



**AGENDA
REGULAR MEETING OF
THE BOARD OF DIRECTORS OF
CARPINTERIA VALLEY WATER DISTRICT**

Wednesday, May 26, 2021 at 5:30 p.m.

Tele-Meeting

BOARD OF DIRECTORS

*Matthew Roberts
President
Case Van Wingerden
Vice President
Polly Holcombe
Shirley L. Johnson
Kenneth Stendell*

GENERAL MANAGER

Robert McDonald, P.E. MPA

THE CARPINTERIA VALLEY WATER DISTRICT HAS DETERMINED THIS MEETING TO BE AN ESSENTIAL PUBLIC MEETING THAT WILL BE CONDUCTED PURSUANT TO THE PROVISIONS OF THE GOVERNOR'S EXECUTIVE ORDERS N-29-20 AND N-33-20 AND SANTA BARBARA COUNTY HEALTH OFFICER'S ORDER

In response to the spread of the COVID-19 virus, Governor Newsom has temporarily suspended the requirement for local agencies to provide a physical location from which members of the public can observe and offer public comment and has ordered all Californians to stay home except as needed to maintain continuity of operations of certain critical infrastructure.

To minimize the potential spread of the COVID-19 virus, the Carpinteria Valley Water District is not permitting public access to the City Council Chamber and Boardroom for this meeting at this time. Meeting may be viewed, live or recorded, on the Districts Website through the Granicus platform

If interested in participating in a matter before the Board, you are strongly encouraged provide the Board with public comment in one of the following ways:

1. **Comments** during a meeting may be submitted online through eComment function found on the website <http://cvwd.net/board/meetings.htm> (**Livestream is available online**).
2. Submitting a Written Comment. If you wish to submit a written comment, please email your comment to the Board Secretary at Public.Comment@cvwd.net by **5:00 P.M. on the day of the meeting**. Please limit your comments to 250 words. Every effort will be made to read your comment into the record, but some comments may not be read due to time limitations.
3. Providing Verbal Comment Telephonically. If you wish to make either a general public comment or to comment on a specific agenda item as it is being heard please send an email to the Board Secretary at Public.Comment@cvwd.net by **5:00 P.M. on the day of the meeting** and include the following information in your email: (a) meeting date, (b) agenda item number, (c) subject or title of the item, (d) your full name, (e) your call back number including area code. During public comment on the agenda item specified in your email, District staff will make every effort to contact you via your provided telephone number so that you can provide public comment to the Board electronically.

Please note the President has the discretion to limit the speaker's time for any meeting or agenda matter. Since this is an evolving COVID-19 situation, CVWD will provide updates to any changes to this policy as soon as possible. The public is referred to the website at www.cvwd.net. Thank you in advance for taking all precautions to prevent spreading the COVID-19 virus.

1301 Santa Ynez Avenue
Carpinteria, CA 93013
(805) 684-2816

**Indicates attachment of document to agenda packet.

- I. CALL TO ORDER AND PLEDGE OF ALLEGIANCE, President Roberts.**
- II. Roll Call, Secretary McDonald.**
- III. PUBLIC FORUM (Any person may address the Board of Directors on any matter within its jurisdiction which is not on the agenda.).**
- IV. APPROVAL ITEMS**
 - A. **Minutes of the Regular Board meeting held on April 28, 2021.**
 - B. **Minutes of the Special Board meeting held on May 5, 2021**
 - C. **Disbursement Report**
- V. UNFINISHED BUSINESS – None**
- VI. NEW BUSINESS**
 - A. Consider Siemens Project update (for information, General Manager McDonald). *Presentation General Manager McDonald***
 - B. **Consider Water Supply Situation (for information, General Manager McDonald). *Presentation General Manager McDonald***
 - C. **Consider CCWA Binding Agreement to purchase 132 AF of water from Casitas Municipal Water District for \$700/AF (for action, General Manager McDonald).**
 - D. **Consider CCWA Binding Agreement to purchase 1000 AF of water from Mojave Water Agency for \$1000/AF (for action, General Manager McDonald).**
 - E. ** Consider Final Water Cost of Service & Rate Study for FY 2022 (for information, General Manager McDonald).**
 - F. ** Consider Article in LA times regarding changing perception of Potable Reuse (for information, General Manager McDonald).**
- VII. DIRECTOR REPORTS (for information)**
 - A. **Cachuma Operation and Maintenance Board – Special Board Meeting – May 13, 2021 – Director Holcombe.**
 - B. **Cachuma Operation and Maintenance Board – Board Meeting – May 24, 2021 – Director Holcombe.**
 - C. **Drought Management & Water Conservation Committee – May 18, 2021 – Directors Johnson and Van Wingerden.**

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D. **Rate & Budget Committee Meeting – May 20, 2021 - Directors Johnson and Van Wingerden

VIII. GENERAL MANAGER REPORTS (for information)

- A. **Engineering Report**
- B. **Operations and Maintenance Report**
- C. **Water Supply & Drought Planning**

IX. [CLOSED SESSION]: CONFERENCE WITH LEGAL COUNSEL: POTENTIAL/EXISTING LITIGATION [GOVERNMENT CODE SECTION 54956.9(D)(4)] NAME OF MATTER: Kimball-Griffith LP v. Brenda Wren Burman et. al United States District Court Central District of California. civil action number 2.20-cv-10647 AB (AFMx)

X. [CLOSED SESSION]: CONFERENCE WITH LEGAL COUNSEL: ANTICIPATED LITIGATION, initiation of litigation [GOVERNMENT CODE SECTION 54956.9(D)(4)]: Central Coast Water Authority, 1 Case

XI. CONSIDER DATES AND ITEMS FOR AGENDA FOR:

CARPINTERIA VALLEY WATER DISTRICT BOARD MEETING OF JUNE 9, 2021 AT 5:30 P.M., TELE-CONFERENCE

XII. ADJOURNMENT.

Robert McDonald, Secretary

Note: The above Agenda was posted at Carpinteria Valley Water District Administrative Office in view of the public no later than 5:30 p.m., May 21, 2021. The Americans with Disabilities Act provides that no qualified individual with a disability shall be excluded from participation in, or denied benefits of, the District's programs, services, or activities because of any disability. If you need special assistance to participate in this meeting, please contact the District Office at (805) 684-2816. Notification at least twenty-four (24) hours prior to the meeting will enable the District to make appropriate arrangements.

Materials related to an item on this Agenda submitted to the Board of Directors after distribution of the agenda packet are available for public inspection in the Carpinteria Valley Water district offices located at 1301 Santa Ynez Avenue, Carpinteria during normal business hours, from 8 am to 5 pm.

	MINUTES OF THE REGULAR MEETING OF THE BOARD OF DIRECTORS
	CARPINTERIA VALLEY WATER DISTRICT
	April 28, 2021
	<p>President Roberts called the regular meeting of the Carpinteria Valley Water District Board of Directors held via tele-conference at 5:30 p.m., Wednesday, April 28, 2021 and led the Board in the Pledge of Allegiance.</p> <p>In response to the spread of the COVID-19 virus, Governor Newsom has temporarily suspended the requirement for local agencies to provide a physical location from which members of the public can observe and offer public comment and has ordered all Californians to stay home except as needed to maintain continuity of operations of certain critical infrastructure.</p>
	Directors Present; Holcombe, Van Wingerden, Roberts, Johnson and Stendell
	Director Absent: none
	Others Present: Bob McDonald
	Roger Myers Norma Rosales Ursula Santana Greg Stanford
PUBLIC FORUM	No one from the public addressed the Board.
MINUTES	<p>Following discussion, Director Holcombe moved, and Director Van Wingerden seconded the motion to approve the minutes of the Board meeting held on April 28, 2021. The motion carried by a 5-0 vote. The minutes were approved by roll call as follows;</p> <p>Ayes: Roberts, Johnson, Holcombe, Stendell and Van Wingerden Nays: None Abstain: None Absent: None</p>
DISBURSEMENT REPORT	Assistant General Manager Rosales reported that the report had been revised from what was in the packet. Following discussion, Director Johnson moved, and Director Stendell

	<p>seconded the motion to approve the revised disbursement report. The motion carried by a 5-0 vote. The report was approved by roll call as follows;</p> <p>Ayes: Van Wingerden, Johnson, Roberts, Stendell and Holcombe Nayes: None Absent: None</p>
INVESTMENT REPORT	<p>Following discussion, Director Vanwingerden moved, and Director Johnson seconded the motion to approve the Investment Report. The motion carried by a 5-0 vote. The report was approved by roll call as follows;</p> <p>Ayes: Van Wingerden, Johnson, Roberts, Stendell and Holcombe Nayes: None Absent: None</p>
QUARTERLY DIRECTOR MEETING REPORT	<p>Following discussion, Director Johnson moved, and Director Stendell seconded the motion to approve the Quarterly Director Meeting Report. The motion carried by a 5-0 vote. The report was approved by roll call as follows;</p> <p>Ayes: Van Wingerden, Johnson, Roberts, Stendell and Holcombe Nayes: None Absent: None</p>
BUILDING AND OFFICE SPACE IMPROVEMENTS	<p>Assistant General Manager Rosales and Operation & Maintenance Manager Stanford presented proposed building and office space improvements. This Item was for information only.</p>
WORKSPACE REMODEL PROPOSAL and GUY SMITH PAINTING CONTRACT	<p>Following discussion, Director Holcombe moved, and Director Van Wingerden seconded the motion to approve the authorization to Tri-County Office Furniture in an amount not to exceed \$83,000.00 and to approve the authorization of paint contract to Guy Smith Painting for interior paint only not to exceed \$57,340.00.</p> <p>The motion carried by a 5-0 vote. The motion was approved by roll call as follows:</p> <p>Ayes: Van Wingerden, Johnson, Roberts, Stendell and Holcombe Nayes: None</p>

	Absent: None
REPLACEMENT CREW TRUCK	<p>General Manager McDonald presented to consider the purchase of replacement crew truck in the amount of \$117,440.80.</p> <p>Following discussion, Director Vanwingerden moved, and Director Johnson seconded the motion to approve authorizing the purchase of replacement crew truck in the amount of \$117,440.80. The motion carried by a 5-0 vote. The motion was approved by roll call as follows:</p> <p>Ayes: Van Wingerden, Johnson, Roberts, Stendell and Holcombe Nays: None Absent: None</p>
TITLE XVI GRANT	<p>General Manager McDonald presented to consider the ratification of General Manager’s approval of Title XVI Grant Proposal for application assistance from MNS Engineers, cost increase to \$45,580.00.</p> <p>Following discussion, Director Holcombe moved, and Director Stendell seconded the motion to approve the increase of the Title XVI Grant proposal for application assistance from MNS Engineers, cost increase to \$45,580.00 The motion carried by a 5-0 vote. The motion was approved by roll call as follows:</p> <p>Ayes: Van Wingerden, Johnson, Roberts, Stendell and Holcombe Nays: None Absent: None</p>
FLOWERS & ASSOCIATES PROPOSAL FOR DESIGN	<p>General Manager McDonald presented to consider Proposal for Design from Flowers & Associates for the South Coast Conduit Lateral Valve Replacement Project in an amount not to exceed \$65,000.</p> <p>Following discussion, Director Holcombe moved, and Director Stendell seconded the motion to approve the South Coast Conduit Lateral Valve Replacement Project in an amount not to exceed \$65,000.</p> <p>The motion carried by a 5-0 vote. The motion was approved by roll call as follows:</p>

	<p>Ayes: Van Wingerden, Johnson, Roberts, Stendell and Holcombe Nays: None Absent: None</p>
ADMINISTRATIVE COMMITTEE ASSIGNMENTS	<p>General Manager McDonald presented to consider new assignments for the Administrative Committee.</p> <p>President Roberts appointed Director Holcombe to replace Director Johnson on the Administrative Committee.</p>
ADMINISTRATIVE COMMITTEE MEETING	<p>Directors Holcombe and Van Wingerden gave a verbal report on the Administrative Committee Meeting held on April 27, 2021.</p>
CACHUMA OPERATION & MAINTENANCE BOARD MEETING	<p>Director Holcombe gave a verbal report on the Cachuma Operation & Maintenance Board meeting held on April 22, 2021.</p>
CACHUMA OPERATION & MAINTENANCE BOARD MEETING	<p>Director Holcombe gave a verbal report on the Cachuma Operation & Maintenance Administrative Committee meeting held on April 15, 2021.</p>
CENTRAL COAST WATER AUTHORITY BOARD MEETING	<p>Director Johnson gave a verbal report on the Central Coast Water Authority Board Meeting held on April 22, 2021</p>
ADJOURNED TO CLOSED SESSION	<p>The Board met to discuss the following items in Closed session:</p> <p>IX. CONFERENCE WITH LEGAL COUNSEL: POTENTIAL/EXISTING LITIGATION [GOVERNMENT CODE SECTION 54956.9(D)(4)] NAME OF MATTER: Kimball-Griffith LP v. Brenda Wren Burman et. al United States District Court Central District of California. civil action number 2.20-cv-10647 AB (AFMx).</p> <p>X. CONFERENCE WITH LEGAL COUNSEL: ANTICIPATED LITIGATION, initiation of litigation [GOVERNMENT CODE SECTION 54956.9(D)(4)]: Central Coast Water Authority, 1 Case</p> <p>XI. CONFERENCE WITH LEGAL COUNSEL: POTENTIAL [GOVERNMENT CODE SECTION 54956.9(D)(4)] NAME OF MATTER: CVWD WATER RIGHT</p>
BOARD RECONVENED IN OPEN SESSION	<p>At 7:45 p.m., President Roberts reconvened the Board meeting in open session.</p> <p>IX. No reportable action</p>

	X. The Board gave direction
	XI. No reportable action
NEXT BOARD MEETING	The next regular Board meeting is scheduled to be held on May 26, 2021
ADJOURNMENT	President Roberts adjourned the meeting at 7:50 p.m.
	Ursula Santana, Secretary

	MINUTES OF THE SPECIAL MEETING OF THE BOARD OF DIRECTORS
	CARPINTERIA VALLEY WATER DISTRICT
	May 5, 2021
	<p>President Roberts called the special meeting of the Carpinteria Valley Water District Board of Directors held via tele-conference at 5:30 p.m., Wednesday, May 5, 2021 and led the Board in the Pledge of Allegiance.</p> <p>In response to the spread of the COVID-19 virus, Governor Newsom has temporarily suspended the requirement for local agencies to provide a physical location from which members of the public can observe and offer public comment and has ordered all Californians to stay home except as needed to maintain continuity of operations of certain critical infrastructure.</p>
	Directors Present; Holcombe, Van Wingerden, Roberts and Johnson
	Director Absent: Stendell
	Others Present: Bob McDonald
	Roger Myers Norma Rosales Ursula Santana Kevin Kostiuk
PUBLIC FORUM	No one from the public addressed the Board.
PROPOSITION 218 NOTICE OF PUBLIC HEARING	<p>General Manager McDonald introduced Kevin Kostiuk for Raftelis to present the updated proposed changes to water rates and monthly service charges effective July 1, 2021.</p> <p>The District is proposing changes to:</p> <ul style="list-style-type: none"> • the unit cost of water • the Basic monthly charge • the Capital Improvement Program charge • the AG O&M charge for agricultural accounts <p>The District also proposes to:</p> <ul style="list-style-type: none"> • eliminate the meter and volumetric Drought surcharges • implement a three-tier volumetric rate structure for Residential customers.

	<p>The Board of Directors of the Carpinteria Valley Water District will tentatively hold a Public Hearing on Wednesday, June 30, 2021 at 5:30 p.m.to consider changes in its Rates and Charges.</p> <p>Following discussion, Director Johnson moved, and Director Holcombe seconded the motion to approve the Prop 218 notice as presented.</p> <p>The motion carried by a 4-0-1 vote with Director Stendell absent. The motion was approved by roll call as follows:</p> <p>Ayes: Van Wingerden, Johnson, Roberts and Holcombe Nays: None Absent: Stendell</p>
NEXT BOARD MEETING	The next regular Board meeting is scheduled to be held on May 26, 2021 via tele-conference.
ADJOURNMENT	<p>President Roberts adjourned the meeting at 5:56 p.m.</p> <hr/> <p>Ursula Santana, Secretary</p>



Monthly Disbursement Report Carpinteria Valley Water District

Payment Dates: 04/16/21 - 05/15/21

Disbursement Summary	
Operating Account	614,575.00
Carpinteria Groundwater Sustainability Agency (CGSA)	445.00
Rnacho Monte Alegre (RMA)	400,617.18
Total	\$ 1,015,637.18

Operating Account - Disbursements Report				
Vendor	Description	Payment Number	Payment Date	Payment
ACWA/JPIA				
	WORKER'S COMP - 3RD QUARTER	37315	5/14/2021	14,950.41
ACWA-JPIA				
	HEALTH INSURANCE, DENTAL AND VISION	37286	5/7/2021	35,449.79
AFLAC				
	SUPPLEMENTAL INSURANCE	37287	5/7/2021	785.74
ALL AROUND LANDSCAPE SUPPLY				
	MAINTENANCE OF MAINS	37250	4/27/2021	81.39
	MAINTENANCE OF PLANTS - PVC FITTING	37250	4/27/2021	6.89
ANTHEM BLUE CROSS				
	SUPPLEMENTAL INSURANCE - RETIREE -MAY	37251	4/27/2021	79.90
ANTHEM BLUE CROSS				
	ANTHEM RETIREE PREMIUM - RETIREE- MAY	37272	4/27/2021	309.98
APPLIED BEST PRACTICES, LLC				
	APB CONTINUING DISCL SVCS	37252	4/27/2021	1,500.00
ASPECT ENGINEERING GROUP				
	AUTOMATION ANALYST, REH - 041421 - SHEPARD MESA	37295	5/11/2021	230.00
AT&T MOBILITY				
	MOBILE DEVICES	37279	5/4/2021	180.32
	SCADA, TABLETS, OTHER WIRELES	37279	5/4/2021	200.08
BIG GREEN CLEANING COMPANY / RICH & FAMOUS, INC.				
	CONFERENCE ROOM CARPET CLEANING-031921	37253	4/27/2021	135.00
BNY MELLON CORPORATE TRUST				
	REFUNDING BONDS - SERIES 2020A	37296	5/11/2021	1,250.00
	REFUNDING BONDS SERIES 2020B	37275	4/28/2021	1,250.00
	CERTIFICATES OF PARTICIPATION-SERIES 2020C	37275	4/28/2021	1,250.00
CACHUMA O & M BOARD				
	4TH QTR BUDGET - APRIL - JUNE FY 20/21	37281	5/5/2021	52,677.00
CANON FINANCIAL SERVICES, INC				
	MONTHLY CONTRACT CHARGES COPIER - MAY	37297	5/11/2021	775.84
CARDMEMBER SERVICES				
	SOFTWARE SUBSCRIPTION	37294	5/7/2021	1251.44
	BOARD MEETINGS & SUPPLIES	37294	5/7/2021	349.62
	TELEPHONE	37294	5/7/2021	806.33
	MINOR TOOLS & EQUIP	37294	5/7/2021	85.08
	CONSTRUCTION IN PROCESS	37294	5/7/2021	1033
	EMPLOYEE ED & TRAINING	37294	5/7/2021	775
	COMPUTER SYST MAINT	37294	5/7/2021	167.23
	DIGITAL SIGNS	37294	5/7/2021	116.37
	ENGINEERING SUPPLIES	37294	5/7/2021	567.73
	CREDIT ON ACCOUNT	37294	5/7/2021	-927.71
COASTAL VIEW NEWS				
	WATERWISE AD - 041521	37298	5/11/2021	254.00
	DROUGHT AD - 042921	37298	5/11/2021	254.00

Vendor	Description	Payment Number	Payment Date	Payment
COLONIAL LIFE	SUPPLEMENTAL INSURANCE	37270	4/27/2021	744.26
COMPLETE CONNECTION CABLING SERVICES INC	ADMIN BLDG CENTRAL POWER & CABLE UPGRADE	37254	4/27/2021	501.00
	ADMIN BLDG CENTRAL POWER & CABLE UPGRADE	37254	4/27/2021	3,690.98
	ADMIN BLDG CENTRAL POWER & CABLE UPGRADE	37254	4/27/2021	1,932.49
CONSOLIDATED ELECTRICAL DISTRIBUTORS, INC.	SMALL TOOLS - CIRC BRKR FINDER	37255	4/27/2021	124.84
COUNTY OF SANTA BARBARA CLERK RECORDER ASSESSOR	CR-RECORDING FEES-113020	37256	4/27/2021	20.00
COX COMMUNICATIONS CALIFORNIA	INTERNET PROVIDER - MAY	37289	5/7/2021	250.41
DIG SAFE BOARD	2020-CA REGULATORY COSTS	37257	4/27/2021	55.58
DOCUSIGN, INC.	ESIGNATURE PRO EDITION - 021521-021422	37276	4/28/2021	4,246.51
E.J. HARRISON & SONS, INC.	TRASH & RECYCLE - APRIL	37273	4/27/2021	254.91
E.M. CLARK AND SONS, INC.	PROGRESS BILL - FRONT DESK AREA	37317	5/14/2021	7,065.00
ECHO COMMUNICATIONS	ECHO COMM MONTHLY STMT - MAY	37299	5/11/2021	2.21
EDISON CO	CARP RES - 18,720 KWH - APRIL	37249	4/27/2021	2,948.58
	LYONS WELL - 106 KWH - APRIL	37277	4/28/2021	94.72
	OFFICE - 2,321 - kWh - APRIL	37249	4/27/2021	440.74
	SMILLIE WELL - 43,806 KWH - APRIL	37249	4/27/2021	5,143.48
	HQ WELL - -28,029 KWH	37249	4/27/2021	(6,468.95)
	EL CARRO WELL - 6,626 KWH - APRIL	37249	4/27/2021	2,474.58
	GOB CYN PUMP - 883 KWH	37249	4/27/2021	152.20
	SM TANK - 221 kWh - APRIL	37249	4/27/2021	53.65
	FOOTHILL TANK - 4224 kWh - APRIL	37249	4/27/2021	1,675.31
	SM PUMP - 4,727 kWh - APRIL	37249	4/27/2021	899.93
ELITE GENERAL ENGINEERING INC	REPAIRS - 4700 SANDY LAND AVE -SIDEWALK - 031821	37300	5/11/2021	6,453.11
	Customer Project 760 Palm - 031521	37300	5/11/2021	981.00
	REPAIRS -1240 FRANCISCAN CT - 032421	37300	5/11/2021	6,027.00
	EMERGENCY LEAK REPAIRS - 041521 - HWY 150	37300	5/11/2021	4,974.00
EMPLOYEE RELATIONS NETWORK	EMP REL - BACKGROUND CK - JANUARY INV.	37258	4/27/2021	59.22
ENTERPRISE FM TRUST	FLEET LEASE AND MAINT - APRIL	37292	5/7/2021	7,637.68
	FLEET LEASE AND MAINT - MAY	37290	5/7/2021	7,637.68
FRONTIER COMMUNICATIONS	ORTEGA - 0416-0515	37278	4/28/2021	433.92
	ORTEGA - 041621	37259	4/27/2021	125.33
FRUIT GROWERS LABORATORY, INC	ORGANIC ANALYSIS - EPA 551.1 / EPA 552.2	37260	4/27/2021	812.00
	ORGANIC ANALYSIS - EPA 551.1 / EPA 552.2 - 040721	37301	5/11/2021	871.00
	INORGANIC ANALYSIS - METALS, TOTAL-FE,MN - 040721	37301	5/11/2021	120.00
	BACTI ANALYSIS - COLIFORM - COLILERT-P/A - 041221	37301	5/11/2021	151.00
	BACTI ANALYSIS - COLIFORM - COLILERT-P/A- 041921	37301	5/11/2021	151.00
FTI SERVICES, INC.	MONTHLY MONITORING & ANTIVIRUS - MAY	37302	5/11/2021	465.00
	FTI - IT SUPPORT - MARCH & APRIL	37302	5/11/2021	1,130.51
	ONSITE IT SUPPORT - 041521	37302	5/11/2021	937.50
GUY SMITHSON PAINTING & DECORATING INC.	OFFICE PAINTING	37318	5/14/2021	14,335.00

Vendor	Description	Payment Number	Payment Date	Payment
INFOSEND INC	MARCH-MONTHLY SUPPORT FEE/eBILLS	37261	4/27/2021	314.50
	MARCH-DISCONNECTS/STATEMENTS	37261	4/27/2021	2,120.45
KATZ & ASSOCIATES, INC.	CAPP - JANUARY/FEBRUARY/MARCH	37303	5/11/2021	1,926.25
LINCOLN LIFE	DEFERRED COMPENSATION	37271	4/27/2021	5,345.02
	ROTH IRA	37271	4/27/2021	300.00
	DEFERRED COMPENSATION	37314	5/12/2021	5,507.28
	ROTH IRA	37314	5/12/2021	300.00
LINKO TECHNOLOGY, INC	Software agreement for Backflow data management	37293	5/7/2021	6,700.00
LISA SILVA	OFFICE SUPPLIES - POSTAGE FOR A/P	37282	5/5/2021	52.70
MILNER-VILLA CONSULTING	UWMP2021 - MARCH	37304	5/11/2021	4,480.00
MONTGOMERY & ASSOCIATES	GSP DEVELOPMENT - FEBRUARY	37305	5/11/2021	660.00
	GSP DEVELOPMENT - MARCH	37305	5/11/2021	230.00
MYERS, WIDDERS, GIBSON, JONES & FEINGOLD, LLP	KIMBALL-GRIFFITH-LEGAL SERVICES-MARCH	37262	4/27/2021	285.00
OPEN EDGE	CREDIT CARD PROC FEES 0421	DFT0000867	5/3/2021	6,857.97
PAYROLL TRANSFER	PR TRANSFER PPE 041921	DFT0000852	4/16/2021	46,093.52
	PAYROLL TRANSFER PPE 050121	DFT0000869	4/29/2021	51,254.35
	PAYROLL TRANSFER PPE 051521	DFT0000868	5/13/2021	45,612.74
PUEBLO WATER RESOURCES, INC	GSP - GSP DEVELOPMENT - 02/27/21-03/31/21	37306	5/11/2021	14,230.00
	CAPP - IPR PDR & PERMITTING SUPPORT 2/27/21-4/2/21	37306	5/11/2021	3,485.00
QUADIENT LEASING USA, INC.	POSTAGE & LETTER - MAY 10 - AUG 9 2021	37263	4/27/2021	958.20
RAFTELIS	COS & RATE STUDY - MARCH	37307	5/11/2021	14,267.50
RAUCH COMMUNICATION CONSULTANTS, INC.	WEBSITE UPDATE - FEBRUARY	37264	4/27/2021	2,077.50
SIEMENS PUBLIC, INC.	MASTER LEASE AGREEMENT - #280-0006004-001 - MAY	37274	4/27/2021	134,669.33
STAPLES BUSINESS ADVANTAGE	OFFICE SUPPLIES	37265	4/27/2021	14.25
	OFFICE SUPPLIES - DIGITAL DESKTOP CALCULATOR	37265	4/27/2021	85.41
	OFFICE SUPPLIES - RULER	37265	4/27/2021	2.82
STATE OF CALIFORNIA - DCA	RENEWAL OF PE LICENSE	37316	5/14/2021	180.00
STATE OF CALIFORNIA - EDD	STATE WITHHOLDING	DFT0000849	4/19/2021	2,936.23
	STATE DISABILITY INSURANCE	DFT0000849	4/19/2021	679.61
	STATE WITHHOLDING	DFT0000860	5/4/2021	3,258.80
	STATE DISABILITY INSURANCE	DFT0000860	5/4/2021	687.22
	STATE WITHHOLDING	DFT0000872	5/14/2021	2,867.31
	STATE DISABILITY INSURANCE	DFT0000872	5/14/2021	684.78
TRUE CUT CONCRETE	FLAT SAW - 4869 CARP AVE	37308	5/11/2021	250.00
TYLER TECHNOLOGIES, INC	UTILITY BILLING NOTIFCATION – CALLS & SMS	37266	4/27/2021	148.00
UNDERGROUND SERVICE	DIG ALERT - 58 NEW TICKET	37267	4/27/2021	105.70

