Calculated Debt Coverage Ratio[10]	**416%**	**420%**	**463%**	**484%**	**507%**
Required Debt Coverage Ratio	120%	120%	120%	120%	120%

Aspects of the proposed financial plan are also displayed graphically in Figure 4-2, Figure 4-3, and Figure 4-4, below. Figure 4-2 shows how the proposed revenue adjustments along with revenues from current rates and other miscellaneous revenues are projected to generate adequate revenues to fund O&M expenses, including water supply costs, debt service obligations for current bonds, and the proposed capital projects. Current revenues (shown by the solid black line) are inadequate to recover O&M expenses, debt service, and capital expenditures starting in FYE

[9] Based on the District's current reserve policies.
[10] Debt coverage = (Total Revenues – Total O&M Expenses) / Total Debt Service

2021, as shown by the black line falling below the combined height of light blue, dark blue, green, and gray bars in Figure 4-2.

Figure 4-2: Proposed Operating Financial Plan

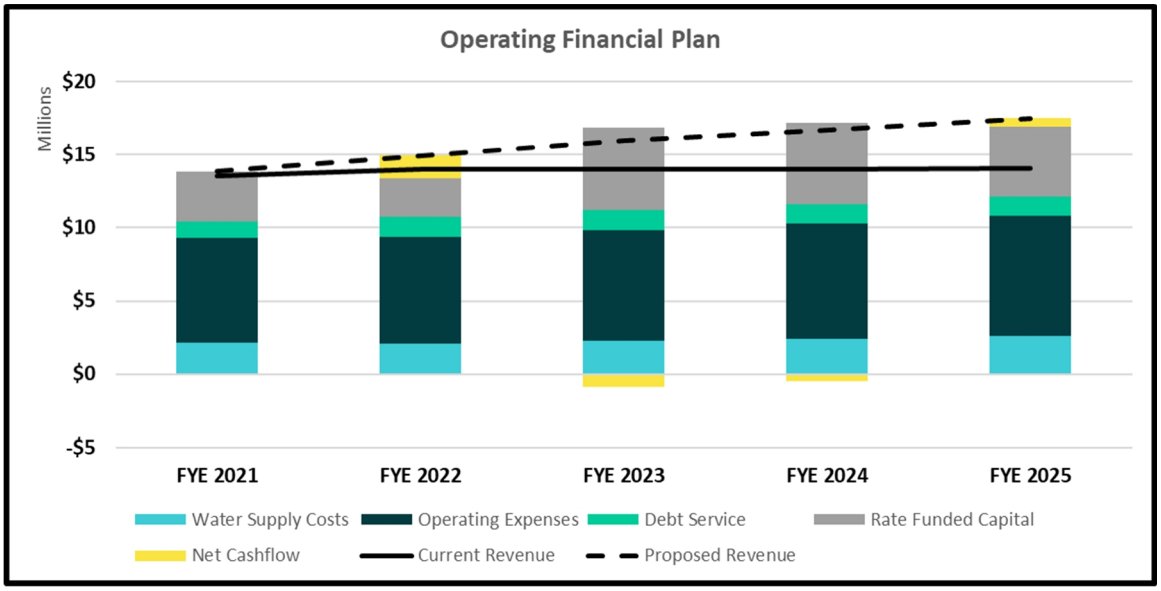
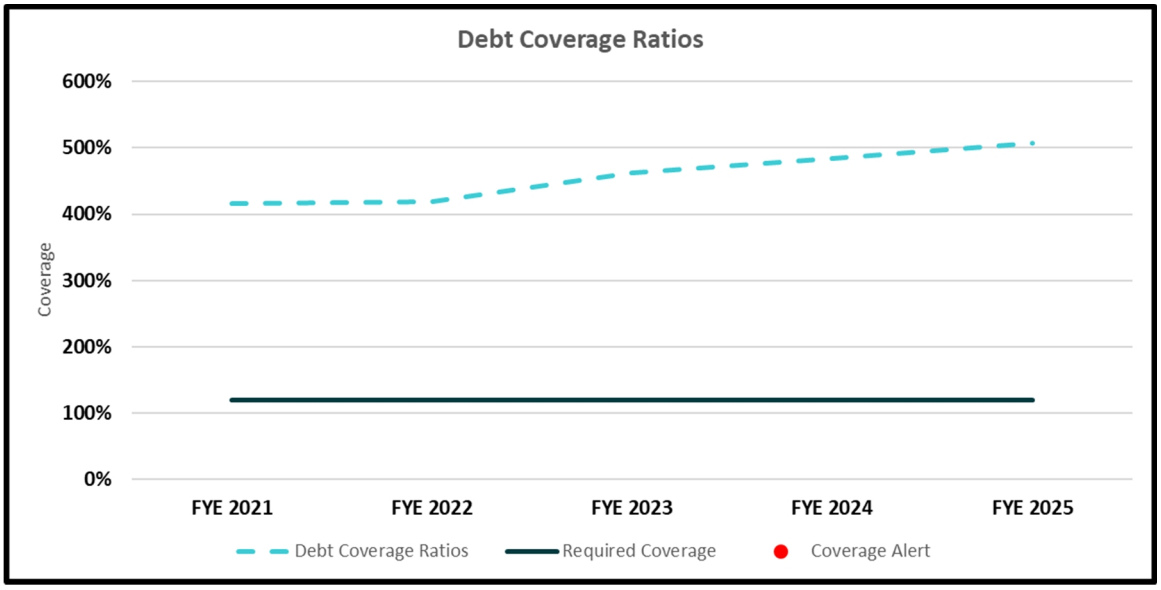


Figure 4-3 illustrates how the proposed revenue adjustments ensure that the District will meet its bond covenants by maintaining at least a 120% debt coverage ratio. Thus, these proposed adjustments will also assist in maintaining the District's current credit ratings.

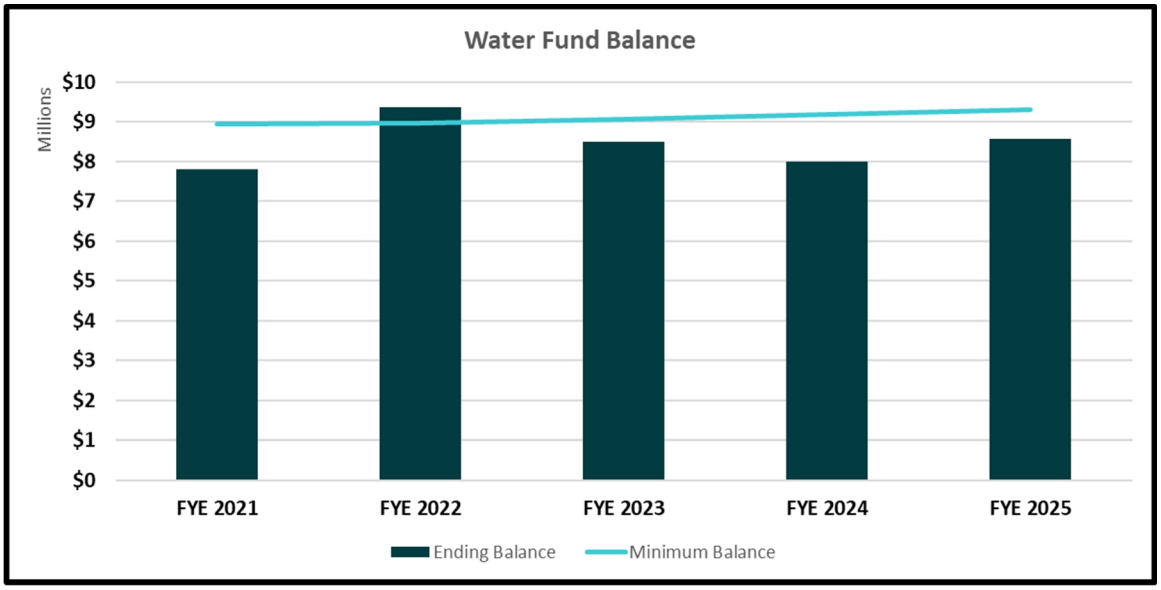
Figure 4-3: Projected Debt Coverage Ratios



Finally, Figure 4-4 shows the District's ending fund balance by fiscal year. The dark blue bars indicate the total ending balance under the proposed financial plan while the light blue line indicates the total target balance. Reserve balances are expected to grow during the Study period to meet the minimum target balances[11] (light blue line)..

[11] Established by the District's current financial policy.

Figure 4-4: Projected Water Fund Ending Balances



5. Proposed Water Rates & Customer Impact Analysis

Government Code §54999.7(c) requires that water agencies must conduct a cost-of-service study a minimum of every 10 years. The District conducted a comprehensive cost-of-service rate study for its water service in 2018 and documented the results and findings in the "CCWD Cost of Service and Rate Study Report" dated May 10, 2018 (Appendix A). The proposed revenue adjustments resulting from the financial plan, shown in Table 5-1, will be applied across all categories of the current rates to calculate the proposed rates, resulting in a 5 percent rate increase for FYE 2021 and FYE 2022.

Table 5-1: Proposed Revenue Adjustments

	FYE 2021	FYE 2022
Effective Month	January	January
Revenue Adjustment	5.0%	5.0%

5.1. PROPOSED TWO-YEAR RATES

5.1.1. FIXED MONTHLY SERVICE CHARGES

Two years of monthly service charge rates are shown in Table 5-2 and Table 5-3 shows the current and proposed fire service charges. The proposed fire service charges apply to all customers with private fire service connections. The rates for the current and proposed monthly service charges and fire service charges are calculated based on the meter size and diameter of the fire line serving a property, respectively. All rates are rounded up to the nearest whole penny.

Table 5-2: Proposed FYE 2021-2022 Monthly Service Charges

Meter Size	Current	FYE 2021 January	FYE 2022 January
5/8"	$28.90	$30.35	$31.87
3/4"	$42.70	$44.84	$47.09
1"	$70.30	$73.82	$77.52
1 1/2"	$139.31	$146.28	$153.60
2"	$222.13	$233.24	$244.91
3"	$484.37	$508.59	$534.02
4"	$870.85	$914.40	$960.12

Table 5-3: Proposed FYE 2021-2022 Fire Service Charges

Fire Line Size	Current	FYE 2021 January	FYE 2022 January
3/4"	$4.85	$5.09	$5.35
1"	$6.46	$6.79	$7.13
1 1/2"	$9.69	$10.18	$10.69
2"	$12.92	$13.57	$14.25
3"	$19.38	$20.35	$21.37
4"	$25.84	$27.14	$28.50
6"	$38.76	$40.70	$42.74
8"	$51.68	$54.27	$56.99
10"	$64.60	$67.83	$71.23

5.1.2. COMMODITY RATES

Two years of variable commodity, or volumetric, water rates are shown in Table 5-4. Volumetric rates are charged for each unit (hcf) of water. All rates are rounded up to the nearest whole penny.

Table 5-4: Proposed FYE 2021-2022 Commodity Rates

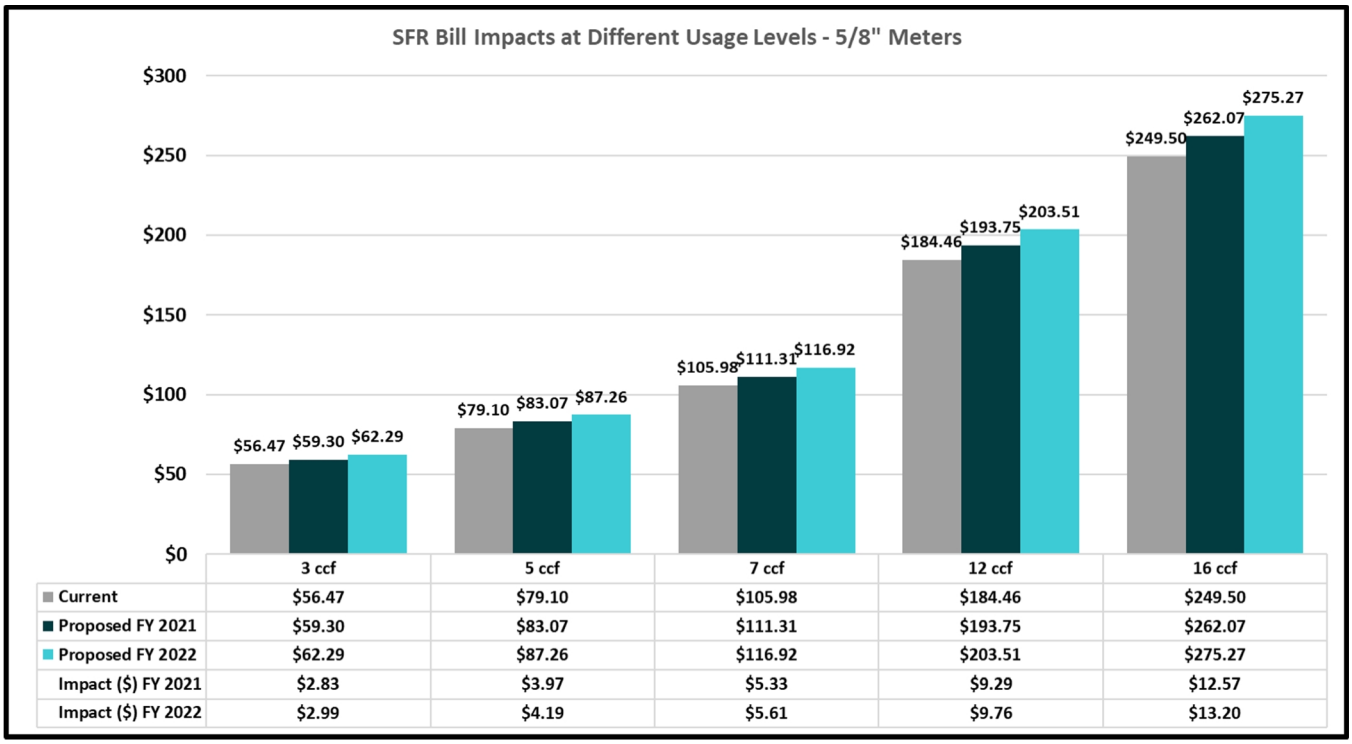
Customer Class	Tier Width (hcf)	Current	FYE 2021 January	FYE 2022 January
Single Family Residential				
Tier 1	0 - 4	$9.19	$9.65	$10.14
Tier 2	5 - 8	$13.44	$14.12	$14.83
Tier 3	9+	$16.26	$17.08	$17.94
Multi-Family Residential	Uniform	$12.25	$12.87	$13.52
Non-Residential	Uniform	$13.06	$13.72	$14.41

5.2. CUSTOMER IMPACT ANALYSIS

It is important to understand how the proposed rates would impact the District's customers. The customer impact analysis is a powerful tool, which can be used to assist elected officials in making informed decisions.

Figure 5-1 shows the water bills for typical Single Family residential (SFR) customers with a ⅝" meter for a monthly billing period at various water consumption levels under current and proposed rates. The monthly water bills under the current rates are illustrated by the gray bars and the monthly water bills assuming the proposed rates are shown by the dark blue bars for FYE 2021 and light blue bars for FYE 2022.

Figure 5-1: Single Family Residential Customer Bill Impacts



	3 ccf	5 ccf	7 ccf	12 ccf	16 ccf
Current	$56.47	$79.10	$105.98	$184.46	$249.50
Proposed FY 2021	$59.30	$83.07	$111.31	$193.75	$262.07
Proposed FY 2022	$62.29	$87.26	$116.92	$203.51	$275.27
Impact ($) FY 2021	$2.83	$3.97	$5.33	$9.29	$12.57
Impact ($) FY 2022	$2.99	$4.19	$5.61	$9.76	$13.20

APPENDIX A:

CCWD Cost of Service and Rate Study Report

COASTSIDE COUNTY WATER DISTRICT

Cost of Service and Rate Study

Final Report / May 15, 2018

RAFTELIS

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May 15, 2018

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

Subject: Cost of Service and Rate Study Report

Dear Ms. Rogren,

Raftelis Financial Consultants, Inc. (Raftelis) is pleased to provide this Cost of Service and Rate Study Report (Study) for Coastside County Water District (CCWD or District) to develop cost of service based water rates with a technically sound methodology which meets the requirements of California Constitution Article XIII D, Section 6 (commonly referred to as "Proposition 218"). In particular, this Study contains thorough details on the following:

1. The legal framework surrounding Proposition 218, particularly with respect to potable water service
2. Recommended revisions and modifications to rate structures and customer classes
3. Equitable cost of service based potable water commodity rates, bi-monthly fixed charges, and private fire service charges that meet the requirements of Proposition 218

The Study summarizes the key findings and results related to the cost allocations to customer classes and development of rates and charges for water service.

It has been a pleasure working with you and we thank you, Mr. David Dickson, and District staff for the support provided during the course of this Study.

Sincerely,
Raftelis Financial Consultants, Inc.

Sanjay Gaur
Vice President

Kevin Kostiuk
Senior Consultant

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1. EXECUTIVE SUMMARY

1.1 STUDY BACKGROUND

In 2018, Coastside County Water District (CCWD or District) contracted with Raftelis to conduct a Cost of Service and Rate Study (Study) across all water services. This Study presents the cost allocations for the respective customer classes and services and resulting water rates for implementation in July 2018.

This Executive Summary compiles the proposed water rates and charges and contains a description of the rate study process, methodology, results, and recommendations for CCWD rates. CCWD's last rate adjustment was effective July 1, 2017. CCWD wishes to establish fair and equitable rates that:

- Proportionately allocate the costs of providing service in accordance with California Constitution Article XIII D, Section 6 (commonly referred to as Proposition 218)
- Meet the District's fiscal needs in terms of operational expenses, reserve targets, and capital investment to maintain the water system
- Maintain affordable charges for customers that are fair and equitable
- Preserve an indirect price signal for those whose higher usage creates greater demands and burdens on CCWD's water system
- Are easy for customers to understand and easy for CCWD staff to implement and update in the future

1.2 STUDY OBJECTIVES

The major objectives of the Study include the following:

1. Evaluate the existing rate structures and propose revisions to tiered rate structures
2. Ensure recovery of all operations and maintenance (O&M) costs, ensure sufficient funding of financial reserves, and funding of capital repair and replacement (R&R) collectively
3. Conduct a cost of service analysis for the water system
4. Allocate costs between user classes
5. Develop fair and equitable water rates that adequately recover costs, provide revenue stability for recovering fixed costs, and maintain affordable water service while remaining compliant with the requirements of Proposition 218

This Study was prepared using the principles established by the American Water Works Association's (AWWA) *Principles of Water Rates, Fees, and Charges: Manual of Water Supply Practices M1*, *Sixth Edition* (M1 Manual). The M1 Manual's general principles of rate structure design and the objectives of the Study are described in Section 1.3.3.

1.3 WATER SYSTEM AND SERVICE AREA CHARACTERISTICS

The District provides treated water service to the City of Half Moon Bay and the communities of Princeton, Miramar, and El Granada. The service area is approximately 14 square miles with service provided to roughly 6,400 connections across a population of 17,000. The service area is heavily residential with other customers including commercial and governmental users, landscape irrigators, and agricultural users.

Raw water is provided from two sources: a mix of local surface water and groundwater and imported water purchased from the San Francisco Public Utility Commission (SFPUC). Long term water supply

mix is approximately 50 percent local source and 50 percent purchased water. Raw water from 20 miles of transmission pipelines is treated at one of two treatment plants before distribution through the District's 83 miles of pipeline.

1.4 LEGAL REQUIREMENTS AND RATE SETTING METHODOLOGY

1.4.1 *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. 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.

The restructured tiered rates presented in this report comply with the substantive requirements of Proposition 218 as interpreted by the courts, including the April 2015 appellate court decision Capistrano Taxpayers Association, Inc. v. City of San Juan Capistrano (2015) 235 Cal.App.4th 1493., which requires calculating the cost of providing service among the different tiers for tiered rate structures.

As stated in AWWA's 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 this Study meets Proposition 218 requirements for potable customers and creates rates that do not exceed the proportionate cost of providing water services on a parcel basis.

1.4.2 *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."*

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

To meet the objectives of Article X, Section 2 a water purveyor may utilize its water rate design to incentivize the efficient use of water. CCWD utilizes inclining tier (also known as "conservation based" or simply "tiered") water rates to incentivize customers to use water in an efficient manner. The tiered rates (as well as rates for uniform rate classes) need to be based on the proportionate costs incurred to provide water to customer classes and on a parcel basis within each customer class to achieve compliance with Proposition 218.

CCWD is a signatory to the Memorandum of Understanding (MOU) of the California Water Efficiency Partnership, formerly the California Urban Water Conservation Council (CUWCC). As a member agency, CCWD recognizes the importance of water conservation in its portfolio of water supplies and is committed to use water efficiently throughout its service area.

In addition to being a member of the California Water Efficiency Partnership, CCWD is charged with mandates by the State of California to achieve reduced per capita water use. In 2008, Governor Schwarzenegger signed into law a bill referred to as SBX7-7. In addition to providing a plan for improving the Sacramento-San Joaquin Delta through co-equal goals for the environment and people, SBX7-7 required all urban water suppliers to reduce per capita water use by 20 percent by the year 2020. CCWD's rate structure is one of the means by which the District is able to achieve this mandate.

When properly designed and differentiated by customer class, tiered rates allow a water utility to send indirect conservation price signals to customers while proportionately allocating the costs of service. Due to heightened interest in water use efficiency and conservation, tiered water rates are ubiquitous, especially in California. Tiered rates meet the requirements of Proposition 218 as long as the tiers reasonably reflect the proportionate cost of providing service on a parcel basis in each tier.

1.4.3 *Cost-Based Rate-Setting Methodology*

As stated in the AWWA M1 Manual, "the costs of water rates and charges should be recovered from classes of customers in proportion to the cost of serving those customers." To develop utility rates that comply with Proposition 218 and industry standards while meeting other emerging goals and objectives of the utility, there are four major steps discussed below and previously addressed in Section 1.2.

1) Calculate the Revenue Requirement

The rate-making process starts by determining the base year (rate setting year) revenue requirement, which for this Study is Fiscal Year (FY) 2018-2019. The revenue requirement should sufficiently fund the utility's operations and maintenance (O&M), debt service, capital expenses (Repair and Replacement abbreviated as R&R), and reserve funding.

2) Cost of Service Analysis (COS)

The annual cost of providing water service is distributed among customer classes commensurate with their service requirements. A COS analysis involves the following:

1. Functionalize costs. Examples of functions are supply, treatment, transmission, distribution, storage, meter servicing, and customer billing and collection.
2. Allocate functionalized costs to cost components. Cost components include variable supply, base delivery, maximum day, maximum hour[1], conservation, public fire protection, meter service, and customer servicing and billing costs.
3. Develop unit costs for each cost component using appropriate units of service for each component.
4. Distribute the cost components. Distribute cost components, using unit costs, to customer classes in proportion to their demands and burdens on the water system. This is described in the M1 Manual published by AWWA.

A COS analysis considers both the average quantity of water consumed (base costs) and the peak rate at which it is consumed (peaking or capacity costs as identified by maximum day and maximum hour demands)[2]. Peaking costs are costs that are incurred during peak times of consumption. There are additional costs associated with designing, constructing, operating and maintaining, and replacing facilities to meet peak demands. These peak demand costs need to be allocated to those customers whose water usage patterns generate additional costs for the utility. In other words, not all customer classes and not all customers share the same responsibility for peaking related costs.

3) Rate Design and Calculations

Rates do more than simply recover costs. Within the legal framework and industry standards, properly designed rates should support and optimize a blend of various utility objectives, such as conservation, affordability for essential needs, and revenue stability, among others. Rates may also act as a public information tool in communicating these objectives to customers.

4) Rate Adoption

Rate adoption is the last step of the rate-making process. Raftelis documents the rate study results in this Study which reflect the basis upon which the rates were calculated, the rationale and justifications behind the proposed changes, and their anticipated financial impacts to ratepayers.

1.5 RESULTS AND RECOMMENDATIONS

1.5.1 Factors Affecting Revenue Adjustments

The following items affect the water system's revenue requirement (i.e., costs), thus its water rates. CCWD's expenses include Operation and Maintenance (O&M) expenses and capital expenses (including debt service).

[1] Collectively maximum day and maximum hour costs are known as peaking costs or capacity costs.

[2] System capacity is the system's ability to supply water to all delivery points at the time when demanded. Coincident peaking factors are calculated for each customer class at the time of greatest system demand. The time of greatest demand is known as peak demand. Both the operating costs and capital asset related costs incurred to accommodate the peak flows are generally allocated to each customer class based upon the class's relative demands during the peak month, day, and hour event.

- **Operating & Maintenance Expenses:** CCWD incurs costs to operate and maintain the water system including water supply costs, personnel and customer service costs, water pumping and treatment facilities costs, and technical services costs. Inflationary pressure on these expenses is generally between two and four percent per year. This is comparable to the long-term consumer price index (CPI) of approximately 2.8 percent per year.