Vendor	Description	Payment Number	Payment Date	Payment
UNION BANK				
	FICA PR	DFT0000848	4/19/2021	8,851.56
	FEDERAL W/H	DFT0000848	4/19/2021	7,081.35
	MEDICARE W/H	DFT0000848	4/19/2021	2,070.12
	FICA PR	DFT0000859	5/3/2021	9,616.04
	FEDERAL W/H	DFT0000859	5/3/2021	7,436.12
	MEDICARE W/H	DFT0000859	5/3/2021	2,248.88
	FICA PR	DFT0000873	5/14/2021	8,804.84
	FEDERAL W/H	DFT0000873	5/14/2021	7,004.47
	MEDICARE W/H	DFT0000873	5/14/2021	2,059.16
UNUM LIFE INSURANCE COMPANY				
	LIFE INSURANCE - MAY	37268	4/27/2021	578.86
URSULA SANTANA				
	OFFICE SUPPLIES - POSTAGE	37283	5/5/2021	55.00
USPS				
	TO REPLENISH POSTAGE	37280	5/4/2021	500.00
VENTURA COUNTY STAR				
	JOB AD - 3/7 - 4/5 - FIELD ENG TECH	37269	4/27/2021	868.33
VENTURA STEEL				
	PLATE FOR FRONT OFFICE - 040721	37309	5/11/2021	27.25
VERIZON WIRELESS				
	CREW CELL PHONES	37291	5/7/2021	322.60
VULCAN MATERIALS COMPANY				
	VARIOUS PAVING - 031221	37310	5/11/2021	586.23
	VARIOUS PAVING - 042221	37310	5/11/2021	380.15
WAGE WORKS DISBURSEMENTS				
	WAGEWORKS DISBURSEMENT 04/2, 04/09 & 04/16	DFT0000856	4/16/2021	102.09
	WAGEWORKS DISB 0416-043021	DFT0000871	4/30/2021	54.11
	WAGEWORKS DISBURSEMENTS 0501-051521	DFT0000870	5/15/2021	851.59
				\$ 614,575.00

Carpinteria Groundwater Sustainability Agency - Account Check Report

FRUIT GROWERS LABORATORY, INC				
	AB3030 - INORGANIC ANALYSIS	1013	4/27/2021	445.00
				\$ 445.00

Rancho Monte Alegre - Account Check Report

LASH CONSTRUCTION				
	RMA BRIDGE REPLACEMENT PROJECT - ESTIMATE NO 3	1072	4/27/2021	207,889.33
	RMA BRIDGE REPLACEMENT PROJECT - ESTIMATE NO 4	1075	5/14/2021	183,690.35
PADRE ASSOCIATES, INC				
	RMA PROJECT - PROFESSIONAL SERVICE - MARCH	1073	5/12/2021	9,037.50
				\$ 400,617.18



Carpinteria Valley Water District

1301 Santa Ynez Avenue • Carpinteria, CA 93013
Phone (805) 684-2816

BOARD OF DIRECTORS

Matthew Roberts
President
Case Van Wingerden
Vice President
Polly Holcombe
Shirley L. Johnson
Kenneth Stendell

MEMO

GENERAL MANAGER

Robert McDonald, P.E. MPA

To: CVWD Board of Directors

From: Bob McDonald, General Manager

Date: May 10, 2021

SUBJECT: CVWD Two Year Water Supply Outlook

Due to the drought conditions over the past 2 years, Cachuma will likely have a reduced allocation for WY22. Historically, CVWD is allocated 2813 AF in normal years, however due to the dry winter and the lower available water in the Lake, there is a chance that the USBR will not allocate a full 2813 AF this October. For planning purposes, we estimated a 50% allocation (1407 AF) for WY22 followed by 0% allocation in WY23 for Cachuma. In addition, the SWP has had lower allocations in CY20 and 21 assuming similar low allocations for the SWP of 0% in CY22 and 10% CY23. The discussion amongst the State Water Contractors is that this is the one of the worst year ever for the Project and may take several years for the SWP to recover.

Finally, with local groundwater we have a slightly mixed picture, the good news is that the ERT survey at the coast did not show elevated electro-conductivities inland in the A and B zones. This means that there is unlikely seawater intrusion inland occurring in these zones. Unfortunately, we could not get a good read on the C zone with the ERT survey because of its depth and relative thickness. Although we know that the C zone, through the induction surveys over time, is showing increasing conductivities over the past two years at the Sentinel Well and the chloride levels in this zone concur with this trend. So, its safe to say we are seeing sea water moving inland at that location in the C zone although we do not know, aerially, what this might look like. There was a high conductivity "hotspot" detected in between the A and B zones right along the oceans edge. It was unclear if this was in the A or B zone or within an intermediate zone of either clays or sands. We will need to look again in this area overtime to determine what this hot spot means. As you know, out of caution, last year we stopped pumping El Carro Well, which is perforated in the A, B & C zones and HQ well that is perforated in the A and B zones. Considering our current water supply situation, we will revisit this operational decision along with considering some options to allow us to generate more groundwater without having a significant effect at the coast.

We have updated our two “winter” water supply outlook using the above inputs. With no supplemental water and pumping 1300 AF of groundwater each year (this is optimistic) Chart 1, the District will run out for water supply in July 2023 if we experience average or below average precipitation over the next two winters (this has become typical). With 1000 AF of supplemental water, Chart 2, The District will make it to October of 2023 when the Cachuma Project may have supply. We will evaluate the inputs and update the Outlook on a monthly basis since we have determined that there is a potential shortage within two years.

CCWA has 1132 AF available for Carpinteria to access through the Supplemental Water Purchase Program. There is 1000 AF at \$1000/AF from Mojave and 132 AF at \$700/AF for a total cost of \$1,092,105. To deliver this water will cost an additional ~\$400,000 over two years. Total additional cost would approximately \$1.5 M.

Actions recommended now

Staff is recommending that the ~500 AF stored in IRWD bank be withdrawn in November 2021 and that CVWD purchase through the CCWA approximately 1000AF of supplemental water . This should provide water supply through October 2023. Additionally, as soon as practical CVWD should developing drought messaging and begin analyzing when to implement stage 2 drought conditions. Finally, CVWD should begin setting up a groundwater strategy that will allow the District to extract enough ground water without causing significant seawater advancement at the coast.

To pay for the supplemental water, Staff recommends that CVWD utilize funds from District Reserves in the amount of \$1.5M from the emergency fund. There are sufficient funds in District reserves to cover this purchase.

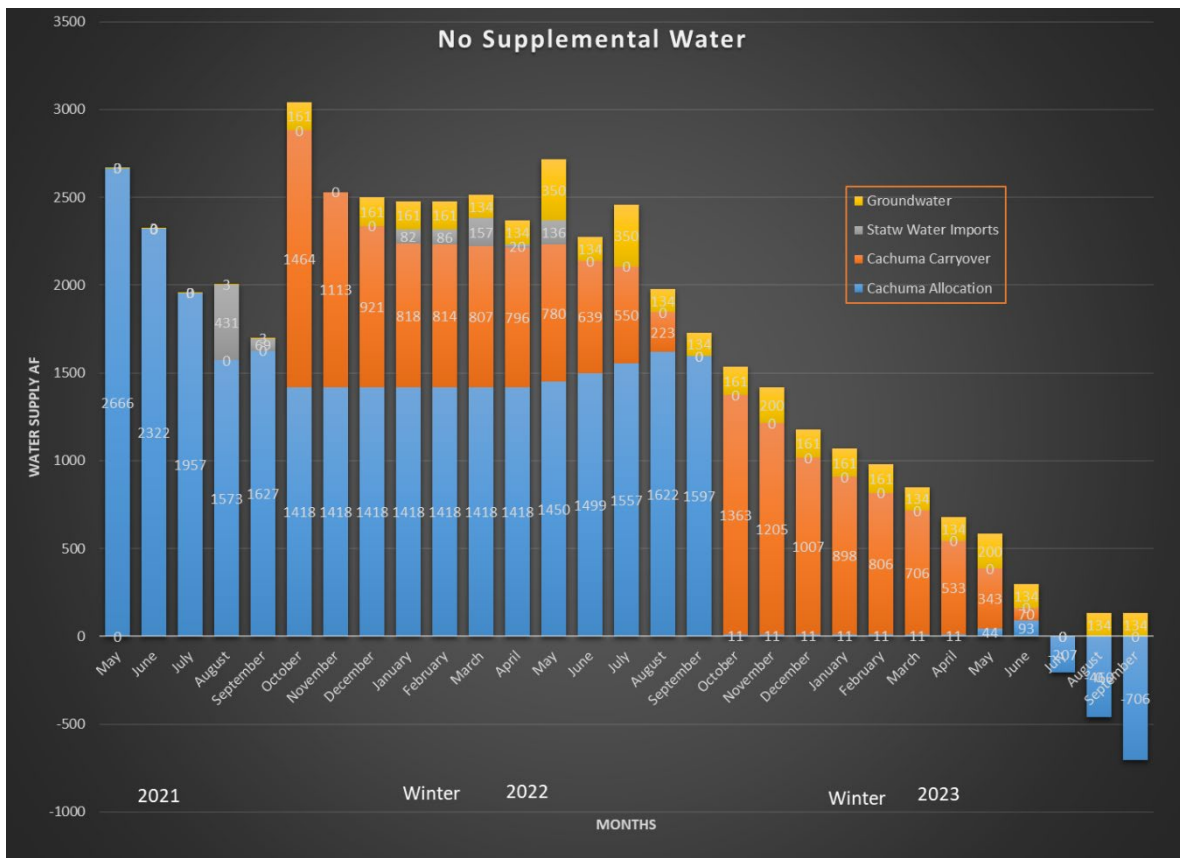


Chart 1- No Supplemental Water

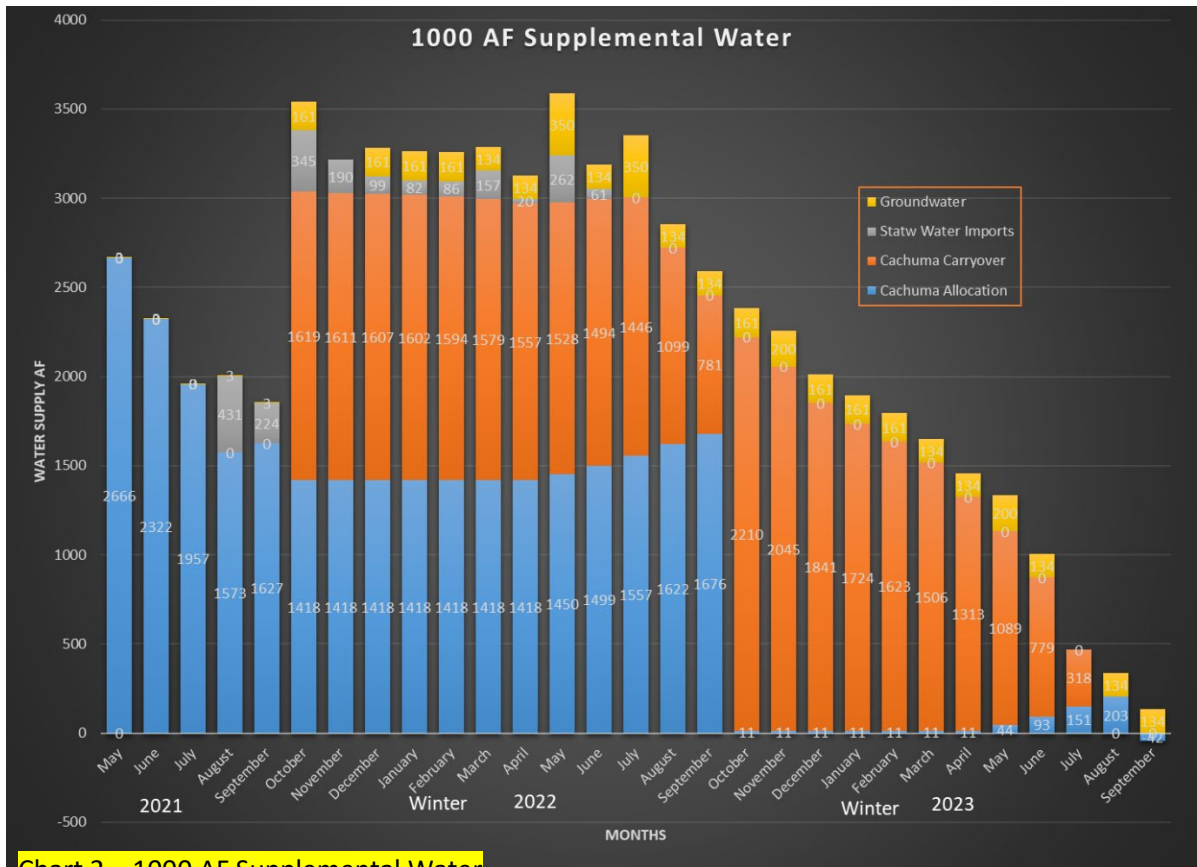


Chart 2 – 1000 AF Supplemental Water

**BINDING AGREEMENT TO PURCHASE
2021 Casitas Municipal Water District**

This Binding Agreement to Purchase (“Agreement”) is made as of _____, 2021
by

CENTRAL COAST WATER AUTHORITY (“Authority”)

and

CARPINTERIA VALLEY WATER DISTRICT (“Participant”).

Recitals

A. The Authority and Participant have entered into a Supplemental Water Purchase Program Participation Agreement as of _____, 2021 (“Participation Agreement”), and the Participant is designated as a “Contractor” under that agreement.

B. The Participant has determined to participate in a specific water purchase that has been identified by the Authority, and has submitted a Statement of Intent related thereto.

Agreement

1. **Delivery and Acceptance.** The Authority agrees to deliver, and the Participant agrees to accept delivery of, Water to be provided to Authority by the **Casitas Municipal Water District** (“Seller”) pursuant to, and subject to the terms and conditions of, an agreement between the Authority and Seller (“Purchase Agreement”), and subject to the availability of capacity in the water transmission and treatment facilities owned or operated by the Authority. The quantity of Water being purchased by Authority for the Participant shall as stated on **Exhibit A** and shall be determined either (i) by agreement of all Participants with respect to that Purchase Agreement or, (ii) in the event no agreement is reached among all Participants, by an allocation based on the pro-rata amounts stated in the respective Delivery Goals of the Participants.

2. **Participant Payments.** The Participant agrees to pay the Authority in accordance with the provisions of the Participation Agreement.

2.1 **Deposit.** Prior to execution of this Agreement, the Authority prepared and delivered to the Participant an estimate of the Participant’s anticipated financial obligations hereunder with respect to the Purchase Agreement, and shall provide that estimate to the Participant. Concurrently with execution of this Agreement, Participant shall place on deposit with the Authority the amount stated in the estimate.

2.2 Invoices and Payments. In the event the Authority reasonably determines that the deposit paid by Participant to the Authority will be insufficient to cover Participant's financial obligations hereunder, the Authority is authorized to deliver to the Participant a revised estimate of those financial obligations and an invoice for an additional deposit. The Participant shall remit the amount stated in the invoice within thirty (30) days of receipt.

2.3 Obligation in the Event of Default.

2.3.1 Written Demand Upon Failure to Make Payment. Upon failure of the Participant to make any payment in full when due under this Agreement or to perform any other obligation hereunder, the Authority shall make written demand upon the Participant, and if such failure is not remedied within thirty (30) days from the date of such demand, such failure shall constitute a default at the expiration of such period. Notice of such demand shall be provided to each other Participant by the Authority. Upon failure of the Authority to perform any obligation of the Authority hereunder, the Participant shall make written demand upon the Authority, and if said failure is not remedied within thirty (30) days from the date of such demand, such failure shall constitute a default at the expiration of such period. Notice of such demand shall be provided to each Participant by the Participant making such written demand.

2.3.2 Other Events of Default. In addition to any default resulting from breach by the Authority or the Participant of any agreement, condition, covenant or term hereof, if the Authority or the Participant shall file any petition or institute any proceedings under any act or acts, state or federal, dealing with or relating to the subject of bankruptcy or insolvency or under any amendment of such act or acts, either as a bankrupt or as an insolvent or as a debtor or in any similar capacity, wherein or whereby the Authority of the Participant asks or seeks or prays to be adjudicated a bankrupt, or is to be discharged from any or all of its debts or obligations, or offers to its creditors to effect a composition or extension or time to pay its debts, or asks, seeks or prays for a reorganization or to effect a plan of reorganization or for a readjustment of its debts or for any other similar relief, or if the Authority or the Participant shall make a general or any assignment for the benefit of its creditors, then in each and every such case the Authority or the Participant, as the case may be, shall be deemed to be in default hereunder.

2.3.3 Transfer for Defaulting Participant's Account. Upon the failure of the Participant to make any payment which failure constitutes a default under this Agreement, the Authority shall use its best efforts to transfer for the Participant's account, all or a portion of the Water to which the Participant is entitled hereunder for all or a portion of the remainder of the term of this Agreement. Notwithstanding that all or any portion of the Participant's Water is so transferred, the Participant shall remain liable to the Authority to pay the full amount of its share of costs hereunder as if such sale or transfer has not been made, except that such liability shall be discharged to the extent that the Authority shall receive payment from the transferee thereof.

2.3.4 Termination of Contractual Rights; Continuing Obligations. Upon the failure of the Participant to make any payment which failure constitutes a default under this Agreement and causes the Authority to be in default under the Purchase Agreement, the Authority may (in addition to the remedy provided by section 2.3.3 hereof), terminate the provisions of this Agreement insofar as the same entitle the Participant to any deliveries of Water. Irrespective of

such termination, the obligations of the Participant to the Authority to pay the full amount of costs under this Agreement shall continue in full force and effect.

2.3.5 Increase in Non-defaulting Participant Costs. Upon the failure of any Participant to make any payment which failure constitutes a default under its respective Participation Agreement, and except as transfers are made pursuant to Section 2.3.3 hereof, (i) the pro-rata share of each non-defaulting Participant shall be automatically increased for the remaining term of the Purchase Agreement pro rata with those of the other non-defaulting Participants, and (ii) such defaulting Participant's right to receive Water shall be reduced accordingly. Upon payment of such increase, a non-defaulting Participant shall be entitled to take delivery of its pro rata share of such defaulting Participant's Water.

2.3.6 Right of Recovery from Defaulting Participant. If a Participant shall fail or refuse to pay any amounts due to the Authority, the fact that a non-defaulting Participant has increased its obligation to make such payments shall not relieve the defaulting Participant of its liability for such payments, and the non-defaulting Participant shall have a right of recovery from the defaulting Participant to the extent of such respective increase in obligation caused by the defaulting Participant. Any amounts received by the Authority from the defaulting Participant for costs that were previously paid by a Non-Defaulting Participant pursuant to Section 2.3.5 above, shall be reimbursed by the Authority to the Non-Defaulting Participant.

3. Reconciliation. Upon termination of the Purchase Agreement, and delivery of all water specified therein, the Authority shall provide to the Participant an accounting of the actual amounts Participant is obligated to pay hereunder. Any overpayment by Participant shall be promptly refunded by the Authority and any underpayment by the Participant shall be promptly paid to the Authority.

4. Term; Termination. The term of this Agreement shall commence on the date this Agreement is signed by the Participant and the Authority, and said executed agreement is delivered to the Authority accompanied by the deposit required by Section 2.1, and shall continue until the termination of the Purchase Agreement, unless sooner terminated as provided for herein.

5. Participant's Representative. The provisions of Section ___ of the Participation Agreement are incorporated herein by reference as though set forth in full herein.

6. General Provisions. The provisions of Section ___ to ___ of the Participation Agreement are incorporated herein by reference as though set forth in full herein. Additionally:

6.1 Indemnification and Defense. Participant agrees to indemnify, defend, protect and hold harmless (i) the Authority and its officers, directors, employees and agents, and (ii) all Contractors under a Water Purchase Participation Agreement (as described in Recital A, above) who are not Participants in the Water purchase which is the subject of this Agreement, from and against all claims, actions, damages, losses and expenses, including reasonable attorneys' fees, arising from or relating to this Agreement, the Purchase Agreement, and the Participation Agreement. If more than one Participant signs this Agreement, the obligations of this Section 6.1 shall be allocated among such Participants in the same manner as the Water is allocated pursuant to Section 2 hereof.

6.2 Superseding Previous Agreement. This Agreement entirely supersedes and replaces any Participation Agreement concerning the same subject executed between the parties hereto.

6.3 Third Party Beneficiary; Enforcement. The parties agree that this Agreement is for the benefit of (i) the Contractor, (ii) the Authority, (iii) all Project Participants under their respective Water Supply Agreements with the Authority dated _____, and (iv) all other Contractors who are signatories to agreements in substantially the same form as this Agreement, and all of the aforementioned entities and persons shall be entitled to enforce the provisions of this Agreement.

IN WITNESS WHEREOF, the parties have executed and entered into this Agreement as of the date first written above.

“Authority”

“Participant”

CENTRAL COAST WATER AUTHORITY
a California joint powers agency

CARPINTERIA VALLEY WATER DISTRICT

By: _____
Name: Ray A. Stokes
Title: Executive Director

By: _____
Name: Matthew Roberts
Title: CVWD Board President

Approved as to form:
Brownstein Hyatt Farber Schreck

Approved as to form:
Myers, Widders, Gibson, Jones & Feingold

By: _____
Stephanie Osler Hastings

By: _____
Roger Myers

Exhibit A: Table of Amounts Purchased by All Participants

Exhibit A

<i>Casitas Municipal Water District</i>					
	Delivery Goal (AF)	% Allocation	Estimated Water (AF)	\$/AF	Estimated Delivered Water After Losses (N/A)
La Cumbre Mutual Water Co.	500	26%	66	\$ 46,053	66
Santa Ynez ID#1 (for City of Solvang)	400	21%	53	\$ 36,842	53
Carpinteria Valley Water District	1,000	53%	132	\$ 92,105	132
	1,900	100%	250	\$ 175,000	250

**BINDING AGREEMENT TO PURCHASE
2021 Mojave Water Agency**

This Binding Agreement to Purchase (“Agreement”) is made as of _____, 2021
by

CENTRAL COAST WATER AUTHORITY (“Authority”)

and

CARPINTERIA VALLEY WATER DISTRICT (“Participant”).

Recitals

- A. The Authority and Participant have entered into a Supplemental Water Purchase Program Participation Agreement as of _____, 2021 (“Participation Agreement”), and the Participant is designated as a “Contractor” under that agreement.
- B. The Participant has determined to participate in a specific water purchase that has been identified by the Authority, and has submitted a Statement of Intent related thereto.

Agreement

1. **Delivery and Acceptance.** The Authority agrees to deliver, and the Participant agrees to accept delivery of, Water to be provided to Authority by the **Mojave Water Agency** (“Seller”) pursuant to, and subject to the terms and conditions of, an agreement between the Authority and Seller (“Purchase Agreement”), and subject to the availability of capacity in the water transmission and treatment facilities owned or operated by the Authority. The quantity of Water being purchased by Authority for the Participant shall as stated on **Exhibit A** and shall be determined either (i) by agreement of all Participants with respect to that Purchase Agreement or, (ii) in the event no agreement is reached among all Participants, by an allocation based on the pro-rata amounts stated in the respective Delivery Goals of the Participants.
2. **Participant Payments.** The Participant agrees to pay the Authority in accordance with the provisions of the Participation Agreement.
- 2.1 **Deposit.** Prior to execution of this Agreement, the Authority prepared and delivered to the Participant an estimate of the Participant’s anticipated financial obligations hereunder with respect to the Purchase Agreement, and shall provide that estimate to the Participant. Concurrently with execution of this Agreement, Participant shall place on deposit with the Authority the amount stated in the estimate.

2.2 Invoices and Payments. In the event the Authority reasonably determines that the deposit paid by Participant to the Authority will be insufficient to cover Participant's financial obligations hereunder, the Authority is authorized to deliver to the Participant a revised estimate of those financial obligations and an invoice for an additional deposit. The Participant shall remit the amount stated in the invoice within thirty (30) days of receipt.

2.3 Obligation in the Event of Default.

2.3.1 Written Demand Upon Failure to Make Payment. Upon failure of the Participant to make any payment in full when due under this Agreement or to perform any other obligation hereunder, the Authority shall make written demand upon the Participant, and if such failure is not remedied within thirty (30) days from the date of such demand, such failure shall constitute a default at the expiration of such period. Notice of such demand shall be provided to each other Participant by the Authority. Upon failure of the Authority to perform any obligation of the Authority hereunder, the Participant shall make written demand upon the Authority, and if said failure is not remedied within thirty (30) days from the date of such demand, such failure shall constitute a default at the expiration of such period. Notice of such demand shall be provided to each Participant by the Participant making such written demand.

2.3.2 Other Events of Default. In addition to any default resulting from breach by the Authority or the Participant of any agreement, condition, covenant or term hereof, if the Authority or the Participant shall file any petition or institute any proceedings under any act or acts, state or federal, dealing with or relating to the subject of bankruptcy or insolvency or under any amendment of such act or acts, either as a bankrupt or as an insolvent or as a debtor or in any similar capacity, wherein or whereby the Authority of the Participant asks or seeks or prays to be adjudicated a bankrupt, or is to be discharged from any or all of its debts or obligations, or offers to its creditors to effect a composition or extension or time to pay its debts, or asks, seeks or prays for a reorganization or to effect a plan of reorganization or for a readjustment of its debts or for any other similar relief, or if the Authority or the Participant shall make a general or any assignment for the benefit of its creditors, then in each and every such case the Authority or the Participant, as the case may be, shall be deemed to be in default hereunder.

2.3.3 Transfer for Defaulting Participant's Account. Upon the failure of the Participant to make any payment which failure constitutes a default under this Agreement, the Authority shall use its best efforts to transfer for the Participant's account, all or a portion of the Water to which the Participant is entitled hereunder for all or a portion of the remainder of the term of this Agreement. Notwithstanding that all or any portion of the Participant's Water is so transferred, the Participant shall remain liable to the Authority to pay the full amount of its share of costs hereunder as if such sale or transfer has not been made, except that such liability shall be discharged to the extent that the Authority shall receive payment from the transferee thereof.

2.3.4 Termination of Contractual Rights; Continuing Obligations. Upon the failure of the Participant to make any payment which failure constitutes a default under this Agreement and causes the Authority to be in default under the Purchase Agreement, the Authority may (in addition to the remedy provided by section 2.3.3 hereof), terminate the provisions of this Agreement insofar as the same entitle the Participant to any deliveries of Water. Irrespective of

such termination, the obligations of the Participant to the Authority to pay the full amount of costs under this Agreement shall continue in full force and effect.