  Water supply costs have increased substantially in the past several years as the cost of imported purchased water from the San Francisco Public Utility Commission (SFPUC) increased by 41 percent from FY 2012-2013 to FY 2016-2017.

- **Capital Funding:** CCWD requires approximately $3.6 million in annual capital expenditures to maintain the existing system at the same level of service. These capital expenditures include both capital projects and capitalized expenses. For the purpose of this Study, capital projects are expected to be fully funded by rate revenue (cash reserves). Management may elect to expedite or postpone annual Capital Improvement Projects (CIP) based on system demand, funding availability, and other conditions.

- **Reserve Funding:** CCWD has adopted reserve policies for the utility to meet cash flow needs (operating), ensure adequate funding of capital repairs and replacements (capital), and to fund certain liabilities as part of bond covenants (debt). The targeted reserve policy for the Operating Reserve is 25 percent of annual expenses to fund short term variations in operating costs and for unanticipated changes in revenues and expenses. The Operating Reserve for FY 2018-2019 is $2.09 million. The capital reserve allows the utility to award contracts and provide flexibility in the timing of projects. The defined policy for the Capital Reserve is one year of long term annual CIP or $3.63 million. The Debt Service Reserve policy is one year of debt service which is $1.14 million for the District. The total target for all reserves is approximately $6.86 million in FY 2018-2019. The District's current reserve balance is approximately $5.1 million. Modest additions in annual reserve funding will allow the District to achieve the target over a long horizon.

- **Conservation:** The recent drought, mandated water conservation, and public outreach efforts have reduced water demand within CCWD's service area and, therefore, the revenues of the utility. Customers reduced water use by approximately 20 percent when comparing FY 2016-2017 to FY 2012-2013. CCWD anticipates permanent demand reductions from behavioral changes, increased efficiencies, and permanent conservation actions and measures taken during the drought, such as the installation of water efficient appliances and landscape changes that have occurred. Total long-term demand is estimated at 1,810 acre-feet per year.

Given the factors detailed above and the FY 2018-2019 revenue requirement of $11.71 million, CCWD has proposed a revenue adjustment of 2.3 percent for FY 2018-2019 when compared to FY 2017-2018. Table 1-1 shows the proposed revenue adjustment, which is used to allocate costs to the service classes and calculate proposed rates. The revenue adjustment is proposed for implementation on July 1, 2018 with a second-year increase of 4 percent on July 1, 2019 based on the District's FY 2019-2020 budget. The assumptions used in calculating the FY 2018-2019 revenue adjustments are described in more detail in Section 2 and the rationale for the FY 2019-2020 revenue requirement is discussed in Section 7.

Table 1-1: Proposed Revenue Adjustments

Year	Revenue Requirement	Revenue Adjustment
FY 2018-2019	$11.71 Million	2.3%
FY 2019-2020	$12.18 Million	4.0%

1.5.2 *Proposed Rates and Charges*

The following subsections summarize the final rates and charges derived through the cost of service study. All rates are proposed to be implemented on July 1, 2018.

Table 1-2 shows the current and proposed meter-based fixed charges. The proposed rates are applicable to all metered users. The rates for the current and proposed fixed charge are calculated on the basis of a property's meter size. The proposed FY 2018-2019 rates account for the revenue adjustment found in Table 1-1.

Table 1-2: Current and Proposed Rates for Bi-Monthly Base Charges ($/Meter Size)

Meter Size	Proposed Base Charge	Current Base Charge	$ Difference	% Difference
5/8"	$55.55	$52.20	$3.35	6%
3/4"	$82.09	$78.45	$3.64	5%
1"	$135.18	$130.76	$4.42	3%
1-1/2"	$267.90	$252.52	$15.38	6%
2"	$427.16	$418.48	$8.68	2%
3"	$931.48	$915.50	$15.98	2%
4"	$1,674.70	$3,139.22	($1,464.52)	-47%

Table 1-3 shows the current and proposed charges for private fire service customers. The proposed rates are applicable to all users with private fire service. The rates for the current and proposed fire service charge are calculated on the basis of the diameter of the fireline serving a property. The proposed FY 2018-2019 rates are inclusive of the revenue adjustment found in Table 1-1.

Table 1-3: Current and Proposed Rates for Bi-Monthly Private Fire Service Charges ($/Line Size)

Fireline Size	Proposed Fire Service Charge	Current Fire Service Charge	$ Difference	% Difference
3/4"	$9.31	$8.57	$0.74	9%
1"	$12.42	$11.43	$0.99	9%
1-1/2"	$18.62	$17.15	$1.48	9%
2"	$24.83	$22.86	$1.97	9%
3"	$37.24	$34.29	$2.95	9%
4"	$49.65	$45.72	$3.93	9%
5"	$62.07	$57.15	$4.92	9%
6"	$74.48	$68.58	$5.90	9%
8"	$99.30	$91.44	$7.86	9%
10"	$124.13	$114.30	$9.83	9%

Table 1-4 shows the current and proposed water rates (commodity charges) for all customers. The rates for the current and proposed commodity charges are calculated on the basis of customer class and tier and are expressed in dollars per hundred cubic feet ($/hcf).

Raftelis recommends certain rate structure changes to better reflect similarities and differences across customer classes as well as usage characteristics within customer classes. In addition to the class rate structure modifications, Raftelis recommends new tier definitions as shown in Table 1-4. Changes to the existing customer classes and tier definition modifications are discussed in detail in Section 5. The proposed FY 2018-2019 rates are inclusive of the revenue adjustment found in Table 1-1.

Table 1-4: Current and Proposed Rates for the Water Commodity Charges ($/hcf)

Customer Class & Tier	Proposed Tier Definition	Current Tier Definition	Proposed Rate	Current Rate
SFR				
Tier 1	0-8	0-4	$8.83	$9.65
Tier 2	9-16	5-16	$12.92	$10.77
Tier 3	>16	17-30	$15.63	$13.89
Tier 4		>30	N/A	$18.41
MFR	Uniform	N/A	$11.77	$11.88
All Other Customers	Uniform	Uniform	$12.55	$11.88

Together, the components of the proposed water service charges are structured to recover the proportionate costs of providing water service to each customer class and each connection within the service area.

2. DISTRICT BUDGET

The Study year is Fiscal Year (FY) 2018-2019[3], with proposed revenue adjustments and rates presented for the same year. CCWD staff provided Raftelis with budgeted FY 2018-2019 operating expenditures and estimated capital and reserve contribution (net cash). The combination of the two becomes the total revenue required to operate and maintain the utility at the existing level of service. For FY 2018-2019 the operating requirement is $8.19 million. The capital requirement is $3.52 million[4]. The total revenue required from rates is $11.71 million and is summarized in Table 2-1. The revenue requirement is discussed in detail in Table 4-1 in Section 4: Cost of Service Analysis.

Table 2-1: FY 2018-2019 Proposed Budget

REVENUE REQUIREMENTS	FY 2018-2019 BUDGET
REVENUES	
Operating Revenues	
Water Sales	$11,450,000
Total Operating Revenues	***$11,450,000***
Non-Operating Revenues	
Hydrant Sales	$50,000
Late Penalty	$60,000
Service Connections	$10,000
Interest Earned	$6,236
Property Taxes	$725,000
Miscellaneous	$25,000
Cell Site Lease Income	$165,000
ERAF Refund	$325,000
Total Non-Operating Revenues	**$1,366,236**
TOTAL REVENUES	**$12,816,236**
OPERATING EXPENDITURES	
Water Purchased	$1,900,998
Electrical Exp. Nunes WTP	$42,697
Electrical Expenses, CSP	$337,080
Electrical Expenses/Trans. & Dist.	$26,966
Elec Exp/Pilarcitos Cyn	$39,248
Electrical Exp., Denn	$130,000
CSP - Operation	$10,700
CSP - Maintenance	$37,000
Nunes WTP Oper	$77,850
Nunes WTP Maint	$122,500

[3] CCWD's fiscal year is July 1 through June 30.

[4] The capital requirement includes $3.62 million in long term annual CIP repair and replacement and use of $100,000 in reserves in FY 2018-2019.

Denn. WTP Oper.	$47,000
Denn WTP Maint	$101,850
Laboratory Expenses	$71,450
Maintenance Expenses	$291,700
Maintenance, Wells	$40,000
Uniforms	$12,500
Studies/Surveys/Consulting	$160,000
Water Resources	$25,200
Community Outreach	$54,700
Legal	$100,000
Engineering	$60,000
Financial Services	$20,000
Computer Services	$163,600
Salaries, Admin.	$1,133,881
Salaries - Field	$1,400,505
Payroll Taxes	$177,733
Employee Medical Insurance	$444,246
Retiree Medical Insurance	$50,659
Employee Retirement	$598,859
SIP 401a Plan	$35,000
Motor Vehicle Exp.	$60,000
Office & Billing Expenses	$261,600
Meetings/Training/Seminars	$26,000
Insurance	$129,000
Memberships & Subscriptions	$75,970
Election Expense	$25,000
Union Expenses	$6,000
County Fees	$20,000
State Fees	$36,500
TOTAL OPERATING EXPENDITURES	**$8,353,991**
REVENUES LESS OPERATING EXPENSES	**$4,462,245**
DEBT SERVICE	
Existing Bonds - 2006B	$486,383
Existing Bond-CIEDB 11-099	$336,126
CIEDB 16-111	$324,235
TOTAL DEBT SERVICE	**$1,146,744**
Net Revenue to CIP & Reserves Contribution	**$3,315,501**

3. PROJECTED WATER DEMAND AND ACCOUNT INFORMATION

FY 2018-2019 is the baseline consumption year within the cost of service and rate model using billed water consumption for FY 2016-2017. Table 3-1 through Table 3-3 shows the total number of connections and water demand. Total potable water demand is assumed to increase by seven and a half percent relative to FY 2016-2017, based on District staff estimates.

Table 3-1 shows the count of meters by meter size. The overwhelming majority of customers are Single Family Residential (SFR) and the most common meter size is 5/8". The District has 6,439 active meters subject to the bi-monthly base charge[5]. No growth in meters or customer accounts is assumed.

Table 3-1: FY 2018-2019 Potable Meter Count

Meter Size	Total by Meter Size
5/8"	6,000
3/4"	194
1"	175
1-1/2"	28
2"	34
3"	5
4"	3
Total	**6,439**

Table 3-2 shows the firelines and sizes subject to private fire service charges. The vast majority of firelines are 1" in diameter. The District has 995 firelines subject to charges. No growth in fireline accounts is assumed.

Table 3-2: FY 2018-2019 Private Fireline Count

Fireline Size	Total by Fireline Size
3/4"	10
1"	658
1-1/2"	49
2"	82
3"	4
4"	123
5"	0
6"	55
8"	13
10"	1
Total	**995**

Table 3-3 shows estimated water demand for FY 2018-2019, by customer class. FY 2016-2017 actual water sales are increased by seven and a half percent to arrive at staff's estimated FY 2018-2019

[5] Certain customers are billed by the District monthly instead of bi-monthly

water sales. Total estimated water deliveries in FY 2018-2019 are 788,525 hundred cubic feet (hcf) or 1,810 acre-feet (AF). FY 2018-2019 represents the estimate for long term baseline demand. The totals do not account for system water loss, which is discussed in Section 6.

Table 3-3: Annual Water Demand by Proposed Rate Class

Delivery	Water Sales FY 2016-2017 (Actual) hcf	Water Demand Factor	Water Sales FY 2018-2019 (Estimated) hcf	Water Sales FY 2018-2019 (Estimated) AF
Single Family Residential (SFR)	386,887	107.5%	415,904	955
Multi-Family Residential (MFR)	40,919	107.5%	43,988	101
All Other Customers	305,706	107.5%	328,634	754
Total	**733,512**		**788,525**	**1,810**

4. COST OF SERVICE ANALYSIS

4.1 METHODOLOGY

The principles and methodology of a cost of service analysis were described in Section 1.4 and are summarized in this sub-section. The annual cost of providing water service is distributed among customer classes commensurate with their service requirements. A COS analysis involves the following:

1. Functionalize costs. Examples of functions are supply, treatment, transmission, distribution, storage, meter servicing, and customer billing and collection.
2. Allocate functionalized costs to cost components. Cost components include variable supply, base delivery, maximum day, maximum hour, conservation, public fire protection, meter service, and customer servicing and billing costs.
3. Develop unit costs for each cost component using appropriate units of service for each component.
4. Distribute the cost components. Distribute cost components, using unit costs, to customer classes in proportion to their demands and burdens on the water system. This is described in the M1 Manual published by AWWA.

A COS analysis considers both the average quantity of water consumed (base costs) and the peak rate at which it is consumed (peaking or capacity costs as identified by maximum day and maximum hour demands). Peaking costs are costs that are incurred during peak times of consumption. There are additional costs associated with designing, constructing, and operating and maintaining facilities to meet peak demands. These peak demand costs need to be allocated to those customers whose water usage patterns generate additional costs for the utility. In other words, not all customer classes and not all customers share the same responsibility for peaking related costs.

The functionalization of costs allows us to better allocate to the **cost causation components** (plainly, cost components). Organizing the costs in terms of end function allows direct correlation between the cost component and the rate, coupling the cost incurred by the utility to the demand and burden that the customer places on the utility's system and/or water resources. The costs incurred are generally responsive to the specific service requirements or cost drivers imposed on the system and its water resources by its customers. The **functions** (i.e., cost categories) for the cost of service analysis include:

1. Water Supply
2. Reservoir
3. Pumping
4. Transmission
5. Treatment
6. Distribution
7. Meters
8. Hydrants
9. Conservation
10. Operations, Meters, and Customer[6]

[6] This function reflects the specific accounting of District cost categories which include personnel and costs related to water operations, meter maintenance, and customer service duties.

11. General

The functionalized costs are then allocated to the **cost causation components** which become the rate components in Section 6.[7] The cost components include:

1. **Supply** costs are related to the production of local raw water and purchase of imported raw water supplies. As explained in previous sections, CCWD acquires water from two primary sources of supply, local and imported.
2. **Base** (average) costs vary with the total quantity of water used within the water system under average conditions. These costs may include treatment, transmission and distribution facilities, storage costs, and capital costs associated with serving customers at a constant, or average, annual rate of use. Base costs are, therefore, spread over all units of water equally.
3. **Peaking** (maximum day and maximum hour) costs are divided into maximum day and maximum hour demand. The maximum day demand is the maximum amount of water used in a single day in a year. The maximum hour demand is the maximum usage in an hour on the maximum usage day. Different facilities, such as distribution and storage facilities, and the capital and O&M costs associated with those facilities, are designed to meet the peak demands placed on the system by customers. Therefore, extra capacity costs include the O&M and capital costs associated with meeting peak customer demand in excess of average annual rate of use, or base use, requirements.
4. **Meter Service** costs include maintenance and capital costs related to meters and associated services.
5. **Customer** costs are directly associated with serving customers, irrespective of the amount of water used, and generally include meter reading, bill generation, accounting, customer service, and collection expenses.
6. **Fire Protection** are costs of providing public and private fire protection service. They include both direct and indirect capital and maintenance costs for fire hydrants and private fire connections, as well as indirect costs for source of supply, treatment, transmission, and distribution of water as these facilities and infrastructure must be upsized to meet fire flow demand.
7. **Conservation** costs include all costs of funding, administering, and executing water conservation and efficiency related programs and services, as well as development of alternative and/or supplemental water supplies.
8. **General** and administrative costs are incurred in operating and maintaining the water system not otherwise recovered in the other functionalized cost components. These costs are distributed to the other cost components in proportion to the cost responsibility of the other components.

This method of functionalizing costs is consistent with the AWWA M1 Manual and is widely used in the water industry to perform cost of service analyses.

4.2 REVENUE REQUIREMENT

Table 4-1 shows the FY 2018-2019 revenue requirement of $11,710,499. The total represents all O&M and capital revenue requirements. O&M expenses include costs directly related to the supply, treatment, and distribution of water, as well as routine maintenance of system facilities. To arrive at the rate revenue requirement, we subtract revenue offsets (non-rate revenues) and adjustment for

[7] This Study uses the Base-Extra Capacity methodology set forth in the M1 Manual for functionalizing and allocating costs.

annual net cash balances which fund R&R capital and District reserves. The result is the total revenue required from rates. This total is the amount that meter base charges, private fire service charges, and commodity rates are designed to collect.

Table 4-1: FY 2018-2019 Revenue Required from Rates

Revenue Requirements	Operating	Capital	Total
Operating Expenses	$8,353,991		$8,353,991
Debt Service		$1,146,744	$1,146,744
Sub-total Revenue Requirements	**$8,353,991**	**$1,146,744**	**$9,500,735**
Rate Revenue Offsets			
Property Taxes		$725,000	$725,000
Cell Site Lease Income	$165,000		$165,000
Other Non-Rate Revenue		$426,236	$426,236
Total Rate Revenue Offsets	**$165,000**	**$1,151,236**	**$1,316,236**
Adjustments			
Annual Capital Funding		$3,626,000	$3,626,000
Annual Reserve Funding[8]		($100,000)	($100,000)
Total Adjustments	**$0**	**$3,526,000**	**$3,726,000**
COS to be Recovered from Water Rates	**$8,188,991**	**$3,521,508**	**$11,710,499**

4.1 FUNCTIONALIZATION OF O&M EXPENSES

Table 4-2 shows the functionalization of CCWD O&M expenses for the rate setting year, FY 2018-2019. Functionalizing O&M expenses allows Raftelis to follow the principles of rate setting theory in which the goal is to allocate the O&M expenses to cost causation components. The totals by function are presented in Table 4-2.

Table 4-2: Functionalization of O&M Expenses

Cost Category	O&M Expenses by Function ($)
Supply	$2,238,078
Pumping	$169,247
Transmission	$74,666
Treatment	$503,347
Distribution	$424,200
Conservation	$79,900
Ops/Meters/Customer	$1,133,881
General	$3,730,672
Total	**$8,353,991**

[8] The District anticipates drawing upon $100,000 in reserves in FY 2018-2019 to help fund capital during the fiscal year. Annual Reserve Funding is, therefore, shown as a negative number.

4.2 ALLOCATION OF FUNCTIONALIZED EXPENSES TO COST COMPONENTS

After functionalizing expenses, the next step is to allocate the functionalized expenses to cost components. To do so, we must identify system-wide peaking factors. The system-wide factors for base and max day were calculated using CCWD daily water production records. Daily production record values and ratios are shown in Table 4-3. The ratio in the column furthest right is the maximum day production in million gallons per day (mgd) divided by the average production in million gallons per day.

Table 4-3: Water Production Factors

	Max Day (mgd)	Avg Day (mgd)	Min Day (mgd)	Max Day/ Avg Day
FY 2016	2.28	1.54	0.79	1.49
FY 2017	2.64	1.51	0.77	1.75
Average	**2.46**	**1.52**	**0.78**	**1.62**

Calculated water system peaking factors are shown in column B of Table 4-4. The system-wide peaking factors are used to derive the cost causation component allocation bases (i.e., percentages) shown in columns C, D, and E of Table 4-4. Line 1 "Base" represents the average day demand throughout the year and is, therefore, a factor of 1.00. Line 2 "Max day" is the ratio of maximum day demand (calculated in Table 4-3) to base demand or 1.62. The incremental responsibility due to max day is therefore 0.62 (1.62-1.00)/1.62) or 38 percent. Similarly, Line 3, "max hour" is the ratio of maximum hour demand, on the maximum day, to base demand. In the absence of hourly data, we rely on industry standards for similarly sized systems of 1.66 times the max day demand. The max hour factor is, therefore, 1.66 X 1.62 or 2.68. 1.00 out of 2.68 of the max hour factor is attributable to base demand (1.00/2.68 or 37 percent) and 0.62 out of 2.68 or 23 percent is attributable to max day. The remainder ((2.68-1.62)/2.68 or 1.06) represents the incremental amount attributable to max hour (1.06/2.68 or 40 percent). These factors indicate how much additional capacity is required to meet demand above average daily use. As demand, and therefore capacity, increases, so must the sizing of facilities and pipelines, which incur greater costs to construct, maintain, and replace. Functionalized expenses are then allocated to the cost components using these bases. To understand the interpretation of the percentages shown in columns C through E we must first establish the base use as the average daily demand during the year.

These allocation bases are used to assign certain functionalized costs to the cost causation components including reservoir, transmission, treatment, distribution, and Ops/Meters/Customer functions.

Table 4-4: System-Wide Peaking Factors

		System Wide Factors	Base	Max Day	Max Hour
	A	B	C	D	E
1	Base	1.00	100%		
2	Max Day	1.62[9]	62%	38%	
3	Max Hour	2.68[10]	37%	23%	40%

Table 4-5 shows the allocation basis for CCWD O&M costs. The top row of Table 4-5 shows the cost causation components and the leftmost column shows the cost functions. For example, transmission related costs are allocated 62 percent to base and 38 percent to max day (allocation based upon the max day calculation in Table 4-4). This means that 62 percent of transmission costs are due to meeting base customer demands and 38 percent of costs are due to meeting max day demands.

[9] Max Day to Average Day from Table 4-3

[10] Max Hour factor is estimated using the calculated Max Day factor multiplied by an industry standard of 1.66. 1.66 represents the increase in demand on the maximum day during the maximum hour

Table 4-5: Allocation of Functionalized O&M Expenses to Cost Causation Components

Function	FY 2018-2019	Supply	Base	Max Day	Max Hour	Fire Protection	Meters	Customer	Conservation	General
Supply	$2,238,078	100%								
Pumping	$169,247	100%								
Transmission	$74,666		62%	38%						
Treatment	$503,347		62%	38%						
Distribution	$424,200		31%	19%	33%	18%				
Conservation	$79,900								100%	
Ops/Meters/Customer	$1,133,881		35.3%	21.8%	37.7%			5.2%		
General	$3,730,672									100%
Total	**$8,353,991**	**$2,407,325**	**$887,686**	**$547,696**	**$565,863**	**$76,356**	**$0**	**$58,493**	**$79,900**	**$3,730,672**

4.1 ALLOCATION OF FUNCTIONALIZED EXPENSES TO COST COMPONENTS

A similar allocation is performed for the District's capitalized assets. Capital costs are allocated based on the asset base of the system in recognition that assets need to be replaced over time. Correspondingly, capital expenses over time should correlate to the asset base. This ensures that the allocations to the cost causation components, and ultimately the rates, remain relatively stable over time. Table 4-6 shows the functionalized assets allocated to the cost components in both dollar and percentage terms.

Table 4-6: Allocation of Functionalized Asset Valuation to Cost Causation Components

Function	Value ($)	Supply	Base	Max Day	Max Hour	Fire Protection	Meters	General
Supply	$1,269,937	100%	0%	0%	0%	0%	0%	0%
Treatment	$11,642,869	0%	62%	38%	0%	0%	0%	0%
Reservoir	$4,475,361	0%	51%	31%	0%	18%	0%	0%
Distribution	$20,200,260	0%	31%	19%	33%	18%	0%	0%
Transmission	$10,895,890	0%	62%	38%	0%	0%	0%	0%
Meters	$865,783	0%	0%	0%	0%	0%	100%	0%
General	$1,685,904	0%	0%	0%	0%	0%	0%	100%
Wells	$246,949	100%	0%	0%	0%	0%	0%	0%
Fire	$390,647	0%	0%	0%	0%	100%	0%	0%
Total ($)	**$51,673,601**	**$1,516,886**	**$22,379,195**	**$13,807,803**	**$6,585,772**	**$4,832,259**	**$865,783**	**$1,685,904**
Total (%)		2.9%	43.3%	26.7%	12.7%	9.4%	1.7%	3.3%

4.1 PRELIMINARY COST ALLOCATION OF REVENUE REQUIREMENT

Table 4-7 shows the revenue requirement, by cost component, before adjustments for public fire protection and capacity costs (discussed further in the next sub-section). The operating expenses come directly from the allocation in Table 4-5. The capital expense allocation uses the capital revenue requirement[11] from Table 4-1 and the percentages from the bottom of Table 4-6. General costs are distributed to the cost causation components on a pro rata basis.

Table 4-7: Preliminary Revenue Requirement by Cost Component

Cost of Service	Supply	Base	Max Day	Max Hour	Fire Protection	Meters	Customer	Conservation	General	Revenue Offsets	Total
Operating Expenses	$2,407,325	$887,686	$547,696	$565,863	$76,356	$0	$58,493	$79,900	$3,730,672		$8,353,991
Capital Expenses	$124,657	$1,839,110	$1,134,718	$541,215	$397,112	$71,150	$0	$0	$138,547		$4,246,508
Revenue Offsets	$0	$0	$0	$0	$0	$0	$0	$0	$0	($890,000)	($890,000)
Sub-total Cost of Service	**$2,531,982**	**$2,726,796**	**$1,682,413**	**$1,107,078**	**$473,468**	**$71,150**	**$58,493**	**$79,900**	**$3,869,219**	**($890,000)**	**$11,710,499**
Allocation of General Cost		$1,701,897	$1,050,059	$690,970	$295,510	$44,407	$36,507	$49,869	($3,869,219)		$0
Allocated Cost of Service	**$2,531,982**	**$4,428,693**	**$2,732,472**	**$1,798,048**	**$768,978**	**$115,557**	**$95,000**	**$129,769**	**$0**	**($890,000)**	**$11,710,499**

4.2 REVENUE RECOVERY BY COST COMPONENTS

The cost components are recovered from customers through fixed bi-monthly base service charges and variable volumetric commodity charges. Table 4-8 shows the total revenue requirement, calculated in Table 4-1, to be collected through rates in the second column from

[11] The capital revenue requirement in Table 4-1 is reduced by the amount of property taxes ($725,000), which is added back to Table 4-7 to show the gross capital requirement. The property tax and cell site lease income from Table 4-1 ($165,000) represent the revenue offset in Table 4-7 and are shown as their own cost component.

the left (and transposed from the bottom of Table 4-7). While Table 4-8 shows the allocation to rate components in percentage terms, Table 4-9 shows the allocation in dollars. The sum of all rate components under the blue header represents the revenue required from commodity charges. The sum of all rate components under the orange header represents the revenue required from service charges. Max day and max hour capacity cost recovery is split between the variable components (max day and max hour columns) and the fixed charge components (meter column) to balance between affordability and revenue stability. Service Charge components include the two fixed charge components, meter and customer, as well as the private fire protection costs. In total, commodity charge revenue represents 78.1 percent of the total revenue requirement, while bi-monthly service charges and private fire service charges account for the remaining 21.9 percent. This proposed revenue split reduces the revenue recovery from fixed charges relative to current rates. The District currently recovers approximately 22.5 percent of revenue from fixed charges.

Table 4-8: Cost Recovery, Cost Components (Percentage)

Cost Components	FY 2018-2019	Commodity Rate Components (78.1%)						Service Charge Components (21.9%)		
	Revenue Requirement	Supply	Base Delivery	Max Day	Max Hour	Conservation	Rev Offsets	Meters	Customer	Fire Protection
Supply	$2,531,982	100%								
Base Delivery	$4,428,693		100%							
Max Day	$2,732,472			65%				35%		
Max Hour	$1,798,048				65%			35%		
Fire Protection	$768,978									100%
Meters	$115,557							$100		
Customer	$95,000								100%	
Conservation	$129,769					100%				
Rev. Offsets	($890,000)						100%			
Total	**$11,710,499**	**$2,531,982**	**$4,428,693**	**$1,776,107**	**$1,168,731**	**$129,769**	**($890,000)**	**$1,701,239**	**$95,000**	**$768,978**

Table 4-9: Cost Recovery, Cost Components (Values)

Cost Components	FY 2018-2019	Commodity Rate Components (78.1%)						Service Charge Components (21.9%)		
	Revenue Requirement	Supply	Base Delivery	Max Day	Max Hour	Conservation	Rev Offsets	Meters	Customer	Fire Protection
Supply	$2,531,982	$2,531,982								
Base Delivery	$4,428,693		$4,428,693							
Max Day	$2,732,472			$1,776,107				$956,365		
Max Hour	$1,798,048				$1,168,731			$629,317		
Fire Protection	$768,978									$768,978
Meters	$115,557							$115,557		
Customer	$95,000								$95,000	
Conservation	$129,769					$129,769				
Rev. Offsets	($890,000)						($890,000)			
Total	**$11,710,499**	**$2,531,982**	**$4,428,693**	**$1,776,107**	**$1,168,731**	**$129,769**	**($890,000)**	**$1,701,239**	**$95,000**	**$768,978**

4.1 ALLOCATION OF FIRE PROTECTION COSTS – PUBLIC VERSUS PRIVATE

Water systems provide two types of fire protection: public fire protection for firefighting, which is generally visible as hydrants on a street, and private fire protection which provides fire flow to building and other structure sprinkler systems for fire suppression within private improvements. To determine the share of total fire costs responsible to each, Raftelis performs an analysis of the public hydrants and private firelines. Table 4-10 shows the steps of allocating costs between public and private. Each connection size has a fire flow demand factor similar to a hydraulic capacity factor of potable meters. The diameter of the connection is raised to the 2.63 power to determine the fire flow demand factor. The count of connections of a specific size is multiplied by the fire flow demand factor to derive total equivalent connections. Total fire costs of $768,978 are allocated based on the percentage share of total equivalent fire connections between public and private. From the analysis it is determined that 82 percent of fire costs relate to public fire and will be included and recovered on the bi-monthly fixed charges. The remaining 18 percent is attributable to private fire and will be recovered through private fire protection charges.

Table 4-10: Fire Analysis

Connection Size	Demand Factor	Unit Counts	Equivalent Connections	Percent Allocation	Fire Protection Costs	Fire Exponent
					$768,978	**2.63**
Public Hydrants						
2.5"	11.1					
4"	38.3					
6"	111.3	647	72,018			
10"	426.6					
Total Public Hydrants		**647**	**72,018**	82%	**$631,127**	
(Private Fire Lines)						
3/4"	0.47	10	5			
1"	1	658	658			
1 1/2"	3	49	142			
2"	6	82	508			
3"	18	4	72			
4"	38	123	4,713			
5"	69					
6"	111	55	6,122			
8"	237	13	3,084			
10"	427	1	427			
Total Private Lines		**995**	**15,730**	18%	**$137,851**	
Total Fire Connections		**1,642**	**87,748**	100%	**$768,978**	

4.1 FINAL COST ALLOCATION OF REVENUE REQUIREMENT

The total revenue recoverable from each cost causation component through water rates is shown in Table 4-11 using the revenue requirement from Table 4-1, the O&M and asset allocations in Table 4-5 and Table 4-6, the capacity cost recovery adjustment in Table 4-8 and Table 4-9, and the fire cost analysis in Table 4-10. Public fire protection costs are reallocated to the meter component, along with a portion of the max day and max hour peaking costs.

Table 4-11: Revenue Requirement by Cost Component

Cost of Service	Supply	Base	Max Day	Max Hour	Fire Protection	Meters	Customer	Conservation	General	Revenue Offsets	Total
Operating Expenses	$2,407,325	$887,686	$547,696	$565,863	$76,356	$0	$58,493	$79,900	$3,730,672		$8,353,991
Capital Expenses	$124,657	$1,839,110	$1,134,718	$541,215	$397,112	$71,150	$0	$0	$138,547		$4,246,508
Revenue Offsets	$0	$0	$0	$0	$0	$0	$0	$0	$0	($890,000)	($890,000)
Sub-total Cost of Service	**$2,531,982**	**$2,726,796**	**$1,682,413**	**$1,107,078**	**$473,468**	**$71,150**	**$58,493**	**$79,900**	**$3,869,219**	**($890,000)**	**$11,710,499**
Allocation of General Cost		$1,701,897	$1,050,059	$690,970	$295,510	$44,407	$36,507	$49,869	($3,869,219)		$0
Allocated Cost of Service	**$2,531,982**	**$4,428,693**	**$2,732,472**	**$1,798,048**	**$768,978**	**$115,557**	**$95,000**	**$129,769**	**$0**	**($890,000)**	**$11,710,499**
Re-allocation of Public Fire					**($631,127)**	**$631,127**					
Reallocation of Capacity Components			**($956,365)**	**($629,317)**		**$1,585,682**					
Adjusted Cost of Service	**$2,531,982**	**$4,428,693**	**$1,776,107**	**$1,168,731**	**$137,851**	**$2,332,366**	**$95,000**	**$129,769**	**$0**	**($890,000)**	**$11,710,499**

4.2 UNIT COST COMPONENT DERIVATION

The end goal of a cost of service analysis is to proportionately distribute the cost components to each user class and tier. To do so, we must first calculate the cost component unit costs, which starts by assessing the total water demanded (or equivalent service units) for each cost component. Projected usage (base units of service) for FY 2018-2019 is shown in Table 4-12. Demand is detailed by proposed rate class.

Table 4-12: FY 2018-2019 Projected Water Usage by Class

Class	hcf/year
SFR	415,904
MFR	43,988
All Other Customers	328,634
Total	**788,525**

Second, peaking factors are established for the maximum day and maximum hour requirements, which become the basis for the peaking unit rate differentials developed in Section 6.

Analyzing usage characteristics gives a better understanding of how the peaking costs should be allocated. In the absence of maximum day data, the maximum billing period values are used. Since peaking costs are proportional to the peaking experienced by each tier, the relative values are more important than the actual values. Therefore, max billing period data derived from the usage patterns are a good proxy for the max day factors. The max day factor is equal to the max month factor. Similarly, since max hour factors are not available, we use the District's system wide max hour factor to approximate the max hour factor.

Table 4-13 shows the calculation of cost component units for average (daily) demand, max day demand, and max hour demand, for each class.

Daily use is calculated as annual use divided by 365 days. For example, SFR is estimated to use 415,904 hcf annually, or 1,139 hcf daily. The max day demand is then calculated as the daily demand multiplied by the max day factor (1,139 X 1.97). However, we must subtract the anticipated daily usage (1,139) from the max day usage (2,247) to calculate the incremental max day units of service (1,108). Max hour units of service are calculated similarly and the same calculations are completed for the MFR and All Other Customers classes.

Table 4-13: Derivation of Cost Component Units of Service

Tier	Annual Usage (hcf)	Daily Usage (hcf)	Max Day Factor	Max Day Demand (hcf)	Max Day Units (hcf)	Max Hour Factor	Max Hour Demand (hcf)	Max Hour Units (hcf)
SFR	415,904	1,139	1.97	2,247	1,108	3.27	3,730	1,483
MFR	43,988	121	1.73	209	88	2.88	347	138
All Other Customers	328,634	900	2.06	1,851	950	3.41	3,072	1,221
Total	**788,525**	**2,160**		**4,307**	**2,146**		**7,149**	**2,842**

Table 4-14 shows the total equivalent meters (discussed in detail in Section 6.2) and annual number of bills issued (also discussed in Section 6.2). Table 4-15 shows the total equivalent fireline connections (further discussed in Section 6.3.) These totals are used as the denominator in developing unit costs for the rate components of the bi-monthly base charges and private fire service charges.

Table 4-14: Derivation of Equivalent Meters

Meter Size	Meter Count	Hydraulic Capacity Factor	Equivalent Meters	Annual Bills
5/8"	6,000	1.00	6,000	36,000
3/4"	194	1.50	291	1,164
1"	175	2.50	438	1,050
1.5"	28	5.00	140	168
2"	34	8.00	272	204
3"	5	17.50	88	30
4”	3	31.50	95	18
Total	**6,439**		**7,323**	**38,634**

Table 4-15: Derivation of Equivalent Firelines

Fireline Size	Fireline Count	Inch-Diameter Demand Factor	Equivalent Firelines
3/4"	10	0.75	8
1"	658	1.00	658
1 1/2"	49	1.50	74
2"	82	2.00	164
3"	4	3.00	12
4"	123	4.00	492
5"	-	5.00	-
6"	55	6.00	330
8"	13	8.00	104
10"	1	10.00	10
Total	**995**		**1,851**

Utilizing the adjusted cost of service at the bottom of Table 4-11 as the numerator and Table 4-13, Table 4-14, and Table 4-15 as the denominators allows us to derive unit costs of service in Table 4-16. The total cost of service is divided by the respective units of service to calculate the unit cost of each cost component. For example, the unit cost for the base component is determined by dividing the total base cost ($4,428,693) by total water use (788,525 hcf) to derive a base unit cost of $5.62. Max day and max hour costs are divided by the total max day and max hour requirements to determine a unit rate in hcf/day. Meter costs are divided by total meter equivalencies from Table 4-14 to determine a cost per equivalent meter and annual customer costs are divided by the estimated number of annual bi-monthly bills, also from Table 4-14. Fire protection costs are divided by total fire equivalencies from Table 4-15 to determine a cost per inch of fireline. The unit costs are used to distribute the cost components to the meter classes and commodity classes and tiers.

Table 4-16: Cost Causation Component Unit Cost Calculation

Cost of Service	Supply	Base Delivery	Max Day	Max Hour	Fire Protection	Meters	Customer	Conserv -ation	Revenue Offsets	Total
Cost of Service	$2,531,982	$4,428,693	$1,776,107	$1,168,731	$137,851	$2,332,366	$95,000	$129,769	($890,000)	$11,710,499
Unit of Measure	hcf	hcf	hcf/day	hcf/day	Equivalent Firelines	Equivalent Meters	Number of Bills	hcf	hcf	
Units of Service	788,525	788,525	2,146	2,842	1,851	7,323	38,634	788,525	788,525	
Unit Cost	**$3.21**	**$5.62**	**$827.56**	**$411.19**	**$12.41**	**$53.09**	**$2.46**	**$0.16**	**($1.13)**	

4.3 DISTRIBUTION OF COST COMPONENTS TO CUSTOMER CLASSES

The final step in a cost of service analysis is to distribute the cost components to the customer classes using the unit costs derived in Table 4-16. This is the end goal of a cost of service analysis and yields the cost to serve each class. Table 4-17 shows the derivation of the cost to serve (i.e., cost of service) for each class. The cost components from Supply through Revenue Offsets are collected through the commodity (volumetric) charges ($/hcf). Fire Protection, Meters, and Customer components are collected through the District's bi-monthly base service and private fire service charges.

To derive the cost to serve each class, the unit costs from Table 4-16 are multiplied by the respective units of service for each class. For example, the base costs for the Single Family Residential (SFR) class are calculated by multiplying the base unit cost ($5.62) by the annual SFR use (415,904 hcf) to arrive at a total of $2,335,891. Similar calculations for each of the remaining user classes and cost components yield the total cost to serve each user class shown in the furthest right column of Table 4-17. Note that the total cost of service is equal to the revenue requirement in Table 4-1 as intended. With the cost to serve each user class calculated we can proceed to derive rates to collect the cost to serve each commodity class, tier, and meter size.

Table 4-17: Derivation of the Cost to Serve Each Class

Customer Class	Supply	Base	Max Day	Max Hour	Conservation	Revenue Offsets	Fire Protection	Meters	Customer	Total
SFR	$1,335,480	$2,335,891	$916,662	$609,838	$68,446	($469,426)				$4,796,891
MFR	$141,247	$247,055	$73,007	$56,647	$7,239	($49,649)				$475,546
All Other Customers	$1,055,255	$1,845,748	$786,438	$502,246	$54,084	($370,926)				$3,872,845
Meters								$2,332,366	$95,000	$2,427,366
Private Fire							$137,851			$137,851
Total	**$2,531,982**	**$4,428,693**	**$1,776,107**	**$1,168,731**	**$129,769**	**($890,000)**	**$137,851**	**$2,332,366**	**$95,000**	**$11,710,499**

5. RATE STRUCTURE DEFINITIONS AND PROPOSED REVISIONS

CCWD has an inclining tier rate structure for residential users (SFR and some MFR) and a uniform rate for all other users[12]. The most recent update to these rate structures occurred with the last Cost of Service Study in May 2015. Existing rates and charges were implemented July 1, 2017.

5.1 EXISTING RATE STRUCTURE AND RATES

CCWD water service charges have two components for most customers – a fixed bi-monthly base meter service charge and a volumetric charge (water use). Some customers requiring fire protection have a third charge related to private firelines serviced by CCWD. The bi-monthly fixed charge and private fire service charge increases with meter size or fireline size as larger meters/fire conduits consume more water on average and tend to have higher rates of peaking (required for instantaneous demand in terms of irrigation of firefighting); therefore, the costs to provide service to these customers are higher.

A typical single family home with a 5/8" meter has a bi-monthly fixed charge of $52.20. CCWD has a different bi-monthly base charge for certain Multi-Family Residential (MFR) customers with two dwelling units. Current base meter charges are shown in Table 5-1. Current private fire service charges are shown in Table 5-2.

Table 5-1: Existing Bi-Monthly Base Charges

Meter Size	Fixed Charge
5/8"	$52.20
3/4"	$78.45
1"	$130.76
1-1/2"	$252.52
2"	$418.48
3"	$915.50
4"	$3,139.22
5/8" MFR	$104.39
3/4" MFR	$156.89

[12] Multi-Family residential accounts are billed on either the tiered residential structure or the uniform "all other customer" structure dependent on the type of multi-family customer and meter type serving the connection.

Table 5-2: Existing Bi-Monthly Private Fire Service Charges

Fireline Size	Fixed Charge
3/4"	$8.57
1"	$11.43
1-1/2"	$17.15
2"	$22.86
3"	$34.29
4"	$45.72
5”	$57.15
6"	$68.58
8"	$91.44
10"	$114.30

The volumetric component of a customer’s water charge is the number of units delivered in one hundred cubic feet, or “hcf”, multiplied by rates that vary by customer class and tier. Single Family Residential (SFR) refers to stand alone houses with a single dwelling unit. MFR refers to residential housing with two or more dwelling units, such as duplexes, triplexes, certain condominiums, and apartment complexes.

Table 5-3: Existing Commodity Rates and Tiers

Current Commodity Rates	Definition (hcf)	Rate ($/hcf)
Residential		
Tier 1	0-4	$9.65
Tier 2	5-16	$10.77
Tier 3	17-30	$13.89
Tier 4	31+	$18.41
All Other Customer Classes	N/A	$11.88

5.2 PROPOSED CHANGES TO RATE STRUCTURES

Raftelis has identified several recommendations for the District. Throughout the Study, Raftelis worked with CCWD staff and Board direction to refine proposed revisions to the rate structures.

Raftelis recommends changes to the rate structures and tier definitions for the commodity charges. Raftelis proposes to reduce the Residential (proposed SFR rate class) rate structure from four tiers to three and justify those tiers based upon usage characteristics of the class consistent with how water is used. The proposed changes and rationale are detailed in the following subsections.

5.2.1 *SFR Class*

The existing Residential rate structure includes SFR and some MFR customers. While tiering works well for SFR customers due to fairly homogenous use across the class, MFR customers exhibit different characteristics. For example, MFR customers may or may not be individually metered, MFR customers may have separate domestic and landscape meters, and one domestic meter may serve many dwelling units. Therefore, a tiered rate structure for MFR customers is only fair and equitable when considering the number of dwelling units served by each metered connection. Raftelis

recommends separating the existing Residential class into one rate structure for SFR and one rate structure for MFR. The proposed tiers and rationale are as follows:

5.2.1.1 *Tier 1 Definition – 0-8 hcf monthly*

Raftelis recommends using average low winter use as the Tier 1 definition. The average low winter use isolates the effects of outdoor irrigation in the warmer and drier use periods. Raftelis calculated approximately 8 hcf bi-monthly (4 hcf monthly) as the average low winter use for residential customers using FY 2016-2017 data.

5.2.1.2 *Tier 2 Definition – 8-16 hcf monthly*

Raftelis recommends using an efficiency standard for an average user to define Tier 2. An additional eight units (16 units total in Tier 2) represents the efficient summer water demand of a median size parcel in the District's service area. To derive the volume of water for efficient outdoor use Raftelis makes assumptions of the percent of irrigated area and incorporates local evapotranspiration data and a crop coefficient

The irrigable landscape area is measured as the square footage of landscape surface on a customer's property that is being actively irrigated. The weather data are based on the reference evapotranspiration (ET_0), which is the amount of water lost to the atmosphere over a given time period at given specific atmospheric conditions. ET_0 is the amount of water (in inches of water) needed for a reference crop (in this case cool season turf grass). The ET Adjustment Factor (ETAF) is a coefficient that adjusts the ET_0 values based on plant factor and irrigation system efficiency. The formula to calculate the eight units of water is as follows:

$$\text{hcf} = \left(\frac{\text{Lot Size} * \% \text{ Lot Size} * ET_0 * \text{ETAF}}{1200} \right)$$

Where:

- Lot Size is the median parcel area identified for the service area in square feet. The median lot size is estimated at 8,398 square feet.
- % of lot size – is the estimated area of a median sized parcel that is actively irrigated which is assumed at 25 percent. % of lot size multiplied by the median lot size yields an estimate for actively irrigated landscape area of 1,470 square feet .
- ET_0 is measured in inches of water during the billing period based on actual ET measurements taken from California Irrigation Management Information System (CIMIS) Station 253 at Pescadero, CA.
- ETAF (% of ET_0): The current California Model Water Efficient Landscape Ordinance[13] is 70 percent. It is based upon plant factor divided by irrigation efficiency.
- 1,200 is the conversion unit from inch*ft^2 to billing unit of hundred cubic feet (hcf).

5.2.1.3 *Tier 3 Definition – Greater than 16 hcf monthly*

All water use greater than Tier 2. Tier 3 represents demand in excess of peak summer demands for the average SFR user.

[13] *California Code of Regulations Title 23, Division 2, Chapter 2.7. Model Water Efficient Landscape Ordinance.*

5.2.1 *MFR*

The vast majority of MFR customers are currently billed using the All Other Customers uniform rate, with a minority billed on the tiered Residential rate structure. MFR customers have very low peaking compared to commercial or irrigation customers as most use is domestic and consistent throughout the year; and MFR customers are distinct from SFR users which have seasonal peaking due to irrigation demands. To increase equity between the customer classes, Raftelis recommends the class be charged a MFR specific uniform rate derived using MFR usage and peaking data.

5.2.2 *All Other Customer Classes*

The existing structure charges a uniform rate to all customer classes that are not residential. These accounts consist of commercial users, landscape irrigators, and agricultural users. Raftelis analyzed water use and peaking characteristics of non-residential customers. The usage patterns and peaking characteristics among commercial, irrigation, and agricultural users are very similar and we propose to keep the existing uniform rate structure for all users that are not SFR or MFR.

5.2.3 *Multi-Family Residential Fixed Charge*

The existing rate structure charges two dwelling unit (duplex) multi-family accounts a fixed charge that is two times that of a comparable 5/8" or 3/4" meter. Raftelis proposes to eliminate the per-dwelling unit charge in favor of a charge based solely on the size of the meter. This eliminates the conflict of some customers being charged by capacity (i.e, meter size) and some by dwelling unit counts. The effect is to simplify the rate structure so that all connections are charged based on the capacity- utilized or potential- of their connection.

Table 5-4 summarizes the proposed changes to the commodity rate structures.

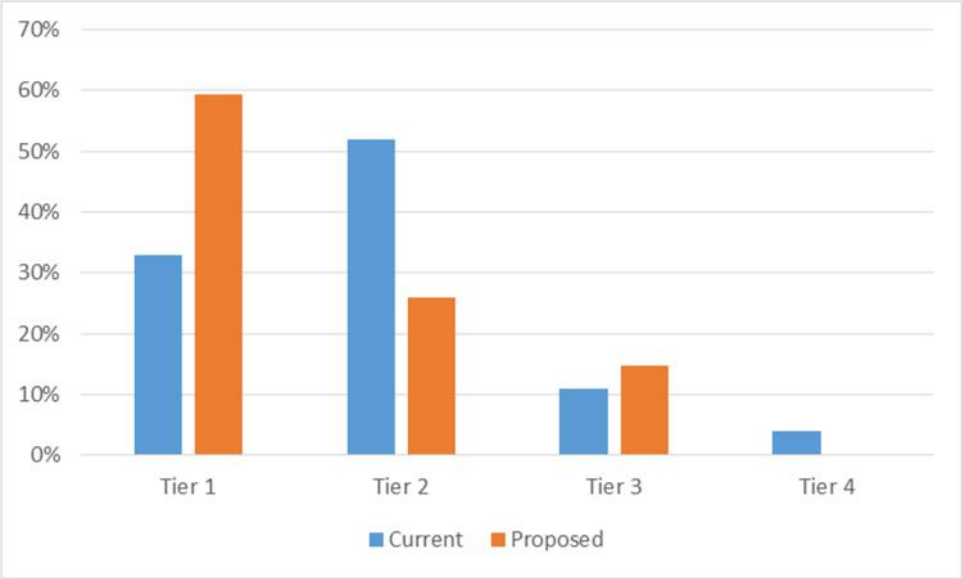
Table 5-4: Existing and Proposed Water Commodity Definitions

Proposed Rate Classes	Current Definition (hcf)	Proposed Definition (hcf)
SFR		
Tier 1	0-4	0-8
Tier 2	5-16	8-16
Tier 3	17-30	17+
Tier 4	31+	N/A
MFR		
Tier 1	0-4	Uniform
Tier 2	5-16	
Tier 3	17-30	
Tier 4	31+	
All Other Customer Classes (Commercial, Irrigation, Agriculture)	Uniform	Uniform

5.3 USAGE ANALYSIS AND USAGE PROJECTIONS

Figure 5-1 compares the distribution of SFR usage under the existing rate structure to the proposed structure. Under the revised tiers, 59 percent of use will occur in Tier 1 versus 33 percent in the current structure. Since the proposed definition doubles the allotment in Tier 1, more use will fall in the first tier. The opposite is true for the proposed Tier 2 versus the current Tier 2, since Tier 2 will now have a width of eight hcf versus the current 12 hcf. The proposed Tier 3 includes all the use in the current Tier 3 and Tier 4 (15 percent). Note, the comparisons in Figure 5-1 utilize historical water use. Predicting future water use relies on several factors and is difficult to determine. Therefore, this analysis does not attempt to forecast changes by customers due to changes in tier definition or price.