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6. General Provisions. The provisions of Section ___ to ___ of the Participation Agreement are incorporated herein by reference as though set forth in full herein. Additionally:

6.1 Indemnification and Defense. Participant agrees to indemnify, defend, protect and hold harmless (i) the Authority and its officers, directors, employees and agents, and (ii) all Contractors under a Water Purchase Participation Agreement (as described in Recital A, above) who are not Participants in the Water purchase which is the subject of this Agreement, from and against all claims, actions, damages, losses and expenses, including reasonable attorneys' fees, arising from or relating to this Agreement, the Purchase Agreement, and the Participation Agreement. If more than one Participant signs this Agreement, the obligations of this Section 6.1 shall be allocated among such Participants in the same manner as the Water is allocated pursuant to Section 2 hereof.

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IN WITNESS WHEREOF, the parties have executed and entered into this Agreement as of the date first written above.

“Authority”

“Participant”

CENTRAL COAST WATER AUTHORITY
a California joint powers agency

CARPINTERIA VALLEY WATER DISTRICT

By: _____
Name: Ray A. Stokes
Title: Executive Director

By: _____
Name: Matthew Roberts
Title: CVWD Board President

Approved as to form:
Brownstein Hyatt Farber Schreck

Approved as to form:
Myers, Widders, Gibson, Jones & Feingold

By: _____
Stephanie Osler Hastings

By: _____
Roger Myers

Exhibit A: Table of Amounts Purchased by All Participants

Exhibit A

	<i>Mojave Water Agency</i>				
	Delivery Goal (AF)	% Allocation	Estimated Water (AF)	\$/AF \$ 1,000	Estimated Delivered Water After Losses (N/A)
La Cumbre Mutual Water Co.	500	26%	200	\$ 200,000	200
Santa Ynez ID#1 (for City of Solvang)		0%	-	\$ -	-
Carpinteria Valley Water District	1,000	53%	1,000	\$ 1,000,000	1,000
	1,500	79%	1,200	\$ 1,200,000	1,200

CARPINTERIA VALLEY WATER DISTRICT

Water Cost of Service and Rate Study

Final Report / May 4, 2021



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May 4, 2021

Mr. Robert T. McDonald
General Manager
Carpinteria Valley Water District
1301 Santa Ynez Ave.
Carpinteria, CA 93013

Subject: Water Cost of Service and Rate Study Report

Dear Mr. McDonald,

Raftelis is pleased to provide this Water Cost of Service and Rate Study Report to the Carpinteria Valley Water District. This report presents the analyses, rationales, and methodologies utilized in the study to determine cost of service-based water rates that meet the requirements of California Constitution Article XIII D, Section 6 (commonly referred to as Proposition 218).

The study involved a comprehensive review of the District’s current rate structures and cost requirements, a cost of service analysis to fairly and equitably allocate costs, and a rate design process to determine proposed water rates that are in line with the District’s policy objectives and California rate setting requirements.

The main objectives that informed the study include:

- » Adequately recover all cost requirements to maintain the District’s financial sufficiency
- » Minimize rate impacts to customers where possible
- » Fairly and equitably allocate costs between customer classes
- » Develop alternative rate structure components that are defensible, improve customer understanding, and provide revenue stability to the District

We are confident that the proposed rates developing within this study are fair and equitable to the District’s water customers. It has been a pleasure working with you and we wish to express gratitude for the support you, other District staff, and the Board of Directors provided to us during the study.

Sincerely,

Raftelis Financial Consultants, Inc.

Sanjay Gaur
Vice President

Kevin Kostiuk
Manager

Nancy Phan
Senior Consultant

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1. Executive Summary

Study Background

Carpinteria Valley Water District (District) engaged Raftelis in 2020 to complete a Water Cost of Service and Rate Study (Study). The study consists of reviewing the District's annual operating and capital budget requirements; developing an Excel-based model to calculate revenues from existing rates and data to validate units of service; developing a cost of service analysis to allocate costs to water system functions and the District's unique customer and rate classes; and designing and calculating water rates.

The Study relies upon data across three fiscal years and historical consumption data dating to calendar year 2014. The rates presented in this Rate Study Report (Report) are for adoption and implementation for fiscal year (FY) 2021-22, which begins July 1, 2021 and ends June 30, 2022. The District updates its cost of service analysis and rates on an annual basis.

Raftelis collaborated closely with the District's staff and Board of Directors to design and derive rates that meet the District's policy objectives. The main objectives that informed the study include:

- » Adequately recover all cost requirements to maintain the District's financial sufficiency
- » Minimize rate impacts to customers where possible
- » Fairly and equitably allocate costs between customer classes
- » Develop alternative rate structure components that are defensible, improve customer understanding, and provide revenue stability to the District

District Background

The Carpinteria Valley Water District provides water service to a population of approximately 15,600 people. The District's service area encompasses approximately 11,300 acres and is bordered by the Pacific Ocean to the south and by the Santa Ynez Mountains to the north. Residential, commercial, industrial, public authority, and agricultural customers are served by 75 miles of pipeline in the water system. The District's three main water sources are the Cachuma Project (Cachuma Lake), local groundwater from the Carpinteria Groundwater Basin (Basin), and the State Water Project (SWP) via the District's wholesale purveyor Central Coast Water Authority (CCWA). The Cater Treatment Plant (Cater) treats Cachuma and SWP water under a Joint Powers Agreement with the City of Santa Barbara and Montecito Water District.

The Cachuma Project is the District's main water supply source, providing approximately 50% to 70% of the District's water supply during normal conditions. On average, the District pumps 1,460 acre-feet (AF) each year of groundwater from the Basin. The remainder of the Basin's annual production of 4,000 AF is pumped by agricultural users. The District has a contract entitlement to 2,000 AF per year of water from the SWP. An additional 200 AF per year is also available from the SWP to act as a buffer in times of drought.

Current Rates

The District's existing water rate structure consists of the following components:

1. Monthly Basic and SWP Service Charge
 - » For non-Master Metered Residential (MMR) connections, the charge is based on meter size.
 - » For MMR connections the charge is based on meter size for the basic service component and per dwelling unit equivalency (DEQ) for the SWP component and the Drought Surcharge component.

2. Monthly Agricultural Operations and Maintenance (O&M) Service Charge¹ – for all Agricultural class customers, based on meter size. Recovers costs that non-Agricultural customers pay through the Capital Improvement Program (CIP) Charge (see #4 for note regarding Agricultural residences).
3. Monthly Fire Service Charge – for all customers with private fire suppression systems, based on fire line size.
4. Monthly CIP Charge and Drought Surcharge – for all non-Agricultural customers, charge is based on a five-year rolling average of water use with a minimum charge of 6 hundred cubic feet (hcf) per month and a maximum of 125 hcf. Agricultural residences (REQ) are charged assuming 9 hcf of water use per month.
5. Water Use Rates – for all customers, per hcf of usage, customer class, and tier.
 - » Single Family Residential (SFR) and Master-Metered Residential (MMR) – two tier Base/Peak rate structure
 - » Base = 5-year average Dec. to March water consumption by acct/dwelling unit; 6 hcf minimum.
 - » Peak = all consumption in excess of Base.
 - » Commercial, Industrial, & Public Authority (sometimes abbreviated herein as Com/Ind/Pub for brevity) – two tier Base/Peak rate structure
 - » Base = 5-year average Dec. to March water consumption by acct/dwelling unit; 6 hcf minimum.
 - » Peak = all consumption in excess of Base.
 - » Agricultural/Irrigation (sometimes simply Agriculture or Agricultural) – uniform rate for all consumption
 - » Monthly Residential Equivalency Charge (REQ) for all residential dwelling units served on an Agricultural connection.
 - » Elevation surcharges – uniform rate for water delivered in the District’s two elevation zones (Zone I and Zone II) above the Base zone.

Legal Framework²

The rate-making process, especially for water agencies in California, begins with a review of the legal requirements and framework currently in place. The major legal requirements include Proposition 218 and Article X, Section 2 of the California Constitution, which are outlined in the following sections.

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 and subject to the provisions of Proposition 218. The principal requirements, as they relate to public water service fees and charges, are as follows:

1. Revenues derived from a property-related charge imposed by a public agency 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.

¹ May be shown herein as “Ag O&M Charge” for brevity.

² Raftelis does not practice law nor does it provide legal advice. The above discussion provides a general overview of Raftelis’ understanding as rate practitioners and is labeled “legal framework” for literary convenience only. The District should consult with its legal counsel for clarification and/or specific guidance.

As stated in the American Water Works Association’s Manual of Water Supply Practices M1, *Principles of Water Rates, Fees, and Charges, Seventh 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 establish a clear nexus between costs and the rates charged.

California Constitution – Article X, Section 2

Article X, Section 2 of the California Constitution was established in 1976 and 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 California 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.

Process and Approach

The process and approach Raftelis utilized in the study is informed by the District’s policy objectives, the current water system and rates, and the legal requirements in California (namely, Proposition 218). The resulting cost of service analysis and rate design process considers all these factors and follows four key steps, outlined below, to derive proposed rates that fulfill the District’s policy objectives, meets industry standards, and complies with Proposition 218.

Step 1: Revenue Requirement Calculation

The rate-making process begins by determining the revenue requirement for the base year, also known as the rate-setting year. The base year for this study is FY 2022 (July 1, 2021 to June 30, 2022). The revenue requirement should sufficiently fund the utility’s operation and maintenance (O&M) costs, annual debt service, capital project expenses, and reserve funding as projected in the District’s budgets.

Step 2: Cost of Service Analysis

The annual cost of providing water service, or the revenue requirement, is then distributed among customer classes commensurate with their use of and burden on the system. A cost of service analysis involves the following steps:

1. Functionalize costs – the O&M expense budget is categorized into functions such as supply, treatment, pumping, transmission and distribution (T&D), etc.
2. Allocate to cost components – the functionalized costs are then allocated to system cost components such as supply, delivery, peaking, conservation, etc.
3. Develop unit costs – unit costs for each cost component is determined using appropriate units of service for each.
4. Distribute cost components – the cost components are allocated to each customer class using the unit costs in proportion to their demand and burden on the system.

A cost of service analysis considers both the average water demand and peak demand. Peaking costs³ are incurred during maximum periods of consumption, most often coinciding with summertime irrigation usage. There are

³ Collectively, maximum day and maximum hour costs are known as peaking costs.

additional capacity-related⁴ costs associated with designing, constructing, operating, maintaining, and replacing and refurbishing facilities to meet peak demand. These peaking costs must be allocated to the customer classes whose water demand patterns generate additional costs for the utility, proportionate to their burden on the peaking-related facilities.

Step 3: Rate Design and Calculation

After allocating the revenue requirement to each water system and its corresponding customer classes, the rate design and calculation process can begin. Rates do more than simply recover costs; within the legal framework and industry standards, properly designed rates should support the District's policy objectives, while adhering to cost of service principles. Rates are not only a financial instrument but act as a public information tool in communicating policy objectives to customers. The rate design process also includes a rate impact analysis to all customer classes and sample customer bill impact analysis.

Step 4: Administrative Record Preparation and Rate Adoption

The final step in a cost of service and rate study is to develop the administrative record in preparation for the rate adoption process. The administrative record, also known as the study report, documents the rate study results and presents the methodologies, rationale, justifications, and calculations utilized to derive the proposed rates. A thorough and methodical administrative record serves two important functions: maintaining defensibility in a litigious environment and communicating the rate adoption process to customers and important stakeholders.

⁴ System capacity is the system's ability to supply water to all delivery points at the time when demanded. The time of greatest demand is known as peak demand. Both the operating and capital costs incurred to accommodate peak flows are generally allocated to each customer class based upon the relative demand during the peak day and peak hour event.

Results and Recommendations

The results and recommendations that Raftelis developed during the Study, in collaboration with District staff and the Board of Directors, include the following:

- » Elimination of the Drought Surcharge components to the monthly Service Charges and CIP Charges
- » Proposed three-tier inclining rate structure for Residential customers, based on efficiency standards and actual class demand patterns
- » Updated capital cost allocation between the District’s two distinct user groups: Agricultural customers and Municipal & Industrial (M&I)⁵
- » Updated CIP charges for Agricultural customers which consolidate multiple capital components in to one component
- » Updated meter capacity ratios based on data provided by District staff and AWWA standard methodologies
- » Updated private fire service charges based on a current system fire flow analysis

Proposed Rates

The proposed rates for FY 2022, the rate-setting year, is a result of the cost of service analysis developed during the Study and the recommendations summarized immediately above. **Table 1-1** shows the proposed monthly meter-based service charges for FY 2022 compared to current charges. Also included are the individual cost components. The proposed charges eliminate the Drought component and represent base, or non-drought, charges.

Table 1-1: Proposed Monthly Service Charges

Meter Size	Current FY 2021				Proposed FY 2022			Difference (\$)
	Basic	SWP	Drought	Total	Basic	SWP	Total	
3/4"	\$14.28	\$33.56	\$0.54	\$48.38	\$10.11	\$35.37	\$45.48	-\$2.90
1"	\$23.80	\$55.93	\$0.90	\$80.63	\$14.23	\$58.94	\$73.17	-\$7.46
1 1/2"	\$47.60	\$111.85	\$1.80	\$161.25	\$24.53	\$117.88	\$142.41	-\$18.84
2"	\$76.16	\$178.96	\$2.88	\$258.00	\$36.89	\$188.60	\$225.49	-\$32.51
3"	\$152.32	\$357.92	\$5.76	\$516.00	\$76.03	\$412.56	\$488.59	-\$27.41
4"	\$238.00	\$559.25	\$9.00	\$806.25	\$133.70	\$742.62	\$876.32	\$70.07
6"	\$476.00	\$1,118.50	\$18.00	\$1,612.50	\$271.71	\$1,532.38	\$1,804.09	\$191.59

Table 1-2 shows the proposed FY 2022 monthly Agricultural O&M Charges. As previously mentioned, the proposed Ag O&M charge consolidates capital recovery for the Agricultural class from three components to one⁶.

Table 1-2: Proposed Monthly Agricultural O&M Service Charge

Meter Size	Current FY 2021	Proposed FY 2022	Difference (\$)
3/4"	\$6.78	\$28.82	\$22.04
1"	\$11.30	\$48.02	\$36.72
1 1/2"	\$22.60	\$96.04	\$73.44
2"	\$36.16	\$153.66	\$117.50
3"	\$72.32	\$336.13	\$263.81
4"	\$113.00	\$605.02	\$492.02
6"	\$226.00	\$1,248.45	\$1,022.45

⁵ M&I customers include the Residential, Commercial, Industrial, and Public Authority customer classes.

⁶ Currently the Agricultural class’ capital cost responsibility is recovered across the Agricultural O&M charge, the Agricultural REQ CIP charge, and a portion of the Basic service charge.

Table 1-3 shows the proposed FY 2022 monthly private fire service charges. The proposed charges eliminate the Drought component. Proposed rates in the table represent base, or non-drought, charges.

Table 1-3: Proposed Monthly Private Fire Service Charges

Meter Size	Current FY 2021				Proposed FY 2022			Difference (\$)
	Basic	SWP	Drought	Total	Basic	SWP	Total	
2"	\$9.52	\$22.37	\$0.36	\$32.25	\$8.56	\$35.36	\$43.92	\$11.67
3"	\$21.42	\$50.33	\$0.81	\$72.56	\$17.36	\$79.57	\$96.93	\$24.37
4"	\$38.08	\$89.48	\$1.44	\$129.00	\$32.55	\$141.45	\$174.00	\$45.00
6"	\$85.68	\$201.33	\$3.24	\$290.25	\$87.05	\$318.27	\$405.32	\$115.07
8"	\$152.32	\$357.92	\$5.76	\$516.00	\$181.06	\$565.80	\$746.86	\$230.86
10"	\$238.00	\$559.25	\$9.00	\$806.25	\$322.47	\$884.07	\$1,206.54	\$400.29

Table 1-4 shows the proposed FY 2022 CIP for the M&I classes. The proposed rates eliminate the Drought component of the CIP charge and represent base, non-drought, rates.

Table 1-4: Proposed Monthly CIP Charge and Drought Surcharges

Current FY 2021		Proposed FY 2022		Difference (\$)
Rate (\$/hcf)	\$3.70	Rate (\$/hcf)	\$3.70	\$0.00
Minimum (6 hcf)	\$22.20	Minimum (6 hcf)	\$22.20	\$0.00
Maximum (125 hcf)	\$462.50	Maximum (125 hcf)	\$462.50	\$0.00

Table 1-5 shows the District’s proposed FY 2022 water use rates, by class, tier, and pressure zone. The proposed rates modify the Residential rate structure from a Base/Peak excess use structure to a three-tier structure based on efficiency standards and class usage patterns. The rate structures for Commercial/Industrial/Public Authority and Agriculture remain the same.

Table 1-5: Proposed Water Use Rates

	Current FY 2021			Proposed FY 2022			Difference (\$)
	Base	Pressure Zone I	Pressure Zone II	Base	Pressure Zone I	Pressure Zone II	
	\$/hcf	\$/hcf	\$/hcf	\$/hcf	\$/hcf	\$/hcf	\$/hcf
Residential (\$/hcf)							
Tier 1 / Base	\$3.90	\$4.13	\$4.37	\$3.67	\$3.87	\$4.16	-\$0.23
Tier 2 / Peak	\$5.12	\$5.35	\$5.59	\$4.39	\$4.59	\$4.88	-\$0.73
Tier 3				\$5.32	\$5.52	\$5.81	\$0.20
Commercial/Industrial/Public Authority (\$/hcf)							
Base	\$3.90	\$4.13	\$4.37	\$3.76	\$3.96	\$4.25	-\$0.14
Peak	\$5.12	\$5.35	\$5.59	\$5.12	\$5.32	\$5.61	\$0.00
Agricultural Irrigation (\$/hcf)							
Residential Equivalency Fee (\$/Month)	\$17.37	\$17.37	\$17.37	\$18.10	\$18.10	\$18.10	\$0.73

Customer Impacts

Figure 1-1 shows the estimated monthly customer bill impacts for all SFR customers, based on estimated FY 2021 customer data (from FY 2019 data provided by District staff inflated to account for increase in usage). Raftelis recalculates each bill for each customer in the class at the current and proposed rates to estimate impacts. The chart shows that 94% of SFR bills will experience a reduction in their monthly water charge. This is based in part from a

reduction in the monthly meter-based service charges and a reduction to the Tier 1 rate. Only the highest volume users in the class will experience increases to their bill.

Figure 1-1: Monthly Customer Bill Impacts – Single Family Residential Customers

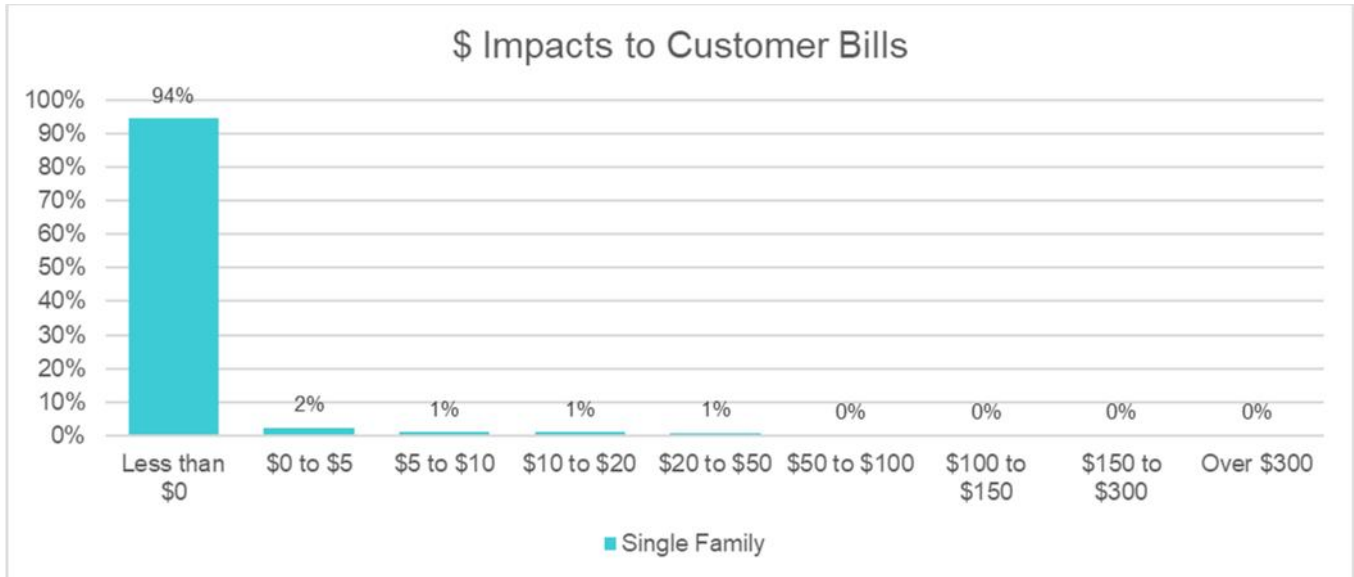


Table 1-6 shows the monthly bill impacts at various levels of usage for a SFR customer with a 3/4” meter. Almost all SFR connections are 3/4". The median and average SFR bill is 6 hcf and 13 hcf per month, respectively. A median use bill will experience a \$4.28 decrease to their monthly charges and an average use bill will experience a \$5.73 savings compared to their current charges.

Table 1-6: Monthly Bill Impacts at Various Levels of Usage – Residential, 3/4-inch Meter

Residential Customer Impacts	Water Use (hcf/Month)	Current Monthly Bill	Proposed Monthly Bill	Difference (\$)
Very Low Use (15th percentile)	2	\$78.38	\$75.02	(\$3.36)
Low Use (30th percentile)	4	\$86.18	\$82.36	(\$3.82)
Median Use (50th percentile)	6	\$93.98	\$89.70	(\$4.28)
Average Use	13	\$152.06	\$146.33	(\$5.73)
High Use (80th percentile)	15	\$169.70	\$162.51	(\$7.19)
Very High Use (95th percentile)	39	\$381.38	\$378.06	(\$3.32)

Figure 1-2 shows the distribution of monthly bill impacts for all Commercial, Industrial, and Public Authority customers, based on estimated FY 2021 customer data provided by District staff. Raftelis recalculates each bill for each customer in the class at the current and proposed rates to estimate impacts. The chart shows that 99% of Commercial, Industrial, and Public Authority bills will experience a reduction in their monthly water charge. This is due to both a decrease in the monthly meter-based service charge at smaller diameter meters as well as a reduction in the Base allocation water use rate.

Figure 1-2: Monthly Customer Bill Impacts – Commercial, Industrial, Public Authority Class

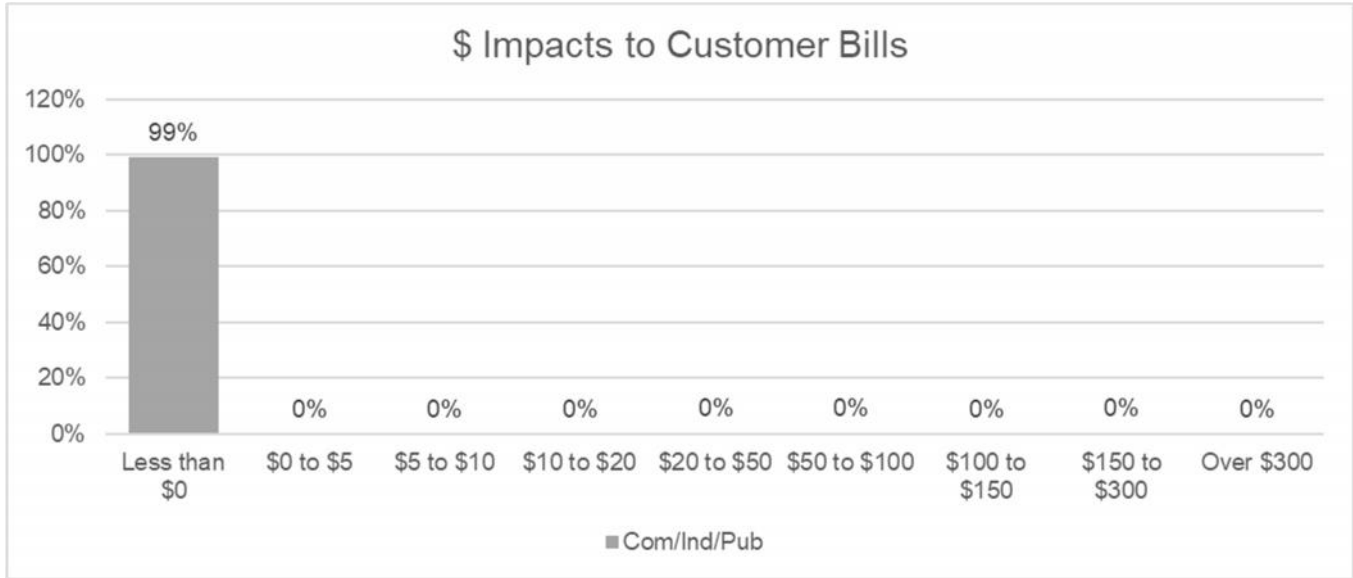


Figure 1-3 shows the estimated monthly customer bill impacts for all Agricultural customers, based on estimated FY 2021 customer data. Raftelis recalculates each bill for each customer in the class at the current and proposed rates to estimate impacts. 27% of Agricultural bills will experience a reduction in their monthly water charges. 28% of bills will experience an increase of \$50 to \$100 per month.

Figure 1-3: Monthly Customer Bill Impacts – Agricultural Class

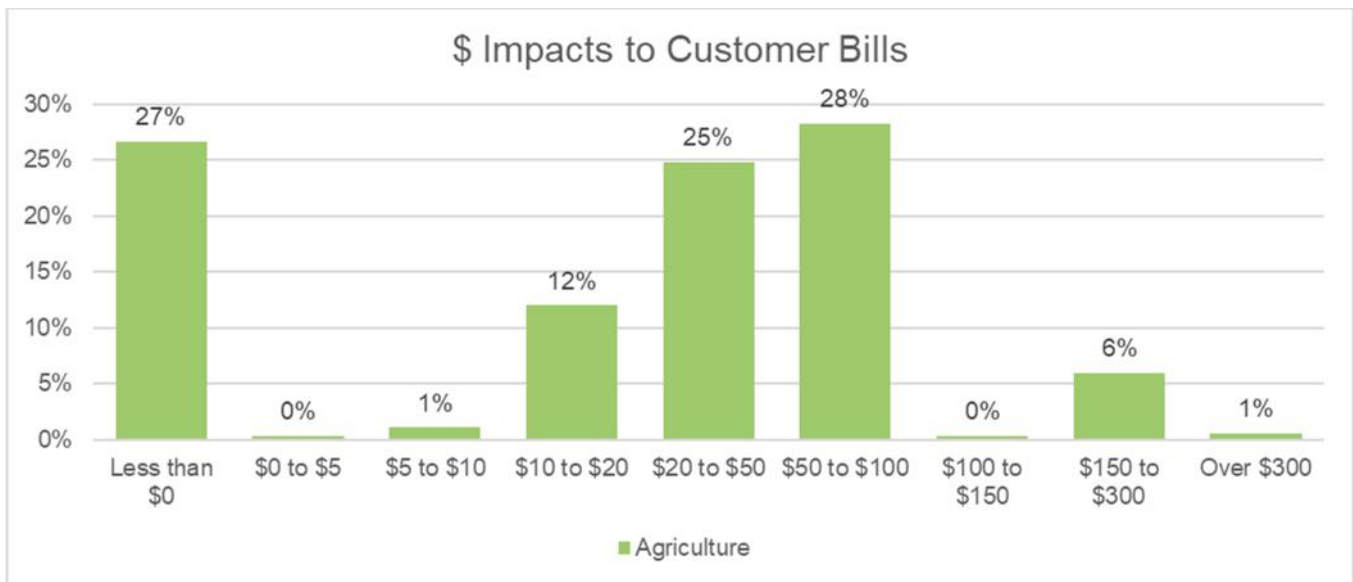


Table 1-7 shows the monthly bill impacts at various levels of usage for Agricultural customers with 2” meters. The majority of Agricultural connections are 2”. The median and average Agricultural bill is 49 hcf and 172 hcf per month, respectively. A median use bill will experience an \$84.01 increase to their charges and an average use bill will experience an \$81.55 increase compared to their current charges.