Figure 5-1: Current and Proposed SFR Usage Distribution



5.3.1 *Projected Water Use FY 2018-2019*

Using the proposed tier definitions, projected usage in FY 2018-2019 for all classes and tiers is shown in Table 5-5. FY 2018-2019 demand includes an assumed seven and a half percent demand increase from FY 2016-2017 water use. Any sales from fire flow or construction/temporary meters is not counted since revenue from these sources is variable and unreliable.

Table 5-5: Projected FY 2018-2019 Demand by Customer Class (Proposed Tier Definitions)

Class	FY 2018-2019 Demand (hcf)
SFR	
Tier 1	246,360
Tier 2	108,265
Tier 3	61,278
MFR	43,988
All Other Customers	328,634
Total	**788,525**

6. WATER RATE DERIVATION

6.1 EXISTING RATE STRUCTURE AND RATES

As previously explained, the rate structure for CCWD's water service charges have three components – a fixed base charge by meter size, a variable volumetric commodity charge, and, for certain customers, a fixed charge by fireline diameter. The rates for the bi-monthly fixed meter charge are determined on the basis of the size of the water meter serving a property and increase with meter size. Larger meters generally consume more water on average and tend to have higher rates of peaking. Therefore, the costs to provide service to these customers are higher. The rates for the current commodity charges are calculated on the basis of the amount of water delivered in hcf.

6.2 PROPOSED FIXED METER CHARGES

Utilities invest in and continuously maintain facilities to provide capacity to meet all levels of water consumption, including peak demand plus fire protection. These costs must be recovered regardless of the amount of water used during a given period. Generally, an agency with access to a significant portion of local water sources have high fixed costs. In many cases, greater than 80 percent of total costs are fixed water system costs and do not vary based on the amount of water sold. To balance between affordability and revenue stability, it is a common practice that a portion of the capacity related costs are recovered in the bi-monthly service charge, along with customer-related costs and meter-related costs. The cost of service analysis allocates 35 percent of peak capacity costs (max day and max hour) to the base meter charge, along with all meter, customer, and public fire protection costs.

There are two components that comprise the fixed meter charge: meter servicing costs and customer service costs. The meter service charge recognizes the fact that even when a customer does not use water, CCWD incurs ongoing costs in order to operate and maintain the system for each connection at all times.

6.2.1 *Meter Services Component*

The meter services component collects service related costs as well as a portion of system capacity costs. Larger meters are more expensive to maintain and replace and have the potential to demand more capacity, or, said differently, larger meters exert greater peaking demand compared to smaller meters. The capacity (peaking) is proportional to the potential flow through each meter size as established by the American Water Works Association (AWWA) hydraulic capacity ratios. For example, the flow through a 4" meter is 31.5 times that of a 5/8" meter and, therefore, the meter capacity component of the fixed meter charge should be 31.5 times that of the 5/8" meter.

In order to create parity across the various meter sizes, each meter size is assigned a factor relative to a 5/8" meter, which has a value of 1.00. This establishes the "base" meter size. A given meter size's ratio of meter servicing costs relative to the base (that of a 5/8" meter) determines the *meter equivalency*. Summation of all meter equivalencies for a given size yields total equivalent meters. For this Study, Raftelis uses standard AWWA hydraulic capacity ratios as found in the *Manual M22 – Sizing Water Service Lines and Meters, Third Edition*.

Table 6-1 shows total meter equivalencies in the system. The total equivalent meters are derived by multiplying the number of meters at each size by the respective capacity ratio (relative to the 5/8" base meter) and summing across all meter sizes. The total number of equivalent meters within CCWD's system is 7,323.

Table 6-1: Meter Equivalents Calculation

Meter Size	Meter Count (a)	Capacity Ratio (5/8" Base) (b)	Equivalent Meters (Capacity) (a)*(b)
5/8"	6,000	1.00	6,000
3/4"	194	1.50	291
1"	175	2.50	438
1-1/2"	28	5.00	140
2"	34	8.00	272
3"	5	17.50	88
4"	3	31.50	95
Total Count/ Equivalencies	**6,439**		**7,323**

Table 6-2 shows the calculation of the meter service component of the fixed meter charge. It is calculated by dividing the total meter costs (inclusive of meter servicing costs and the portion of capacity costs previously discussed) from Table 4-16 by the total number of equivalent meters in Table 6-1 and the total number of billing periods (six). The cost is $53.09 per equivalent meter per billing period rounded up to the nearest penny.

Table 6-2: Fixed Base Charge Meter Service Component Calculation

	FY 2018-2019
Meter Services Costs	$2,332,366
Equivalent Meters	7,323
Cost per Equivalent Meter (per bill)	**$53.09**

6.2.2 *Billing and Customer Service Component*

The customer service component recovers costs associated with meter reading, customer billing and collection, as well as answering customer service calls. These costs are uniform for all meter sizes as it costs the same to bill a small meter as it does a large meter.

Table 6-3 shows the customer service component calculation. To calculate the customer component, Raftelis divides the total billing and customer service costs from Table 4-16 by the total annual bills (active meters multiplied by six billing periods) prepared by CCWD to determine the bi-monthly customer service charge component of $2.46.

Table 6-3: Billing and Customer Service Component Calculation

	FY 2018-2019
Customer Service Costs	$95,000
Annual Bills	38,634
Customer Component (per bill)[14]	**$2.46**

[14] Billing & Customer Service calculation includes all potable water accounts.

Table 6-4 shows the calculation of the proposed FY 2018-2019 rates for the fixed meter charges. The proposed rates are the sum of the meter service component and the billing and customer service component (shown as customer component). The customer component is uniform for all meter sizes. The meter services component is the cost per equivalent meter calculated in Table 6-2 multiplied by the respective meter ratio in Table 6-1. The rate comparison is relative to existing rates implemented in July 2017. The most common meter size of 5/8" experiences an increase of $3.35 relative to the current charge. All other meter sizes other than the 4" also experience increases due to recovering more rate revenue overall. The varying differences are due to harmonizing the hydraulic capacity ratios across all meter sizes using the most current industry guidance as well as the inclusion of the uniform customer component which is currently not included in the District's fixed charge calculation. While Raftelis has calculated meter charges up to 8", charges are only shown up to 4", the largest meter size currently active in the water system.

Table 6-4: Calculation of Fixed Base Charges

Meter Size	Meter Service Component	Customer Component	Proposed FY 2018-2019 Fixed Charge	Current Charge	Difference ($)	Difference (%)
5/8"	$53.09	$2.46	$55.55	$52.20	$3.35	6%
3/4"	$79.63	$2.46	$82.09	$78.45	$3.64	5%
1"	$132.72	$2.46	$135.18	$130.76	$4.42	3%
1 1/2"	$265.43	$2.46	$267.90	$252.52	$15.38	6%
2"	$424.69	$2.46	$427.16	$418.48	$8.68	2%
3"	$929.02	$2.46	$931.48	$915.50	$15.98	2%
4"	$1,672.23	$2.46	$1,674.70	$3,139.22	($1,464.52)	-47%

6.3 PROPOSED PRIVATE FIRE SERVICE CHARGES

Table 6-5 shows the derivation of the private fire service charges. The private fire costs are determined to be $137,851 (see Table 4-16). This cost is divided by the total equivalent firelines calculated in Table 4-15. Similar to rates for the fixed meter charges, private firelines use the count of total firelines (995 lines) and the ratio between the various fireline sizes to determine total equivalent lines. The fireline ratios are similar to the hydraulic capacity ratios used to determine the fixed meter charges. The fireline factor is the ratio of the specific fireline diameter relative to the base fireline diameter of 3/4". The calculated total equivalent fireline inches is 1,851.

Table 6-5: Fireline Equivalents Calculation

Fireline Diameter	Fireline Count (a)	Fire Ratio (3/4" Base) (b)	Equiv. Lines (Capacity) (a)*(b)
3/4"	10	0.75	8
1"	658	1.00	658
1 1/2"	49	1.50	74
2"	82	2.00	164
3"	4	3.00	12
4"	123	4.00	492
5"	-	5.00	-
6"	55	6.00	330
8"	13	8.00	104
10"	1	10.00	10
Total Count/ Equivalencies	**995**		**1,851**

Table 6-6 shows the calculation of the fireline service component. Dividing the total private fireline costs ($137,851) by total equivalent lines (1,851) yields the bi-monthly cost per equivalent fireline inch of $12.42 (rounded up to the nearest whole penny).

Table 6-6: Fire Service Component Calculation

	FY 2018-2019
Fire Protection Costs	$137,851
Equivalent Lines	1,851
Cost per Equivalent Fireline Inch (per bill)	**$12.42**

Table 6-7 shows the derivation of the bi-monthly rates by fireline size for the fire service charges. The cost per inch ($12.42) is multiplied by the respective fireline ratio to derive the charge for each fireline size. All firelines experience the same increase in rates due to using the same methodology in the fire flow analysis as from the prior rate study.

Table 6-7: Calculation of Private Fire Service Charges

Fireline Size	Fire Ratio (1" Base)	Proposed Fire Service Charge FY 2018-2019	Current Fire Service Charge	Difference ($)	Difference (%)
3/4"	0.75	$9.31	$8.57	$0.74	9%
1"	1.00	$12.42	$11.43	$0.99	9%
1 1/2"	1.50	$18.62	$17.15	$1.48	9%
2"	2.00	$24.83	$22.86	$1.97	9%
3"	3.00	$37.24	$34.29	$2.95	9%
4"	4.00	$49.65	$45.72	$3.93	9%
5"	5.00	$62.07	$57.15	$4.92	9%
6"	6.00	$74.48	$68.58	$5.90	9%
8"	8.00	$99.30	$91.44	$7.86	9%
10"	10.00	$124.13	$114.30	$9.83	9%

6.4 PROPOSED RATES FOR COMMODITY CHARGES

6.4.1 *Unit Cost Components Definitions*

The rates for the commodity charges for each customer class and tier are derived by summation of the unit rates ($/hcf) for:

1. Supply costs (Variable Supply cost component)
2. Delivery costs (Base cost component)
3. Max Day and Max Hour capacity costs (Peaking component)
4. Conservation costs (Conservation component)
5. Revenue Offsets (Non-Rate revenue component)

Variable Supply are costs related to the production of local water and purchase of imported water to meet customer demand. CCWD maintains two sources of supply. These variable supply costs form the foundation of the rate components.

Delivery, also known as base, are the costs associated with obtaining and treating water to make it ready for transmission and distribution, as well as the operating costs associated with delivering water to all customers at a constant and average rate of use – also known as serving customers under average daily demand conditions. Therefore, base costs are spread over all units of water uniformly, irrespective of customer class or tier.

Peaking, or extra-capacity, costs are costs incurred to meet customer peak demands in excess of base use (or average daily demand). Total extra capacity costs are comprised of maximum day and maximum hour demands. The peaking costs are distributed to each class and tier using peaking factors derived from customer use data.

Conservation costs cover water conservation and efficiency programs and efforts. These programs are targeted to high volume water users. Allocation of conservation costs to the commodity rates helps provide a price signal for conservation, consistent with Article X Section 2 of the State of California Constitution

Revenue Offsets are the non-rate revenues available to the District to reduce the commodity rates in the lower tiers to promote affordability and efficient use. Revenue offsets consist of direct property tax revenue and cell site lease income. These funds allow flexibility in the rate design process to achieve policy objectives while maintaining cost of service principles.

6.4.1.1 Variable Supply Unit Cost

The variable supply cost is the cost to produce and purchase water supply. The costs in Table 6-8 are based on FY 2018-2019 water supply costs from the respective sources and were provided by CCWD staff as part of the draft budget. The water unit cost is the cost of purchasing SFPUC water and includes estimated fixed and variable charges from the purveyor. Additional supply costs to SFPUC relate to Crystal Springs Reservoir pump station. Additional supply costs to surface water and groundwater represent the remainder of the supply component from Table 4-16 not attributable to SFPUC purchases. These costs include operations and maintenance of the District's local intakes and wells as well as capital facilities associated with the Denniston water supplies.

Table 6-8: Water Supply Costs, FY 2018-2019

Source of Supply	Average Production/ Purchase (AF)	Average Production/ Purchase (hcf)	Water Cost ($)	Additional Supply Costs ($/AF)	Total Cost ($/AF)
Surface Water	598	260,556	$0	$203,964	$341
Groundwater	264	114,896	$0	$89,940	$341
SFPUC	1,039	452,500	$1,900,998	$337,080	$2,155

The water supply unit cost converts the cost per AF to cost per hcf (748 gallons). The unit cost for each source is calculated to include a five percent water system loss. The water supply costs and water availability in Table 6-9 are used in the water supply unit cost calculation for each class and tier.

Table 6-9: Water Supply Unit Costs, FY 2018-2019

	Surface Water	Groundwater	Purchased SFPUC
Supply to Meet Demand (hcf)	260,556	114,896	452,500
Cost ($/AF)	$341	$341	$2,155
Unit Cost ($/hcf)	$0.78	$0.78	$4.95
Unit Cost ($/hcf) after loss[15]	$0.83	$0.83	$5.21

Table 6-10 shows estimated total demand in FY 2018-2019 for all customer classes and tiers.

Table 6-10: Estimated Water Demand in FY 2018-2019

Class	hcf
SFR	
Tier 1	246,360
Tier 2	108,265
Tier 3	61,278
MFR	43,988
All Other Customers	328,634
Total	**788,525**

Given the water available from each source (Table 6-9), and allocating available water proportional to the demands of each class, the estimated water required to meet demand for each class is shown in Table 6-11.

Table 6-11: Supply to Meet Demand, by Source

	Annual Usage	Surface Water	Groundwater	Purchased SFPUC
SFR	415,904	130,557	57,571	227,775
MFR	43,988	13,808	6,089	24,091
All Other Customers	328,634	103,162	45,491	179,981
Total	**788,525**	**247,528**	**109,151**	**431,846**

[15] Unit cost accounts for an estimated 5 percent system-wide water loss. The loss is allocated to all sources.

The unit rates for variable supply costs are derived in Table 6-12. Total costs are determined as the sum-products of the unit rates (after loss) from Table 6-9 and the water required in each tier from Table 6-12. For example, meeting demand in SFR Tier 1 requires all local surface and groundwater allocated to the class (130,557 hcf surface and 57,571 hcf groundwater) as well as SFPUC purchased water (58,231 hcf) with respective unit costs of $0.83, $0.83, and $5.21 per hcf, respectively. The blended cost of meeting demand in Tier 1 is $1.87 per hcf.

Table 6-12: Variable Supply Unit Cost Calculation, by Class and Tier ($/hcf)

Class	Annual Usage	Surface Water	Groundwater	Purchased SFPUC	Unit Cost ($/hcf)
Unit Cost of Supply		$0.83	$0.83	$5.21	
SFR					
Tier 1	246,360	130,557	57,571	58,231	$1.87
Tier 2	108,265	-	-	108,265	$5.21
Tier 3	61,278	-	-	61,278	$5.21
Total	**415,904**	**130,557**	**57,571**	**227,775**	
MFR	**43,988**	**13,808**	**6,089**	**24,091**	**$3.23**
All Other Customers	**328,634**	**103,162**	**45,491**	**179,981**	**$3.23**
Total	**788,525**	**247,528**	**109,151**	**431,846**	

6.4.1.2 *Delivery Unit Cost*

Base delivery costs are the costs to deliver water under average daily demand conditions. Dividing estimated annual usage by total base costs (Table 4-16) derives the cost to provide water delivery during average conditions. The calculated base unit cost is presented in Table 6-13. The base unit cost is the same for all classes and tiers. The unit cost is rounded up to the nearest whole penny.

Table 6-13: Base Delivery Unit Cost Calculation

Class and Tier	Projected Demand
SFR	
Tier 1	246,360
Tier 2	108,265
Tier 3	61,278
MFR	43,988
All Other Customers	328,634
Total	**788,525**
Delivery Costs ($)	**$4,763,701**
Delivery Unit Cost ($/hcf)	**$5.62**

6.4.1.3 *Peaking Unit Cost*

Table 6-14 provides customer class peaking factors. These factors are determined by analyzing FY 2016-2017 data and identifying the maximum billing period of use and dividing that amount by the average period use. For the derivation of intra-class peaking cost components, we must derive peaking factors *within* the tiers. The peaking ratios shown are derived by analyzing CCWD water

usage while utilizing the revised tier definitions (Table 5-4). As with calculating the class peaking factor, the tier factors are calculated by dividing the maximum period of use by the average period of use. For each tier, Raftelis determined the average use within the tier throughout the year (six billing periods). Next, Raftelis identified the maximum use period for the tier during the year. Dividing the maximum and average gives a factor of max-to-average. Table 6-14 shows the calculated class and tier peaking factors.

Table 6-14: Class and Tier Peaking Factors

Usage	Max Billing Period Use	Average Billing Period Use	Max / Average
Residential			
Tier 1	39,777	38,195	1.04
Tier 2	21,644	16,785	1.29
Tier 3	17,221	9,500	1.81
MFR	7,305	6,820	1.07
All Other Customers[16]	51,983	40,890	1.27

Table 6-15 shows the unit cost calculation for peaking. Projected demand in each class (Column A) is multiplied by the respective peaking factor (Column B) to derive total weighted units (peaking units) in Column C for each class. The relative share of peaking units (Column D) is calculated for each class which allows the total peaking costs ($2,944,838) to be distributed in proportion to peak demand. Once the peaking costs are distributed to each class, the unit cost is calculated by dividing the revenue required (column E) by the water demanded by each class (Column A). The same process is repeated to determine the unit cost for each tier of the SFR class. Unit costs are rounded to the nearest whole penny.

[16] Excludes demand from the District's single raw water customer as their use is highly variable and not representative of other commercial or irrigation users.

Table 6-15: Peaking Unit Cost Calculation

Customer Class/Tier	Annual Usage	Peaking Factor	Weighted Use	% Allocated	Revenue Requirement	Unit Rate ($/hcf)
	A	B	C = A x B	D = C_i/C_{Total}	E = D_i x Peaking Costs[17]	F = E/A
SFR	415,904	1.97	820,205	52.2%	$1,536,601	$3.70
MFR	43,988	1.73	76,188	4.8%	$142,734	$3.25
All Other Customers	328,634	2.06	675,499	43.0%	$1,265,503	$3.86
Total	**788,525**		**1,571,892**	**100%**	**$2,944,838**	**$3.73**
Residential	**Usage by Tier**	**Peaking Factor**	**Weighted Use**	**% Allocated**	**Revenue Requirement**	**Unit Rate ($/hcf)**
SFR Tier 1	246,360	1.04	256,562	50.6%	$777,210	$3.16
SFR Tier 2	108,265	1.29	139,604	27.5%	$422,906	$3.91
SFR Tier 3	61,278	1.81	111,075	21.9%	$336,484	$5.50
Total	**415,904**		**507,241**	**100%**	**$1,536,601**	**$3.69**

6.4.1.4 *Conservation Unit Cost*

CCWD's water conservation programs offer a variety of solutions to reduce water use for all customers served by the District. Water conservation offsets the demand for potable water and more expensive imported water and is a low-cost water supply available to all utilities. These programs ensure reliable future water supply for all rate payers and reduce expensive imported water purchases. Accordingly, CCWD finds it appropriate to allocate conservation costs to SFR Tier 3 use, MFR use, and All Other Customers use. Conservation unit costs are derived similarly to peaking unit costs by distributing the conservation revenue requirement first to the class and then to the SFR tier based on units demanded. Table 6-16 shows the calculation for the conservation unit cost, with each unit rate rounded to the nearest whole penny.

[17] Max Day and Max Hour costs from Table 4-16

Table 6-16: Conservation Unit Cost Calculation

Customer Class/Tier	Annual Usage	% Allocated	Revenue Requirement	Unit Rate ($/hcf)
	A	B	C = B_i x Conserv. Costs[18]	D = C/A
SFR	415,904	53%	$68,446	$0.17
MFR	43,988	6%	$7,239	$0.17
All Other Customers	328,634	42%	$54,084	$0.17
Total	**788,525**	**100%**	**$129,769**	
Residential	**Usage by Tier**	**% Allocated**	**Revenue Requirement**	**Unit Rate ($/hcf)**
SFR Tier 1		0%	$0	$0.00
SFR Tier 2		0%	$0	$0.00
SFR Tier 3	61,278	100%	$68,446	$1.12
Total	**61,278**	**100%**	**$68,446**	

[18] Max Day and Max Hour costs from Table 4-16

6.4.1.5 *Revenue Offset Unit Cost*

Revenue offsets are applied to all units of water demanded by all classes and tiers. Table 6-17 shows the revenue offset unit cost and revenue offset component rate calculation. Revenue offsets are allocated based on the share of accounts in each of the three customer classes. For example, SFR accounts represent 85 percent of total accounts and, therefore, receive 85 percent of the revenue offset value. The amount of revenue offset for each class is divided by the respective annual usage to derive the unit cost. Unit costs are rounded to the nearest whole penny.

Table 6-17: Revenue Offset Unit Cost Calculation

Class and Tier	Allocation %	Revenue Offset ($)	Annual Usage (hcf)	Unit Cost ($/hcf)
SFR	85%	($758,837)	415,904	($1.82)
MFR	3%	($22,257)	43,988	($0.50)
All Other Customers	12%	($108,907)	328,634	($0.33)
Total	**100%**	**($890,000)**	**788,525**	

6.4.2 *Final Commodity Rates Derivation*

The cost of service based rates are shown in Column H of Table 6-18. To determine the commodity rates, the components detailed above are added together. The summation of columns C through G of Table 6-18 constitutes the final rates. Note the COS rates represent FY 2018-2019 rates inclusive of the proposed increase in revenue over FY 2017-2018.

Table 6-18: Proposed Commodity Rates ($/hcf)

Class and Tier	Tier Definition	Supply	Base	Peaking	Conservation	Revenue Offset	COS Rates ($/hcf)
A	B	C	D	E	F	G	H
	Table 5-4	Table 6-12	Table 6-13	Table 6-15	Table 6-16	Table 6-17	
SFR							
Tier 1	0-8	$1.87	$5.62	$3.16	$0.00	($1.82)	**$8.83**
Tier 2	9-16	$5.21	$5.62	$3.91	$0.00	($1.82)	**$12.92**
Tier 3	>16	$5.21	$5.62	$5.50	$1.12	($1.82)	**$15.63**
MFR	Uniform	$3.23	$5.62	$3.25	$0.17	($0.50)	**$11.77**
All Other Customers	Uniform	$3.23	$5.62	$3.86	$0.17	($0.33)	**$12.55**

6.5 WATER CUSTOMER IMPACTS

The rate model calculates water customer impacts for all classes and meter sizes. Customer impacts from the proposed new rates are presented below for each class.

Figure 6-1 illustrates the current and proposed tier breakpoints and corresponding rate per hcf. The proposed structure has three tiers versus the existing structure of four tiers. The proposed rate structure doubles Tier 1 from 4 hcf to 8 hcf bi-monthly and has the same breakpoint for Tier 2 (16 hcf bi-monthly). The proposed Tier 3 is all units greater than 16 hcf bi-monthly with a price that is between that of the existing Tier 3 and Tier 4.

Figure 6-1: Current and Proposed SFR Tiers

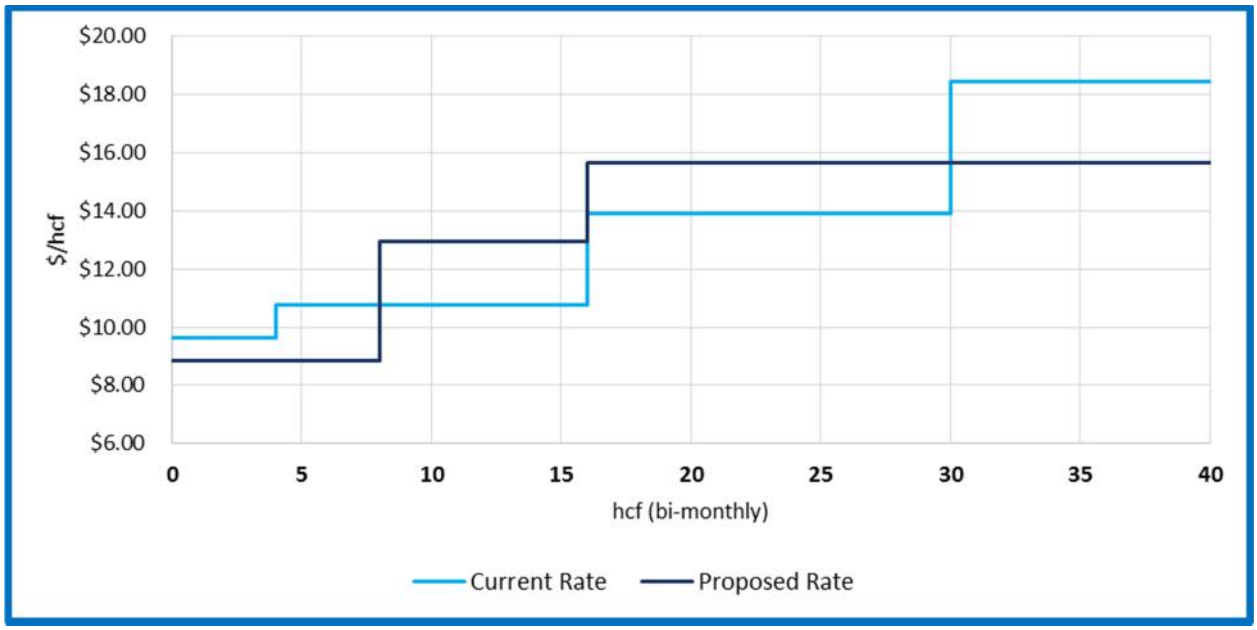


Figure 6-2 shows a range of bill impacts to SFR customers. Raftelis recalculates each bill for every customer using FY 2017-2018 rates to determine the billed amount under current and proposed rates. This allows us to calculate the difference between the two for every bill generated and provide a distribution across the class.

Figure 6-2: Bill Impacts - SFR

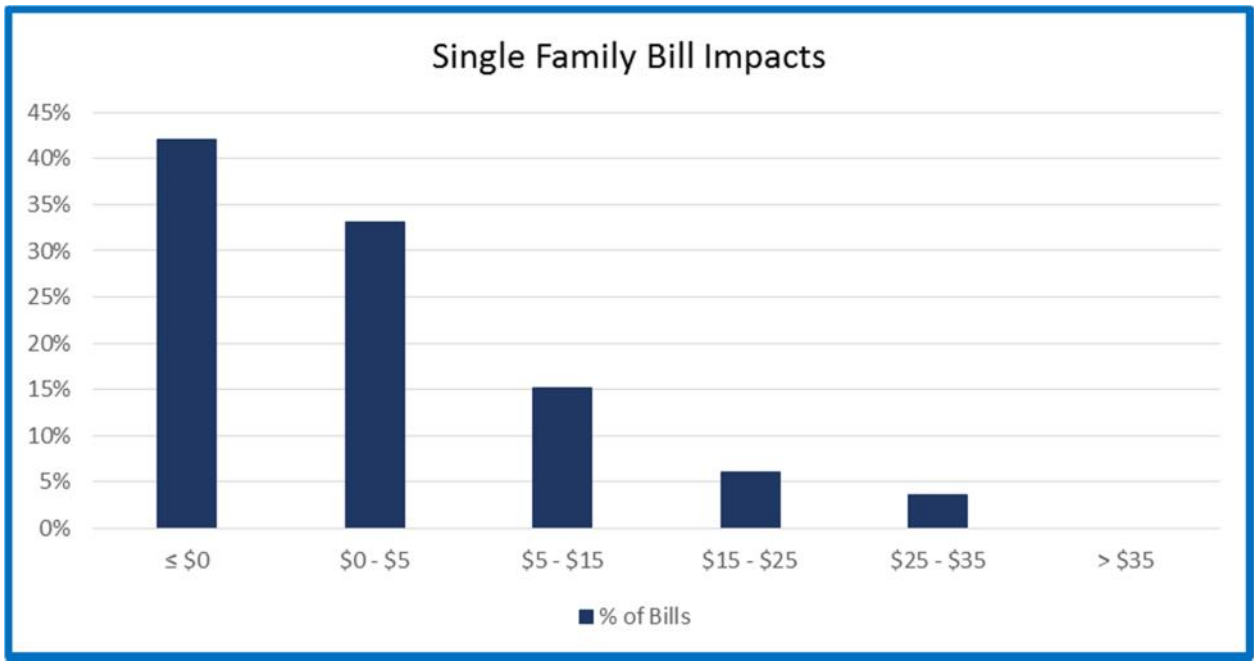


Figure 6-3 shows the impacts to a SFR customer with a 5/8" meter using 12 hcf bi-monthly, near the District' median. With the proposed rates, the customer will experience an increase of $0.91 or 0.5 percent bi-monthly compared to existing rates. This is due to a $3.35 increase in the base charge and a $2.44 decrease in the commodity charge.

Figure 6-3: Bill Impacts – Median SFR Use

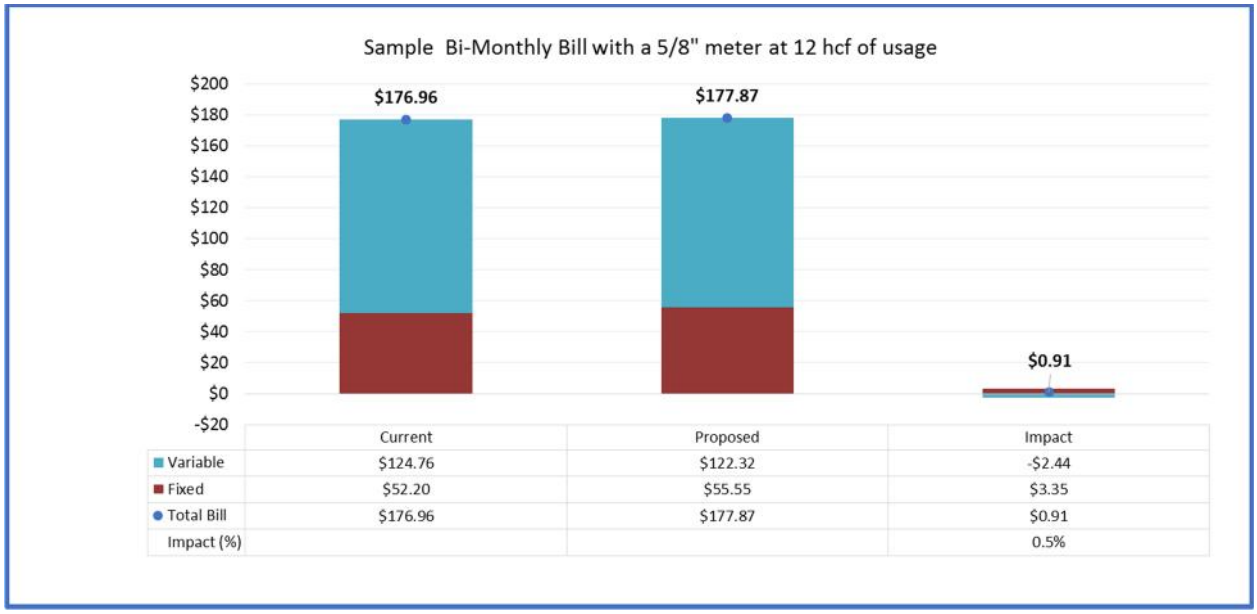
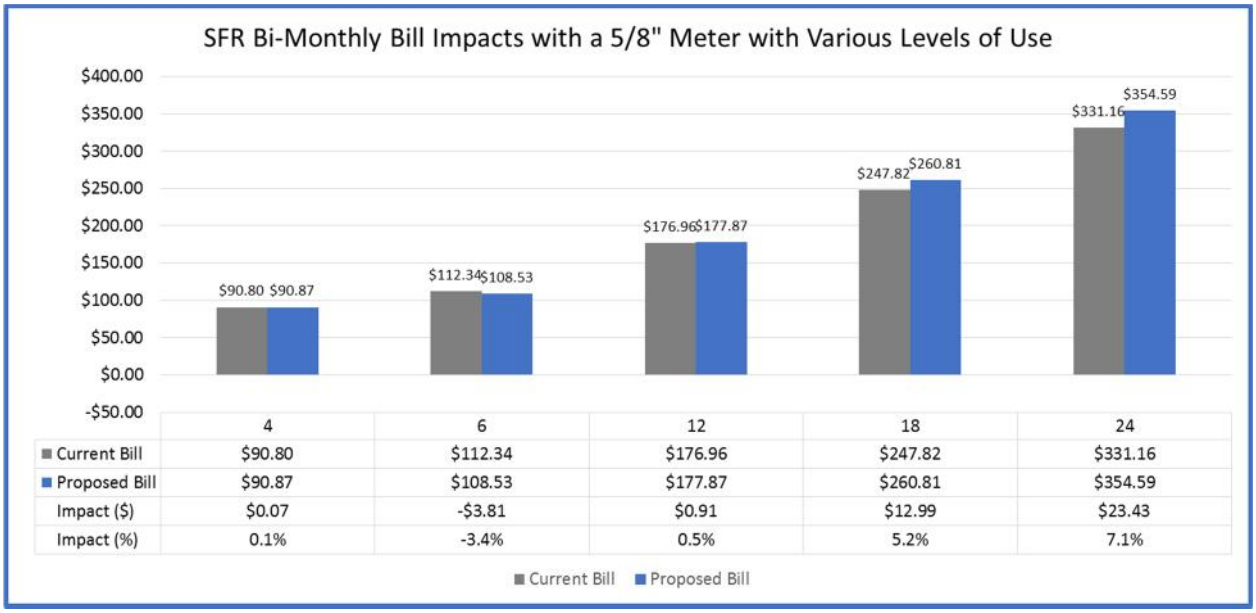


Figure 6-4 calculates bills for a SFR account with a 5/8" meter at different levels of use. Bills are calculated at current rates and tiers and compared to proposed rates and tiers. The figure shows the percentage and dollar change between current and proposed rates and tiers. The levels of use shown represent very low, low, median, high, and very high users.

Figure 6-4: Bill Impacts - Single Family Residential with 5/8" Meter



	4	6	12	18	24
Current Bill	$90.80	$112.34	$176.96	$247.82	$331.16
Proposed Bill	$90.87	$108.53	$177.87	$260.81	$354.59
Impact ($)	$0.07	-$3.81	$0.91	$12.99	$23.43
Impact (%)	0.1%	-3.4%	0.5%	5.2%	7.1%

7. SECOND YEAR RATES

The District has adopted a budget for FY 2019-2020 which estimates a four percent increase in revenue requirement. This increase is due in part to inflationary pressures on operating and capital costs and in part due to additional reserve funding to achieve the District's financial reserves policies over the long term.

The second year rates will use the cost of service and rates developed in Section 4 and Section 6 as the basis and will increase all rates "across the board" by four percent relative to FY 2018-2019 rates. Major cost drivers of an agency generally do not change year to year. That is, sources of supply, supply mix, customer base, and usage characteristics among others may change slowly over time necessitating an updated cost of service. From our experience, a best practice is to perform an updated cost of service every three to five years to ensure system costs are recovered appropriately and adequately.

Table 7-1, Table 7-2, and Table 7-3 show all proposed rates and charges for FY 2018-2019 and FY 2020.

Table 7-1: Proposed Two-Year Rates for Bi-Monthly Base Charges ($/Meter Size)

Meter Size	FY 2018-2019	FY 2020	$ Difference	% Difference
5/8"	$55.55	$57.78	$2.23	4%
3/4"	$82.09	$85.38	$3.29	4%
1"	$135.18	$140.59	$5.41	4%
1-1/2"	$267.90	$278.62	$10.72	4%
2"	$427.16	$444.25	$17.09	4%
3"	$931.48	$968.74	$37.26	4%
4"	$1,674.70	$1,741.69	$66.99	4%

Table 7-2: Proposed Two-Year for the Water Commodity Rates ($/hcf)

Customer Class & Tier	FY 2018-2019	FY 2020	$ Difference	% Difference
SFR				
Tier 1	$8.83	$9.19	$0.36	4%
Tier 2	$12.92	$13.44	$0.52	4%
Tier 3	$15.63	$16.26	$0.63	4%
MFR	$11.77	$12.25	$0.48	4%
All Other Customers	$12.55	$13.06	**$0.51**	4%

Table 7-3: Proposed Two-Year Rates for Private Fire Service Charges ($/Line Size)

Fireline Size	FY 2018-2019	FY 2020	$ Difference	% Difference
3/4"	$9.31	$9.69	$0.38	4%
1"	$12.42	$12.92	$0.50	4%
1-1/2"	$18.62	$19.37	$0.75	4%
2"	$24.83	$25.83	$1.00	4%
3"	$37.24	$38.73	$1.49	4%
4"	$49.65	$51.64	$1.99	4%
5”	$62.07	$64.56	$2.49	4%
6"	$74.48	$77.46	$2.98	4%
8"	$99.30	$103.28	$3.98	4%
10"	$124.13	$129.10	$4.97	4%

8. APPENDICES

8.1 FY 2018-2019 O&M EXPENSE ALLOCATION DETAIL

Description	Function	Supply	Base	Max Day	Max Hour	Fire Protection	Meters	Customer	Conservation	General	Total
Water Purchased	Supply	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Electrical Exp. Nunes WTP	Treatment	0%	62%	38%	0%	0%	0%	0%	0%	0%	100%
Electrical Expenses, CSP	Supply	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Electrical Expenses/Trans. & Dist.	Transmission	0%	62%	38%	0%	0%	0%	0%	0%	0%	100%
Elec Exp/Pilarcitos Cyn	Pumping	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Electrical Exp., Denn	Pumping	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
CSP - Operation	Transmission	0%	62%	38%	0%	0%	0%	0%	0%	0%	100%
CSP - Maintenance	Transmission	0%	62%	38%	0%	0%	0%	0%	0%	0%	100%
Nunes WTP Oper	Treatment	0%	62%	38%	0%	0%	0%	0%	0%	0%	100%
Nunes WTP Maint	Treatment	0%	62%	38%	0%	0%	0%	0%	0%	0%	100%
Denn. WTP Oper.	Treatment	0%	62%	38%	0%	0%	0%	0%	0%	0%	100%
Denn WTP Maint	Treatment	0%	62%	38%	0%	0%	0%	0%	0%	0%	100%
Laboratory Expenses	Treatment	0%	62%	38%	0%	0%	0%	0%	0%	0%	100%
Maintenance Expenses	Distribution	0%	31%	19%	33%	18%	0%	0%	0%	0%	100%
Maintenance, Wells	Treatment	0%	62%	38%	0%	0%	0%	0%	0%	0%	100%
Uniforms	Distribution	0%	31%	19%	33%	18%	0%	0%	0%	0%	100%
Studies/Surveys/Consulting	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Water Resources	Conservation	0%	0%	0%	0%	0%	0%	0%	100%	0%	100%
Community Outreach	Conservation	0%	0%	0%	0%	0%	0%	0%	100%	0%	100%
Legal	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Engineering	Distribution	0%	31%	19%	33%	18%	0%	0%	0%	0%	100%
Financial Services	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Computer Services	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Salaries, Admin.	Ops/Meters/Customer	0%	35%	22%	38%	0%	0%	5%	0%	0%	100%
Salaries - Field	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Payroll Taxes	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Employee Medical Insurance	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Retiree Medical Insurance	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Employee Retirement	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
SIP 401a Plan	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Motor Vehicle Exp.	Distribution	0%	31%	19%	33%	18%	0%	0%	0%	0%	100%
Office & Billing Expenses	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Meetings/Training/Seminars	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Insurance	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Memberships & Subscriptions	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Election Expense	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Union Expenses	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
County Fees	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
State Fees	General	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%

8.1 FY 2018-2019 O&M EXPENSE ALLOCATION DETAIL

Description		Supply	Base	Max Day	Max Hour	Fire Protection	Meters	Customer	Conservation	General	Total
Water Purchased	Supply	$1,900,998	$0	$0	$0	$0	$0	$0	$0	$0	$1,900,998
Electrical Exp. Nunes WTP	Treatment	$0	$26,405	$16,292	$0	$0	$0	$0	$0	$0	$42,697
Electrical Expenses, CSP	Supply	$337,080	$0	$0	$0	$0	$0	$0	$0	$0	$337,080
Electrical Expenses/Trans. & Dist.	Transmission	$0	$16,677	$10,290	$0	$0	$0	$0	$0	$0	$26,966
Elec Exp/Pilarcitos Cyn	Pumping	$39,248	$0	$0	$0	$0	$0	$0	$0	$0	$39,248
Electrical Exp., Denn	Pumping	$130,000	$0	$0	$0	$0	$0	$0	$0	$0	$130,000
CSP - Operation	Transmission	$0	$6,617	$4,083	$0	$0	$0	$0	$0	$0	$10,700
CSP - Maintenance	Transmission	$0	$22,882	$14,118	$0	$0	$0	$0	$0	$0	$37,000
Nunes WTP Oper	Treatment	$0	$48,145	$29,705	$0	$0	$0	$0	$0	$0	$77,850
Nunes WTP Maint	Treatment	$0	$75,758	$46,742	$0	$0	$0	$0	$0	$0	$122,500
Denn. WTP Oper.	Treatment	$0	$29,066	$17,934	$0	$0	$0	$0	$0	$0	$47,000
Denn WTP Maint	Treatment	$0	$62,987	$38,863	$0	$0	$0	$0	$0	$0	$101,850
Laboratory Expenses	Treatment	$0	$44,187	$27,263	$0	$0	$0	$0	$0	$0	$71,450
Maintenance Expenses	Distribution	$0	$89,112	$54,981	$95,101	$52,506	$0	$0	$0	$0	$291,700
Maintenance, Wells	Treatment	$0	$24,737	$15,263	$0	$0	$0	$0	$0	$0	$40,000
Uniforms	Distribution	$0	$3,819	$2,356	$4,075	$2,250	$0	$0	$0	$0	$12,500
Studies/Surveys/Consulting	General	$0	$0	$0	$0	$0	$0	$0	$0	$160,000	$160,000
Water Resources	Conservation	$0	$0	$0	$0	$0	$0	$0	$25,200	$0	$25,200
Community Outreach	Conservation	$0	$0	$0	$0	$0	$0	$0	$54,700	$0	$54,700
Legal	General	$0	$0	$0	$0	$0	$0	$0	$0	$100,000	$100,000
Engineering	Distribution	$0	$18,329	$11,309	$19,561	$10,800	$0	$0	$0	$0	$60,000
Financial Services	General	$0	$0	$0	$0	$0	$0	$0	$0	$20,000	$20,000
Computer Services	General	$0	$0	$0	$0	$0	$0	$0	$0	$163,600	$163,600
Salaries, Admin.	Ops/Meters/Customer	$0	$400,635	$247,189	$427,564	$0	$0	$58,493	$0	$0	$1,133,881
Salaries - Field	General	$0	$0	$0	$0	$0	$0	$0	$0	$1,400,505	$1,400,505
Payroll Taxes	General	$0	$0	$0	$0	$0	$0	$0	$0	$177,733	$177,733
Employee Medical Insurance	General	$0	$0	$0	$0	$0	$0	$0	$0	$444,246	$444,246
Retiree Medical Insurance	General	$0	$0	$0	$0	$0	$0	$0	$0	$50,659	$50,659
Employee Retirement	General	$0	$0	$0	$0	$0	$0	$0	$0	$598,859	$598,859
SIP 401a Plan	General	$0	$0	$0	$0	$0	$0	$0	$0	$35,000	$35,000
Motor Vehicle Exp.	Distribution	$0	$18,329	$11,309	$19,561	$10,800	$0	$0	$0	$0	$60,000
Office & Billing Expenses	General	$0	$0	$0	$0	$0	$0	$0	$0	$261,600	$261,600
Meetings/Training/Seminars	General	$0	$0	$0	$0	$0	$0	$0	$0	$26,000	$26,000
Insurance	General	$0	$0	$0	$0	$0	$0	$0	$0	$129,000	$129,000
Memberships & Subscriptions	General	$0	$0	$0	$0	$0	$0	$0	$0	$75,970	$75,970
Election Expense	General	$0	$0	$0	$0	$0	$0	$0	$0	$25,000	$25,000
Union Expenses	General	$0	$0	$0	$0	$0	$0	$0	$0	$6,000	$6,000
County Fees	General	$0	$0	$0	$0	$0	$0	$0	$0	$20,000	$20,000
State Fees	General	$0	$0	$0	$0	$0	$0	$0	$0	$36,500	$36,500
Total O&M Allocated		**$2,407,325**	**$887,686**	**$547,696**	**$565,863**	**$76,356**	**$0**	**$58,493**	**$79,900**	**$3,730,672**	**$8,353,991**
% O&M Allocated		28.8%	10.6%	6.6%	6.8%	0.9%	0.0%	0.7%	1.0%	44.7%	100%
		Supply	Base	Max Day	Max Hour	Fire Protection	Meters	Customer	Conservation	General	Total

8.1 ASSET SCHEDULE SUMMARY (AS OF FY 2018-2019)

Asset Category	Function	Original Cost (OC)	Accumulated Depreciation (AD)	Book Value (OC -AC)	Work In Progress	Net Value
breakout	GENERAL	$0	$0	$0		$0
BUILDINGS	GENERAL	$1,006,051	$310,014	$696,037		$696,037
DISTRIBUTION	DISTRIBUTION	$26,439,163	$8,772,503	$17,666,659	$2,533,601	$20,200,260
FIRE	HYDRANTS	$526,726	$136,078	$390,647		$390,647
GENERAL	GENERAL	$1,400,458	$495,638	$904,821		$904,821
Land/Easements	N/A	$138,975	$0	$138,975		$138,975
METERS	METERS	$546,266	$125,715	$420,552	$445,231	$865,783
TANKS	RESERVOIR	$5,267,330	$1,539,410	$3,727,920	$747,441	$4,475,361
TRANSMISSION	TRANSMISSION	$19,111,820	$8,683,403	$10,428,416	$467,474	$10,895,890
TREATMENT	TREATMENT	$19,499,091	$8,366,281	$11,132,810	$510,059	$11,642,869
VEHICLES	GENERAL	$491,834	$406,787	$85,046		$85,046
WATER SUPPLY	PUMPING	$188,217	$111,913	$76,304	$1,193,633	$1,269,937
WELLS	PUMPING	$568,499	$321,550	$246,949		$246,949
	Total	**$75,184,429**	**$29,269,292**	**$45,915,136**	**$5,897,439**	**$51,812,575**
		TRUE	TRUE	TRUE	Less Land	$51,673,601