Table 1-7: Monthly Bill Impacts at Various Levels of Usage – Agricultural, 2-inch Meter

Agriculture Customer Impacts	Usage (hcf)	Current Monthly Bill	Proposed Monthly Bill	Difference (\$)
Very Low Use (15th percentile)	5	\$304.01	\$388.90	\$84.89
Low Use (30th percentile)	16	\$325.68	\$410.35	\$84.67
Median Use (50th percentile)	49	\$390.69	\$474.70	\$84.01
Average Use	172	\$633.00	\$714.55	\$81.55
High Use (80th percentile)	239	\$764.99	\$845.20	\$80.21
Very High Use (95th percentile)	755	\$1,781.51	\$1,851.40	\$69.89

2. FY 2021 Revenue Reconciliation

To validate data and ensure accurate units of service prior to the cost of service analysis, recalculates rate revenues and compares calculated values with budgeted revenues from the District's various rate components. Current year FY 2021 rates and estimated units of service are used to calculate revenues.

Current Rates

Table 2-1 shows the Basic component of the District's current monthly service charges. The Basic component is differentiated by meter size.

Table 2-1: Current Monthly Service Charges (Basic Component)

Meter Size	\$/Month
3/4"	\$14.28
1"	\$23.80
1 1/2"	\$47.60
2"	\$76.16
3"	\$152.32
4"	\$238.00
6"	\$476.00

Table 2-2 shows the SWP component of the District's current monthly service charges. The SWP component is differentiated by meter size for all classes other than MMR. MMR connections pay the 3/4" rate for each dwelling unit equivalent (DEQ) on the service connection, regardless of meter size.

Table 2-2: Current Monthly Service Charges (SWP Component)

Meter Size	\$/Month
3/4"	\$33.56
1"	\$55.93
1 1/2"	\$111.85
2"	\$178.96
3"	\$357.92
4"	\$559.25
6"	\$1,118.50

Table 2-3 shows the Drought Surcharge component of the District's current monthly service charges. The Drought Surcharge component is differentiated by meter size for all classes other than MMR. MMR connections pay the 3/4" rate for each DEQ on the service connection, regardless of meter size.

Table 2-3: Current Monthly Service Charges (Drought Surcharge Component)

Meter Size	\$/Month
3/4"	\$0.54
1"	\$0.90
1 1/2"	\$1.80
2"	\$2.88
3"	\$5.76
4"	\$9.00
6"	\$18.00

Table 2-4 shows the Basic component of the District's current monthly private fire charges. The Basic component is differentiated by the diameter of the fire line connection to the water system.

Table 2-4: Current Monthly Private Fire Service Charges (Basic Component)

Fire Line Size	\$/Month
2"	\$9.52
3"	\$21.42
4"	\$38.08
6"	\$85.68
8"	\$152.32
10"	\$238.00

Table 2-5 shows the SWP component of the District's current monthly private fire charges. The SWP component is differentiated by the diameter of the fire line connection to the water system.

Table 2-5: Current Monthly Private Fire Service Charges (SWP Component)

Fire Line Size	\$/Month
2"	\$22.37
3"	\$50.33
4"	\$89.48
6"	\$201.33
8"	\$357.92
10"	\$559.25

Table 2-6 shows the Drought Surcharge component of the District's current monthly private fire charges. The Drought Surcharge component is differentiated by the diameter of the fire line connection to the water system.

Table 2-6: Current Monthly Private Fire Service Charges (Drought Surcharge Component)

Fire Line Size	\$/Month
2"	\$0.36
3"	\$0.81
4"	\$1.44
6"	\$3.24
8"	\$5.76
10"	\$9.00

Table 2-7 shows the District's current monthly Agricultural O&M service charge. The Agricultural O&M charge is applied to all metered connections within the Agricultural class, is differentiated by meter size, and recovers those costs which are recovered from M&I customers through the CIP charge.

Table 2-7: Current Monthly Agricultural O&M Service Charge

Meter Size	\$/Month
3/4"	\$6.78
1"	\$11.30
1 1/2"	\$22.60
2"	\$36.16
3"	\$72.32
4"	\$113.00
6"	\$226.00

Table 2-8 shows the District’s current monthly CIP charges paid by M&I classes. The CIP charge is a volumetric rate per hcf based on the five year historical use on the connection. While a volumetric rate, the CIP charge is subject to a minimum of 6 hcf and maximum of 125 hcf monthly. The M&I CIP charge recovers costs which are recovered from Agricultural users through the Agricultural O&M charge.

Table 2-8: Current Monthly CIP Charge and Drought Surcharges (\$/hcf)

Current Rates	FY 2021
CIP Charge (\$/hcf)	\$3.20
Drought Surcharge (\$/hcf)	\$0.50
Total CIP Charge (\$/hcf)	\$3.70

Table 2-9 shows the District’s current variable water usage rates, by class, tier, and pressure zone. All rates are per hcf.

Table 2-9: Current Water Use Rates (\$/hcf)

Consumption Charges (Water Use)	\$/hcf
Base Zone (M&I)	
Base	\$3.90
Peak	\$5.12
Pressure Zone I (M&I)	
Base	\$4.13
Peak	\$5.35
Pressure Zone II (M&I)	
Base	\$4.37
Peak	\$5.59
Agricultural/Irrigation	
Basic	\$1.97
Pressure Zone I	\$2.20
Pressure Zone II	\$2.44

Table 2-10 shows the District’s current REQ charge. Any Agricultural connection with one or more residential dwelling unit on the parcel served pays the REQ for each residential unit. This charge captures the differential between the Residential water use rates paid by all other customers requiring treated water and the Agricultural commodity rate.

Table 2-10: Current Agricultural REQ Charge (\$/Dwelling Unit)

Residential Equivalency Charge	\$/DU
Monthly Charge	\$17.37

Table 2-11 shows the District’s current CIP charges for Agricultural REQ customers. Any Agricultural connection with one or more residential dwelling unit on the parcel served pays the CIP REQ for each residential unit. This charge ensures residential dwelling units on Agricultural connections are on par with other Residential customers. The charge is the average Residential Base water allocation of 9 hcf monthly multiplied by the M&I CIP charge.

Table 2-11: Current Agricultural REQ CIP Charge (\$/Dwelling Unit)

Agricultural REQ CIP Charge	\$/DU
Monthly Charge (\$3.70 x 9 hcf)	\$33.30

Units of Service

Table 2-12 shows the counts by meter size and customer class for the basic service charge component of the monthly service charge. The most common meter size for SFR and Commercial/Industrial/Public Authority connections are 3/4", for Agricultural connections are 2", and for MMR connections are 1".

Table 2-12: Counts by Size and Customer Class (for Basic Service Charge)

Meter Size	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
3/4"	3,060	94	127	21	0
1"	161	122	77	54	0
1 1/2"	39	99	42	62	0
2"	25	30	90	220	0
3"	0	1	7	26	7
4"	0	1	2	2	0
6"	0	4	2	0	0
Total - Basic Service Charge	3,285	351	347	385	7

Table 2-13 shows the counts by meter size and class for the SWP component. The counts for all classes other than MMR are the same as in **Table 2-12**. MMR connections are charged the 3/4" SWP component rate for each DEQ, therefore all MMR DEQs are shown in the table as 3/4".

Table 2-13: Counts by Meter Size and Customer Class (for SWP Charge)

Meter Size / DEQs	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
3/4"	3,060	3,159	127	21	0
1"	161	0	77	54	0
1 1/2"	39	0	42	62	0
2"	25	0	90	220	0
3"	0	0	7	26	7
4"	0	0	2	2	0
6"	0	0	2	0	0
Total - SWP Charge	3,285	3,159	347	385	7

Table 2-14 shows the counts by meter size and class for the Drought Surcharge component. The counts for all classes other than MMR are the same as in **Table 2-12**. MMR connections are charged the 3/4" Drought component rate for each DEQ, therefore all MMR DEQs are shown in the table as 3/4".

Table 2-14: Counts by Meter Size and Customer Class (for Drought Surcharge)

Meter Size / DEQs	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
3/4"	3,060	3,159	127	21	0
1"	161	0	77	54	0
1 1/2"	39	0	42	62	0
2"	25	0	90	220	0
3"	0	0	7	26	7
4"	0	0	2	2	0
6"	0	0	2	0	0
Total - Drought Surcharge	3,285	3,159	347	385	7

Table 2-15 shows the counts by fire line diameter and class for the Basic component of the private fire service charge. The majority of fire lines are in the Com/Ind/Pub class at 4" and 6" diameter.

Table 2-15: Fire Line Counts by Diameter and Customer Class (for Fire Service Charge)

Fire Line Diameter	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
2"	2	2	1	0	
3"	0	3	2	0	
4"	6	5	40	7	
6"	0	1	44	4	
8"	0	1	11	0	
10"	0	0	2	0	
Total - Fire Service Charge	8	12	100	11	0

Table 2-16 shows the counts by fire line diameter and class for the SWP component of the private fire service charge.

Table 2-16: Fire Line Counts by Diameter and Customer Class (for Fire SWP Charge)

Fire Line Diameter	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
2"	2	2	1	0	
3"	0	3	2	0	
4"	6	5	40	7	
6"	0	1	44	4	
8"	0	1	11	0	
10"	0	0	2	0	
Total - Fire SWP Charge	8	12	100	11	0

Table 2-17 shows the counts by fire line diameter and class for the Drought Surcharge component of the private fire service charge.

Table 2-17: Fire Line Counts by Diameter and Customer Class (for Drought Surcharge)

Fire Line Diameter	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
2"	2	2	1	0	
3"	0	3	2	0	
4"	6	5	40	7	
6"	0	1	44	4	
8"	0	1	11	0	
10"	0	0	2	0	
Total - Drought Surcharge	8	12	100	11	0

Table 2-18 shows the counts by meter size for the Agricultural O&M charge. Only Agricultural connections are levied the Agricultural O&M charge.

Table 2-18: Counts by Size (for Agricultural O&M Charge)

Meter Size	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
3/4"				21	
1"				54	
1 1/2"				62	
2"				220	
3"				26	
4"				2	
6"				0	
Total - Ag O&M Charge	0	0	0	385	0

Table 2-19 shows water consumption in hcf for each customer class and tier.

Table 2-19: Water Demand by Class and Pressure Zone

	SFR	MMR	Com/Ind/Pub	Agricultural ⁷	Temporary
Base Zone Water Use					
Base	250,297	176,390	130,512	627,696	5,287
Peak	108,137	15,338	61,468	0	0
Total - Base Zone Use (hcf)	358,434	191,728	191,980	627,696	5,287
Pressure Zone I Water Use					
Base	5,146	377	14,399	135,911	0
Peak	3,379	112	5,479	0	0
Total - Pressure Zone I Use (hcf)	8,524	489	19,878	135,911	0
Pressure Zone II Water Use					
Base	9,486	136	0	31,420	0
Peak	4,493	53	0	0	0
Total - Pressure Zone II Use (hcf)	13,979	190	0	31,420	0

Table 2-20 shows water consumption in hcf for each customer class that is subject to the uniform, variable CIP charge. Only M&I customer classes pay the variable CIP charge, along with Agricultural residential dwelling units. The current CIP charge recovers capital costs from M&I and treated water users, as well as a portion of existing Drought Surcharge costs. The term billed units is used in the table as the variable charge is based on historical water use and billed for a minimum of 6 hcf and a maximum of 125 hcf each month.

Table 2-20: Water Units subject to the CIP Charge

Billed Units for CIP Charge	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
CIP Charge					
Billed Units (hcf)	403,068	242,952	176,760	53,352	3,345
Drought Surcharge (Volume)					
Billed Units (hcf)	403,068	242,952	176,760	53,352	3,345

Table 2-21 shows the count of residential dwelling units on connections served by an Agricultural meter. Agricultural customers pay a monthly REQ charge for each dwelling unit on served by an Agricultural connection.

⁷ Agricultural customers are charged a uniform rate, so all usage is represented in the Base tier.

Table 2-21: Meter Counts by Size (Agricultural REQ Charge)

Agricultural REQ DUs	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
Residential Equivalency Charge (DUs)				494	

Calculated Revenues Under Current Rates

Table 2-22 through Table 2-31 calculate the amount of revenue generated by each of the District’s individual rate components by multiplying each respective rate by the units of service (Table 2-1 through Table 2-11 and Table 2-12 through Table 2-21). The total calculated rate revenue is summarized and compared to budgeted values in the next section.

Table 2-22: Monthly Service Charge - Basic Component Revenue

Meter Size	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
3/4"	\$524,362	\$16,108	\$21,763	\$3,599	\$0
1"	\$45,982	\$34,843	\$21,991	\$15,422	\$0
1 1/2"	\$22,277	\$56,549	\$23,990	\$35,414	\$0
2"	\$22,848	\$27,418	\$82,253	\$201,062	\$0
3"	\$0	\$1,828	\$12,795	\$47,524	\$12,795
4"	\$0	\$2,856	\$5,712	\$5,712	\$0
6"	\$0	\$22,848	\$11,424	\$0	\$0
Total Revenue	\$615,468	\$162,449	\$179,928	\$308,734	\$12,795

Table 2-23: Monthly Service Charge - SWP Component Revenue

Meter Size / DEQs	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
3/4"	\$1,232,323	\$1,272,192	\$51,145	\$8,457	\$0
1"	\$108,057	\$0	\$51,679	\$36,243	\$0
1 1/2"	\$52,346	\$0	\$56,372	\$83,216	\$0
2"	\$53,688	\$0	\$193,277	\$472,454	\$0
3"	\$0	\$0	\$30,065	\$111,671	\$30,065
4"	\$0	\$0	\$13,422	\$13,422	\$0
6"	\$0	\$0	\$26,844	\$0	\$0
Total Revenue	\$1,446,414	\$1,272,192	\$422,805	\$725,464	\$30,065

Table 2-24: Monthly Service Charge - Drought Surcharge Component Revenue

Meter Size / DEQs	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
3/4"	\$19,829	\$20,470	\$823	\$136	\$0
1"	\$1,739	\$0	\$832	\$583	\$0
1 1/2"	\$842	\$0	\$907	\$1,339	\$0
2"	\$864	\$0	\$3,110	\$7,603	\$0
3"	\$0	\$0	\$484	\$1,797	\$484
4"	\$0	\$0	\$216	\$216	\$0
6"	\$0	\$0	\$432	\$0	\$0
Total Revenue	\$23,274	\$20,470	\$6,804	\$11,675	\$484

Table 2-25: Private Fire Line - Basic Component Revenue

Fire Line Diameter	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
2"	\$228	\$228	\$114	\$0	\$0
3"	\$0	\$771	\$514	\$0	\$0
4"	\$2,742	\$2,285	\$18,278	\$3,199	\$0
6"	\$0	\$1,028	\$45,239	\$4,113	\$0
8"	\$0	\$1,828	\$20,106	\$0	\$0
10"	\$0	\$0	\$5,712	\$0	\$0
Total Revenue	\$2,970	\$6,140	\$89,964	\$7,311	\$0

Table 2-26: Private Fire Line - SWP Component Revenue

Fire Line Diameter	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
2"	\$537	\$537	\$268	\$0	\$0
3"	\$0	\$1,812	\$1,208	\$0	\$0
4"	\$6,443	\$5,369	\$42,950	\$7,516	\$0
6"	\$0	\$2,416	\$106,302	\$9,664	\$0
8"	\$0	\$4,295	\$47,245	\$0	\$0
10"	\$0	\$0	\$13,422	\$0	\$0
Total Revenue	\$6,979	\$14,429	\$211,397	\$17,180	\$0

Table 2-27: Private Fire Line Drought Surcharge Component Revenue

Fire Line Diameter	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
2"	\$9	\$9	\$4	\$0	\$0
3"	\$0	\$29	\$19	\$0	\$0
4"	\$104	\$86	\$691	\$121	\$0
6"	\$0	\$39	\$1,711	\$156	\$0
8"	\$0	\$69	\$760	\$0	\$0
10"	\$0	\$0	\$216	\$0	\$0
Total Revenue	\$112	\$232	\$3,402	\$276	\$0

Table 2-28: Agricultural O&M Charge Revenue

Meter Size	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
3/4"	\$0	\$0	\$0	\$1,709	\$0
1"	\$0	\$0	\$0	\$7,322	\$0
1 1/2"	\$0	\$0	\$0	\$16,814	\$0
2"	\$0	\$0	\$0	\$95,462	\$0
3"	\$0	\$0	\$0	\$22,564	\$0
4"	\$0	\$0	\$0	\$2,712	\$0
6"	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$0	\$0	\$0	\$146,584	\$0

Table 2-29: Commodity (Consumption) Rate Revenue

Consumption (hcf)	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
Base Zone Water Use					
Base	\$976,159	\$687,919	\$508,996	\$1,236,561	\$20,618
Peak	\$553,662	\$78,531	\$314,718	\$0	\$0
Total Revenue	\$1,529,821	\$766,451	\$823,714	\$1,236,561	\$20,618
Pressure Zone I Water Use					
Base	\$21,251	\$1,558	\$59,468	\$299,004	\$0
Peak	\$18,076	\$597	\$29,313	\$0	\$0
Total Revenue	\$39,327	\$2,155	\$88,782	\$299,004	\$0
Pressure Zone II Water Use					
Base	\$41,456	\$595	\$0	\$76,664	\$0
Peak	\$25,114	\$298	\$0	\$0	\$0
Total Revenue	\$66,570	\$894	\$0	\$76,664	\$0
Total	\$1,635,718	\$769,499	\$912,495	\$1,612,229	\$20,618

Table 2-30: CIP Charge Rate Revenue

CIP Charge	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
CIP Charge					
Total Revenue	\$1,289,818	\$777,446	\$565,632	\$170,726	\$10,705
Drought Surcharge (Volume)					
Total Revenue	\$201,534	\$121,476	\$88,380	\$26,676	\$1,673

Table 2-31: Agricultural REQ Charge Revenue

Agricultural REQ Charge	SFR	MMR	Com/Ind/Pub	Agricultural	Temporary
Total Revenue	\$0	\$0	\$0	\$102,969	\$0

Calculated Revenues Comparison

District staff provided budgeted rate revenues for FY 2021, shown in

Table 2-32. Raftelis recalculated FY 2021 rate revenues using actual and estimated customer data. Actual FY 2019 customer data is used for this analysis, with a 6.5% inflation factor for water usage to account for growth in the two years between FY 2019 and FY 2021.

Table 2-32: Budgeted versus Calculated Rate Revenues

Revenue Comparison	Budgeted	Calculated
Residential	\$2,395,964	\$2,405,217
Com/Ind/Pub	\$834,593	\$933,113
Agricultural	\$1,750,585	\$1,612,229
Ag Residential Equivalency Charge (REQ)	\$82,334	\$102,969
Monthly Service Charge-Basic	\$1,274,119	\$1,279,374
Monthly Service Charge-SWP	\$2,594,338	\$2,624,748
Monthly Service Charge-CIP	\$2,824,934	\$2,814,327
Dwelling Unit Equiv. Charge (SWP DEQ)	\$1,290,928	\$1,272,192
Drought Surcharge - Meter	\$62,526	\$66,730
Drought Surcharge - Volume	\$446,862	\$439,739
AG Fixed O&M	\$146,963	\$146,584
Fire Protection	\$360,394	\$356,371
Total	\$14,064,540	\$14,053,594
Fixed Charges	\$8,636,536	\$8,663,295
Variable Charges	\$5,428,004	\$5,390,299
Total	\$14,064,540	\$14,053,594

3. FY 2022 Revenue Requirement

This section of the report discusses the District’s revenue needs in the upcoming fiscal year, FY 2022. The District’s fiscal year begins on July 1 and ends on June 30 of the following calendar year. All budgeted values were developed by District staff and provided to Raftelis for inclusion into the cost of service and rate model. The values within our report, and the rates proposed in subsequent sections, are based on the proposed FY 2022 budget as of March 24, 2021. Numbers shown in the tables of this section are rounded. Therefore, hand calculations based on the displayed numbers, such as summing or multiplying, may not equal the exact results shown.

Revenues

Table 3-1 shows recent historical actual and budgeted District revenues. The table shows rate revenues by customer class and by fixed service charge component. Non-rate revenues include other operating revenues and non-operating revenues. In **Section 2** Raftelis recalculated rate revenues for FY 2021. FY 2019 and FY 2020 actual revenues are shown for comparative purposes only.

Table 3-1: District Revenues Actual and Budgeted (FY 2019-2022)

Water Sales Revenue	FY 2019	FY 2020	FY 2021	FY 2022
Residential	\$2,154,564	\$2,362,641	\$2,395,964	\$2,395,964
Commercial	\$480,616	\$498,163	\$505,649	\$505,649
Industrial	\$128,446	\$127,354	\$129,744	\$129,744
Public Authority	\$181,317	\$195,813	\$199,200	\$199,200
Agricultural	\$1,534,186	\$1,810,963	\$1,750,585	\$1,750,585
Ag Residential Equivalency Charge (REQ)	\$75,715	\$80,201	\$82,334	\$82,334
Monthly Service Charge-Basic	\$972,825	\$1,202,447	\$1,274,119	\$1,274,119
Monthly Service Charge-SWP	\$3,035,539	\$2,975,523	\$2,594,338	\$2,594,338
Monthly Service Charge-CIP	\$2,539,925	\$2,527,385	\$2,824,934	\$2,824,934
Dwelling Unit Equiv. Charge (SWP DEQ)	\$717,466	\$901,330	\$1,290,928	\$1,290,928
Drought Surcharge - Meter	\$376,759	\$261,188	\$62,526	\$62,526
Drought Surcharge - Volume	\$586,087	\$446,862	\$446,862	\$446,862
AG Fixed O&M	\$0	\$0	\$146,963	\$146,963
Fire Protection	\$304,357	\$362,745	\$360,394	\$360,394
Lifeline Program Credits	(\$39,367)	(\$35,700)	\$0	\$0
Total - Water Sales Revenue	\$13,048,435	\$13,716,915	\$14,064,540	\$14,064,540
Other Revenue				
Capital Cost Recovery	\$715,610	\$150,000	\$150,000	\$150,000
Misc Service Revenue	\$86,210	\$38,760	\$0	\$0
Other Income	\$209,205	\$10,200	\$10,200	\$50,000
Overhead Control	\$46,291	\$51,000	\$51,000	\$51,000
Interest	\$288,664	\$25,500	\$25,500	\$150,000
Total - Other Revenue	\$1,345,980	\$275,460	\$236,700	\$401,000
Non-Operating Revenue				
Asset Disposal	(\$15,523)	\$0	\$0	\$0
Infrequent / Unusual Revenue	\$112,314	\$0	\$0	\$0
Interest-COP Funds Restricted	\$13,049	\$5,100	\$5,100	\$5,100
Contributed Capital	\$105,738	\$0	\$0	\$0
Total - Non-Operating Revenue	\$215,578	\$5,100	\$5,100	\$5,100
Total - Revenues	\$14,609,993	\$13,997,475	\$14,306,340	\$14,470,640

Expenses

Table 3-2 shows actual and budgeted O&M expenses for FY 2019 through FY 2022. FY 2019 and FY 2020 are actual O&M expenses incurred. FY 2021 and FY 2022 represent current year budget and proposed budgeted O&M expenses, respectively. The proposed FY 2022 budgeted values are included in the revenue requirement for the rate setting year, FY 2022.

Table 3-2: Projected O&M Expenses

O&M Expenses	FY 2019	FY 2020	FY 2021	FY 2022
Personnel	\$2,985,312	\$3,063,665	\$2,945,950	\$3,029,254
General and Administrative	\$269,303	\$321,320	\$379,912	\$406,638
Utilities	\$311,667	\$227,622	\$218,082	\$265,217
Professional Services	\$171,226	\$248,983	\$328,076	\$331,698
Operations Expense	\$1,023,229	\$752,193	\$995,197	\$1,006,557
State Water	\$667,744	\$136,832	\$82,000	\$195,000
Water Treatment & Testing	\$1,075,827	\$1,195,037	\$1,443,462	\$1,512,137
Joint Powers Authority	\$825,505	\$612,055	\$773,250	\$672,740
Water Conservation	\$25,769	\$20,506	\$51,800	\$46,466
Other Expenses	\$421,387	\$464,476	\$490,163	\$476,029
Total - O&M Expenses	\$7,776,969	\$7,042,689	\$7,707,892	\$7,941,736

Debt Service

Table 3-3 shows actual and budgeted annual debt service for FY 2019 through FY 2022. FY 2019 and FY 2020 are actual debt service incurred. FY 2021 and FY 2022 represent current year budget and proposed budgeted debt service expenses, respectively. The proposed FY 2022 budgeted values are included in the revenue requirement for the rate setting year, FY 2022. The District’s existing debt includes SWP repayment via the District’s wholesale agency, CCWA; State Revolving Fund (SRF) loan repayment for the District’s share of Ortega and Cater treatment facilities; and loan repayments for other water quality and meter infrastructure capital costs. The proposed FY 2022 budgeted values are included in the revenue requirement for the rate setting year, FY 2022.

Table 3-3: Debt Service

Debt Service	FY 2019	FY 2020	FY 2021	FY 2022
CCWA Bonds-State Water-Interest	\$164,474	\$122,549	\$75,187	\$25,466
CCWA Bonds-State Water-Principal	\$879,886	\$921,761	\$970,196	\$1,018,630
State DWR Charges	\$1,904,158	\$2,404,903	\$2,053,203	\$2,045,744
SRF-Joint MWD-Ortega Interest	\$144,615	\$139,013	\$0	\$0
SRF-Joint MWD-Ortega Principal	\$0	\$451,406	\$0	\$0
SRF-Cater Treatment Plant Interest	\$35,500	\$33,070	\$25,597	\$20,456
SRF-Cater Treatment Plant Principal	\$0	\$202,105	\$209,578	\$212,132
Interest Expense - 2010A CABS	\$936,703	\$0	\$0	\$0
Revenue Bonds 2016-Interest	\$265,478	\$350,500	\$315,500	\$284,625
Revenue Bonds 2016-Principal	\$0	\$750,000	\$800,000	\$435,000
Siemens Lease - Interest	\$339,463	\$167,974	\$157,664	\$147,068
Siemens Lease - Principal	\$0	\$370,703	\$381,013	\$391,609
Revenue Bonds 2020A - Principal	\$0	\$0	\$425,000	\$375,000
Revenue Bonds 2020A - Interest	\$0	\$189,502	\$151,938	\$198,875
Bond Payable-2020B Taxable Ref Rev Bonds	\$0	\$0	\$0	\$95,000
Revenue Bonds 2020B - Interest	\$0	\$39,162	\$98,264	\$137,509
Revenue Bonds 2020C - Interest	\$0	\$11,924	\$53,479	\$75,500
Total - Debt Service	\$4,670,277	\$6,154,572	\$5,716,619	\$5,462,614

Capital Projects

Table 3-4 shows the annual cash funded CIP spending. The District aims to execute \$800k in pay-as-you-go (PAYGO), or cash-funded, capital projects in each fiscal year. The proposed FY 2022 budgeted values are included in the revenue requirement for the rate setting year, FY 2022.