EXHIBIT B

FINAL - APPROVED 6.9.2020

Updated: 7/29/2020 4:22 PM

YEAR 1 Operations & Maintenance Budget - FY 2020-2021

Account Number	Description	Approved 6.9.2020 FY2020/21 Budget	Approved FY 2019/20 Budget	FY20/21 Budget Vs. FY 19/20 Budget $ Change	FY20/21 Budget Vs. FY 19/20 Budget % Change	Proj Year End FY19/20	FY 20/21 Budget Vs. FY 19/20 Projected Actual $ Change	FY 20/21 Budget Vs. FY 19/20 Projected Actual % Change	YTD Actual FY 19/20 as of May 31, 2020
OPERATING REVENUE									
4120	*Water Sales **	***$12,096,000***	***$12,300,000***	*-$204,000*	-1.7%	**$12,300,000**	-$204,000	**-1.7%**	$11,388,827
	Water Sales in MG	*580 MG*	*598 MG*						
Total Operating Revenue		***$12,096,000***	***$12,300,000***	***-$204,000***	**-1.7%**	**$12,300,000**	**-$204,000**	**-1.7%**	**$11,388,827**
NON-OPERATING REVENUE									
4170	Hydrant Sales	**$50,000**	$50,000	$0	0.0%	$55,000	-$5,000	-9.1%	$53,501
4180	Late Penalty	**$25,000**	$60,000	-$35,000	-58.3%	$52,889	-$27,889	-52.7%	$52,889
4230	Service Connections	**$10,000**	$10,000	$0	0.0%	$10,494	-$494	-4.7%	$10,494
4920	Interest Earned	**$56,250**	$6,270	$49,980	797.1%	$80,000	-$23,750	-29.7%	$87,461
4930	Property Taxes	**$750,000**	$725,000	$25,000	3.4%	$860,647	-$110,647	-12.9%	$860,647
4950	Miscellaneous	**$7,000**	$25,000	-$18,000	-72.0%	$28,863	-$21,863	-75.7%	$28,863
4955	Cell Site Lease Income	**$179,000**	$171,300	$7,700	4.5%	$171,300	$7,700	4.5%	$154,113
4965	ERAF Refund	**$375,000**	$338,000	$37,000	10.9%	$501,486	-$126,486	-25.2%	$501,487
Total Non-Operating Revenue		**$1,452,250**	**$1,385,570**	**$66,680**	**4.8%**	**$1,760,679**	**-$308,429**	**-17.5%**	**$1,749,455**
TOTAL REVENUES		**$13,548,250**	**$13,685,570**	**-$137,320**	**-1.0%**	**$14,060,679**	**-$512,429**	**-3.6%**	**$13,138,282**
OPERATING EXPENSES									
5130	Water Purchased	**$ 2,114,940**	$1,771,945	$342,995	19.4%	$1,842,720	$272,220	14.8%	$1,620,822
5130A	BAWSCA Bond Surcharge	**$226,620**	$170,003	$56,617	33.3%	$107,280	$119,340	111.2%	$98,340
5230	Electrical Exp. Nunes WTP	**$41,000**	$45,259	-$4,259	-9.4%	$39,000	$2,000	5.1%	$34,614
5231	Electrical Expenses, CSP	**$350,000**	$357,305	-$7,305	-2.0%	$300,000	$50,000	16.7%	$256,689
5232	Electrical Expenses/Trans. & Dist.	**$21,000**	$28,584	-$7,584	-26.5%	$20,000	$1,000	5.0%	$15,680
5233	Elec Exp/Pilarcitos Cyn	**$43,000**	$42,000	$1,000	2.4%	$42,000	$1,000	2.4%	$32,322
5234	Electrical Exp., Denn	**$110,000**	$137,800	-$27,800	-20.2%	$120,000	-$10,000	-8.3%	$107,310
5242	CSP - Operation	**$16,500**	$11,128	$5,372	48.3%	$16,000	$500	3.1%	$14,270
5243	CSP - Maintenance	**$37,000**	$37,000	$0	0.0%	$37,000	$0	0.0%	$29,419
5246	Nunes WTP Oper	**$90,000**	$80,964	$9,036	11.2%	$85,000	$5,000	5.9%	$70,857
5247	Nunes WTP Maint	**$125,000**	$122,500	$2,500	2.0%	$85,000	$40,000	47.1%	$90,365
5248	Denn. WTP Oper.	**$55,000**	$49,000	$6,000	12.2%	$60,000	-$5,000	-8.3%	$57,829
5249	Denn WTP Maint	**$132,000**	$104,000	$28,000	26.9%	$150,000	-$18,000	-12.0%	$141,670
5250	Laboratory Expenses	**$75,000**	$75,000	$0	0.0%	$75,000	$0	0.0%	$54,594
5260	Maintenance Expenses	**$348,500**	$300,000	$48,500	16.2%	$335,000	$13,500	4.0%	$295,904
5261	Maintenance, Wells	**$30,000**	$40,000	-$10,000	-25.0%	$44,630	-$14,630	-32.8%	$44,630
5263	Uniforms	**$10,000**	$12,500	-$2,500	-20.0%	$10,000	$0	0.0%	$5,230
5318	Studies/Surveys/Consulting	**$150,000**	$160,000	-$10,000	-6.3%	$125,000	$25,000	20.0%	$87,171
5321	Water Resources	**$26,000**	$26,200	-$200	-0.8%	$6,000	$20,000	333.3%	$3,399
5322	Community Outreach	**$58,400**	$56,900	$1,500	2.6%	$55,000	$3,400	6.2%	$33,630
5381	Legal	**$100,000**	$100,000	$0	0.0%	$145,000	-$45,000	-31.0%	$128,985
5382	Engineering	**$66,000**	$62,000	$4,000	6.5%	$100,000	-$34,000	-34.0%	$74,495
5383	Financial Services	**$22,000**	$22,000	$0	0.0%	$22,000	$0	0.0%	$11,382
5384	Computer Services	**$211,500**	$167,600	$43,900	26.2%	$195,000	$16,500	8.5%	$152,638
5410	Salaries, Admin.	**$1,223,311**	$1,179,832	$43,479	3.7%	$1,050,000	$173,311	16.5%	$922,333
5411	Salaries - Field	**$1,501,399**	$1,461,020	$40,380	2.8%	$1,450,000	$51,399	3.5%	$1,280,906
5420	Payroll Taxes	**$191,701**	$183,582	$8,119	4.4%	$190,000	$1,701	0.9%	$163,561
5435	Employee Medical Insurance	**$511,400**	$481,419	$29,982	6.2%	$455,000	$56,400	12.4%	$410,372
5436	Retiree Medical Insurance	**$69,562**	$55,274	$14,288	25.8%	$54,000	$15,562	28.8%	$46,335
5440	Employee Retirement	**$496,240**	$619,321	-$123,082	-19.9%	$450,000	$46,240	10.3%	$398,523

FINAL - APPROVED 6.9.2020

Updated: 7/29/2020 4:22 PM

YEAR 1 Operations & Maintenance Budget - FY 2020-2021

Account Number	Description	Approved 6.9.2020 FY2020/21 Budget	Approved FY 2019/20 Budget	FY20/21 Budget Vs. FY 19/20 Budget $ Change	FY20/21 Budget Vs. FY 19/20 Budget % Change	Proj Year End FY19/20	FY 20/21 Budget Vs. FY 19/20 Projected Actual $ Change	FY 20/21 Budget Vs. FY 19/20 Projected Actual % Change	YTD Actual FY 19/20 as of May 31, 2020
5445	SIP 401a Plan	**$35,000**	$35,000	$0	0.0%	$35,000	$0	0.0%	$0
5510	Motor Vehicle Exp.	**$75,000**	$63,000	$12,000	19.0%	$95,000	-$20,000	-21.1%	$88,104
5620	Office & Facilities Expenses	**$163,500**	$146,219	$17,281	11.8%	$170,000	-$6,500	-3.8%	$157,203
5620A	Credit Card/bank Fees & Billing Expenses	**$150,000**	$107,000	$43,000	40.2%	$140,000	$10,000	7.1%	$122,453
5620B	Bad Debt Expense	**$50,000**	$10,000	$40,000	400.0%	$10,000	$40,000	400.0%	$6,424
5625	Meetings/Training/Seminars	**$33,000**	$27,000	$6,000	22.2%	$23,000	$10,000	43.5%	$19,940
5630	Insurance	**$159,000**	$137,000	$22,000	16.1%	$135,000	$24,000	17.8%	$114,610
5687	Memberships & Subscriptions	**$85,100**	$78,970	$6,130	7.8%	$78,970	$6,130	7.8%	$74,035
5688	Election Expense	**$30,000**	$0	$30,000		$0	$30,000		$0
5689	Labor Relations	**$6,000**	$6,000	$0	0.0%	$0	$6,000		$0
5700	County Fees	**$25,000**	$24,000	$1,000	4.2%	$24,000	$1,000	4.2%	$17,349
5705	State Fees	**$36,500**	$36,500	$0	0.0%	$36,500	$0	0.0%	$32,453
Total Operating Expenses		**$9,301,174**	**$8,630,824**	**$670,351**	**7.8%**	**$8,413,100**	**$888,074**	**10.6%**	**$7,316,846**
	CAPITAL ACCOUNTS								
5712	Existing Bonds - 2006B	**$0**	$484,831	-$484,831	-100.0%	$0	$0		$0
5715	Existing Bond-CIEDB 11-099	**$335,825**	$335,977	-$152	0.0%	$335,977	-$152	0.0%	$335,977
5716	CIEDB 16-111	**$323,357**	$323,803	-$446	-0.1%	$323,803	-$446		$323,803
5717	Chase-2018 Loan	**$433,567**		$433,567		$433,567	$0		$435,951
Total Capital Accounts		**$1,092,748**	**$1,144,611**	**-$51,863**	**-4.5%**	**$1,093,347**	**-$598**	**-0.1%**	**$1,095,731**
TOTAL REVENUE LESS TOTAL EXPENSE		**$3,154,327**	**$3,910,135**	**-$755,808**	**-19.3%**	**$4,554,232**	**-$1,399,905**	**-30.7%**	**$4,725,705**
5713	Cont. to CIP & Reserves	**$3,154,327**							

% Budgeted Increase *0%*

EXHIBIT C

Draft FY 2020/2021

Updated: 8/6/2020 11:32 AM

DRAFT Year 2 Operations & Maintenance Budget - FY 2021-2022

Account Number	Description	DRAFT FY2021/22 Budget	Approved 6.9.2020 FY2020/21 Budget	FY21/22 Budget Vs. FY 20/21 Budget $ Change	FY21/22 Budget Vs. FY 20/21 Budget % % Change
OPERATING REVENUE					
4120	*Water Sales **	***$12,464,294***	***$12,096,000***	*$368,294*	3.0%
	Water Sales in MG	*603 MG*	*580 MG*		
Total Operating Revenue		***$12,464,294***	***$12,096,000***	***$368,294***	**3.0%**
NON-OPERATING REVENUE					
4170	Hydrant Sales	**$52,000**	$50,000	$2,000	4.0%
4180	Late Penalty	**$50,000**	$25,000	$25,000	100.0%
4230	Service Connections	**$10,000**	$10,000	$0	0.0%
4920	Interest Earned	**$56,250**	$56,250	$0	0.0%
4930	Property Taxes	**$780,000**	$750,000	$30,000	4.0%
4950	Miscellaneous	**$7,000**	$7,000	$0	0.0%
4955	Cell Site Lease Income	**$184,000**	$179,000	$5,000	2.8%
4965	ERAF Refund	**$400,000**	$375,000	$25,000	6.7%
Total Non-Operating Revenue		**$1,539,250**	**$1,452,250**	**$87,000**	**6.0%**
TOTAL REVENUES		**$14,003,544**	**$13,548,250**	**$455,294**	**3.4%**
OPERATING EXPENSES					
5130	Water Purchased	**$ 2,095,101**	$2,114,940	-$19,840	-0.9%
5130A	BAWSCA Bond Surcharge	**$226,620**	$226,620	$0	0.0%
5230	Electrical Exp. Nunes WTP	**$44,800**	$41,000	$3,800	9.3%
5231	Electrical Expenses, CSP	**$275,000**	$350,000	-$75,000	-21.4%
5232	Electrical Expenses/Trans. & Dist.	**$23,000**	$21,000	$2,000	9.5%
5233	Elec Exp/Pilarcitos Cyn	**$47,000**	$43,000	$4,000	9.3%
5234	Electrical Exp., Denn	**$120,000**	$110,000	$10,000	9.1%
5242	CSP - Operation	**$17,000**	$16,500	$500	3.0%
5243	CSP - Maintenance	**$38,000**	$37,000	$1,000	2.7%
5246	Nunes WTP Oper	**$92,500**	$90,000	$2,500	2.8%
5247	Nunes WTP Maint	**$128,400**	$125,000	$3,400	2.7%
5248	Denn. WTP Oper.	**$56,500**	$55,000	$1,500	2.7%
5249	Denn WTP Maint	**$135,600**	$132,000	$3,600	2.7%
5250	Laboratory Expenses	**$77,000**	$75,000	$2,000	2.7%
5260	Maintenance Expenses	**$358,000**	$348,500	$9,500	2.7%
5261	Maintenance, Wells	**$30,800**	$30,000	$800	2.7%
5263	Uniforms	**$10,300**	$10,000	$300	3.0%
5318	Studies/Surveys/Consulting	**$154,000**	$150,000	$4,000	2.7%
5321	Water Resources	**$26,700**	$26,000	$700	2.7%
5322	Community Outreach	**$60,000**	$58,400	$1,600	2.7%
5381	Legal	**$100,000**	$100,000	$0	0.0%
5382	Engineering	**$67,800**	$66,000	$1,800	2.7%
5383	Financial Services	**$22,600**	$22,000	$600	2.7%
5384	Computer Services	**$217,300**	$211,500	$5,800	2.7%

Draft FY 2020/2021

Updated: 8/6/2020 11:32 AM

DRAFT Year 2 Operations & Maintenance Budget - FY 2021-2022

Account Number	Description	DRAFT FY2021/22 Budget	Approved 6.9.2020 FY2020/21 Budget	FY21/22 Budget Vs. FY 20/21 Budget $ Change	FY21/22 Budget Vs. FY 20/21 Budget % % Change
5410	Salaries, Admin.	**$1,278,400**	$1,223,311	$55,089	4.5%
5411	Salaries - Field	**$1,569,000**	$1,501,399	$67,601	4.5%
5420	Payroll Taxes	**$196,900**	$191,701	$5,199	2.7%
5435	Employee Medical Insurance	**$542,100**	$511,400	$30,700	6.0%
5436	Retiree Medical Insurance	**$73,700**	$69,562	$4,138	5.9%
5440	Employee Retirement	**$518,600**	$496,240	$22,360	4.5%
5445	SIP 401a Plan	**$35,000**	$35,000	$0	0.0%
5510	Motor Vehicle Exp.	**$77,100**	$75,000	$2,100	2.8%
5620	Office & Facilities Expenses	**$168,500**	$163,500	$5,000	3.1%
5620A	Credit Card/bank Fees & Billing Expenses	**$150,000**	$150,000	$0	0.0%
5620B	Bad Debt Expense	**$10,000**	$50,000	-$40,000	-80.0%
5625	Meetings/Training/Seminars	**$33,000**	$33,000	$0	0.0%
5630	Insurance	**$163,300**	$159,000	$4,300	2.7%
5687	Memberships & Subscriptions	**$87,400**	$85,100	$2,300	2.7%
5688	Election Expense	**$0**	$30,000	-$30,000	-100.0%
5689	Labor Relations	**$6,000**	$6,000	$0	0.0%
5700	County Fees	**$25,700**	$25,000	$700	2.8%
5705	State Fees	**$37,500**	$36,500	$1,000	2.7%
Total Operating Expenses		**$9,396,221**	**$9,301,174**	**$95,046**	**1.0%**
	CAPITAL ACCOUNTS				
5712	Existing Bonds - 2006B	**$0**	$0	$0	#DIV/0!
5715	Existing Bond-CIEDB 11-099	**$335,825**	$335,825	$0	0.0%
5716	CIEDB 16-111	**$322,895**	$323,357	-$462	-0.1%
5717	Chase-2018 Loan	**$435,168**	$433,567	$1,601	
Total Capital Accounts		**$1,093,888**	**$1,092,748**	**$1,140**	**0.1%**
TOTAL REVENUE LESS TOTAL EXPENSE		**$3,513,435**	**$3,154,327**	**$359,108**	**11.4%**
5713	Cont. to CIP & Reserves	**$3,513,435**			

** Water Revenue reflect 0% rate adjustments for FY2020-2021 and FY2021-2022 pending rate increases. Budget will be adjusted at a future date with approved rate increases.*

COASTSIDE COUNTY WATER DISTRICT
CIP Projects FY 20/21 to FY 29/30

FINAL - APPROVED July 14, 2020
FY20/21 to FY29/30

EXHIBIT D
8/6/2020

Project #	Project Name	FY19/20 Carryover to FY 20/21	Projected FY 20/21 to FY 29/30 Total	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY26/27	FY27/28	FY28/29	FY 29/30	Projected FY 20/21 to FY 29/30 Total
Equipment Purchase & Replacement														
06-03	SCADA/Telemetry/Electric Controls Replacement		**$ 500,000**	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 500,000
15-04	Vactor Truck/Trailer		**$ 500,000**						$ 500,000					$ 500,000
19-04	Valve truck		**$ 225,000**	$ 225,000										$ 225,000
21-08/22-05	Asset Management/ESRI GIS Software/Planning Software	$ 60,000	**$ 60,000**	$ 60,000										$ 60,000
99-02	Vehicle Fleet Replacement		**$ 320,000**			$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 320,000
	Equipment Purchase & Replacement Totals	**$ 60,000**	**$ 1,605,000**	**$ 335,000**	**$ 50,000**	**$ 90,000**	**$ 90,000**	**$ 90,000**	**$ 590,000**	**$ 90,000**	**$ 90,000**	**$ 90,000**	**$ 90,000**	**$ 1,605,000**
Facilities & Maintenance														
09-09	Fire Hydrant Replacement		**$ 1,260,000**		$ 140,000	$ 140,000	$ 140,000	$ 140,000	$ 140,000	$ 140,000	$ 140,000	$ 140,000	$ 140,000	$ 1,260,000
15-03	*District Admin/Operations Center (moved from FY25/26 to 10+ years)*		**$ -**											$ -
20-07	District Office Improvements	$ 60,000	**$ -**											$ -
18-13	Denniston WTP and Tank Road Repairs and Paving	$ 400,000	**$ -**											$ -
99-01	Meter Change Program		**$ 200,000**	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 200,000
	Facilities and Maintenance Totals	**$ 460,000**	**$ 1,460,000**	**$ 20,000**	**$ 160,000**	**$ 160,000**	**$ 160,000**	**$ 160,000**	**$ 160,000**	**$ 160,000**	**$ 160,000**	**$ 160,000**	**$ 160,000**	**$ 1,460,000**
Pipeline Projects														
13-02	Pipeline Replacement Under Creek at Pilarcitos Ave. (Strawflower)		**$ 750,000**	$ 750,000										$ 750,000
14-01	Highway 92 - Replacement of Welded Steel Line	$ 700,000	**$ 3,100,000**	$ 100,000					$ 1,000,000	$ 2,000,000				$ 3,100,000
14-27	Grandview Pipeline Replacement Project		**$ 1,650,000**		$ 1,650,000									$ 1,650,000
14-29	Replacement of Galvanized Steel Pipeline - Purissima Way		**$ 125,000**								$ 125,000			$ 125,000
14-33	Miramar Cast Iron Pipeline Replacement		**$ 2,550,000**							$ 50,000	$ 1,000,000	$ 1,500,000		$ 2,550,000
16-09	Magellan at Hwy 1/Miramar Dead Ends		**$ 450,000**								$ 450,000			$ 450,000
18-01	Pine Willow Oak Pipeline Replacement		**$ 2,300,000**							$ 2,300,000				$ 2,300,000
20-08	Highway 1 (Silver/Terrace/Grandview/Spindrift) -Replacement of Highway 1 crossings	$ 30,000	**$ 2,000,000**								$ 200,000	$ 1,800,000		$ 2,000,000
21-01	Redondo Beach Loop to St Andrews Road		**$ 125,000**			$ 125,000								$ 125,000
21-09	Miramar Tank/Pipeline Replacement (700 ft)		**$ 500,000**			$ 500,000								$ 500,000
21-10	El Granada Tank #2 Pipeline Replacement		**$ 500,000**	$ 500,000										$ 500,000
NN-00	Unscheduled CIP		**$ 3,800,000**	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 1,000,000	$ 100,000	$ 2,000,000	$ 3,800,000
	Pipeline Projects Totals	**$ 730,000**	**$ 17,850,000**	**$ 1,450,000**	**$ 1,750,000**	**$ 725,000**	**$ 100,000**	**$ 100,000**	**$ 1,100,000**	**$ 4,450,000**	**$ 2,775,000**	**$ 3,400,000**	**$ 2,000,000**	**$ 17,850,000**

COASTSIDE COUNTY WATER DISTRICT
CIP Projects FY 20/21 to FY 29/30

FINAL - APPROVED July 14, 2020
FY20/21 to FY29/30

EXHIBIT D
8/6/2020

Project #	Project Name	FY19/20 Carryover to FY 20/21	Projected FY 20/21 to FY 29/30 Total	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY26/27	FY27/28	FY28/29	FY 29/30	Projected FY 20/21 to FY 29/30 Total
Pump Stations/Tanks/Wells														
21-07	Carter Hill Tank Improvement Project		**$ 6,700,000**	$ 600,000			$ 4,000,000	$ 2,100,000						$ 6,700,000
08-14	Alves Tank Rehabilitation/Replacement		**$ 3,300,000**		$ 300,000				$ 3,000,000					$ 3,300,000
19-01	EG#1 Tank Improvement Project/New Pump Station		**$ 1,000,000**							$ 1,000,000				$ 1,000,000
14-33	Miramar Tank Rehabilitation		**$ 200,000**									$ 200,000		$ 200,000
08-16	Cahill Tank Rehabilitation		**$ 125,000**		$ 125,000									$ 125,000
20-16	Denniston Tank Rehabilitation		**$ 125,000**		$ 125,000									$ 125,000
09-18	Pilarcitos Well Field Improvements		**$ 250,000**			$ 250,000								$ 250,000
16-08	Denniston Well Field Improvements		**$ 150,000**						$ 150,000					$ 150,000
21-02	Pilarcitos Reservoir Spillway - Pump/Emergency Generator		**$ 100,000**	$ 100,000										$ 100,000
20-01	CSP Pump #1 Replacement		**$ 100,000**								$ 100,000			$ 100,000
21-03	CSP Pump #3 Replacement		**$ 80,000**								$ 80,000			$ 80,000
19-05	Tanks - THM Control		**$ 110,000**	$ 60,000	$ 50,000									$ 110,000
21-11	Tank Cathodic Protection Project		**$ 40,000**	$ 40,000										$ 40,000
	Pump Stations/Tanks/Wells Totals	$ -	**$ 12,280,000**	**$ 800,000**	**$ 600,000**	**$ 250,000**	**$ 4,000,000**	**$ 2,100,000**	**$ 3,150,000**	**$ 1,000,000**	**$ 180,000**	**$ 200,000**	$ -	**$ 12,280,000**
Water Supply Development														
12-12	San Vicente/Denniston Water Supply Project		**$ 2,900,000**	$ 300,000	$ 300,000	$ 300,000	$ 1,000,000	$ 1,000,000						$ 2,900,000
13-04	Denniston Reservoir Restoration		**$ 1,000,000**					$ 1,000,000						$ 1,000,000
17-12	Recycled Water Project Development		**$ 100,000**						$ 100,000					$ 100,000
			$ -											
	Water Supply Development Totals	$ -	**$ 4,000,000**	**$ 300,000**	**$ 300,000**	**$ 300,000**	**$ 1,000,000**	**$ 2,000,000**	**$ 100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 4,000,000**
Water Treatment Plants														
20-14	Nunes Water Treatment Plant Improvement Project		**$ 7,600,000**	$ 700,000	$ 2,900,000	$ 4,000,000								$ 7,600,000
21-04	Nunes/Denniston Turbidimeter Replacement		**$ 35,000**	$ 35,000										$ 35,000
21-06	Nunes - Effluent Meter		**$ 100,000**			$ 100,000								$ 100,000
13-05	Denniston WTP and Booster Standby Power	$ 300,000	**$ -**	$ -										$ -
	Water Treatment Plants Totals	**$ 300,000**	**$ 7,735,000**	**$ 735,000**	**$ 2,900,000**	**$ 4,100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**		**$ 7,735,000**
	GRAND TOTAL	**$ 1,550,000**	**$ 44,930,000**	**$ 3,640,000**	**$ 5,760,000**	**$ 5,625,000**	**$ 5,350,000**	**$ 4,450,000**	**$ 5,100,000**	**$ 5,700,000**	**$ 3,205,000**	**$ 3,850,000**	**$ 2,250,000**	**$ 44,930,000**

* red highlight = design

5 years $ 24,825,000
5 year average $ 4,965,000

Estimated CIP used for Raftelis 3/2020 study				*$ 5,465,000*	*$ 4,780,000*	*$ 5,485,000*	*$ 5,350,000*	*$ 4,400,000*	$ 25,480,000					

STAFF REPORT

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

From: **Mary Rogren, General Manager**

Agenda: **August 11, 2020**

Report Date: August 7, 2020

Subject: **Fiscal Years 2020-2021 and 2021-2022 Budget Process Timeline**

Recommendation:
None. Information only.

Background:
The attached Budget Process Timeline lays out key milestones and schedule for presentation, consideration and approval of the Fiscal Year 2020-2021 and Fiscal Year 2021-2022 Budgets, the Fiscal Year 2020/21 – 2029/30 Capital Improvement Program, and Fiscal Year 2020/21 – 2020/24 Financial Plan.

Given the COVID 19 pandemic, at a Special Meeting on April 3, 2020, the Board voted to delay discussions of rate increases until July, 2020. The schedule has resumed given direction from the July 13, 2020 Board Meeting, with a timetable leading up to a public hearing to occur on October 13, 2020.

Staff will review the timeline and answer any questions the Board may have.

Fiscal Impact:
None.

Coastside County Water District
BUDGET (O&M and CIP) PROCESS TIMELINE
Fiscal Year 2020-2021 and Fiscal Year 2021-2022

Light blue = task completed

Description	Date
Finance Committee – Introduction to Budget Process / Timeline Rate Study Update / Overview SB998	November 25, 2019
Present Budget Timeline for Board Review / Approve Rate Study (with Raftelis Financial Consultants, Inc.)	December 10, 2019 Regular Board Meeting
Staff Internal Budget Review – Distribute O&M Budget Worksheets	Week of December 16, 2019
Present any revisions to Budget Timeline / Process	January 14, 2020 Regular Board Meeting
Facilities Committee Meeting – Review Draft FY2020/21 to FY2029/30 Capital Improvement Program ("CIP") Budget	January 15, 2020
Staff Internal Budget Review – Worksheets Due/Review CIP Budget	January 20, 2020
Finance Committee Meeting – Review Draft O&M Budget & CIP	January 29, 2020
Facilities Committee Meeting – Review Draft CIP Budget	February 4, 2020
Present "Draft" O&M Budget and CIP to Board of Directors at Board Meeting	February 11, 2020 Regular Board Meeting
Finance Committee Meeting – Review Draft O&M Budget & CIP	March 10, 2020
Present "Draft" O&M Budget, CIP, and Financing Plan to Board of Directors at Board Meeting / **Raftelis Workshop with Board** *(Board authorizes Staff to prepare Prop 218 noticing for increase to be effective July 1, 2020)*	March 10, 2020 Regular Board Meeting
COVID-19 Pandemic declared by World Health Organization (WHO) *San Mateo County Shelter-in-Place Order*	March 11, 2020 March 16, 2020
Board votes to postpone rate increase (planned for July 1, 2020) due to pandemic and unforeseen economic situation in community	*April 3, 2020* *Special Board Meeting*
Present "Draft" O&M Budget and CIP to Board of Directors at Board Meeting	May 12, 2020 Regular Board Meeting

Light blue = task completed

Description	Date
Facilities Committee Meeting - Review Draft CIP Budget	May 28, 2020
Finance Committee Meeting - Review Draft O&M Budget & CIP	June 3, 2020
Board Approval of FY2020-2021 O&M Budget; Review of Draft CIP	June 9, 2020 Regular Board Meeting
Facilities Committee Meeting - Review Draft CIP Budget	June 25, 2020
Board Approval of FY2020/21 to FY2029/30 Capital Improvement Program	July 14, 2020 Regular Board Meeting
Second Financial Planning and Rate Update Workshop with Raftelis Financial Consultants (Board authorizes Staff to prepare Prop 218 noticing for rate increase to be effective January 1, 2020)	July 14, 2020 Regular Board Meeting
Review "Water Financial Plan and Rate Update Study" prepared by Raftelis Financial Consultants; O&M Budgets for FY2020-2021 and FY2021-2022 (Draft), CIP, and Financing Plan; Approve Notice of Public Hearing (Prop. 218)	August 11, 2020 Regular Board Meeting
Mail Notice of Rate Increase (Prop 218) – Minimum 45-Day Notice Before Public Hearing and post Notice on Bulletin Board	August 18, 2020
Customer Outreach – E-Newsletter – Shared with Facebook and Twitter Message: Public Meeting Schedule for Budget –Links to Operations Budget and CIP	August 28, 2020
Review "Water Financial Plan and Rate Update Study" prepared by Raftelis Financial Consultants; O&M Budgets for FY2020-2021 and FY2021-2022 (Draft), CIP, and Financing Plan – in anticipation of October 13, 2020 Public Hearing	September 8, 2020 Regular Board Meeting
Customer Outreach – E-Newsletter Message: Understanding Budget and Proposed Rate Increase	September 16, 2020
Proposition 218 Notice Published in the Half Moon Bay Review	September 16, 2020 and September 23, 2020
Public Hearing Approve Rate Adjustments to be effective January 1, 2021 and January 1, 2022; Approve FY2021-2022 O&M Budget	October 13, 2020 – 7:00 p.m. Regular Board Meeting / Public Hearing
New Year 1 Rates Effective	January 1, 2021

STAFF REPORT

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

From: **Mary Rogren, General Manager**

Agenda: **August 11, 2020**

Report Date: August 7, 2020

Subject: **Schedule a Public Hearing on Proposed Rate Increases for Fiscal Years 2020-2021 and 2021-2022 and Authorize Issuance of a Notice of Public Hearing and Proposed Rate Increases to be effective January 1, 2021 and January 1, 2022.**

Recommendation:
Schedule a Public Hearing for Tuesday, October 13, 2020 at the regular Board of Directors meeting beginning at 7:00 PM on the proposed rate increases for Fiscal Years 2020-2021 and 2021-2022 and authorize Staff to issue a Notice of Public Hearing and Proposed Rate Increases to be effective January 1, 2021 and January 1, 2022.

Background:
In order to comply with the requirements of Proposition 218, the recommended Board action would authorize issuance of a notice of a rate increases for the Fiscal Years 2020-2021 and 2021-2022 (draft attached*) and schedule a public hearing for October 13, 2020. Following the public hearing, the Board can adopt the rate increase. If a majority of affected property owners submit written protests, the rate increase cannot be adopted.

(* The draft reflects a (not to exceed) adjustment in rates to cover an increase in the District's revenue requirement of 5% effective January 1, 2021 for the Fiscal Year 2020-2021; and an additional increase of 5% in the District's revenue requirement effective January 1, 2022 for the Fiscal Year 2021-2022.)

DRAFT

NOTICE OF PUBLIC HEARING

PROPOSED RATE ADJUSTMENTS FOR WATER SERVICES

To be effective January 1, 2021 and January 1, 2022

August 18, 2020

Coastside County Water District provides customers with reliable, high-quality drinking water and services, while maintaining its facilities and infrastructure. The District's capital improvement program provides that the District's infrastructure is replaced at the end of its life cycle and upgraded to meet current standards.

Coastside County Water District is proposing two years of rate increases as shown on page 2 of this notice. If approved, a proposed increase of up to 5% will become effective on and after **January 1, 2021** for year 1, and a proposed increase of up to 5% will become effective on and after **January 1, 2022** for year 2.

At its March 10, 2020 Regular Board Meeting, Coastside County Water District Board of Directors directed Staff to prepare noticing for a proposed 6.5% rate increase to occur July 1, 2020 and 6.5% on July 1, 2021. However, at a Special Meeting on April 3, 2020, the Board decided to delay discussions of a rate increase due to the unforeseen circumstances brought upon by the COVID-19 pandemic. At the July 14, 2020 Board Meeting, the Board directed staff to prepare noticing for a 6-month delay in the proposed increases to January 1, 2021 and January 1, 2022 and to reduce the amount of the proposed rate increase to 5% for each of the next two fiscal years.

The Coastside County Water District Board of Directors will hold a Public Hearing at 7:00 PM on Tuesday, October 13, 2020 during a regular Board of Director's meeting. The Board of Directors will consider adoption of the proposed water rates effective January 1, 2021 and January 1, 2022 affecting all water customers. Interested persons are encouraged to attend and comment. This meeting will be conducted entirely by remote participation. ZOOM Meeting instructions are included on page 2 of this notice.

The proposed rate increase is necessitated due to inflationary adjustments in operating expenses; funding of the District's Capital Improvement Program; and increased contributions to the District's reserves. As of January 1, 2021, a typical single-family residential customer using 6 units monthly will pay an additional $4.65 per month. Below are examples of the impact of residential bills at various usages.

The basis for the proposed increase in rates is described in the Water Financial Plan and Rate Update Report dated August 3, 2020 prepared by the District's Water Rate consultant, Raftelis Financial Consultants, Inc. Copies of the Water Financial Plan and Rate Update Report, Operations Budgets for FY2020-2021 and FY2021-2022, and Capital Improvement Program are available online at **www.coastsidewater.org.**

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, October 13, 2020 at 7:00 PM.

You may deliver the protest in advance of the public hearing by first class mail or deliver the District's payment dropbox 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) or 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 adjustment(s). 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.

Example of Single Residential Monthly Bills

# units (hcf)	Current Bill	Effective January 1, 2021 Proposed Bill (January, 2021)	Additional Cost - Monthly	Effective January 1, 2022 Proposed Bill (January, 2022)
2	$ 47.28	$ 49.65	$ 2.37	$ 52.15
4	$ 65.66	$ 68.95	$ 3.29	$ 72.43
6	$ 92.54	$ 97.19	$ 4.65	$ 102.09
9	$ 135.68	$ 142.51	$ 6.83	$ 149.69
12	$ 184.46	$ 193.75	$ 9.29	$ 203.51

COASTSIDE COUNTY WATER DISTRICT JANUARY 1, 2021 and JANUARY 1, 2021 PROPOSED AMENDMENTS TO WATER RATE SCHEDULE

RESIDENTIAL & OTHER CUSTOMERS – BASE CHARGE

MONTHLY BASE CHARGE			
Meter Size	**Current**	**Proposed Effective January 1, 2021**	**Proposed Effective January 1, 2022**
5/8 inch	$28.90	**$30.35**	**$31.87**
3/4 inch	$42.70	**$44.84**	**$47.09**
1.0 inch	$70.30	**$73.82**	**$77.52**
1.5 inch	$139.31	**$146.28**	**$153.60**
2.0 inch	$222.13	**$233.24**	**$244.91**
3.0 inch	$484.37	**$508.59**	**$534.02**
4.0 inch	$870.85	**$914.40**	**$960.12**

FIRE SERVICE CHARGE

(Formerly called Fire Detector Check Valve Service Charge)

MONTHLY SERVICE CHARGE (By Service Line Size)		
Current– Per Inch	**Proposed–Per Inch January 1, 2021**	**Proposed–Per Inch January 1, 2022**
$6.46	**$6.79**	**$7.13**

RESIDENTIAL CUSTOMERS - WATER CONSUMPTION QUANTITY CHARGE

(One Unit of water equals 100 cubic feet or 748 gallons)

MONTHLY QUANTITY CHARGE				
Tier #	**Current Rate Tiers Monthly Use**	**Current Water Quantity Charge Per Unit**	**Proposed Water Quantity Charge Per Unit Effective January 1, 2021**	**Proposed Water Quantity Charge Per Unit Effective January 1, 2022**
1	1 - 4 Units	$9.19	**$9.65**	**$10.14**
2	5 - 8 Units	$13.44	**$14.12**	**$14.83**
3	9+ Units	$16.26	**$17.08**	**$17.94**

ALL OTHER CUSTOMERS - WATER CONSUMPTION QUANTITY CHARGE

WATER RATE QUANTITY CHARGE PER UNIT			
Customer Type	**Current**	**Proposed Effective January 1, 2021**	**Proposed Effective January 1, 2022**
Multi-Family	$12.25	**$12.87**	**$13.52**
All Other Customers	$13.06	**$13.72**	**$14.41**

ATTEND THE PUBLIC HEARING:

Tuesday, October 13, 2020 - Meeting begins at 7:00 pm

ON MARCH 17, 2020, THE GOVERNOR ISSUED EXECUTIVE ORDER N-29-20 SUSPENDING CERTAIN PROVISIONS OF THE RALPH M. BROWN ACT IN ORDER TO ALLOW FOR LOCAL LEGISLATIVE BODIES TO CONDUCT THEIR MEETINGS TELEPHONICALLY OR BY OTHER ELECTRONIC MEANS. PURSUANT TO THE SHELTER-IN-PLACE ORDER ISSUED BY THE SAN MATEO COUNTY HEALTH OFFICER ON MARCH 16, 2020, AS REVISED ON MARCH 31, 2020, THE STATEWIDE SHELTER-IN-PLACE ORDER ISSUED BY THE GOVERNOR IN EXECUTIVE ORDER N-33-20 ON MARCH 19, 2020, AND THE CDC'S SOCIAL DISTANCING GUIDELINES WHICH DISCOURAGE LARGE PUBLIC GATHERINGS, THE BOARDROOM WILL NOT BE OPEN FOR THE OCTOBER 13, 2020 PUBLIC HEARING OF THE COASTSIDE COUNTY WATER DISTRICT. THIS MEETING WILL BE CONDUCTED REMOTELY VIA TELECONFERENCE.

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

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.

ONLINE: JOIN ZOOM MEETING
https://zoom.us/j/93778260596?pwd=aEpRcFlnaHdQM21PSEJQWjNiN09TQT09
MEETING ID: 937 7826 0596
PASSWORD: 184355
ONE TAP MOBILE
+16699006833,,93778260596#,,,,,,0#,,184355# US (San Jose)
DIAL BY YOUR LOCATION
+1 669 900 6833 US (San Jose)
MEETING ID: 937 7826 0596
PASSWORD: 184355
FIND YOUR LOCAL NUMBER: https://zoom.us/u/adZt3d9LjB

STAFF REPORT

To: **Mary Rogren, General Manager**

From: **James Derbin**

Agenda: **August 11, 2020**

Report Date: **August 7, 2020**

Subject: **Authorize the General Manager to Procure Turbidimeters for the Denniston and Nunes Water Treatment Plants**

Recommendation: Authorize the General Manager to purchase nine (9) online turbidimeters and two new Hach benchtop turbidimeters with calibration supplies for Nunes and Denniston Water Treatment Plants for a total price of $35,600 (including estimated shipping and tax.)

Background: The District currently uses older 1720E Hach Turbidimeters, for monitoring online filter performance with Hach 2100N benchtop turbidimeters for confirmation as per our Water System Permit with DDW.

Last year, Hach indicated they will gradually phase out support of these older model turbidimeters and will only stock limited parts for repair. Since plant performance relies heavily on turbidity readings of the individual filter effluent and the combined filter effluent water, staff is proposing we replace all the turbidimeters at once, including the benchtop instrument for confirmation.

Since online turbidity instrumentation performance can vary from the more accurate benchtop instrumentation, staff prefers to replace the benchtop turbidimeters at the same time. In addition, staff negotiated a 10% discount from the vendor for buying all the instruments in one order.

Fiscal Impact: This project is included in the approved FY 20/21 CIP budget in the amount of $35,000 entitled "Nunes/Denniston Turbidimeter Replacement Project".

Quotation

Quote Number: 100516486v4
Use quote number at time of order to ensure that you receive prices quoted

Hach
PO Box 608
Loveland, CO 80539-0608
Phone: (800) 227-4224
Email: quotes@hach.com
Website: www.hach.com

Quote Date: 27-Jul-2020

Quote Expiration: 25-Sep-2020

COASTSIDE COUNTY WATER DIST
WATER TREATMENT PLANT
766 MAIN ST
HALF MOON BAY, CA 94019-1995

Name: James Derbin
Phone: (650) 726-4405
Email: jderbin@coastsidewater.org

Customer Account Number : 107117

Sales Contact: Michael Stroth Email: mstroth@hach.com Phone: 209-647-0006

PRICING QUOTATION

Line	Part Number	Description	Qty	Net Unit Price	Extended Price
1	LXV445.99.53112	db ee TU5300sc TURB,FLOW,CLEAN,SYSCHK,RFID,EPA. Standard lead time 15 days.	9	2,609.10	23,481.90
2	LZY904.97.00002	Calibration Lid TU5xxx (RoW). Standard lead time 10 days.	2	20.29	40.58
3	LZY835	StablCal Calibration Set w. RFID. Standard lead time 3 days.	2	437.40	874.80
4	LPV442.99.03012	KTO: TU5200, Lab Turb with RFID, EPA	2	3,663.90	7,327.80
4.1	LPV4425303012	nn KIT, TU5200, Lab Turb with RFID, EPA			
				Estimated Shipping Charge-Ground	$ 793.13
				Grand Total	$ 32,518.21

TERMS OF SALE

Freight: Ground Prepay and Add

FCA: Hach's facility

California Proposition 65:
WARNING
Cancer & Reproductive Harm -

All purchases of Hach Company products and/or services are expressly and without limitation subject to Hach Company's Terms & Conditions of Sale ("Hach TCS"), incorporated herein by reference and published on Hach Company's website at www.hach.com/terms. Hach TCS are contained directly and/or by reference in Hach's offer, order acknowledgment, and invoice documents. The first of the following acts constitutes an acceptance of Hach's offer and not a counteroffer and creates a contract of sale "Contract" in accordance with the Hach TCS: (i) Buyer's issuance of a purchase order document against Hach's offer; (ii) acknowledgement of Buyer's order by Hach; or (iii) commencement of any performance by Hach pursuant to Buyer's order. Provisions contained in Buyer's purchase documents (including electronic commerce interfaces) that materially alter, add to or subtract from the provisions of the Hach TCS are not part of the Contract.

Due to International regulations, a U.S. Department of Commerce Export License may be required. Hach reserves the right to approve specific shipping agents. Wooden boxes suitable for ocean shipment are extra. Specify final destination to ensure proper documentation and packing suitable for International transport. In addition, Hach may require : 1). A statement of intended end-use; 2).Certification that the intended end-use does not relate to proliferation of weapons of mass destruction (prohibited nuclear end use, chemical / biological weapons, missile technology); and 3). Certification that the goods will not be diverted contrary to U.S. and/or applicable laws in force in Buyer's jurisdiction.

ORDER TERMS:
Terms are Subject to Credit Review
In order for Hach to process the order as quickly as possible, please provide the following information.
• Complete Billing address.
• Complete Shipping address.
• Part numbers and quantities of items being ordered.
• Please reference the quotation number on your purchase order

If the order is over $25,000 Hach will also require the following additional information.
• Pricing
• Purchase Order Number
• Freight terms and INCO term FOB Origin or FCA Shipping Point
• Required delivery date
• Vendor name should specify "Hach Company" with the Loveland address:
    o Hach, PO Box 389, Loveland, CO 80539
• Credit terms of payment. Default payment terms are Net 30.
• Indicate if order needs to ship complete or if it can ship partial.
• Tax status
• Special invoicing instructions

Sales tax is not included on quote. Applicable sales tax will be added to the invoice based on the U.S. destination, if applicable provide a resale/exemption certificate.
Shipments will be prepaid and added to invoices unless otherwise specified.
Equipment quoted operates with standard U.S. supply voltage.
Hach standard terms and conditions apply to all sales.
Additional terms and conditions apply to orders for service partnerships.
Prices do not include delivery of product. Reference attached Freight Charge Schedule and Collect Handling Fees.
Standard lead time is 30 days.
This Quote is good for a one time purchase

Sales Contact:

Name:	Michael Stroth
Title:	Sales Development Manager
Phone:	209-647-0006
Email:	mstroth@hach.com

HACH COMPANY

Headquarters
P.O. Box 389
5600 Lindbergh Drive
Loveland, CO 80539-0389

Purchase Orders
PO Box 608
Loveland, CO 80539-0608

WebSite: www.hach.com

U.S.A.
Phone: 800-227-4224
Fax: 970-669-2932
E-Mail: orders@hach.com
quotes@hach.com
techhelp@hach.com

Export
Phone: 970-669-3050
Fax: 970-461-3939
Email: intl@hach.com

Remittance
2207 Collections Center Drive
Chicago, IL 60693

Wire Transfers
Bank of America
231 S. LaSalle St.
Chicago, IL 60604
Account: 8765602385
Routing (ABA): 071000039

Be Right™

Quotation Addendum

ADVANTAGES OF WORKING WITH HACH

Hach Service

Protect your investment & peace of mind
- ✓ A global partner who understands your needs
- ✓ Delivers timely, high-quality service you can trust
- ✓ Provides team of unique experts to help you maximize instrument uptime
- ✓ Ensure data integrity
- ✓ Maintain operational stability
- ✓ Reduce compliance risk

www.hach.com/service-contracts

Pick&Ship™

Pick&Ship™ Program offers a better way to keep your supplies in stock
- ✓ **Convenience** of one purchase order for the entire year
- ✓ **Flexibility** to change, cancel or create new orders
- ✓ **Savings** from locking in prices & thus avoiding price surges and rush charges
- ✓ **Peace of mind** with automatic, reliable shipments just as you need them

www.Hach.com/pickandship

Technical Support

Provides post-sale instrumentation and application support
- ✓ Hach's highly skilled Technical Support staff is dedicated to helping you resolve technical issues before, during and after the sale.
- ✓ Available via phone, e-mail, or live online chat at Hach.com!
- ✓ Fast access to answers at https://support.hach.com
- ✓ Toll-free phone: 800-227-4224
- ✓ E-mail: techhelp@hach.com

www.Hach.com

ADVANTAGES OF SIMPLIFIED SHIPPING AND HANDLING

Safe & Fast Delivery
- ✓ Receive tracking numbers on your order acknowledgement
- ✓ Hach will assist with claims if an order is lost or damaged in shipment

Save Time – Less Hassle
- ✓ No need to set up deliveries for orders or to schedule pickup
- ✓ Hach ships order as product is available, at no additional charge, when simplified shipping and handling is used.

Save Money
- ✓ No additional invoice to process – save on time and administrative costs
- ✓ Only pay shipping once, even if multiple shipments are required

STANDARD SIMPLIFIED SHIPPING AND HANDLING CHARGES [1, 2, 3, 4] *Pricing Effective 4/11/2020*

Total Price of Merchandise Ordered	Standard Surface (Mainland USA)	Second Day Delivery (Mainland USA)	Next Day Delivery (Mainland USA)	Second Day Delivery (Alaska & Hawaii)	Next Day Delivery (Alaska & Hawaii)	**Collect** [4] Handling Fee *Effective 4/11/2020*
$0.00 - $49.99	$17.99	$44.99	$83.90	$72.21	$137.27	$13.47
$50.00 - $149.99	$28.59	$84.27	$159.00	$120.84	$229.73	$13.85
$150.00 - $349.99	$50.22	$133.98	$272.91	$169.07	$329.04	$14.72
$350.00 - $649.99	$69.95	$182.91	$363.75	$228.65	$442.76	$15.48
$650.00 - $949.99	$88.16	$191.13	$399.98	$236.66	$446.10	$16.04
$950.00 - $1,999.99	$110.91	$235.85	$498.69	$280.67	$543.06	$17.52
$2,000.00 - $3,999.99	$128.04	$250.64	$513.44	$291.54	$554.54	$20.22
$4,000.00 - $5,999.99	$148.44	$260.33	$538.23	$292.89	$570.53	$24.90
$6,000.00 - $7,999.99	$175.40	$296.40	$612.84	$323.07	$622.86	$29.04
$8,000.00 - $9,999.99	$200.15	$336.83	$658.19	$360.41	$683.52	$33.51
Over $10,000	2.5% of Net Order Value	4.5% of Net Order Value	7% of Net Order Value	4.5% of Net Order Value	7% of Net Order Value	$51.84

1 Shipping & Handling charges shown are only applicable to orders billing and shipping to U.S. destinations. Shipping & Handling charges will be prepaid and added to invoice. Shipping & Handling for the Pick&Ship Program is charged on each shipment release and is based on the total price of each shipment release. Shipping & Handling charges are subject to change without notice.

2 Additional Shipping & Handling charges will be applied to orders containing bulky and/or especially heavy orders. Refrigerated and all weather Samplers do not qualify for simplified Shipping & Handling charges, and are considered heavy products. Dissolved Oxygen Sensors can be damaged if exposed to temps below freezing, causing sensor failure. Must be shipped over night or 2nd day air during the cold weather months.

3 Orders shipping to Alaska or Hawaii: Additional Shipping & Handling charges may be applied at time of order processing. Second Day and Next Day delivery is not available to all destinations.

4 Hach Company will assess a collect handling fee on orders with collect shipping terms. This handling fee covers the additional costs that Hach Company incurs from processing and managing collect shipments.

Due to variations in component characteristics, regulatory transportation requirements and/or associated shipping and handling costs, individual kit components may or may not be packaged together in a single carton at time of final packaging and shipping.

SALES TAX

Sales Tax is not included in the attached quotation. Applicable sales and usage taxes will be added to your invoice, at the time of order, based on U.S. destination of goods, unless a valid resale/exemption certificate for destination state is provided to the above address or fax number, attention of the Tax Dept.

TERMS & CONDITIONS OF SALE FOR HACH COMPANY PRODUCTS AND SERVICES

This document sets forth the Terms & Conditions of Sale for goods manufactured and/or supplied, and services provided, by Hach Company of Loveland, Colorado ("Hach") and sold to the original purchaser thereof ("Buyer"). Unless otherwise specifically stated herein, the term "Hach" includes only Hach Company and none of its affiliates. Unless otherwise specifically stated in a previously-executed written purchase agreement signed by authorized representatives of Hach and Buyer, these Terms & Conditions of Sale establish the rights, obligations and remedies of Hach and Buyer which apply to this offer and any resulting order or contract for the sale of Hach's goods and/or services ("Products").

1. APPLICABLE TERMS & CONDITIONS: These Terms & Conditions of Sale are contained directly and/or by reference in Hach's offer, order acknowledgment, and invoice documents. The first of the following acts constitutes an acceptance of Hach's offer and not a counteroffer and creates a contract of sale ("Contract") in accordance with these Terms & Conditions: (i) Buyer's issuance of a purchase order document against Hach's offer; (ii) acknowledgement of Buyer's order by Hach; or (iii) commencement of any performance by Hach pursuant to Buyer's order. Provisions contained in Buyer's purchase documents (including electronic commerce interfaces) that materially alter, add to or subtract from the provisions of these Terms & Conditions of Sale are not a part of the Contract.

2. CANCELLATION: Buyer may cancel goods orders subject to fair charges for Hach's expenses including handling, inspection, restocking, freight and invoicing charges as applicable, provided that Buyer returns such goods to Hach at Buyer's expense within 30 days of delivery and in the same condition as received. Buyer may cancel service orders on ninety (90) day's prior written notice and refunds will be prorated based on the duration of the service plan. Inspections and re-instatement fees may apply upon cancellation or expiration of service programs. Seller may cancel all or part of any order prior to delivery without liability if the order includes any Products that Seller determines may not comply with export, safety, local certification, or other applicable compliance requirements.

3. DELIVERY: Delivery will be accomplished FCA Hach's facility located in Ames, Iowa or Loveland, Colorado, United States (Incoterms 2010). Legal title and risk of loss or damage pass to Buyer upon transfer to the first carrier. Hach will use commercially reasonable efforts to deliver the Products ordered herein within the time specified on the face of this Contract or, if no time is specified, within Hach's normal lead-time necessary for Hach to deliver the Products sold hereunder. Upon prior agreement with Buyer and for an additional charge, Hach will deliver the Products on an expedited basis. Standard service delivery hours are 8 am – 5 pm Monday through Friday, excluding holidays.