Table 3-4: Capital Projects

Capital Projects	FY 2019	FY 2020	FY 2021	FY 2022
PAYGO Capital	\$800,000	\$800,000	\$800,000	\$800,000
Total - Capital Projects	\$800,000	\$800,000	\$800,000	\$800,000

District Cash Flow

Table 3-5 shows the District's four-year cash flow utilizing the revenue and expense values in previous tables. FY 2019 and FY 2020 columns are based on actuals provided by the District while FY 2021 and FY 2022 represent current year budget and proposed budgeted values, respectively. The proposed FY 2022 budgeted values including O&M expenses, debt service, PAYGO capital, and non-rate revenues are included in the revenue requirement for the rate setting year, FY 2022.

Table 3-5: District Cash Flow

Cash Flow	FY 2019	FY 2020	FY 2021	FY 2022
Revenues				
Water Rate Revenues	\$13,048,435	\$13,716,915	\$14,064,540	\$14,064,540
Other Revenue	\$1,345,980	\$275,460	\$236,700	\$401,000
Non-Operating Revenue	\$215,578	\$5,100	\$5,100	\$5,100
Total - Revenues	\$14,609,993	\$13,997,475	\$14,306,340	\$14,470,640
O&M Expenses				
Personnel	\$2,985,312	\$3,063,665	\$2,945,950	\$3,029,254
General and Administrative	\$269,303	\$321,320	\$379,912	\$406,638
Utilities	\$311,667	\$227,622	\$218,082	\$265,217
Professional Services	\$171,226	\$248,983	\$328,076	\$331,698
Operations Expense	\$1,023,229	\$752,193	\$995,197	\$1,006,557
State Water	\$667,744	\$136,832	\$82,000	\$195,000
Water Treatment & Testing	\$1,075,827	\$1,195,037	\$1,443,462	\$1,512,137
Joint Powers Authority	\$825,505	\$612,055	\$773,250	\$672,740
Water Conservation	\$25,769	\$20,506	\$51,800	\$46,466
Other Expenses	\$421,387	\$464,476	\$490,163	\$476,029
Total - O&M Expenses	\$7,776,969	\$7,042,689	\$7,707,892	\$7,941,736
Net Revenue	\$6,833,024	\$6,954,786	\$6,598,448	\$6,528,904
Debt Service	\$4,670,277	\$6,154,572	\$5,716,619	\$5,462,614
Capital Projects	\$800,000	\$800,000	\$800,000	\$800,000
Net Cash Flow	\$1,362,747	\$214	\$81,829	\$266,290
Calculated Debt Coverage	1.46	1.13	1.15	1.20

4. Rate Structure Modifications

This section of the report outlines proposed changes to the District's existing rate structures. Proposed changes are discussed prior to the cost of service analysis as they impact units of service and costs allocated in the cost of service analysis in the subsequent section.

Proposed Changes

Raftelis recommends that the District adopt rate structure modifications for water service, which include the following changes:

- » Elimination of the Drought Surcharge components to the fixed charge and variable CIP charge – the District's current water demand and cost structure reflects new normal conditions
- » Adoption of a three-tier rate structure for Residential customers, based on water efficiency standards and actual District customer usage characteristics
- » Consolidation of capital recovery from the Agricultural class from three components to one to simplify the rate structure and aid in customer understanding. The capital cost allocation to Agricultural users is discussed in detail in the next section.

Drought Surcharges

This study proposes to eliminate the Drought Surcharges. The surcharges were implemented during the prior, and historic, multi-year drought which was the County of Santa Barbara's driest seven consecutive years on record. The Drought Surcharges were adopted and implemented to curtail water use and conserve critical water supplies while mitigating revenue losses from reduced sales to recover the District's unavoidable fixed costs. While the District's water sources have experienced recovery, permanent demand reductions have taken place. Both behavioral changes and changes in land cover and irrigation practices have resulted in a permanent reduction in demand.

Historical pre-drought District-wide demand peaked in 2013 at 4,800 AF. At the lowest demand during the drought water demand hit a low of 3,400 AF. Since 2018, the District's water demand has settled near historic lows. For the cost of service analysis, and as our baseline demand to derive long-term rates, normal year water demand is estimated at 3,640 AFY. Raftelis believes 3,640 AFY to be a realistic expectation of future water demand based on short-term and long-term influences including state efficiency standards, cyclical drought, passive conservation, the increasing cost of water service, and the proposed three-tier Residential rate structure.

The elimination of the line-item Drought Surcharges is an acknowledgement of the new environment that many water service providers across California operate within.

Residential Tiers

The District's existing Residential water use rates consist of a two-tier structure described as an excess use rate. Each Residential metered connection is allotted a Base (effectively a first tier) amount of water determined by the connection's five-year historical use, with a minimum Base allocation of 6 hcf per month. Any amount of water use greater than the Base allotment is charged at a higher Peak rate. New accounts on the connection are allocated Base based on the historical use of the prior account. This structure allots more water to Residential accounts that have higher historical use and less water to accounts with lower historical use.

Raftelis recommends the District modify the Residential water use rates to a three-tier structure with fixed tier widths. This change will improve equity within the class, improve affordability for accounts with minimal water use needs, and provide additional conservation signaling by conveying the differing costs of the District's water supply and water system.

For Residential customers, the proposed Tier 1 will change from a dynamic Base allotment (with a minimum of 6 hcf per month) to a fixed volume of 6 hcf per month. The first tier is based on the 55 gallons per capita per day (gpcd) standard set forth by Senate Bill 606 and Assembly Bill 1668 for an average size household in the District's service area, which is 2.65. The first tier breakpoint is calculated as such:

55 gallons/per person per day x 30 days/month x 2.65 people/household x 1 hcf/748 gallons = 6 hcf (rounded up to nearest hcf)

The proposed Tier 2 will change from Peak use greater than an account's Base allocation to the approximate average summer water demands of the SFR class to account for seasonal irrigation demands of the class, on average. Average summer is defined as June through September and the approximate use per SFR account is 16 hcf.

The proposed new Tier 3 is any usage greater than the Tier 2 threshold of 16 hcf.

Capital Cost Recovery – Agricultural Users

As previously mentioned, the District has two distinct types of water users: 1) Agricultural users who irrigate crops and 2) M&I users who use water for domestic residential, commercial, and institutional needs, as well as for landscape irrigation.

This study refines the capital cost allocation between the District's Agricultural and M&I users. That analysis and discussion is found in the previous section. In addition to updating the total capital cost allocation of each of the District's user classes, Raftelis recommends the District consolidate its several rate components recovering Agricultural capital costs into one rate vehicle, the Agricultural O&M charge. Currently the Agricultural class' capital cost responsibility is recovered across the Agricultural O&M charge, the Agricultural REQ CIP charge, and a portion of the Basic Service Charge. This proposal will simplify the rate structure and promote customer understanding.

5. Cost of Service Analysis

This section of the report outlines the cost of service analysis, which allocates the District's FY 2022 revenue requirement to each system cost component and customer class. Numbers shown in the tables of this section are rounded. Therefore, hand calculations based on the displayed numbers, such as summing or multiplying, may not equal the exact results shown in this report.

Process and Approach

The first step in the cost of service analysis process is to determine the revenue requirement, which is based on the estimated costs of the Agency and include O&M expenses, debt servicing, PAYGO capital, net cash to reserves, and accounts for non-rate revenues. The framework and methodology utilized to develop the cost of service analysis and apportion the revenue requirement to each customer class and tier is informed by the processes outlined in the M1 Manual.

Cost of service analyses are tailored specifically to meet the unique needs of each utility. However, there are four distinct steps in every analysis to recover costs from customer classes in an accurate, equitable, and defensible manner:

1. Cost functionalization – O&M expenses and capital expenditures are categorized by their function in the system. Functions may include supply, transmission, distribution, customer service, billing, etc.
2. Cost causation component allocation – the functionalized costs are then allocated to cost causation components based on their burden on the system. The cost causation components include supply, peaking/extra-capacity, delivery, meter, customer, etc. The revenue requirement is allocated accordingly to the cost causation components and results in the total revenue requirement for each cost causation component.
3. Unit cost development – the revenue requirement for each cost causation component is divided by the appropriate units of service - such as total annual water use, peaking units, equivalent meters, number of customer bills, etc. - and dividing the cost causation component costs by the respective service units to determine the unit cost for each cost causation component.
4. Revenue requirement distribution – the unit costs are utilized to distribute the revenue requirement for each cost causation component to customer classes and tiers based on their individual service units. The District's customer classes include Residential (SFR and MMR), Commercial, Institutional, & Public Authority, and Agriculture.

Cost Components

The cost components used in this study are:

- » Meter – costs of servicing, installing, and replacing meters
- » Fire – direct costs of the water system's ability to provide fire protection
- » Customer – costs of customer service staff, billing, and collections
- » SWP – costs of purchasing imported water from the District's wholesaler, CCWA
- » Base – costs of delivering water to customers during average daily demand conditions
- » Peaking (Max Day and Max Hour) – the extra-capacity costs of delivering water to customers at peak capacity and during peak times of use
- » Groundwater – costs associated with producing water from the Carpinteria Groundwater Basin
- » Cachuma – costs associated with water supply procured from the Cachuma Lake Project
- » Treatment – costs of treating water to potable standards
- » Pumping – costs of moving water to higher elevations to serve customers in Pressure Zone 1 and II
- » Conservation – costs of the District's water conservation programs
- » CIP – costs related to debt servicing and PAYGO capital
- » General – represents all other costs that have a general or administrative function (indirect costs)

Revenue Requirement

Table 5-1 shows the District’s revenue requirement for the rate-setting year, FY 2022. The revenue requirements (Lines 1-5), also known as costs, are equal to the O&M expenses, debt service, and PAYGO capital expenditures. Revenue offsets (Lines 8-9), also known as non-rate revenues, are subtracted from the revenue requirement and the net cash flow to reserves (Line 10, equal to the net cash flow in **Table 3-5**) is added to account for revenues to reserves.

The revenue required from rates (Line 13) is equal to revenue requirements (Line 5) less revenue offsets and adjustments (Line 11) and is separated into Operating, Debt, and Capital components, which will be allocated to the cost components based on O&M, debt, and CIP expenditures, respectively.

Table 5-1: Revenue Requirement Derivation

Line	Revenue Requirement - FY 2022	Operating	Debt	Capital	Total
1	Revenue Requirements				
2	O&M Expenses	\$7,941,736	\$0	\$0	\$7,941,736
3	Debt Service	\$0	\$5,462,614	\$0	\$5,462,614
4	PAYGO Capital	\$0	\$0	\$800,000	\$800,000
5	Total - Revenue Requirements	\$7,941,736	\$5,462,614	\$800,000	\$14,204,350
6					
7	Offsets and Adjustments				
8	Other Revenue	(\$401,000)	\$0	\$0	(\$401,000)
9	Non-Operating Revenue	\$0	\$0	(\$5,100)	(\$5,100)
10	Net Cash Flow to Reserves ⁸	\$266,290	\$0	\$0	\$266,290
11	Total - Offsets and Adjustments	(\$134,710)	\$0	(\$5,100)	(\$139,810)
12					
13	Revenue Required from Rates	\$7,807,026	\$5,462,614	\$794,900	\$14,064,540

Peaking Factors

Table 5-2 shows the system-wide peaking factors used to derive the cost component allocation bases for Base (Delivery), Max Day, and Max Hour costs. Base represents average daily demand during the year, which has been normalized to a factor of 1.00 (Column C, Line 1). District staff provided Max Day and Max Hour peaking factors based on water demand in gallons per hour (gph). The Max Day peaking factor (Line 2 factor) shows that the system-wide Max Day demand is 1.71 times greater than the average daily demand. The Max Hour peaking factor (Line 3 factor) signifies that the system-wide Max Hour demand is 3.67 times greater than average demand.

The allocation bases (Columns titled A through C in the table) are calculated using the equations outlined in this section. Columns are represented in these equations as letters and rows are represented as numbers. For example, Column C, Line 2 is shown as C2.

The Max Day allocations are calculated as follows:

- » Base Delivery: $A1 / A2 \times 100\% = B2$
- » Max Day: $(A2 - A1) / A2 \times 100\% = C2$

The Max Hour allocations are calculated as follows:

- » Base Delivery: $A1 / A3 \times 100\% = B3$
- » Max Day: $(A2 - A1) / A3 \times 100\% = C3$
- » Max Hour: $(A3 - A2) / A3 \times 100\% = D3$

⁸ District staff provided Raftelis with the FY 2022 financial plan, which provides for the amount of net cash to reserves.

Table 5-2: System-Wide Peaking Factors

Line	Peaking Factors	Demand (gph)	A Factor	B Base	C Max Day	D Max Hour	Total
1	Base	152,698	1.00	100.0%	0.0%	0.0%	100.0%
2	Max Day	261,362	1.71	58.5%	41.5%	0.0%	100.0%
3	Max Hour	560,984	3.67	27.2%	19.3%	53.4%	100.0%
4	Avg. Max Day/Hour			42.9%	30.4%	26.7%	100.0%

Table 5-3 shows the customer-specific peaking factors based on the maximum monthly usage divided by average monthly usage for each customer class and tier. The maximum month peaking factor is used as a proxy for the class and tier-specific Max Day peaking factors. The peaking factors for Residential customers are based on the proposed tiers. Com/Ind/Pub is based on their existing Base/Peak structure.

Table 5-3: Customer-Specific Peaking Factors

Line	Customer Class	Peaking Factor
1	Residential	1.31
2	Tier 1	1.09
3	Tier 2	1.47
4	Tier 3	1.89
5		
6	Com/Ind/Pub	1.46
7	Base	1.16
8	Peak	2.11
9		
10	Agriculture	1.65
11	Temporary	1.46

Table 5-4 shows the calculation of additional capacity required to meet Max Day and Max Hour demands of each customer class and tier. Annual use is derived from water usage projections for FY 2021. First, annual use (Column C) is converted to average daily use (Column D), assuming 365 days in a year. The capacity factors (Column E) are the customer-specific peaking factors (**Table 5-3**) and are multiplied by the average daily use (Column D) to arrive at the total capacity required to meet each class and tier’s Max Day demand (Column F). The extra capacity required to meet Max Day demands (Column G) is calculated by subtracting the average daily use (Column D) from the total capacity for Max Day (Column F).

For Max Hour demands, the customer-specific peaking factors (Column E) are inflated based on the ratio between the system-wide Max Day and Max Hour peaking factors to determine the Max Hour peaking factors for all classes and tiers. This is calculated using the following equation:

$$\text{Max Day peaking factor (Column E)} \times [\text{System-wide Max Hour peaking factor (Table 5-2)} / \text{System-wide Max Day peaking factor (Table 5-2)}]$$

The total capacity for Max Hour demands (Column I) is calculated by multiplying the average daily use (Column D) by the Max Hour peaking factors (Column H). The extra capacity required for Max Hour demands (Column J) is equal to the Max Hour total capacity (Column I) less the Max Day total capacity (Column F).

Table 5-4: Water Usage and Extra Capacity

A	B	C	D	E	F	G	H	I	J	K	L
Line	Customer Class	Annual Use (hcf)	Average Daily Use (hcf/day)	Capacity/ Peaking Factor	Max Day		Max Hour			Pressure Zone I	Pressure Zone II
					Total Capacity (hcf/day)	Extra Capacity (hcf/day)	Capacity Factor	Total Capacity (hcf/day)	Extra Capacity (hcf/day)		
1	Residential									9,013	14,169
2	Tier 1	353,419	968	1.09	1,059	91	2.35	2,273	1,214		
3	Tier 2	127,542	349	1.47	513	164	3.15	1,101	588		
4	Tier 3	92,382	253	1.89	479	226	4.06	1,028	549		
5											
6	Com/Ind/Pub									19,878	0
7	Tier 1	144,911	397	1.16	459	62	2.48	985	526		
8	Tier 2	66,947	183	2.11	386	203	4.52	829	443		
9											
10	Agriculture	741,675	2,032	1.65	3,358	1,326	3.55	7,206	3,848	135,911	31,420
11	Agriculture REQ	53,352	146	1.09	160	14	2.35	343	183		
12											
13	Temporary	5,287	14	1.46	21	7	3.12	45	24	0	0
14											
15	Total	1,585,516	4,344		6,434	2,091		13,810	7,375	164,802	45,588

Equivalent Meters

Equivalent meter units are used to allocate meter-related costs appropriately and equitably. Larger meters have the capacity to impose larger demands on the system and are more expensive to install, maintain, and replace than smaller meters.

Equivalent meter units are based on meter hydraulic capacity and are calculated to represent the potential demand on the water system compared to a base meter size. A ratio of hydraulic capacity is calculated by dividing larger meter capacities by the base meter capacity based on the maximum safe operating flow rates in gallons per minute (gpm) at each size and type. The base meter in this study is the 3/4" meter, which is also the most common meter size.

Table 5-5 shows the meter capacity, meter type, and the calculated capacity ratio at each meter size used in the study. The capacity in gpm is based on actual capacity ratings from the AWWA M1 Manual with confirmation provided by District staff. The capacity ratios (Column E) are calculated by dividing the capacity in gpm for each meter size (Column B) by the capacity in gpm for the 3/4" meter (Column C, Line 1).

Table 5-5: Meter Capacity Ratio

A	B	C	D	E
Line	Meter Size	Capacity (gpm)	Meter Type	Capacity Ratio
1	3/4"	30	Displacement	1.00
2	1"	50	Displacement	1.67
3	1 1/2"	100	Displacement	3.33
4	2"	160	Displacement	5.33
5	3"	350	Turbine	11.67
6	4"	630	Turbine	21.00
7	6"	1,300	Turbine	43.33

Table 5-6 shows the estimated equivalent meters for FY 2022. The number of total meters (Column H) is derived from the meter count projections for FY 2022. The meter counts at each size and class (**Table 2-12**) are multiplied by the capacity ratio (Column C) to arrive at the total number of equivalent meters (Column H).

Table 5-6: Equivalent Meters (Meter Capacity)

A	B	C	D	E	F	G	H
Line	Meter Size	Capacity Ratio	Residential	Com/Ind/ Pub	Agriculture	Temporary	Total
1	3/4"	1.00	3,154	127	21	0	3,302
2	1"	1.67	472	128	90	0	690
3	1 1/2"	3.33	460	140	207	0	807
4	2"	5.33	293	480	1,173	0	1,947
5	3"	11.67	12	82	303	82	478
6	4"	21.00	21	42	42	0	105
7	6"	43.33	173	87	0	0	260
8	Total		4,585	1,086	1,836	82	7,589

Table 5-7 shows the estimated equivalents for FY 2022 on a DEQ basis. Recall, the District's SWP costs are recovered on the monthly meter-based service charges and MMR customers pay the SWP component not on a meter capacity equivalent basis but on a dwelling unit equivalent basis. **Table 5-7** shows the calculation of DEQ meter equivalents. Other than Residential, all classes' total equivalents are the same as **Table 5-6**. For the Residential class, the SFR and MMR counts in **Table 2-13** are summed together and then multiplied by the respective capacity ratio in **Table 5-7** (Column C). The number of total meter equivalents on a DEQ basis are shown in Column H.

Table 5-7: Equivalent Meters (DEQ)

A	B	C	D	E	F	G	H
Line	Meter Size	Capacity Ratio	Residential	Com/Ind/Pub	Agriculture	Temporary	Total
1	3/4"	1.00	6,219	127	21	0	6,367
2	1"	1.67	268	128	90	0	487
3	1 1/2"	3.33	130	140	207	0	477
4	2"	5.33	133	480	1,173	0	1,787
5	3"	11.67	0	82	303	82	467
6	4"	21.00	0	42	42	0	84
7	6"	43.33	0	87	0	0	87
8	Total		6,751	1,086	1,836	82	9,754

Like equivalent water meters, private fire lines and public fire hydrants are also converted to equivalent lines based on fire line capacities. **Table 5-9** shows the equivalent lines for private fire lines and public fire hydrants. Private fire lines are derived from the account projections in FY 2022 (**Table 2-16**) and public fire hydrant counts are provided by District staff.

Table 5-8: Public and Private Fire Lines

A	B	C	D
Line	Fire Line Size	Private Fire	Public Hydrants
1	2"	5	0
2	3"	5	0
3	4"	58	0
4	6"	49	200
5	8"	12	0
6	10"	2	0
7	Total	131	200

Table 5-9 derives the total fire equivalents within the water system. The fire line capacity ratios (Column C) are determined based on the Hazen-Williams equation for flow through pressure conduits, as explained in the AWWA M1 Manual. The flow potential is dependent on the diameter of the fire line raised to the power of 2.63. The fire line capacity ratio is normalized based on the capacity of a 6" fire line to be consistent with the most common fire conduit, a 6" public hydrant. Column F shows the total equivalent fire lines in the system.

Table 5-9: Equivalent Fire Lines

A	B	C	D	E	F
Line	Fire Line Size	Fire Ratio	Private Fire	Public Hydrants	Total
1	2"	0.06	0	0	0
2	3"	0.16	1	0	1
3	4"	0.34	20	0	20
4	6"	1.00	49	200	249
5	8"	2.13	26	0	26
6	10"	3.83	8	0	8
7	Total		103	200	303
8	<i>Fire Allocation</i>		<i>34%</i>	<i>66%</i>	<i>100%</i>

SWP costs are recovered from both potable water meters and private fire lines. Equivalency ratios are used to normalize potable water meters and private fire lines to allocate costs to both. **Table 5-10** shows the estimated private fire SWP equivalents for FY 2022. Based on these capacity ratios, a 2" fire line is equivalent to a 3/4" water meter. Private fire

capacity ratios were provided by District staff. Column D shows the total private fire equivalents for allocating SWP costs.

Table 5-10: Equivalent Meters for Private Fire

A	B	C	D
Line	Fire Line Size	Capacity Ratio	Private Fire
1	2"	1.00	5
2	3"	2.25	11
3	4"	4.00	232
4	6"	9.00	441
5	8"	16.00	192
6	10"	25.00	50
7	Total		931

Operating Allocation

Table 5-11 shows the allocation of operating expenses to each cost component, as developed from the District's O&M expense budget for FY 2022. O&M expenses are used in the cost of service analysis to allocate the operating revenue requirement from **Table 5-1** to the relative share of costs in each water system cost component. Raftelis worked with District staff to determine the appropriate allocation to each cost component based on the function of the expense incurred. The majority of functions have a one-to-one relationship with a system cost component, for example, State Water costs. Cater, Wells, and Storage are allocated on the Max Day basis as determined in **Table 5-2**. Distribution and Pumping is allocated on the Max Hour basis as determined in **Table 5-2**. Transmission & Distribution (T&D) uses the average max day/max hour allocation derived in **Table 5-2**. Certain engineering O&M expenses are allocated using the capital basis derived from the water system asset base. All other functional costs are allocated fully to the respective cost components.

Table 5-12 allocates the functionalized O&M budget to the respective cost components using the percentage basis in **Table 5-11**. The bottom row of **Table 5-12** yields the percent of the total O&M budget allocated to each system cost component. These values are used to allocate the Operating portion of the District's total revenue requirement.

Table 5-11: Functional Allocations

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Line	Functions	Rationale	Meter	Fire	Customer	SWP	Base	Max Day	Max Hour	Ground-water	Cachuma	Treatment	Pumping	Conservation	CIP	General	Total
1	Groundwater	Groundwater								100%							100%
2	Lake Cachuma	Cachuma									100%						100%
3	State Water	SWP				100%											100%
4	Cater	Treatment MD					58%	42%									100%
5	Distribution	Max Hour					27%	19%	53%								100%
6	T&D	Avg. MD/MH					43%	30%	27%								100%
7	Pumping	Max Hour					27%	19%	53%								100%
8	Elevation Pumping	Pumping											100%				100%
9	Wells	Max Day					58%	42%									100%
10	Treatment	Treatment										100%					100%
11	Storage	Max Day					58%	42%									100%
12	Meters	Meter	100%														100%
13	Billing	Customer			100%												100%
14	Fire	Fire		100%													100%
15	Conservation	Conservation												100%			100%
16	Administration	General														100%	100%
17	Capital	Capital Costs	23%	1%	0%	0%	30%	21%	12%	0%	0%	2%	0%	0%	0%	12%	100%
18	General	General														100%	100%
19	CIP	CIP													100%		100%

Table 5-12: Operating Expense Allocation

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Line	Functions	Meter	Fire	Customer	SWP	Base	Max Day	Max Hour	Ground-water	Cachuma	Treatment	Pumping	Conservation	CIP	General	O&M Budget
1	Groundwater	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0	\$0	\$40,000
2	Lake Cachuma	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,058,612	\$0	\$0	\$0	\$0	\$0	\$1,058,612
3	State Water	\$0	\$0	\$0	\$530,543	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$530,543
4	Cater	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	Distribution	\$0	\$0	\$0	\$0	\$65,401	\$46,435	\$128,187	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$240,023
6	T&D	\$0	\$0	\$0	\$0	\$116,760	\$82,900	\$72,738	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$272,398
7	Pumping	\$0	\$0	\$0	\$0	\$33,288	\$23,635	\$65,245	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$122,168
8	Elevation Pumping	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$43,683	\$0	\$0	\$0	\$43,683
9	Wells	\$0	\$0	\$0	\$0	\$120,568	\$85,604	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$206,172
10	Treatment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,595,785	\$0	\$0	\$0	\$0	\$1,595,785
11	Storage	\$0	\$0	\$0	\$0	\$14,464	\$10,270	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,734
12	Meters	\$199,403	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$199,403
13	Billing	\$0	\$0	\$171,257	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$171,257
14	Fire	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	Conservation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$136,779	\$0	\$0	\$136,779
16	Administration	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$834,100	\$834,100
17	Capital	\$105,585	\$5,895	\$0	\$0	\$137,545	\$97,657	\$53,601	\$0	\$0	\$8,925	\$0	\$0	\$0	\$56,154	\$465,361
18	General	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000,718	\$2,000,718
19	CIP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
20	Total	\$304,988	\$5,895	\$171,257	\$530,543	\$488,027	\$346,499	\$319,771	\$40,000	\$1,058,612	\$1,604,710	\$43,683	\$136,779	\$0	\$2,890,972	\$7,941,736
21	<i>Operating Allocation</i>	<i>3.8%</i>	<i>0.1%</i>	<i>2.2%</i>	<i>6.7%</i>	<i>6.1%</i>	<i>4.4%</i>	<i>4.0%</i>	<i>0.5%</i>	<i>13.3%</i>	<i>20.2%</i>	<i>0.6%</i>	<i>1.7%</i>	<i>0.0%</i>	<i>36.4%</i>	<i>100.0%</i>

Capital Allocation

Capital Allocation – Agriculture and Municipal & Industrial

The District serves two distinct user groups: Agriculture and M&I. These two user groups require very different levels of service, most notably treated water with specific water quality standards for M&I uses. As part of this study, Raftelis evaluated the existing capital cost recovery between the two groups against an alternative approach. An asset benefit analysis was used to ensure an equitable allocation and appropriate cost recovery from each group.

The analysis utilized the District’s water system capitalized assets database as the starting point. The assets were grouped into summarized categories. Next, different allocation bases were identified with which to distribute a group of assets value to Agriculture, M&I, or both. Once the distribution for all asset categories was completed, the total system value benefiting the two user classes becomes known and is used to allocate the total costs recovered through the District’s two capital rate components: the M&I variable CIP charge and the Agricultural O&M charge. The following tables detail the asset benefit exercise to allocate capital costs, net of SWP debt which is recovered through the monthly meter-based fixed charge.

Table 5-13 shows the various allocation bases for distributing the different asset categories between Agriculture and M&I. The bases include the number of customers, equivalent meters, average potable demand (by class), and average total demand (by class). Note Column C, Line 4 shows some potable demand for Agriculture which represents the average use of residential dwelling units across all Agricultural connections. Lines 8-11 of the table show the allocation basis in percentage terms.

Table 5-13: Asset Benefit Allocations

A	B	C	D	E
Line	CIP Cost Allocation	Agriculture	M&I	Total
1	Basis			
2	Number of Customers	385	3,990	4,375
3	Equivalent Meters	1,836	5,752	7,589
4	Average Potable Demand	53,352	790,489	843,841
5	Average Total Demand	795,027	790,489	1,585,516
6				
7	Allocation			
8	Number of Customers	9%	91%	100%
9	Equivalent Meters	24%	76%	100%
10	Average Potable Demand	6%	94%	100%
11	Average Total Demand	50%	50%	100%

Raftelis worked with District staff to identify the most appropriate allocation basis for each asset category. Generally, water quality and water treatment categories are allocated using average potable demand; storage categories are allocated based on average total demand; operational and administrative facilities are allocated based on the number of customers in each user group; and smaller storage facilities, meters, pumping equipment, and distribution assets are allocated based on equivalent meters.

The results attribute 17.2% of capital costs to Agricultural users and the remaining 82.8% to M&I users. Agriculture’s share will be recovered by the Agricultural O&M charge and M&I’s share by the variable CIP charge.

Table 5-14: Capital Cost Allocation – Agriculture and M&I

A	B	C	D	E	F
Line	Asset Category	Allocation Methodology	RCLD	Agriculture	M&I
1	Administration Building	Number of Customers	\$209,024	\$18,394	\$190,630
2	Carpinteria Reservoir	Avg. Total Demand	\$0	\$0	\$0
3	Carpinteria Reservoir - Water Quality	Avg. Potable Demand	\$6,434,021	\$406,792	\$6,027,229
4	Corrosion Control	Equivalent Meters	\$28,110	\$6,802	\$21,308
5	Office Equipment & Furniture	Number of Customers	\$628,758	\$55,331	\$573,428
6	Other Equipment & Tools	Number of Customers	\$456,304	\$40,155	\$416,149
7	Facility & Grounds Equipment	Number of Customers	\$290,713	\$25,583	\$265,130
8	Foothill Reservoir	Avg. Total Demand	\$0	\$0	\$0
9	Foothill Reservoir - Water Quality/System	Avg. Potable Demand	\$10,321,134	\$652,556	\$9,668,578
10	Headquarters Well	Avg. Total Demand	\$2,477,580	\$1,242,336	\$1,235,244
11	Headquarters Well - Treatment	Avg. Potable Demand	\$691,207	\$43,702	\$647,505
12	Hydrants	Number of Customers	\$417,626	\$36,751	\$380,875
13	Land	Number of Customers	\$779,935	\$68,634	\$711,300
14	Maintenance Center	Number of Customers	\$936,927	\$82,450	\$854,478
15	Meters & Services	Equivalent Meters	\$7,480,610	\$1,810,186	\$5,670,425
16	Ortega Reservoir Cover	Avg. Total Demand	\$0	\$0	\$0
17	Ortega Reservoir Cover - Water Quality	Avg. Potable Demand	\$9,448,964	\$597,413	\$8,851,551
18	Pumping Equipment	Equivalent Meters	\$304,065	\$73,579	\$230,486
19	Tanks & Reservoirs	Equivalent Meters	\$442,368	\$107,046	\$335,322
20	Transmission & Distribution	Equivalent Meters	\$13,100,888	\$3,170,201	\$9,930,687
21	Vehicles	Number of Customers	\$1,133,095	\$99,712	\$1,033,383
22	Wells	Avg. Total Demand	\$3,652,022	\$1,831,237	\$1,820,785
23	Wells - Treatment	Avg. Potable Demand	\$235,701	\$14,902	\$220,799
24	Wells - Groundwater Management	Avg. Total Demand	\$311,349	\$156,120	\$155,229
25	Wells - Water Quality	Avg. Potable Demand	\$1,665,208	\$105,283	\$1,559,925
26	Water Treatment Equipment	Avg. Potable Demand	\$632,312	\$39,978	\$592,334
27	Total		\$62,077,922	\$10,685,141	\$51,392,781
28	<i>Percent of CIP Costs</i>		<i>100%</i>	<i>17.2%</i>	<i>82.8%</i>

Debt Allocations

The District’s debt includes SWP repayment to CCWA; SRF loan repayment for the District’s share of Cater treatment facilities; and loan repayments for other water quality and meter infrastructure capital costs. The proposed budgeted values are included in the Debt portion of the revenue requirement for the rate setting year, FY 2022.

Table 5-15 shows the allocation of the District’s debt revenue requirement. CCWA debt repayment is allocated directly to the SWP cost component. Cater treatment debt is allocated using the Max Day allocation from **Table 5-2** which allocates a portion to Base and a portion to Max Day (as treatment facilities are designed to meet maximum day demands). The remaining debts are allocated directly to the CIP cost component.

Table 5-15: Debt Service Allocation

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Line	Functions	Meter	Fire	Customer	SWP	Base	Max Day	Max Hour	Ground-water	Cach-uma	Treat-ment	Pumping	Conser-vation	CIP	General	Debt Service
1	Groundwater	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	Lake Cachuma	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	State Water	\$0	\$0	\$0	\$3,089,840	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,089,840
4	Cater	\$0	\$0	\$0	\$0	\$136,016	\$96,572	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$232,588
5	Distribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	T&D	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	Pumping	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8	Elevation Pumping	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9	Wells	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10	Treatment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11	Storage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12	Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	Billing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14	Fire	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	Conservation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	Administration	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
17	Capital	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	General	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19	CIP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,140,186	\$0	\$2,140,186
20	Total	\$0	\$0	\$0	\$3,089,840	\$136,016	\$96,572	\$0	\$0	\$0	\$0	\$0	\$0	\$2,140,186	\$0	\$5,462,614
21	<i>Debt Allocation</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>56.6%</i>	<i>2.5%</i>	<i>1.8%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>39.2%</i>	<i>0.0%</i>	<i>100.0%</i>

Revenue Offsets

The District generates a modest amount of non-rate revenue which reduces the total revenue required from rates. These non-rate revenues include categories of other operating and non-operating revenues. The revenue offsets are allocated to the water system cost components based on either the operating allocation (**Table 5-12**) or the capital asset allocation (**Appendix A**), whichever is most appropriate. The percentage allocated to each cost component is used to allocate the revenue offsets between the various components.

Table 5-16: Revenue Offsets

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Line	Revenue Offsets	Allocation	Meter	Fire	Customer	SWP	Base	Max Day	Max Hour	Ground-water	Cachuma	Treatment	Pump-ing	Conser-vation	CIP	General	Revenue Offsets
1	Capital Cost Recovery	Capital	\$34,033	\$1,900	\$0	\$0	\$44,335	\$31,478	\$17,277	\$0	\$0	\$2,877	\$0	\$0	\$0	\$18,100	\$150,000
2	Other Income	Operating	\$1,920	\$37	\$1,078	\$3,340	\$3,073	\$2,182	\$2,013	\$252	\$6,665	\$10,103	\$275	\$861	\$0	\$18,201	\$50,000
3	Overhead Control	Operating	\$1,959	\$38	\$1,100	\$3,407	\$3,134	\$2,225	\$2,053	\$257	\$6,798	\$10,305	\$281	\$878	\$0	\$18,565	\$51,000
4	Interest	Operating	\$5,760	\$111	\$3,235	\$10,021	\$9,218	\$6,545	\$6,040	\$756	\$19,995	\$30,309	\$825	\$2,583	\$0	\$54,603	\$150,000
5	Interest-COP Funds Restricted	Capital	\$1,157	\$65	\$0	\$0	\$1,507	\$1,070	\$587	\$0	\$0	\$98	\$0	\$0	\$0	\$615	\$5,100
6	Total - Revenue Offsets		\$44,830	\$2,151	\$5,413	\$16,768	\$61,266	\$43,499	\$27,971	\$1,264	\$33,458	\$53,692	\$1,381	\$4,323	\$0	\$110,085	\$406,100
7	<i>Revenue Offset Allocation</i>		<i>11.0%</i>	<i>0.5%</i>	<i>1.3%</i>	<i>4.1%</i>	<i>15.1%</i>	<i>10.7%</i>	<i>6.9%</i>	<i>0.3%</i>	<i>8.2%</i>	<i>13.2%</i>	<i>0.3%</i>	<i>1.1%</i>	<i>0.0%</i>	<i>27.1%</i>	<i>100.0%</i>

Fire Service Allocation

Peak capacity, as represented by Max Day and Max Hour, also includes capacity required to meet demands for firefighting. Max Day and Max Hour costs encompass capacity required to meet peak customer demands, public fire service, and private fire service. **Table 5-17** derives the allocation of Max Day and Max Hour costs to these three components, as outlined in the M1 Manual. The Max Hour fire capacity assumes a three hour fire with 3,000 gpm of capacity required.

The total Max Day capacity demanded for fire (Column C, Line 4) is calculated as follows, with letters representing columns and numbers representing rows:

$$C2 \text{ kgal/min} * 60 \text{ min/hour} * C1 \text{ hours} * 1000 \text{ gal/kgal} * 1 \text{ hcf/748 gal}$$

The Max Hour capacity demanded for fire represents the additional capacity needed above Max Day capacity demanded for fire. Thus, the calculation multiplies the Max Hour capacity by 24 hours to convert it into Max Day increments to subtract the Max Day capacity demanded for fire (Column C, Line 4). The total Max Hour capacity demanded for fire (Column D, Line 4) is calculated as follows:

$$[D2 \text{ kgal/min} * 60 \text{ min/hour} * 24 \text{ hours/day} * 1000 \text{ gal/kgal} * 1 \text{ hcf/748 gal}] - C4 \text{ hcf/day}$$

Public fire hydrants account for a portion of the total fire capacity (Line 5) based on the proportionate share of the equivalent fire lines (**Table 5-9**, Column E, Line 8). The total capacity demanded for fire (Line 4) is multiplied by the public fire allocation (Line 5) to determine the additional capacity required for public fire service (Line 8). The remaining capacity demanded for fire is allocated to private fire service (Line 9). The customer demand capacity is equal to the Max Day and Max Hour demand for all other customers (**Table 5-4**, Columns G and J, Line 15). The proportion of system capacity for each of these components (Lines 13-17) is later used to allocate Max Day and Max Hour costs across the different cost components.

Table 5-17: Fire Capacity Estimate

A	B	C	D
Line	Fire Capacity Estimate	Max Day	Max Hour
1	Hours for Fire	3	
2	kgals/min	3	3
3			
4	Capacity Demanded for Fire (hcf/day)	722	5,053
5	Allocation to Public Fire	66%	66%
6			
7	System Capacity		
8	Public Fire Capacity	476	3,332
9	Private Fire Capacity	246	1,721
10	Customer Demand Capacity	2,091	5,378
11	Total	2,813	10,432
12			
13	Proportion of System Capacity		
14	Public Fire Capacity	16.9%	31.9%
15	Private Fire Capacity	8.7%	16.5%
16	Customer Demand Capacity	74.3%	51.6%
17	Total	100.0%	100.0%

Note that costs to maintain public fire flows is included in the cost of service recovered from rates. This reflects that providing water in the volume and at the pressure required to operate fire hydrants that protect, and fire sprinklers in, structures is a statutory mandate of public water systems in California and such cost recovery is authorized by California Government Code sections 53069.9 and 53750.5. Moreover, charging water users for the portion of the cost of water service associated with fire flows appropriately assigns those cost to those who benefit from them. Sprinklers are within, and serve, structures served by water meters. Hydrants serve parcels improved with structures, as they are not suitable to address fire service calls involving individuals in need of medical aid or vehicle fires (which are fought with fire extinguishers) and are not typically used to fight wildland fires because hydrants rarely serve such land. The California Fire Code requires hydrants near structures, not elsewhere. Thus, those who pay water fees which recover fire flow costs also own or occupy structures protected by fire sprinklers and fire hydrants and therefore benefit from that service. Finally, fire hydrants are used to flush water mains periodically and serve a water-system function, as well as the fire suppression function noted here.

Unit Cost and Allocation to Classes

Table 5-18 shows the units of service for each cost component by customer class and tier (when applicable). The units of service for the Base, Groundwater, Cachuma, and Conservation cost components are equal to total annual water usage. The units of service for Max Day and Max Hour are equal to the extra capacity demanded across all classes. Meter is based on meter capacity equivalents (EMUs), Fire is based on fire line equivalents, Customer is based on number of customer accounts billed, and SWP is based on DEQ equivalents. Lastly, Pumping is based on the estimated water use requiring elevation pumping.

Table 5-18: Units of Service by Cost Component

A	B	C	D	E	F	G	H	I	J	K	L	M	N
Line	Customer Class	Meter	Fire	Customer	SWP	Base	Max Day	Max Hour	Ground-water	Cachuma	Treatment	Pumping	Conser- vation
1	Residential	4,585		3,636	6,751							23,182	573,344
2	Tier 1					353,419	91	1,214	353,419	353,419	353,419		
3	Tier 2					127,542	164	588	127,542	127,542	127,542		
4	Tier 3					92,382	226	549	92,382	92,382	92,382		
5													
6	Com/Ind/Pub	1,086		347	1,086							19,878	211,858
7	Tier 1					144,911	62	526	144,911	144,911	144,911		
8	Tier 2					66,947	203	443	66,947	66,947	66,947		
9													
10	Agriculture	1,836		385	1,836	741,675	1,326	3,848	741,675	741,675		167,331	741,675
11	Agriculture REQ					53,352	14	183	53,352	53,352	53,352		53,352
12													
13	Temporary	82		7	82	5,287	7	24	5,287	5,287	5,287		5,287
14	Fire		103	131	931								573,344
15													
16	Total	7,589	103	4,506	10,686	1,585,516	2,091	7,375	1,585,516	1,585,516	843,841	210,391	1,585,516
17	Units of Service	EMUs	EFLs	Accounts	DEQs	hcf	hcf/day	hcf/day	hcf	hcf	hcf	hcf	hcf

Table 5-19 shows the allocation of the revenue requirement to each cost component. Please note that the revenue requirement (Column Q, Lines 5, 9, and 11) is equal to the revenue required from rates (**Table 5-1**, Line 13). Operating expenses (Line 1) are derived from the operating revenue requirement (**Table 5-1**, Operating Line 15) and are allocated to each cost component based on the operating expense allocation in **Table 5-12**, Line 21. Debt expenses (Line 2) are derived from the debt revenue requirement in **Table 5-1**, Line 5. Debt expenses are allocated to the system cost components based on the allocations derived in **Table 5-15**. Capital expenses (Line 3) are based on the capital revenue requirement (**Table 5-1**, Line 5) and are allocated directly to the CIP component. Revenue offsets (Line 4) are allocated based on the allocation percentages derived in **Table 5-16**.

Public fire costs (Line 6) are reallocated to Meter from Max Day and Max Hour based on the public fire protection of system capacity (**Table 5-17**, Line 14). Public fire service is a benefit shared by all customers and connections to the water system. Similarly, private fire costs (Line 7) are reallocated to the Private Fire cost component from Max Day and Max Hour based on the private fire proportion of system capacity (**Table 5-17**, Line 15). Lastly, General (indirect) costs (Line 10) are reallocated to all cost components based on their proportional share of total costs (Line 9).

The resulting allocation of costs (Line 11) are then divided by the units of service for each cost component (Line 13) to derive the unit cost per cost component (Line 16). Units of service in Line 13 are from Table 5-18 and are translated into annual terms where necessary (e.g., number of accounts multiplied by 12 to derive the number of bills per year subject to the Customer cost component).

Table 5-20 shows the allocation of the revenue requirement to each customer class and tier based on the unit costs for each component (**Table 5-19**, Line 16). The unit costs for each cost component are multiplied by the units of service in each class and tier (**Table 5-18**). Please note that the total cost of service (Column P, Line 16) is equal to the total revenue required from rates (**Table 5-1**, Line 13).

Table 5-19: Unit Cost Derivation

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Line	Revenue Requirement	Meter	Fire	Cust-omer	SWP	Base	Max Day	Max Hour	Ground-water	Cach-uma	Treat-ment	Pump-ing	Conser-vation	CIP	General	Total
1	Operating Expenses	\$304,988	\$5,895	\$171,257	\$530,543	\$488,027	\$346,499	\$319,771	\$40,000	\$1,058,612	\$1,604,710	\$43,683	\$136,779	\$0	\$2,890,972	\$7,941,736
2	Debt Expenses	\$0	\$0	\$0	\$3,089,840	\$136,016	\$96,572	\$0	\$0	\$0	\$0	\$0	\$0	\$2,140,186	\$0	\$5,462,614
3	Capital Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$800,000	\$0	\$800,000
4	Revenue Offsets	(\$15,434)	(\$741)	(\$1,863)	(\$5,773)	(\$21,093)	(\$14,976)	(\$9,630)	(\$435)	(\$11,519)	(\$18,485)	(\$475)	(\$1,488)	\$0	(\$37,900)	(\$139,810)
5	Total - Cost of Service	\$289,555	\$5,154	\$169,394	\$3,614,610	\$602,951	\$428,095	\$310,142	\$39,565	\$1,047,093	\$1,586,225	\$43,207	\$135,291	\$2,940,186	\$2,853,073	\$14,064,540
6	Allocation of Public Fire Costs	\$155,618	\$0	\$0	\$0	\$0	(\$72,461)	(\$83,157)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	Allocation of Private Fire Costs	\$0	\$80,369	\$0	\$0	\$0	(\$37,422)	(\$42,946)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8	Allocation of Fire Costs	\$3,399	(\$3,399)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9	Total - Cost of Service with Fire	\$448,571	\$82,124	\$169,394	\$3,614,610	\$602,951	\$318,212	\$184,039	\$39,565	\$1,047,093	\$1,586,225	\$43,207	\$135,291	\$2,940,186	\$2,853,073	\$14,064,540
10	Allocation of General Costs	\$114,152	\$20,899	\$43,107	\$919,839	\$153,438	\$80,978	\$46,834	\$10,068	\$266,462	\$403,660	\$10,995	\$34,429	\$748,213	(\$2,853,073)	\$0
11	Total - Adjusted Cost of Service	\$562,723	\$103,023	\$212,501	\$4,534,449	\$756,389	\$399,189	\$230,873	\$49,633	\$1,313,556	\$1,989,885	\$54,203	\$169,719	\$3,688,399	\$0	\$14,064,540
12																
13	Units of Service	91,064	1,239	54,072	128,227	1,585,516	2,091	7,375	1,585,516	1,585,516	1,585,516	843,841	210,391			
14		EMU/yr	EL/yr	bills/yr	EMU/yr	hcf	hcf/day	hcf/day	hcf	hcf	hcf	hcf	hcf			
15																
16	Unit Cost	\$6.18	\$83.12	\$3.93	\$35.36	\$0.48	\$190.94	\$31.30	\$0.03	\$0.83	\$0.00	\$2.36	\$0.26			
17		EMU	EL	bill	EMU	hcf	hcf/day	hcf/day	hcf	hcf	hcf	hcf	hcf			

Table 5-20: Cost of Service, by Cost Component and Customer Class

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Line	Customer Class	Meter	Fire	Customer	SWP	Base	Max Day	Max Hour	Ground-water	Cachuma	Treatment	Pumping	Conservation	CIP	Total
1	Residential	\$339,992	\$0	\$171,472	\$2,864,659	\$273,520	\$91,683	\$73,589	\$17,948	\$474,999	\$1,352,018	\$5,972	\$61,373	\$2,332,663	\$8,059,889
2	<i>Tier 1</i>					<i>\$168,603</i>	<i>\$17,309</i>	<i>\$37,995</i>	<i>\$11,063</i>	<i>\$292,798</i>	<i>\$833,408</i>				
3	<i>Tier 2</i>					<i>\$60,845</i>	<i>\$31,259</i>	<i>\$18,412</i>	<i>\$3,993</i>	<i>\$105,665</i>	<i>\$300,761</i>				
4	<i>Tier 3</i>					<i>\$44,072</i>	<i>\$43,115</i>	<i>\$17,183</i>	<i>\$2,892</i>	<i>\$76,536</i>	<i>\$217,849</i>				
5															
6	Com/Ind/Pub	\$80,506	\$0	\$16,364	\$460,705	\$101,069	\$50,534	\$30,322	\$6,632	\$175,519	\$499,589	\$5,121	\$22,678	\$694,524	\$2,143,564
7	<i>Tier 1</i>					<i>\$69,131</i>	<i>\$11,822</i>	<i>\$16,467</i>	<i>\$4,536</i>	<i>\$120,055</i>	<i>\$341,718</i>				
8	<i>Tier 2</i>					<i>\$31,938</i>	<i>\$38,712</i>	<i>\$13,856</i>	<i>\$2,096</i>	<i>\$55,464</i>	<i>\$157,871</i>				
9															
10	Agriculture	\$136,170	\$0	\$18,156	\$779,252	\$353,825	\$253,098	\$120,469	\$23,217	\$614,457	\$0	\$43,109	\$79,392	\$634,864	\$3,056,009
11	<i>Agriculture REQ</i>					<i>\$25,452</i>	<i>\$2,613</i>	<i>\$5,736</i>	<i>\$1,670</i>	<i>\$44,201</i>	<i>\$125,811</i>		<i>\$5,711</i>		<i>\$211,193</i>
12															
13	Temporary	\$6,056	\$0	\$330	\$34,655	\$2,522	\$1,261	\$757	\$165	\$4,380	\$12,467	\$0	\$566	\$26,347	\$89,506
14	Fire		\$103,023	\$6,178	\$395,178										\$504,378
15															
16	Total	\$562,723	\$103,023	\$212,501	\$4,534,449	\$756,389	\$399,189	\$230,873	\$49,633	\$1,313,556	\$1,989,885	\$54,203	\$169,719	\$3,688,399	\$14,064,540

Table 5-21 summarizes the revenue recovery, by customer class, based on the existing and new cost of service analyses. Current revenue is based on the budgeted rate revenues for FY 2022 as provided by District staff. Proposed revenue is based on the calculated revenues based on the proposed rates. Current revenues are slightly below the cost of service amount due to variation in recalculating rate revenues for a specific year (a variance below 1% is generally considered acceptable in the industry; the variance between the recalculated and the budgeted rate revenues is 0.1%). Proposed revenues are slightly higher than cost of service since proposed rates are rounded up to the nearest penny.

Table 5-21: Cost of Service by Customer Class

Customer Class	Current Revenue	Proposed Revenue	Difference (\$)	Difference (%)
Single Family	\$5,212,226	\$5,067,068	(\$145,158)	-2.8%
Multi-Family	\$3,123,534	\$3,057,093	(\$66,441)	-2.1%
Com/Ind/Pub	\$2,176,045	\$2,103,219	(\$72,825)	-3.3%
Agriculture	\$3,105,057	\$3,268,659	\$163,602	5.3%
Temporary	\$76,339	\$75,570	(\$769)	-1.0%
Fire Line	\$360,394	\$504,388	\$143,994	40.0%
Total	\$14,053,594	\$14,075,998	\$22,404	0.2%

6. Rate Design and Derivation

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

Monthly Meter Charges

Table 6-1 shows the monthly meter charge calculation, which consists of the Meter, SWP, and Customer cost components. As identified earlier, the Meters cost component is derived based on total equivalent meter capacity units. The Meter unit cost (**Table 5-19**, Column C, Line 16) is multiplied by the capacity ratio for each meter size (Column C) to accurately recover the share of costs by meter size. Similarly, the SWP unit cost (**Table 5-19**, Column F, Line 16) is multiplied by the ratio for each meter size (Column C) to appropriately reflect the share of cost by meter size. All MMR connections SWP component is at the 3/4" meter with a ratio of 1.00. Customer costs do not vary with meter size and therefore the Customer unit cost (**Table 5-19**, Column E, Line 16) is applied uniformly across all meter sizes. These components are added together to derive at the total proposed monthly meter charge for FY 2022 (Column G).

Table 6-1: Monthly Meter Charge Calculation (Basic and SWP)

A	B	C	D	E	F	G	H	I
Line	Meter Size	Capacity Ratio	Meter	SWP-	Customer	Proposed Charge	Current Charge	Difference (\$)
1	3/4"	1.00	\$6.18	\$35.36	\$3.93	\$45.48	\$48.38	(\$2.90)
2	1"	1.67	\$10.30	\$58.94	\$3.93	\$73.17	\$80.63	(\$7.46)
3	1 1/2"	3.33	\$20.60	\$117.88	\$3.93	\$142.41	\$161.25	(\$18.84)
4	2"	5.33	\$32.96	\$188.60	\$3.93	\$225.49	\$258.00	(\$32.51)
5	3"	11.67	\$72.09	\$412.56	\$3.93	\$488.59	\$516.00	(\$27.41)
6	4"	21.00	\$129.77	\$742.62	\$3.93	\$876.32	\$806.25	\$70.07
7	6"	43.33	\$267.77	\$1,532.38	\$3.93	\$1,804.09	\$1,612.50	\$191.59

Monthly Private Fire Charges

Table 6-2 shows the calculation of the monthly private fire charge. The Private Fire unit cost (**Table 5-19**, Column D, Line 16) is multiplied by the fire ratio (Column C), at each line size to arrive at the Private Fire cost for each fire line size. The SWP unit cost (**Table 5-19**, Column F, Line 16) is multiplied by the respective fire EMU ratio (Column E) to determine the SWP component at each fire line size. Like the monthly meter charge calculation, Customer costs do not vary between customer types or meter sizes; therefore, the Customer unit cost is applied uniformly across all line sizes. These three components are added together to derive the proposed monthly private fire service charge for FY 2022 (Column G).

Table 6-2: Monthly Private Fire Charge Calculation

A	B	C	D	E	F	G	H	I	J
Line	Fire Line Size	Fire Ratio	Private Fire	EMU Ratio	SWP	Customer	Proposed Charge	Current Charge	Difference (\$)
1	2"	0.06	\$4.62	1.00	\$35.36	\$3.93	\$43.92	\$32.25	\$11.67
2	3"	0.16	\$13.43	2.25	\$79.57	\$3.93	\$96.93	\$72.56	\$24.37
3	4"	0.34	\$28.61	4.00	\$141.45	\$3.93	\$174.00	\$129.00	\$45.00
4	6"	1.00	\$83.12	9.00	\$318.26	\$3.93	\$405.32	\$290.25	\$115.07
5	8"	2.13	\$177.13	16.00	\$565.80	\$3.93	\$746.86	\$516.00	\$230.86
6	10"	3.83	\$318.53	25.00	\$884.07	\$3.93	\$1,206.54	\$806.25	\$400.29

Water Usage Rate Components

The District’s water usage rates consist of five different cost components: Base, Peaking (the combination of Max Day and Max Hour cost components), Supply (which includes Groundwater and Cachuma), Treatment, and Conservation. The following section presents the derivations of the Peaking, Supply, and Conservation components by customer class and tier. The Base and Treatment components are uniform for each unit of water, regardless of class or tier, and are derived directly in **Table 5-19** (Column G, Line 16 for Base and Column L, Line 13 for Treatment).