4. INSPECTION: Buyer will promptly inspect and accept any Products delivered pursuant to this Contract after receipt of such Products. In the event the Products do not conform to any applicable specifications, Buyer will promptly notify Hach of such nonconformance in writing. Hach will have a reasonable opportunity to repair or replace the nonconforming product at its option. Buyer will be deemed to have accepted any Products delivered hereunder and to have waived any such nonconformance in the event such a written notification is not received by Hach within thirty (30) days of delivery.

5. PRICES & ORDER SIZES: All prices are in U.S. dollars and are based on delivery as stated above. Prices do not include any charges for services such as insurance; brokerage fees; sales, use, inventory or excise taxes; import or export duties; special financing fees; VAT, income or royalty taxes imposed outside the U.S.; consular fees; special permits or licenses; or other charges imposed upon the production, sale, distribution, or delivery of Products. Buyer will either pay any and all such charges or provide Hach with acceptable exemption certificates, which obligation survives performance under this Contract. Hach reserves the right to establish minimum order sizes and will advise Buyer accordingly.

6. PAYMENTS: All payments must be made in U.S. dollars. For Internet orders, the purchase price is due at the time and manner set forth at www.hach.com. Invoices for all other orders are due and payable NET 30 DAYS from date of the invoice without regard to delays for inspection or transportation, with payments to be made by check to Hach at the above address or by wire transfer to the account stated on the front of Hach's invoice, or for customers with no established credit, Hach may require cash or credit card payment in advance of delivery. In the event payments are not made or not made in a timely manner, Hach may, in addition to all other remedies provided at law, either: (a) declare Buyer's performance in breach and terminate this Contract for default; (b) withhold future shipments until delinquent payments are made; (c) deliver future shipments on a cash-with-order or cash-in-advance basis even after the delinquency is cured; (d) charge interest on the delinquency at a rate of 1-1/2% per month or the maximum rate permitted by law, if lower, for each month or part thereof of delinquency in payment plus applicable storage charges and/or inventory carrying charges; (e) repossess the Products for which payment has not been made; (f) recover all costs of collection including reasonable attorney's fees; or (g) combine any of the above rights and remedies as is practicable and permitted by law. Buyer is prohibited from setting off any and all monies owed under this from any other sums, whether liquidated or not, that are or may be due Buyer, which arise out of a different transaction with Hach or any of its affiliates. Should Buyer's financial responsibility become unsatisfactory to Hach in its reasonable discretion, Hach may require cash payment or other security. If Buyer fails to meet these requirements, Hach may treat such failure as reasonable grounds for repudiation of this Contract, in which case reasonable cancellation charges shall be due Hach. Buyer grants Hach a security interest in the Products to secure payment in full, which payment releases the security interest but only if such payments could not be considered an avoidable transfer under the U.S. Bankruptcy Code or other applicable laws. Buyer's insolvency, bankruptcy, assignment for the benefit of creditors, or dissolution or termination of the existence of Buyer, constitutes a default under this Contract and affords Hach all the remedies of a secured party under the U.C.C., as well as the remedies stated above for late payment or non-payment. See ¶20 for further wire transfer requirements.

7. LIMITED WARRANTY: Hach warrants that Products sold hereunder will be free from defects in material and workmanship and will, when used in accordance with the manufacturer's operating and maintenance instructions, conform to any express written warranty pertaining to the specific goods purchased, which for most Hach instruments is for a period of twelve (12) months from delivery. Hach warrants that services furnished hereunder will be free from defects in workmanship for a period of ninety (90) days from the completion of the services. Parts provided by Hach in the performance of services may be new or refurbished parts functioning equivalent to new parts. Any non-functioning parts that are repaired by Hach shall become the property of Hach. No warranties are extended to consumable items such as, without limitation, reagents, batteries, mercury cells, and light bulbs. **All other guarantees, warranties, conditions and representations, either express or implied, whether arising under any statute, law, commercial usage or otherwise, including implied warranties of merchantability and fitness for a particular purpose, are hereby excluded.** The sole remedy for Products not meeting this Limited Warranty is replacement, credit or refund of the purchase price. This remedy will not be deemed to have failed of its essential purpose so long as Hach is willing to provide such replacement, credit or refund.

8. INDEMNIFICATION: Indemnification applies to a party and to such party's successors-in-interest, assignees, affiliates, directors, officers, and employees ("Indemnified Parties"). Hach is responsible for and will defend, indemnify and hold harmless the Buyer Indemnified Parties against all losses, claims, expenses or damages which may result from accident, injury, damage, or death due to Hach's breach of the Limited Warranty. Buyer is responsible for and will defend, indemnify and hold harmless the Hach Indemnified Parties against all losses, claims, expenses or damages which may result from accident, injury, damage, or death due to negligence, misuse or misapplication of any goods or services, violations of law, or the breach of any provision of this Contract by the Buyer, its affiliates, or those employed by, controlled by or in privity with them. Buyer's workers' compensation immunity, if any, does not preclude or limit its indemnification obligations.

9. PATENT PROTECTION: Subject to all limitations of liability provided herein, Hach will, with respect to any Products of Hach's design or manufacture, indemnify Buyer from any and all damages and costs as finally determined by a court of competent jurisdiction in any suit for infringement of any U.S. patent (or European patent for Products that Hach sells to Buyer for end use in a member state of the E.U.) that has issued as of the delivery date, solely by reason of the sale or normal use of any Products sold to Buyer hereunder and from reasonable expenses incurred by Buyer in defense of such suit if Hach does not undertake the defense thereof, provided that Buyer promptly notifies

Hach of such suit and offers Hach either (i) full and exclusive control of the defense of such suit when Products of Hach only are involved, or (ii) the right to participate in the defense of such suit when products other than those of Hach are also involved. Hach's warranty as to use patents only applies to infringement arising solely out of the inherent operation of the Products according to their applications as envisioned by Hach's specifications. In case the Products are in such suit held to constitute infringement and the use of the Products is enjoined, Hach will, at its own expense and at its option, either procure for Buyer the right to continue using such Products or replace them with non-infringing products, or modify them so they become non-infringing, or remove the Products and refund the purchase price (prorated for depreciation) and the transportation costs thereof. The foregoing states the entire liability of Hach for patent infringement by the Products. Further, to the same extent as set forth in Hach's above obligation to Buyer, Buyer agrees to defend, indemnify and hold harmless Hach for patent infringement related to (x) any goods manufactured to the Buyer's design, (y) services provided in accordance with the Buyer's instructions, or (z) Hach's Products when used in combination with any other devices, parts or software not provided by Hach hereunder.

10. TRADEMARKS AND OTHER LABELS: Buyer agrees not to remove or alter any indicia of manufacturing origin or patent numbers contained on or within the Products, including without limitation the serial numbers or trademarks on nameplates or cast, molded or machined components.

11. SOFTWARE AND DATA. All licenses to Hach's separately-provided software products are subject to the separate software license agreement(s) accompanying the software media and/or included as an Appendix to these Terms & Conditions of Sale. Except to the extent such express licenses conflict with the remainder of this paragraph, the following also applies relative to Hach's software: Hach grants Buyer only a personal, non-exclusive license to access and use the software provided by Hach with Products purchased hereunder solely as necessary for Buyer to enjoy the benefit of the Products. A portion of the software may contain or consist of open source software, which Buyer may use under the terms and conditions of the specific license under which the open source software is distributed. Buyer agrees that it will be bound by all such license agreements. Title to software remains with the applicable licensor(s). In connection with Buyer's use of Products, Hach may obtain, receive, or collect data or information, including data produced by the Products. In such cases, Buyer grants Hach a non-exclusive, worldwide, royalty-free, perpetual, non-revocable license to use, compile, distribute, display, store, process, reproduce, or create derivative works of such data, or to aggregate such data for use in an anonymous manner, solely to facilitate marketing, sales and R&D activities of Hach and its affiliates.

12. PROPRIETARY INFORMATION; PRIVACY: "Proprietary Information" means any information, technical data or know-how in whatever form, whether documented, contained in machine readable or physical components, mask works or artwork, or otherwise, which Hach considers proprietary, including but not limited to service and maintenance manuals. Buyer and its customers, employees and agents will keep confidential all such Proprietary Information obtained directly or indirectly from Hach and will not transfer or disclose it without Hach's prior written consent, or use it for the manufacture, procurement, servicing or calibration of Products or any similar products, or cause such products to be manufactured, serviced or calibrated by or procured from any other source, or reproduce or otherwise appropriate it. All such Proprietary Information remains Hach's property. No right or license is granted to Buyer or its customers, employees or agents, expressly or by implication, with respect to the Proprietary Information or any patent right or other proprietary right of Hach, except for the limited use licenses implied by law. Hach will manage Customer's information and personal data in accordance with its Privacy Policy, located at http://www.hach.com/privacypolicy.

13. CHANGES AND ADDITIONAL CHARGES: Hach reserves the right to make design changes or improvements to any products of the same general class as Products being delivered hereunder without liability or obligation to incorporate such changes or improvements to Products ordered by Buyer unless agreed upon in writing before the Products' delivery date. Services which must be performed as a result of any of the following conditions are subject to additional charges for labor, travel and parts: (a) equipment alterations not authorized in writing by Hach; (b) damage resulting from improper use or handling, accident, neglect, power surge, or operation in an environment or manner in which the instrument is not designed to operate or is not in accordance with Hach's operating manuals; (c) the use of parts or accessories not provided by Hach; (d) damage resulting from acts of war, terrorism or nature; (e) services outside standard business hours; (f) site prework not complete per proposal; or (g) any repairs required to ensure equipment meets manufacturer's specifications upon activation of a service agreement.

14. SITE ACCESS / PREPARATION / WORKER SAFETY / ENVIRONMENTAL COMPLIANCE: In connection with services provided by Hach, Buyer agrees to permit prompt access to equipment. Buyer assumes full responsibility to back-up or otherwise protect its data against loss, damage or destruction before services are performed. Buyer is the operator and in full control of its premises, including those areas where Hach employees or contractors are performing service, repair and maintenance activities. Buyer will ensure that all necessary measures are taken for safety and security of working conditions, sites and installations during the performance of services. Buyer is the generator of any resulting wastes, including without limitation hazardous wastes. Buyer is solely responsible to arrange for the disposal of any wastes at its own expense. Buyer will, at its own expense, provide Hach employees and contractors working on Buyer's premises with all information and training required under applicable safety compliance regulations and Buyer's policies. If the instrument to be serviced is in a Confined Space, as that term is defined under OSHA regulations, Buyer is solely responsible to make it available to be serviced in an unconfined space. Hach service technicians will not work in Confined Spaces. In the event that a Buyer requires Hach employees or contractors to attend safety or compliance training programs provided by Buyer, Buyer will pay Hach the standard hourly rate and expense reimbursement for such training attended. The attendance at or completion of such training does not create or expand any warranty or obligation of Hach and does not serve to alter, amend, limit or supersede any part of this Contract.

15. LIMITATIONS ON USE: Buyer will not use any Products for any purpose other than those identified in Hach's catalogs and literature as intended uses. Unless Hach has advised the Buyer in writing, in no event will Buyer use any Products in drugs, food additives, food or cosmetics, or medical applications for humans or animals. In no event will Buyer use in any application any Product that requires FDA 510(k) clearance unless and only to the extent the Product has such clearance. Buyer will not sell, transfer, export or re-export any Hach Products or technology for use in activities which involve the design, development, production, use or stockpiling of nuclear, chemical or biological weapons or missiles, nor use Hach Products or technology in any facility which engages in activities relating to such weapons. Unless the "ship-to" address is in California, U.S.A., the Products are not intended for sale in California and may lack markings required by California Proposition 65; accordingly, unless Buyer has ordered Products specifying a California ship-to address, Buyer will not sell or deliver any Hach Products for use in California. Any warranty granted by Hach is void if any goods covered by such warranty are used for any purpose not permitted hereunder.

16. EXPORT AND IMPORT LICENSES AND COMPLIANCE WITH LAWS: Unless otherwise specified in this Contract, Buyer is responsible for obtaining any required export or import licenses. Buyer will comply with all laws and regulations applicable to the installation or use of all Products, including applicable import and export control laws and regulations of the U.S., E.U. and any other country having proper jurisdiction, and will obtain all necessary export licenses in connection with any subsequent export, re-export, transfer and use of all Products and technology delivered hereunder. Buyer will comply with all local, national, and other laws of all jurisdictions globally relating to anti-corruption, bribery, extortion, kickbacks, or similar matters which are applicable to Buyer's business activities in connection with this Contract, including but not limited to the U.S. Foreign Corrupt Practices Act of 1977, as amended (the "FCPA"). Buyer agrees that no payment of money or provision of anything of value will be offered, promised, paid or transferred, directly or indirectly, by any person or entity, to any government official, government employee, or employee of any company owned in part by a government, political party, political party official, or candidate for any government office or political party office to induce such organizations or persons to use their authority or influence to obtain or retain an improper business advantage for Buyer or for Hach, or which otherwise constitute or have the purpose or effect of public or commercial bribery, acceptance of or acquiescence in extortion, kickbacks or other unlawful or improper means of obtaining business or any improper advantage, with respect to any of Buyer's activities related to this Contract. Hach asks Buyer to "*Speak Up*!" if aware of any violation of law, regulation or our Standards of Conduct ("SOC") in relation to this Contract. See http://danaher.com/integrity-and-compliance and www.danaherintegrity.com for a copy of the SOC and for access to our Helpline portal.

17. RELATIONSHIP OF PARTIES: Buyer is not an agent or representative of Hach and will not present itself as such under any circumstances unless and to

the extent it has been formally screened by Hach's compliance department and received a separate duly-authorized letter from Hach setting forth the scope and limitations of such authorization.

18. FORCE MAJEURE: Hach is excused from performance of its obligations under this Contract to the extent caused by acts or omissions that are beyond its control of, including but not limited to Government embargoes, blockages, seizures or freeze of assets, delays or refusals to grant an export or import license or the suspension or revocation thereof, or any other acts of any Government; fires, floods, severe weather conditions, or any other acts of God; quarantines; labor strikes or lockouts; riots; strife; insurrections; civil disobedience or acts of criminals or terrorists; war; material shortages or delays in deliveries to Hach by third parties. In the event of the existence of any force majeure circumstances, the period of time for delivery, payment terms and payments under any letters of credit will be extended for a period of time equal to the period of delay. If the force majeure circumstances extend for six months, Hach may, at its option, terminate this Contract without penalty and without being deemed in default or in breach thereof.

19. NON ASSIGNMENT AND WAIVER: Buyer will not transfer or assign this Contract or any rights or interests hereunder without Hach's prior written consent. Failure of either party to insist upon strict performance of any provision of this Contract, or to exercise any right or privilege contained herein, or the waiver of any breach of the terms or conditions of this Contract will not be construed as thereafter waiving any such terms, conditions, rights, or privileges, and the same will continue and remain in force and effect as if no waiver had occurred.

20. FUNDS TRANSFERS (PAYMENTS): Buyer and Hach both recognize that there is a risk of banking fraud when individuals impersonating a business demand payment under new banking or mailing instructions. To avoid this risk, Buyer must verbally confirm any new or changed bank transfer or mailing instructions by calling Hach at +1-970-663-1377 and speaking with Hach's Credit Manager before mailing or transferring any monies using the new instructions. Both parties agree that they will not institute mailing or bank transfer instruction changes and require immediate payment under the new instructions but will instead provide a ten (10) day grace period to verify any payment instruction changes before any new or outstanding payments are due using the new instructions.

21. LIMITATION OF LIABILITY: None of the Hach Indemnified Parties will be liable to Buyer under any circumstances for any special, treble, incidental or consequential damages, including without limitation, damage to or loss of property other than for the Products purchased hereunder; damages incurred in installation, repair or replacement; lost profits, revenue or opportunity; loss of use; losses resulting from or related to downtime of the products or inaccurate measurements or reporting; the cost of substitute products; or claims of Buyer's customers for such damages, howsoever caused, and whether based on warranty, contract, and/or tort (including negligence, strict liability or otherwise). The total liability of the Hach Indemnified Parties arising out of the performance or nonperformance hereunder or Hach's obligations in connection with the design, manufacture, sale, delivery, and/or use of Products will in no circumstance exceed in the aggregate a sum equal to twice the amount actually paid to Hach for Products delivered hereunder.

22. APPLICABLE LAW AND DISPUTE RESOLUTION: The construction, interpretation and performance hereof and all transactions hereunder shall be governed by the laws of the State of Colorado, without regard to its principles or laws regarding conflicts of laws. If any provision of this Contract violates any Federal, State or local statutes or regulations of any countries having jurisdiction of this transaction, or is illegal for any reason, said provision shall be self-deleting without affecting the validity of the remaining provisions. Unless otherwise specifically agreed upon in writing between Hach and Buyer, any dispute relating to this Contract which is not resolved by the parties shall be adjudicated in order of preference by a court of competent jurisdiction (i) in the State of Colorado, U.S.A. if Buyer has minimum contacts with Colorado and the U.S., (ii) elsewhere in the U.S. if Buyer has minimum contacts with the U.S. but not Colorado, or (iii) in a neutral location if Buyer does not have minimum contacts with the United States.

23. ENTIRE AGREEMENT & MODIFICATION: These Terms & Conditions of Sale constitute the entire agreement between the parties and supersede any prior agreements or representations, whether oral or written. No change to or modification of these Terms & Conditions shall be binding upon Hach unless in a written instrument specifically referencing that it is amending these Terms & Conditions of Sale and signed by an authorized representative of Hach. Hach rejects any additional or inconsistent Terms & Conditions of Sale offered by Buyer at any time, whether or not such terms or conditions materially alter the Terms & Conditions herein and irrespective of Hach's acceptance of Buyer's order for the described goods and services.

24. APPENDICES: If checked, the following Appendices are attached hereto and incorporated by reference into these Terms & Conditions of Sale:

☐ CLAROS SOFTWARE AS A SERVICE SUBSCRIPTION AGREEMENT

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STAFF REPORT

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

From: **Mary Rogren, General Manager**

Agenda: **August 11, 2020**

Report Date: **August 7, 2020**

Subject: **Approval of Professional Services Agreement with EKI Environment and Water, Inc. for Capital Project Management and As-Needed Engineering Services**

Recommendation:

Authorize the General Manager to retain the professional services of EKI Environment and Water, Inc. (EKI) for capital project management and as needed engineering support, including hydraulic modeling for Fiscal Year 2020-2021 for a not-to-exceed budget of $100,000.

Background:

The District's Capital Improvement Program (CIP) includes projects totaling ~$5M annually. Many of these projects require extensive preparations – planning, design, environmental documentation, permitting, bidding, and contract management. In FY 2018-2019 and FY2019-2020, the District engaged EKI to assist with the overall management and planning of the District's CIP projects. In addition, EKI assumed responsibilities for updating and maintaining the District's hydraulic modeling. The model is now referenced routinely in analyzing distribution system issues and is an indispensable management tool for the District.

Based on EKI's past responsiveness and excellent support provided during the past two fiscal years, staff recommends that the Board approve a professional services agreement for capital project management and as-needed engineering support, including hydraulic modeling, for FY 2020-2021 for a not-to-exceed amount of $100,000. The attached EKI proposal dated August 4, 2020 outlines the scope of their effort.

Fiscal Impact:

Cost of $100,000 to be partially funded in the Engineering expense line item. Costs directly attributable to CIP will be charged against the CIP projects.

Corporate Office
577 Airport Boulevard, Suite 500
Burlingame, CA 94010
(650) 292-9100
ekiconsult.com

4 August 2020

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

Subject: **Proposal for Continuing Capital Project Management Support**
Coastside County Water District, Half Moon Bay, California
(EKI B80108.01)

Dear Ms. Rogren:

EKI Environment & Water, Inc. (EKI) is pleased to submit this proposal for continued consulting services to assist the Coastside County Water District (District) with the management of the District's Capital Improvement Program (CIP) and for as-needed engineering services, including hydraulic modeling.

PROJECT UNDERSTANDING

EKI has been assisting the District with the management of its CIP, including project prioritization, scheduling, budgeting, and implementation. EKI has also updated the District's water system hydraulic model and has used the hydraulic model for several hydraulic analyses and a tank storage evaluation.

The District requested that EKI continue assisting with the management of its CIP for the Fiscal Year 2020-2021 and provide as-needed engineering services, including hydraulic modeling analyses. Therefore, EKI has prepared this proposal for the scope of work described in the following sections.

PROPOSED SCOPE OF WORK

EKI will provide the District continued consulting services for management of the District's CIP and as-needed engineering services. Specific tasks to be performed by EKI are anticipated to include those described below. However, the task list may evolve as the projects progress.

Task 1. Program and Project Management

EKI will coordinate and participate in biweekly update meetings with the District. The meeting will include updates on the schedules and budgets for ongoing projects and discussions of any current or anticipated issues and action items. In addition, EKI and the District will discuss the

anticipated scopes, schedules, and budgets for future upcoming projects. EKI and the District will establish priorities for completing future projects that do not have established schedules. EKI will prepare meeting agendas and document the meeting discussions with summary emails.

EKI will invoice CCWD every four (4) weeks and include a progress report and detailed accounting of time charged. Other project management activities include budget tracking, staff management, and health and safety for fieldwork. EKI will also be available to attend and present at Board of Directors Meetings if requested.

Deliverables: Invoice Progress Reports and Biweekly Meeting Agendas and Summary Emails.

Task 2 – As-Needed Engineering Services

EKI will provide general consulting services on an as-needed basis including attending meetings, preparing correspondences, supporting regular communications, and providing technical or programmatic support on various CIP-related issues. These as-needed services will also include hydraulic model support and analyses. Specific tasks may include the following:

- Develop and assist with implementing a hydrant flow test plan and completion hydraulic model calibration based on the test results;
- Complete hydraulic modeling analyses and summary memorandums to evaluate the hydraulic impacts of potential improvement projects;
- Complete feasibility or alternative analyses for potential CIP projects;
- Preparation of request for proposals for engineering design services for planned CIPs, including tank projects;
- Develop scopes of work for engineering services for planned CIPs.

As-needed services will only be performed if authorized by the District. The time charged will be tracked by each authorized task.

Deliverables: As needed for each project.

PROJECT SCHEDULE

EKI will continue to perform this scope of work in accordance with a mutually agreeable schedule.

COMPENSATION FOR CONSULTING SERVICES

We propose that compensation for consulting services by EKI be on a time and expense reimbursement basis in accordance with the terms of our 19 October 2018 Professional Services agreement and our current Schedule of Charges, dated 1 January 2020. We propose a budget of $100,000 to perform Tasks 1 and 2 as shown by task in Table 1.

Table 1. Proposed Cost by Tasks

Task	Description	Task Total
1	Program and Project Management	$60,000
2	As-Needed Engineering Services	$40,000
	Total Estimated Budget	**$100,000**

EKI anticipates that this budget will cover our services for the fiscal year 2020-2021 (i.e., July 2020 through June 2021). EKI will not exceed the budget without written authorization from the District. Regular invoices will detail the expenditures to date for each of the above tasks.

TERMS AND CONDITIONS

Other than the scope of work, budget, and schedule herein, the work will be performed in accordance with our current Agreement.

Thank you for the opportunity to work with the District on this Project. Please contact Jonathan Sutter at 650-292-9100 with any questions.

Very truly yours,

EKI Environment & Water, Inc.

Jenn Hyman, P.E., LEED AP
Vice President

Jonathan Sutter, P.E.
Project Manager

MONTHLY REPORT

To: **Mary Rogren, General Manager**

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

Agenda: **August 11, 2020**

Report Date: **August 6, 2020**

Monthly Highlights

- Replaced 6 Hydrants
  - 43 Patrick Way
  - Two in Amesport Landing
  - 338 Greenbrier Road
  - 2140 Winged Foot Road
  - 616 Ruisseau Francais Avenue
- Leaks repaired at:
  - Valdez Avenue/Potter Avenue

Sources of Supply

- **July Sources:**
  - Denniston Reservoir/Wells, Pilarcitos/Crystal Springs

Projects

- 766 Main Street fascia board installation/painting is complete
- Garcia Avenue emergency main replacement – Complete
- Denniston Water Treatment Plant down for maintenance
  - Denniston Wash Water Recover pump pulled for replacement
  - Drain/Clean WWR basins
  - Flush/clean/service chemical pumps and rapid mix
  - Replace chemical delivery flex hoses
  - Start installation of redundant Poly Aluminum Chloride filter aid line
- Denniston Tank Road Culvert Replacement project started 7/20/20
- Denniston Generator installation started 7/20/20
- HDR – Bi-weekly progress meetings with staff ongoing. Geotech and survey complete, 60% design expected in September. Staff is pleased with progress thus far.