Table 6-3 shows the Peaking unit cost calculation. Max Day and Max Hour costs (**Table 5-20**, Columns H and I) are summed together for each customer class and tier to determine total peaking costs (Column D). Peaking costs are divided by annual use (Column C) to determine the Peaking unit cost (Column E) for each class and tier.

Table 6-3: Peaking Unit Cost Calculation

A	B	C	D	E
Line	Customer Class	Annual Use (hcf)	Peaking Costs	Peaking Unit Cost
1	Residential			
2	Tier 1	353,419	\$55,303	\$0.16
3	Tier 2	127,542	\$49,671	\$0.39
4	Tier 3	92,382	\$60,298	\$0.65
5				
6	Com/Ind/Pub			
7	Base	144,911	\$28,289	\$0.20
8	Peak	66,947	\$52,568	\$0.79
9				
10	Agriculture	741,675	\$373,567	\$0.50
11	Agriculture REQ ⁹	53,352	\$8,349	\$0.16
12				
13	Temporary	5,287	\$2,018	\$0.38
14				
15	Total	1,585,516	\$630,062	

Table 6-4 shows the supply cost calculation for the water use rates. The District receives water from three sources: the SWP, Lake Cachuma, and groundwater from the Carpinteria Basin. SWP supply costs are recovered on the fixed charges. Only Lake Cachuma and groundwater supply costs are recovered from the variable commodity rates.

District staff provided estimated delivery/production amounts for FY 2022 (Line 1) which reflect normal hydrologic conditions and normal condition demand. The estimated water demand (Column E, Line 4) is allocated to each source of supply based on the proportion of estimated delivery/production (Line 2). The water supply costs (Line 5) are derived from the District’s operating budget (**Table 5-12**) and include the indirect General cost allocation in **Table 5-19**. The unit

⁹ Agriculture REQ peaking costs are captured in the Agriculture REQ calculation in Table 6-9.

cost for each source (Line 6) is calculated by dividing the supply costs (Line 5) by the estimated annual use (Line 4) of each source.

Table 6-4: Water Supply Costs by Source

A	B	C	D	E
Line	Water Sources	Groundwater	Cachuma	Total
1	AFY Estimate	1,000	2,500	3,500
2	Percent of Total	29%	71%	100%
3				
4	Annual Use (hcf)	453,004	1,132,511	1,585,516
5	Total Cost of Service	\$49,633	\$1,313,556	\$1,363,189
6	Unit Rate (\$/hcf)	\$0.11	\$1.16	\$0.86

Table 6-5 shows the allocation of water supply to each class and tier. Water supply from each of the two sources is allocated to each customer class equally based on their proportion of total water use.

Table 6-5: Water Supply Allocation

A	B	C	D	E
Line	Customer Class	Annual Use (hcf)	Groundwater	Cachuma
1	Residential			
2	Tier 1	353,419	100,977	252,442
3	Tier 2	127,542	36,441	91,102
4	Tier 3	92,382	26,395	65,987
5	Total - Residential	573,344	163,813	409,531
6				
7	Com/Ind/Pub			
8	Base	144,911	41,403	103,508
9	Peak	66,947	19,128	47,820
10	Total - Com/Ind/Pub	211,858	60,531	151,327
11				
12	Agriculture	795,027	227,151	567,876
13				
14	Temporary	5,287	1,510	3,776
15				
16	Total	1,585,516	453,004	1,132,511

Table 6-6 shows the Supply unit cost for each customer class and tier. The amount of water available from each source is allocated to each customer class equally based on proportion of water usage (**Table 6-5**), however, *within* the Residential customer class, Tier 1 receives the least expensive source of water first to promote affordability of water for essential water uses. Groundwater is the cheapest source and is allocated exclusively to Residential Tier 1 and Com/Ind/Pub Base allocation. Allocating the cheapest source of water for the lower tiers aligns with Article X, Section 2 of the California Constitution, which mandates that water resources are allocated to beneficial use; indoor use for public health and safety (which is represented by Tier 1) is the most essential use of water.

Demand in both Residential Tier 1 and Com/Ind/Pub Base is greater than the volume of groundwater available and so a portion of Cachuma supply is required to meet demand in those tiers; yielding a blended supply rate. Demand in Residential Tiers 2 and 3, along with the Peak tier demand for the Com/Ind/Pub class is supplied with Cachuma water alone. The uniform classes for Agriculture and Temporary service represent a blended rate, derived in **Table 6-4**. The average supply cost for all classes (**Table 6-6**, Lines 5, 10, 12, and 14) are equal as intended.

Table 6-6: Supply Unit Cost Calculation

A	B	C	D	E	F
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Line	Customer Class	Annual Use (hcf)	Groundwater	Cachuma	Supply Unit Cost
1	Residential				
2	Tier 1	353,419	163,813	189,607	\$0.67
3	Tier 2	127,542	0	127,542	\$1.16
4	Tier 3	92,382	0	92,382	\$1.16
5	Total - Residential	573,344	163,813	409,531	\$0.86
6					
7	Com/Ind/Pub				
8	Tier 1	144,911	60,531	84,380	\$0.72
9	Tier 2	66,947	0	66,947	\$1.16
10	Total - Com/Ind/Pub	211,858	60,531	151,327	\$0.86
11					
12	Agriculture	795,027	227,151	567,876	\$0.86
13					
14	Temporary	5,287	1,510	3,776	\$0.86
15					
16	Total	1,585,516	453,004	1,132,511	\$0.86

Table 6-7 shows the Conservation unit cost calculation. Conservation costs (Table 5-20, Column N) are summed together for all customers at the class level. For Residential customers, Conservation costs are entirely allocated to Tier 3 since that tier represents use greater than the average summertime outdoor irrigation demands of the class. Com/Ind/Pub class Conservation cost responsibility is recovered entirely in the Peak tier. The unit rate of Conservation costs for each class is equal as intended.

Table 6-7: Conservation Unit Cost Calculation

A	B	C	D	E	F
Line	Customer Class	Annual Use (hcf)	Applied Usage	Conservation Costs	Conservation Unit Cost
1	Residential				
2	Tier 1	353,419	0%	\$0	\$0.00
3	Tier 2	127,542	0%	\$0	\$0.00
4	Tier 3	92,382	100%	\$61,373	\$0.66
5	Total - Residential	573,344		\$61,373	\$0.11
6					
7	Com/Ind/Pub				
8	Tier 1	144,911	0%	\$0	\$0.00
9	Tier 2	66,947	100%	\$22,678	\$0.34
10	Total - Com/Ind/Pub	211,858		\$22,678	\$0.11
11					
12	Agriculture	741,675	100%	\$79,392	\$0.11
14					
15	Temporary	5,287	100%	\$566	\$0.11
16					
17	Total	1,585,516		\$169,719	\$0.11

Water Usage Rates

Table 6-8 shows the water usage rate calculation for all customer classes and tiers based on the following unit costs:

- » Base (Table 5-19, Column G, Line 16)
- » Peaking (Table 6-3, Column E)
- » Supply (Table 6-6, Column F)
- » Treatment (Table 5-19, Column L, Line 16)

» Conservation (Table 6-7, Column F)

The proposed rates in Column H are the sum of the five rate components in Columns C through G. All rates are rounded to the nearest penny.

Table 6-8: Water Usage Rate Calculation

A	B	C	D	E	F	G	H	I	J
Line	Customer Class	Base	Peaking	Supply	Treatment	Conservation	Proposed Rate (\$/hcf)	Current Rate (\$/hcf)	Difference (\$)
1	Residential								
2	Tier 1	\$0.48	\$0.16	\$0.67	\$2.36	\$0.00	\$3.67	\$3.90	(\$0.23)
3	Tier 2	\$0.48	\$0.39	\$1.16	\$2.36	\$0.00	\$4.39	\$5.12	(\$0.73)
4	Tier 3	\$0.48	\$0.65	\$1.16	\$2.36	\$0.66	\$5.32	\$5.12	\$0.20
5									
6	Com/Ind/Pub								
7	Base	\$0.48	\$0.20	\$0.72	\$2.36	\$0.00	\$3.76	\$3.90	(\$0.14)
8	Peak	\$0.48	\$0.79	\$1.16	\$2.36	\$0.34	\$5.12	\$5.12	\$0.00
9									
10	Agriculture	\$0.48	\$0.50	\$0.86	\$0.00	\$0.11	\$1.95	\$1.97	(\$0.02)
11	Temporary	\$0.48	\$0.38	\$0.86	\$2.36	\$0.11	\$4.19	\$3.90	\$0.29

Agriculture REQ Charge

Table 6-9 shows the calculation for the proposed Agricultural REQ charge based on the cost of service analysis. Estimated annual residential use on Agricultural connections (9 hcf per dwelling unit) is multiplied by the uniform Agricultural commodity rate to determine the amount of rate revenue generated at the Agricultural commodity rate (Line 3). Next, the calculated amount is subtracted from the REQ cost of service (**Table 5-20**, Column P, Line 11) to determine the net amount of revenue required from REQ charges (Line 7). Lastly the REQ requirement (Line 7) is divided by the number of residential dwelling units and the number of billing periods to yield the monthly REQ charge. The monthly charge is rounded up to the nearest cent.

Table 6-9: Agriculture REQ Charge Calculation

A	B	C
Line	Agriculture REQ Charge	Calculation
1	Annual Use (hcf)	53,352
2	Agriculture Rate (\$/hcf)	\$1.95
3	Amount Charged at Ag Rate	\$103,906
4		
5	Cost of Service	\$211,193
6	Less Charged at Ag Rate	(\$103,906)
7	REQ Requirement	\$107,287
8		
9	Dwelling Units	494
10	Monthly Ag REQ Charge (\$/unit)	\$18.10

Pressure Zone Surcharge

The District incurs electrical power costs associated with serving customers in higher elevation zones. The District is categorized into three zones: Base zone, Pressure Zone I and Pressure Zone II. The District applies a surcharge on all units delivered to Pressure Zone I and Pressure Zone II to recover costs from the customers served.

Table 6-10 shows the calculation of the pressure zone surcharges for Pressure Zone I and II. The power (Pumping) costs derived in the cost of service (Line 2) are allocated based on the percentage of O&M costs for each zone, which was provided by District staff. Then costs are divided by the units of water delivered in each zone. Units pumped to Zone II must first go through Zone I, therefore the units of water delivered to Zone I (Column C, Line 4) is equal to all units pumped to both pressure zones (**Table 5-18**, Column M). The units of water delivered to Zone II (Column D, Line 4) is equal to the units pumped only through Zone II.

The resulting rate is the incremental cost of pumping. Pressure Zone I customers pay only the incremental cost to deliver water to Pressure Zone I. Pressure Zone II customers pay the sum of the incremental costs (Line 5) for water that are elevated first to Pressure Zone I and then through Pressure Zone II. The District applies the proposed surcharge as an additional uniform rate to a customer's water use rate if they are served in the two upper zones.

Table 6-10: Pressure Zone Surcharge Calculation

A	B	C	D
Line	Pressure Zone Surcharge	Pressure Zone I	Pressure Zone II
1	Percent of O&M Costs in Zone	75.9%	24.1%
2			
3	Cost of Service	\$41,143	\$13,059
4	Usage (hcf)	210,391	45,588
5	Unit Cost	\$0.20	\$0.29
6	Surcharge	\$0.20	\$0.49

Capital Charges

Capital charges recover the costs of non-SWP debt service as well as PAYGO capital. The total capital costs to be recovered are derived in **Table 5-19**, Column O, Line 11. This total is apportioned between Agricultural and M&I user classes based on the cost allocation derived in

Table 5-14, Line 28. Agricultural customers capital costs are recovered from the Ag O&M charge while M&I customers capital costs are recovered from the variable CIP charges.

Table 6-11 derives the Agricultural O&M Charge cost per equivalent meter. The total Agricultural capital cost allocation (**Table 5-20**, Column O, Line 10) is divided by the total number of annual EMUs (**Table 5-6**, Column F, Line 8 multiplied by 12 months)Table 5-10 to yield the unit cost per EMU per month. An EMU is equal to a 3/4" meter.

Table 6-11: Agricultural O&M Unit Cost

A	B	C
Line	Agricultural O&M Charge	Calculation
1	Agriculture CIP Costs	\$634,864
2	Annual Agriculture EMUs	22,036
3	Unit Cost per EMU per month	\$28.82

Table 6-12 derives the proposed Agricultural O&M charges. The Agricultural O&M unit cost (**Table 6-11**, Column C, Line 3) is multiplied by the capacity ratio at each meter size (Column C) to accurately recover the share of costs by meter size. As previously mentioned, the Agricultural O&M charge is proposed to recover all Agricultural capital costs, currently recovered across three components; therefore, comparing current and proposed charges is not an apples-to-apples comparison.

Table 6-12: Agricultural O&M Charge Calculation

A	B	C	D	E	F
Line	Agricultural O&M Charge	Meter Capacity Ratio	Proposed Ag O&M Charge	Current Ag O&M Charge	Difference (\$)
1	3/4"	1.00	\$28.82	\$6.78	\$22.04
2	1"	1.67	\$48.02	\$11.30	\$36.72
3	1 1/2"	3.33	\$96.04	\$22.60	\$73.44
4	2"	5.33	\$153.66	\$36.16	\$117.50
5	3"	11.67	\$336.13	\$72.32	\$263.81
6	4"	21.00	\$605.02	\$113.00	\$492.02
7	6"	43.33	\$1,248.45	\$226.00	\$1,022.45

Table 6-13 derives the proposed variable CIP charge for all M&I customers (SFR, MMR, and Com/Ind/Pub, and Temporary). Total capital costs to be recovered from M&I classes (**Table 5-20**, Column O, Lines 1, 6, and 13) are divided by the estimated annual use subject to the charge. By coincidence, the proposed charge is equal to the current charge.

Table 6-13: M&I CIP Charge Calculation

A	B	C
Line	Variable CIP Charge	Calculation
1	Non-Agriculture CIP Costs	
2	Residential	\$2,332,663
3	Com/Ind/Pub	\$694,524
4	Temporary	\$26,347
5	Total	\$3,053,534
6		

7	5-Year Average Use ¹⁰ (hcf)	826,125
8	Proposed CIP Charge (\$/hcf)	\$3.70
9	Current Charge (\$/hcf)	\$3.70
10	Difference (\$)	\$0.00

Customer Impacts

Table 6-14 shows the monthly bill impacts at various levels of usage for a SFR customer with a 3/4” meter. Almost all SFR connections are 3/4". The median and average SFR bill is 6 hcf and 13 hcf per month, respectively. A median use bill will experience a \$4.28 decrease to their charges and an average use bill will experience a \$5.73 savings compared to their current charges.

Table 6-14: Residential Customer Impacts

A	B	C	D	E	F
Line	Residential Customer Impacts	Usage (hcf)	Current Monthly Bill	Proposed Monthly Bill	Difference (\$)
1	Very Low Use (15th percentile)	2	\$78.38	\$75.02	(\$3.36)
2	Low Use (30th percentile)	4	\$86.18	\$82.36	(\$3.82)
3	Median Use (50th percentile)	6	\$93.98	\$89.70	(\$4.28)
4	Average Use	13	\$152.06	\$146.33	(\$5.73)
5	High Use (80th percentile)	15	\$169.70	\$162.51	(\$7.19)
6	Very High Use (95th percentile)	39	\$381.38	\$378.06	(\$3.32)

Figure 6-1 shows the estimated monthly customer bill impacts for all SFR customers, based on estimated FY 2021 customer data. Raftelis recalculates each bill for each customer in the class at the current and proposed rates to estimate impacts. The chart shows that 94% of SFR bills will experience a reduction in their monthly water charge. This is based in part from a reduction in the monthly meter-based service charges and a reduction to the Tier 1 rate. Only the highest volume users in the class will experience increases to their bill.

Figure 6-2 shows the same bill impact distribution chart for the District’s MMR customers, with similar resulting impacts.

¹⁰ Represents billing units subject to the CIP charge with a minimum charge for 6 hcf and maximum charge for 125 hcf.

Figure 6-1: Monthly Customer Bill Impacts – Single Family

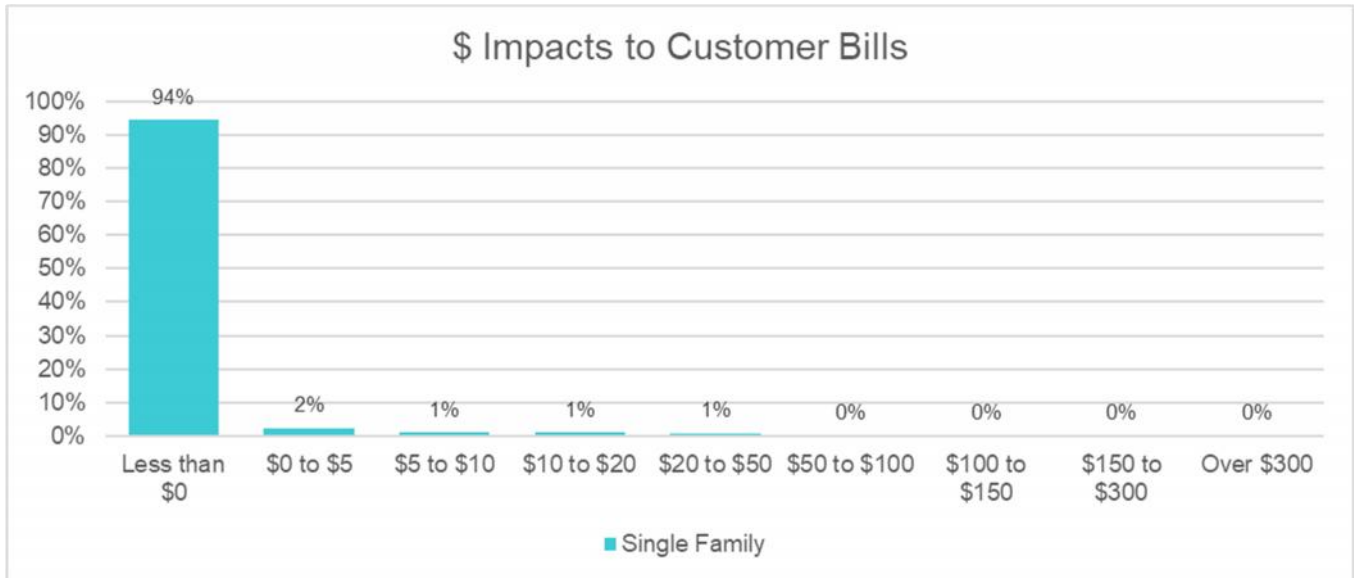


Figure 6-2: Monthly Customer Bill Impacts – Multi-Family

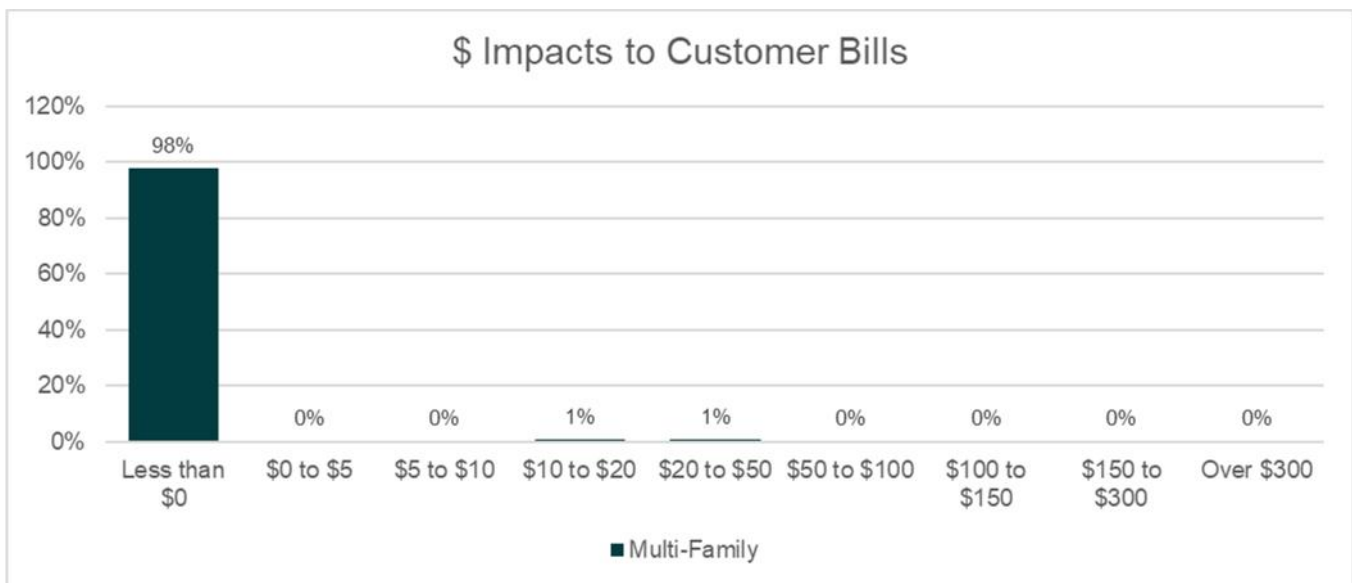


Figure 6-3 shows the distribution of monthly bill impacts for all Commercial, Industrial, and Public Authority customers, based on estimated FY 2021 customer data provided by District staff. Raftelis recalculates each bill for each customer in the class at the current and proposed rates to estimate impacts. The chart shows that 99% of Commercial, Industrial, and Public Authority bills will experience a reduction in their monthly water charge. This is due to both a decrease in the monthly meter-based service charge at smaller diameter metes as well as a reduction in the Base allocation water use rate.

Figure 6-3: Monthly Customer Bill Impacts – Commercial/Industrial/Public Authority

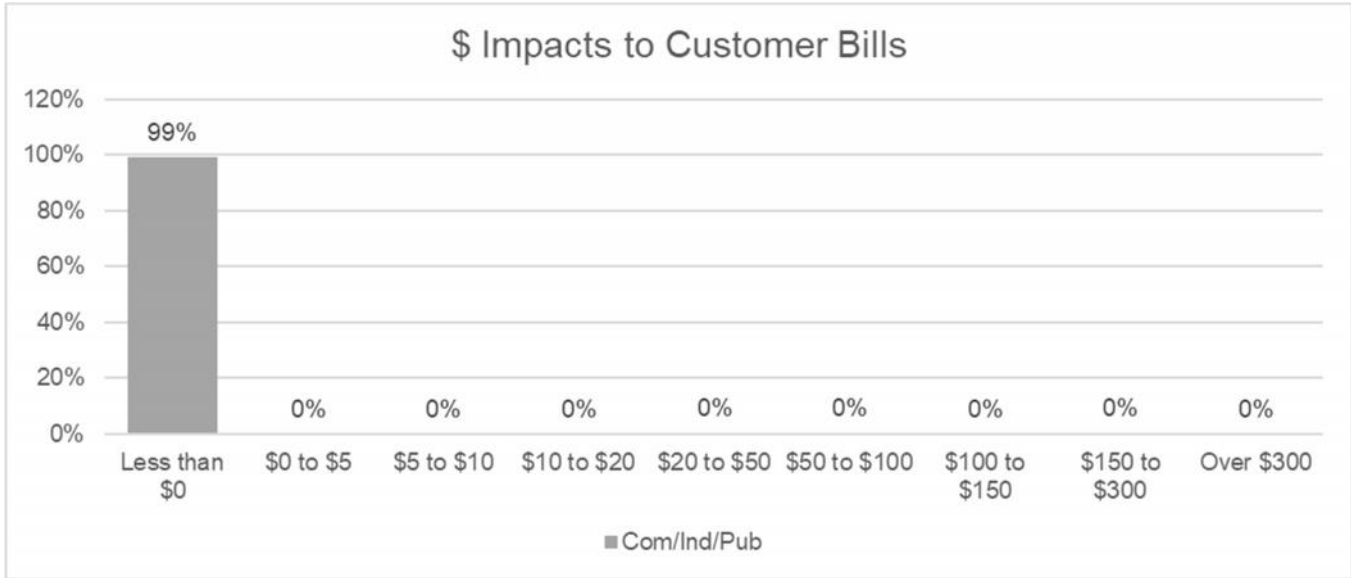
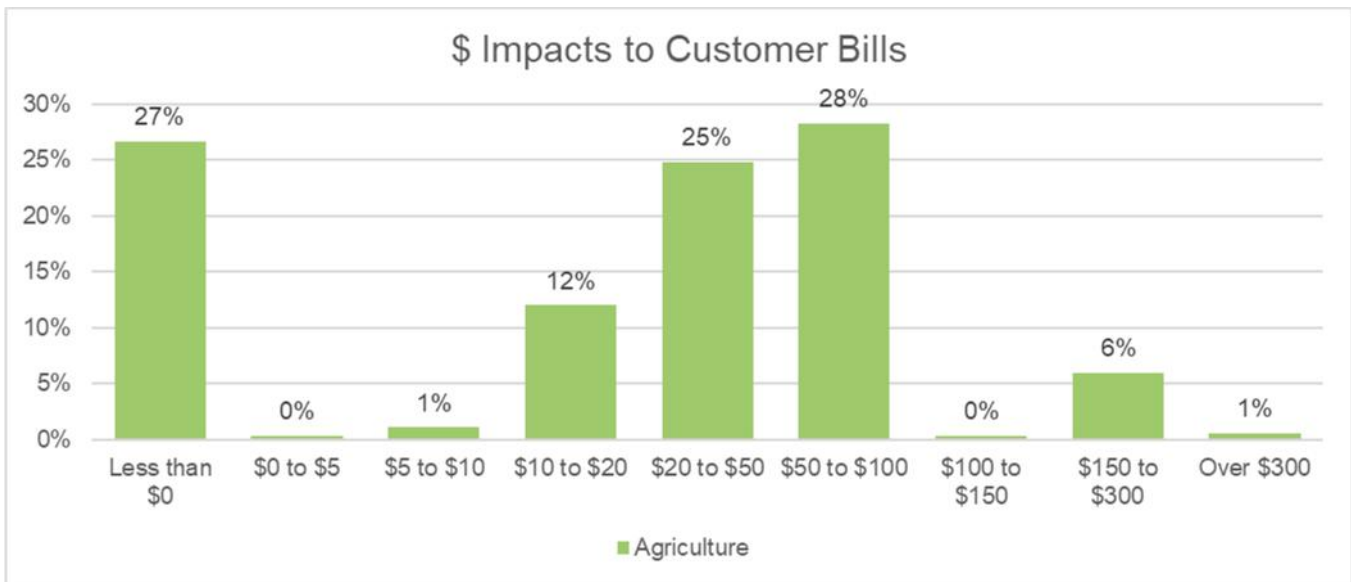


Figure 6-4 shows the estimated monthly customer bill impacts for all Agricultural customers, based on estimated FY 2021 customer data. Raftelis recalculates each bill for each customer in the class at the current and proposed rates to estimate impacts. 27% of Agricultural bills will experience a reduction in their monthly water charges. 28% of bills will experience an increase of \$50 to \$100 per month.

Figure 6-4: Monthly Customer Bill Impacts – Agriculture



Appendices

Appendix A

Water system asset valuation, functionalization, and allocation to system cost components.

Capital Asset Allocation																	
Capital Assets	Function	Base	Max Day	Max Hour	Groundwater	Cachuma	SWP	Treatment	Pumping	Conservation	CIP	Fire	Meter	Customer	Offset	General	Total
Percentage Allocation																	
Administration Building	Administration	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Carpinteria Reservoir	Storage	58%	42%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Corrosion Control	Distribution	27%	19%	53%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Office Equipment & Furniture	Administration	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Other Equipment & Tools	T&D	43%	30%	27%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Facility & Grounds Equipment	General	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Foothill Reservoir	Storage	58%	42%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Headquarters Well	Wells	58%	42%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Hydrants	Fire	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
Land	General	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Maintenance Center	General	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Meters & Services	Meters	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
Ortega Reservoir Cover	Storage	58%	42%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Pumping Equipment	Pumping	27%	19%	53%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Tanks & Reservoirs	Storage	58%	42%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Transmission & Distribution	T&D	43%	30%	27%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Vehicles	General	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Wells	Wells	58%	42%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Water Treatment Equipment	Treatment	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
																	RCLD
Administration Building	Administration	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$209,024	\$209,024
Carpinteria Reservoir	Storage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Corrosion Control	Distribution	\$7,659	\$5,438	\$15,012	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$28,110
Office Equipment & Furniture	Administration	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$628,758	\$628,758
Other Equipment & Tools	T&D	\$195,589	\$138,868	\$121,847	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$456,304
Facility & Grounds Equipment	General	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$290,713	\$290,713
Foothill Reservoir	Storage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Headquarters Well	Wells	\$1,448,877	\$1,028,703	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,477,580
Hydrants	Fire	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$417,626	\$0	\$0	\$0	\$0	\$417,626
Land	General	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$779,935	\$779,935
Maintenance Center	General	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$936,927	\$936,927
Meters & Services	Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,480,610	\$0	\$0	\$0	\$7,480,610
Ortega Reservoir Cover	Storage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pumping Equipment	Pumping	\$82,851	\$58,825	\$162,389	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$304,065
Tanks & Reservoirs	Storage	\$258,695	\$183,673	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$442,368
Transmission & Distribution	T&D	\$5,615,531	\$3,987,027	\$3,498,330	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,100,888
Vehicles	General	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,133,095	\$1,133,095
Wells	Wells	\$2,135,685	\$1,516,337	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,652,022
Water Treatment Equipment	Treatment	\$0	\$0	\$0	\$0	\$0	\$0	\$632,312	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$632,312
Total - Capital Assets		\$9,744,889	\$6,918,871	\$3,797,578	\$0	\$0	\$0	\$632,312	\$0	\$0	\$0	\$417,626	\$7,480,610	\$0	\$0	\$3,978,453	\$32,970,338
Capital Cost Allocation		29.6%	21.0%	11.5%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	1.3%	22.7%	0.0%	0.0%	12.1%	100.0%

Op-Ed: Wastewater recycling got derailed in Los Angeles. Now it's back on track

By Marc Haefele
May 17, 2021 3 AM PT
Los Angeles Times

Los Angeles is planning for a future in which the water that comes out of your tap will be recycled wastewater.

Twenty years ago, in the 2001 Los Angeles mayoral race, a topic usually seen as dull became the most lurid issue of the campaign. The topic was water recycling, and we are still being hurt by the rhetoric from that election today.

Candidate Joel Wachs, a longtime member of the City Council, didn't even make the runoff that year. But during the primary he alarmed voters across the city by insisting that Los Angeles was furtively planning to pipe recycled sewage to millions of unsuspecting Angelenos — without, according to Wachs, adequate public input or scientific research.

The recycling idea became widely known as “toilet to tap,” implying that Department of Water and Power customers would soon be drinking wastewater.

In the years that followed, the city put aside its plans for recycling — and thus its plans for a water supply independent of outside sources. Under two subsequent mayors, almost nothing was heard of it. If you asked the DWP about water recycling, they'd tell you about plans to put recycled water on golf courses and parks. But there was little talk — at least publicly — of recycling water in a way that made it safe to drink and send it to city taps. Until now.

Wastewater recycling has once again become the Great Wet Hope. In 2019, Mayor Eric Garcetti made it a cornerstone of his Green New Deal plan for Los Angeles. Ultimately, if things go according to DWP and L.A. Bureau of Sanitation plans, by 2035 at least 70% of the city's drinking water will be locally sourced, much of it recycled from wastewater plants. The projected cost will be \$8.1 billion.

The Metropolitan Water District of Southern California, which supplies water to 19 million Southern California residents, hopes to build its own wastewater processing plant in cooperation with the Sanitation Districts of Los Angeles County for about \$3.5 billion. That represents an investment of nearly \$12 billion in a technology that had recently appeared to be going nowhere.

Just how did this shift happen? MWD General Manager Jeffrey Kightlinger attributes it to a widespread and growing understanding of what climate change and increasing drought will mean for Southern California.

He says public outreach has improved, too. “Water utilities have learned the importance of gaining public support for water recycling projects,” Kightlinger said. “Once communities have an understanding of the science and safety of purified recycled water, they support it.”

Kightlinger credited Orange County with pioneering effective public outreach. Now nearly 50% of the county’s water is recycled, and public opposition has been minimal. In 2016, a Xylem poll found that 87% of Californians would accept recycled drinking water.

Kightlinger also credited public agencies for “being more open to the possibilities” of recycling, which takes processed wastewater through filtration processes involving membrane bioreactors, reverse osmosis and ultraviolet light. Then it is pumped into sand and gravel aquifers, which provide another stage of filtration before it flows from wells into the pipes that serve the customers. (Some engineers have called this last step unnecessary and contend that with today’s technology, recycled water could safely go directly to our faucets.) Los Angeles County already puts enough water into aquifers to service 1.8 million people.

There is, however, a consensus among local water professionals that the 2001 publicity during the mayoral race severely slowed the progress of recycling in Los Angeles. Right now, only about 2% of L.A.’s 400-million-gallon-plus daily consumption is recovered wastewater; this mostly goes to non-potable uses such as park and golf course irrigation. An additional 27% comes from DWP’s aqueduct system. About 60% is purchased from the Metropolitan Water District’s Colorado River and Sacramento Delta sources. The remainder comes via wells from the city’s underground aquifers.

“Importing water takes a great deal of energy. Plus, with global heating, more Sierra Nevada precipitation will fall as rain rather than snow,” says

Sandra Postel, director of the Global Water Policy Project. That's bad news for Los Angeles, since the annual snowpack currently is the backbone of its water reserves.

Postel also notes that predicted flows from L.A.'s other prime source, the Colorado River, will provide 20% less water by midcentury. A recent report in Science magazine suggests that the entire Southwest is probably facing an "anthropogenic megadrought" of a type not seen since the 1500s.

Those who doubt that wastewater recycling is safe need only look to the International Space Station, which recycles every drop of the crew's moisture. Present earthbound systems are capable of recycling between 80% and 90% of the wastewater run through them.

L.A.'s recycled water supply will be bolstered by storm and rainwater reclamation as well as, city officials hope, by further consumer conservation. Past drought mitigation regulations resulted in a 20% drop in consumer water consumption between 2013 and 2017.

This huge change in how we get water will be largely unnoticed by consumers. All purified water is chemically the same. And we should remember that all water on Earth is essentially recycled, whether we get it from a mountain stream or a sewer pipe. As one engineer put it, "It's all dinosaur pee."

I recently asked Wachs, now president of New York's Andy Warhol Foundation for the Visual Arts, how he sees his 20-year-old mayoral campaign and the damage it did to water recycling. "At the time, it sounded gross and people were upset with it," he recalls. But once the idea was explained and the people were taken into confidence, there came acceptance. "We were not there at that time."

He added: "There's a good lesson in that."

Marc Haefele is a freelance writer in Santa Monica who has covered state and local politics for nearly 30 years.

**SPECIAL MEETING
OF THE
CACHUMA OPERATION AND MAINTENANCE BOARD**

by Teleconference Call ONLY

**Teleconference Call-in Number: 1 (888) 899-7789
Passcode: 804443#**

Thursday, May 13, 2021

1:00 P.M.

AGENDA

NOTICE: This meeting shall be conducted by teleconference call only as authorized and in accordance with Government Code section 54953 and the California Governor's Executive Order N-29-20 and N-33-20.

1. **CALL TO ORDER, ROLL CALL**
2. **PUBLIC COMMENT** *(In accordance with Government Code Section 54954.3, every notice for a special meeting shall provide an opportunity for members of the public to directly address the legislative body concerning any item that has been described in the notice for the meeting before or during consideration of that item.)*
3. **VERBAL REPORTS FROM BOARD COMMITTEES**
Receive verbal information regarding the following committee meetings:
 - Administrative Committee Meeting – April 29, 2021
4. **COMB PROPOSED DRAFT FISCAL YEAR 2021-22 OPERATING BUDGET**
Action: Receive a presentation on the Proposed Draft Fiscal Year 2021-22 Operating Budget and provide direction to staff, as appropriate
5. **DIRECTORS' REQUESTS FOR AGENDA ITEMS FOR FUTURE MEETING**
6. **MEETING SCHEDULE**
 - **May 24, 2021 Regular Board Meeting (by teleconference only) at 1:00 P.M.**
 - **Board Packages Available on COMB Website**
www.cachuma-board.org
7. **COMB ADJOURNMENT**

NOTICE TO PUBLIC

Posting of Agenda: This agenda was posted at COMB's offices, located at 3301 Laurel Canyon Road, Santa Barbara, California, 93105 and on COMB's website, in accordance with Government Code Section 54954.2. The agenda contains a brief general description of each item to be considered by the Governing Board. The Board reserves the right to modify the order in which agenda items are heard. Copies of staff reports or other written documents relating to each item of business are on file at the COMB offices and are available for public inspection during normal business hours. A person with a question concerning any of the agenda items may call COMB's General Manager at (805) 687-4011.

Written materials: In accordance with Government Code Section 54957.5, written materials relating to an item on this agenda which are distributed to the Governing Board less than 72 hours (for a regular meeting) or 24 hours (for a special meeting) will be made available for public inspection at the COMB offices during normal business hours. The written materials may also be posted on COMB's website subject to staff's ability to post the documents before the scheduled meeting.

Public Comment: Any member of the public may address the Board on any subject within the jurisdiction of the Board that is not scheduled for as an agenda item before the Board. The total time for this item will be limited by the President of the Board. The Board is not responsible for the content or accuracy of statements made by members of the public. No action will be taken by the Board on any Public Comment item.

Americans with Disabilities Act: in compliance with the Americans with Disabilities Act, if you need special assistance to review agenda materials or participate in this meeting, please contact the Cachuma Operation and Maintenance Board office at (805) 687-4011 at least 48 hours prior to the meeting to enable the Board to make reasonable arrangements.

Note: If you challenge in court any of the Board's decisions related to the listed agenda items you may be limited to raising only those issues you or someone else raised at any public hearing described in this notice or in written correspondence to the Governing Board prior to the public hearing.

**REGULAR MEETING
OF
CACHUMA OPERATION AND MAINTENANCE BOARD**

by Teleconference Call **ONLY**

**Teleconference Call-in Number: 1 (888) 899-7789
Passcode: 804443#**

Monday, May 24, 2021

1:00 PM

AGENDA

NOTICE: This meeting shall be conducted by teleconference call only as authorized and in accordance with Government Code section 54953 and the California Governor's Executive Order N-29-20 and N-33-20.

- 1. CALL TO ORDER, ROLL CALL**
- 2. PUBLIC COMMENT** *(Public may address the Board on any subject matter within the Board's jurisdiction. See "Notice to the Public" below.)*
- 3. CONSENT AGENDA** *(All items on the Consent Agenda are considered routine and will be approved or rejected in a single motion. Any item placed on the Consent Agenda may be removed and placed on the Regular Agenda for discussion and possible action upon the request of any Board Member.)*
Action: Recommend Approval of Consent Agenda by motion and roll call vote of the Board:
 - a. Minutes of April 26, 2021 Regular Board Meeting
 - b. Investment of Funds
 - Financial Reports
 - Investment Reports
 - c. Review of Paid Claims
- 4. VIRTUAL ACCESS FOR BOARD AND COMMITTEE MEETINGS**
Action: Receive information related to the use of a virtual platform for access to Board and Committee meetings and provide direction to staff, as appropriate
- 5. RESOLUTION NO. 725 – COMB FISCAL YEAR 2021-22 ANNUAL OPERATING BUDGET**
Action: Recommend approval by motion and roll call vote of the Board
- 6. GENERAL MANAGER REPORT**
Receive information from the General Manager on topics pertaining to COMB, including but not limited to the following:
 - Administration
 - Meetings
 - Staff Training
 - Engineering / Operations Division

7. ENGINEER'S REPORT

Receive information from the COMB Engineer, including but not limited to the following:

- Climate Conditions
- Lake Cachuma Water Quality Update
- SCADA System Improvements
- Comprehensive Facility Reviews
- Vehicle Condition Assessment
- CalTrans Highway 192 Paving Project
- Infrastructure Improvement Projects

8. OPERATIONS DIVISION REPORT

Received information regarding the Operations Division, including but not limited to the following:

- Lake Cachuma Operations
- Operation and Maintenance Activities

9. FISHERIES DIVISION REPORT

Receive information regarding Fisheries Division, including but not limited to the following:

- LSYR Steelhead Monitoring Elements
- Tributary Project Updates
- Surcharge Water Accounting
- Reporting/Outreach/Training

10. PROGRESS REPORT ON LAKE CACHUMA OAK TREE PROGRAM

Receive information regarding the Lake Cachuma Oak Tree Program including but not limited to the following:

- Maintenance and Monitoring

11. MONTHLY CACHUMA PROJECT REPORTS

Receive information regarding the Cachuma Project, including but not limited to the following:

- a. Cachuma Water Reports
- b. Cachuma Reservoir Current Conditions
- c. Lake Cachuma Quagga Survey

12. DIRECTORS' REQUESTS FOR AGENDA ITEMS FOR FUTURE MEETING

13. [CLOSED SESSION]: CONFERENCE WITH LEGAL COUNSEL: POTENTIAL LITIGATION

- a. [Government Code Section 54956.9(d)(1)]
Name of matter: *Kimball-Griffith L.P. v. Brenda Wren Burman, et al.*, Case No. 2:20-cv-10647 – Request for Declaratory and Injunctive Relief

14. [CLOSED SESSION]: CONFERENCE WITH LABOR NEGOTIATORS

- a. [Government Code Section 54957.6(a)]
Agency designated representatives: Board President
Unrepresented Employee: General Manager

15. RECONVENE INTO OPEN SESSION

[Government Code Section 54957.7]

Disclosure of actions taken in closed session, as applicable

[Government Code Section 54957.1]

13a. *Kimball-Griffith L.P. v. Brenda Wren Burman, et al.*, Case No. 2:20-cv-10647 – Request for Declaratory and Injunctive Relief

14a. Conference with Labor Negotiators

16. MODIFICATION OF GENERAL MANAGER'S COMPENSATION

Action: At Board discretion, consideration and approval of modification to General Manager compensation

17. MEETING SCHEDULE

- **June 28, 2021 at 1:00 PM**
- **Board Packages available on COMB website www.cachuma-board.org**

18. COMB ADJOURNMENT

NOTICE TO PUBLIC

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BOARD OF DIRECTORS

Matthew Roberts
President
Case Van Wingerden
Vice President
Polly Holcombe
Shirley L. Johnson
Kenneth Stendell

AGENDA

DROUGHT MANAGEMENT & WATER CONSERVATION COMMITTEE

May 18, 2021 at 12:00 p.m.

GENERAL MANAGER

Robert McDonald, P.E. MPA

Join Zoom Meeting

<https://zoom.us/j/94729052635?pwd=ek1JUDdQaW91TDJ3c2VNT3VibEpxQT09>

Dial by your location

+1 669 900 6833 US (San Jose)
+1 346 248 7799 US (Houston)
+1 253 215 8782 US (Tacoma)
+1 929 205 6099 US (New York)
+1 301 715 8592 US (Washington DC)
+1 312 626 6799 US (Chicago)

Meeting ID: 947 2905 2635

Passcode: 821502

Tele-Meeting

THE CARPINTERIA VALLEY WATER DISTRICT HAS DETERMINED THIS MEETING TO BE AN ESSENTIAL PUBLIC MEETING THAT WILL BE CONDUCTED PURSUANT TO THE PROVISIONS OF THE GOVERNOR'S EXECUTIVE ORDERS N-29-20 AND N-33-20 AND SANTA BARBARA COUNTY HEALTH OFFICER'S ORDER

In response to the spread of the COVID-19 virus, Governor Newsom has temporarily suspended the requirement for local agencies to provide a physical location from which members of the public can observe and offer public comment and has ordered all Californians to stay home except as needed to maintain continuity of operations of certain critical infrastructure.

To minimize the potential spread of the COVID-19 virus, the Carpinteria Valley Water District is not permitting public access to the City Council Chamber and Boardroom for this meeting. Instead, you are strongly encouraged provide the Board with public comment in one of the following ways:

1. Submitting a Written Comment. If you wish to submit a written comment, please email your comment to the Board Secretary at Public_Comment@cvwd.net by **11:00 A.M. on the day of the meeting**. Please limit your comments to 250 words. Every effort will be made to read your comment into the record, but some comments may not be read due to time limitations.
2. Providing Verbal Comment Telephonically. If you wish to make either a general public comment or to comment on a specific agenda item as it is being heard please send an email to the Board Secretary at Public_Comment@cvwd.net by **11:00 A.M. on the day of the meeting** and include the following information in your email: (a) meeting date, (b) agenda item number, (c) subject or title of the item, (d) your full name, (e) your call back number including area code. During public comment on the agenda item specified in your email, District staff will make every effort to contact you via your provided telephone number so that you can provide public comment to the Board electronically.

Please note the President has the discretion to limit the speaker's time for any meeting or agenda matter. Since this is an evolving COVID-19 situation, CVWD will provide updates to any changes to this policy as soon as possible. The public is referred to the website at www.cvwd.net. Thank you in advance for taking all precautions to prevent spreading the COVID-19 virus.

I. CALL TO ORDER

II. PUBLIC FORUM (Any person may address the Drought Management & Water Conservation Committee on any matter within its jurisdiction which is not on the agenda)

III. OLD BUSINESS -none

IV. NEW BUSINESS.

****Discuss water supply situation and supplemental water purchase.**

V. ADJOURNMENT.

Robert McDonald, Secretary

Note: The above Agenda was posted at Carpinteria Valley Water District Administrative Office in view of the public no later than 12:15 p.m., May 14, 2021. The Americans with Disabilities Act provides that no qualified individual with a disability shall be excluded from participation in, or denied benefits of, the District's programs, services, or activities because of any disability. If you need special assistance to participate in this meeting, please contact the District Office at (805) 684-2816. Notification at least twenty-four (24) hours prior to the meeting will enable the District to make appropriate arrangements.

Materials related to an item on this Agenda submitted to the Board of Directors after distribution of the agenda packet are available for public inspection in the Carpinteria Valley Water district offices located at 1301 Santa Ynez Avenue, Carpinteria during normal business hours, from 8 am to 5 pm.

**Indicates attachment of document to agenda packet.



BOARD OF DIRECTORS

Matthew Roberts
President
Case Van Wingerden
Vice President
Polly Holcombe
Shirley L. Johnson
Kenneth Stendell

AGENDA

RATE AND BUDGET COMMITTEE

May 20, 2021 at 12:15 p.m.

GENERAL MANAGER

Join Zoom Meeting

Robert McDonald, P.E. MPA

<https://zoom.us/j/92733966960?pwd=V2ROY1xOTBUazRndmxsSktqUitKdz09>

+1 669 900 6833 US (San Jose)
+1 253 215 8782 US (Tacoma)
+1 346 248 7799 US (Houston)
+1 301 715 8592 US (Washington DC)
+1 312 626 6799 US (Chicago)
+1 929 205 6099 US (New York)

Meeting ID: 927 3396 6960

Passcode: 341335

Tele-Meeting

THE CARPINTERIA VALLEY WATER DISTRICT HAS DETERMINED THIS MEETING TO BE AN ESSENTIAL PUBLIC MEETING THAT WILL BE CONDUCTED PURSUANT TO THE PROVISIONS OF THE GOVERNOR'S EXECUTIVE ORDERS N-29-20 AND N-33-20 AND SANTA BARBARA COUNTY HEALTH OFFICER'S ORDER

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1. Submitting a Written Comment. If you wish to submit a written comment, please email your comment to the Board Secretary at Public_Comment@cvwd.net by **11:00 A.M. on the day of the meeting**. Please limit your comments to 250 words. Every effort will be made to read your comment into the record, but some comments may not be read due to time limitations.

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I. CALL TO ORDER

II. PUBLIC FORUM (Any person may address the Rate and Budget Committee on any matter within its jurisdiction which is not on the agenda)

III. OLD BUSINESS -none

IV. NEW BUSINESS.

****Consider Fiscal impacts of proposed drought/Water Supply Actions**

V. ADJOURNMENT.

Robert McDonald, Secretary

Note: The above Agenda was posted at Carpinteria Valley Water District Administrative Office in view of the public no later than 12:15 p.m., May 17, 2021. The Americans with Disabilities Act provides that no qualified individual with a disability shall be excluded from participation in, or denied benefits of, the District's programs, services, or activities because of any disability. If you need special assistance to participate in this meeting, please contact the District Office at (805) 684-2816. Notification at least twenty-four (24) hours prior to the meeting will enable the District to make appropriate arrangements.

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**Indicates attachment of document to agenda packet.

Engineering Monthly Report

Proj. No.	Name	Status	% Done this month	% Done	Completion Date
1	Website Updates	Redesigned CVWD.net website is live and is being updated with current content on an on-going basis. A Board meeting icon has been added to the home page. Regular review of meeting schedule is being implemented to post Upcoming Events (meetings) to website for advance public, staff, and board notification.	-	-	Ongoing
2	Water Conservation	<p>Community Outreach: Santa Barbara County WaterWise Garden Recognition Contest. Three applicates for the CVWD district reviewing applicates as to select winner.</p> <p>Staff is currently compiling and entering data for annual Urban and Agricultural BMP reports due to Bureau of Reclamation by April 30, 2021.</p> <p>Urban Water Management Plan: Staff continues to work with Brad Milner on the District's 2020 Urban Water Management Plan (UWMP) Update.</p>	-	-	Ongoing
3	Sentry Well	<p><u>3 Monitoring Wells</u> Working on issue for the EC loggers, as to handle the high pressure for the deep and intermediate well. Working with instrumentation vendor Endress Hauser</p>	-		Ongoing
4	Caltrans Overpasses	For Linden Overpass . Staff had conference call with Cal Trans, worked out the details for the refund. Cal Trans to process the request will turn around in 4-6 weeks for check processing.			Ongoing

Engineering Monthly Report

5	30 D1 well abandonment	Received notice from Biologist that bird breeding and nesting season ends mid to late August looking to reschedule the abandonment early September.			Sept 2021
6	COMB AVAR Project	Working on Contract with Flowers for the project.			Ongoing
7	701&711 Sandpoint	Working with property owners and their Engineers as to relocate approximately 700 feet of water main off the properties and into the right of way.			Ongoing
8	Santa Claus Lane Improvement	Working with County at looking into possible cost for the District to relocate section of main at the time of construction as to reduce construction cost. And with MNS for a set of construction plans			Ongoing

Project No.	Job / Facility	Status	Monitoring Frequency	Information Received From
1	HQ Well	HQ Well has been off-line since 9/9/2020, due to electrical equipment failure .	Daily	O & M Treatment
2	El Carro Well	El Carro Well is offline, allowing the aquifer to recover.	Daily	O & M Water Treatment
3	Smillie Well	Smillie Well is online pumping ~250gpm.	Daily	O & M Water Treatment
4	Well Status	HQ Well 1200 GPM Offline	Daily	O&M Water Treatment
		El Carro Well 900 GPM Offline		
		Smillie Well 250 GPM Offline		
5	Gobernador Aeration System	The aeration system is online and is working properly. We continue monitoring operation to assess if Phase 2 is necessary.	Daily	O & M Water Treatment
6	Water Quality	District Water Filtration facilities are operating within normal parameters and producing high quality water. All routine sampling was completed and all results met the CDPH & EPA guidelines. HAA5 values were high in February, we have been working with member agencies to address the quality of incoming water from the South Coast Conduit. In early March we requested that City of Santa Barbara make some minor operational changes in their treatment process to help address the HAA5 issues we were noticing. The changes appear to have had a positive outcome as the special samples we took in March showed lower HAA5 results. We collected another set of samples this month and expect to see similar positive results in lower HAA5 numbers.	Daily	O&M Water Treatment
7	SCADA Upgrades	Staff will be conducting a pilot study of a solar radio communication design for possible use at our regulator stations. If successful this will allow us to install SCADA communications and data collection devices in areas we do not have electrical power and will also allow us to bring valuable data into our SCADA system for troubleshooting, and analytical purposes.	Daily	O & M Water Treatment
8	Electrical Motor Control & VFD Systems	A purchase order has been issued to CED/Royal Ventura for the procurement of the new VFD for the failed drive at HQ Well. We received submittals from the vendor and have made requests for minor component location modifications and are awaiting the revised submittals for approval. We expect to receive final documents for approval by the end of April. The new equipment has an estimated lead time of 11 weeks. We now anticipate the drive installation and commissioning to be completed by the end of July 2021.	Daily	O&M Water Treatment
8	Production Meter Testing	Testing of our Production meters is in the process of being scheduled at this time.	Daily	O&M Water Treatment
10	Pumping & Production	Nothing to report at this time	Daily	O & M Water Treatment
11	Distribution System	Nothing to report at this time	Daily	O&M Water Distribution
12	Valve replacement	Nothing to report at this time	Daily	O&M Water Distribution
13	Mainline Leak Repairs	Nothing to report at this time.	Daily	O & M Water Distribution
14	Mainline Replacement	Nothing to report on this item.	Daily	O&M Water Distribution
15	Service Reairs	Staff repaired / replaced (3) three leaking service lines.	Daily	O&M Water Distribution
16	Meter Replacement / Testing	No Update at the time of this report	Daily	O&M Water Distribution
17	Fleet	The new Crew Truck has been ordered, anticipated delivery is late September or early October 2021.	Daily	O&M
18	Facilities Upgrades and Repairs	No Update at the time of this report	Daily	O&M
19	Security	The new bullet resistant door and bullet resistant glass installation over the front counter has been completed.	Daily	O&M
20	Customer Projects	Nothing to report at this time	Daily	O&M Water Distribution
21	Landscape	Dave's Organic Gardening is continuing the landscape revitalization here at the District Office.	Daily	O & M

**CARPINTERIA VALLEY WATER DISTRICT
WATER SUPPLY REPORT
(ALL VALUES IN ACRE-FEET / AF)**

MONTH ENDING: 4/30/2021

		MONTHLY USE			
		CACHUMA	GW	SWP	ID#1 EXCHANGE
2020	MAY	223	156	0	33
	JUN	226	145	0	49
	JUL	421	24	0	58
	AUG	461	14	0	65
	SEP	419	3	0	54
	OCT	373	13	0	11
	NOV	345	3	0	0
2021	DEC	342	10	0	0
	JAN	251	11	0	0
	FEB	234	9	0	0
	MAR	267	40	0	0
	APR	371	29	0	0

12-MONTH TOTALS	3,933	457	0	270
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12-MONTH RUNNING METERED SALES	4,313
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12-MONTH RUNNING READ-CYCLE LOSSES	131
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AVAILABLE SURFACE WATER SUPPLY

CACHUMA PROJECT

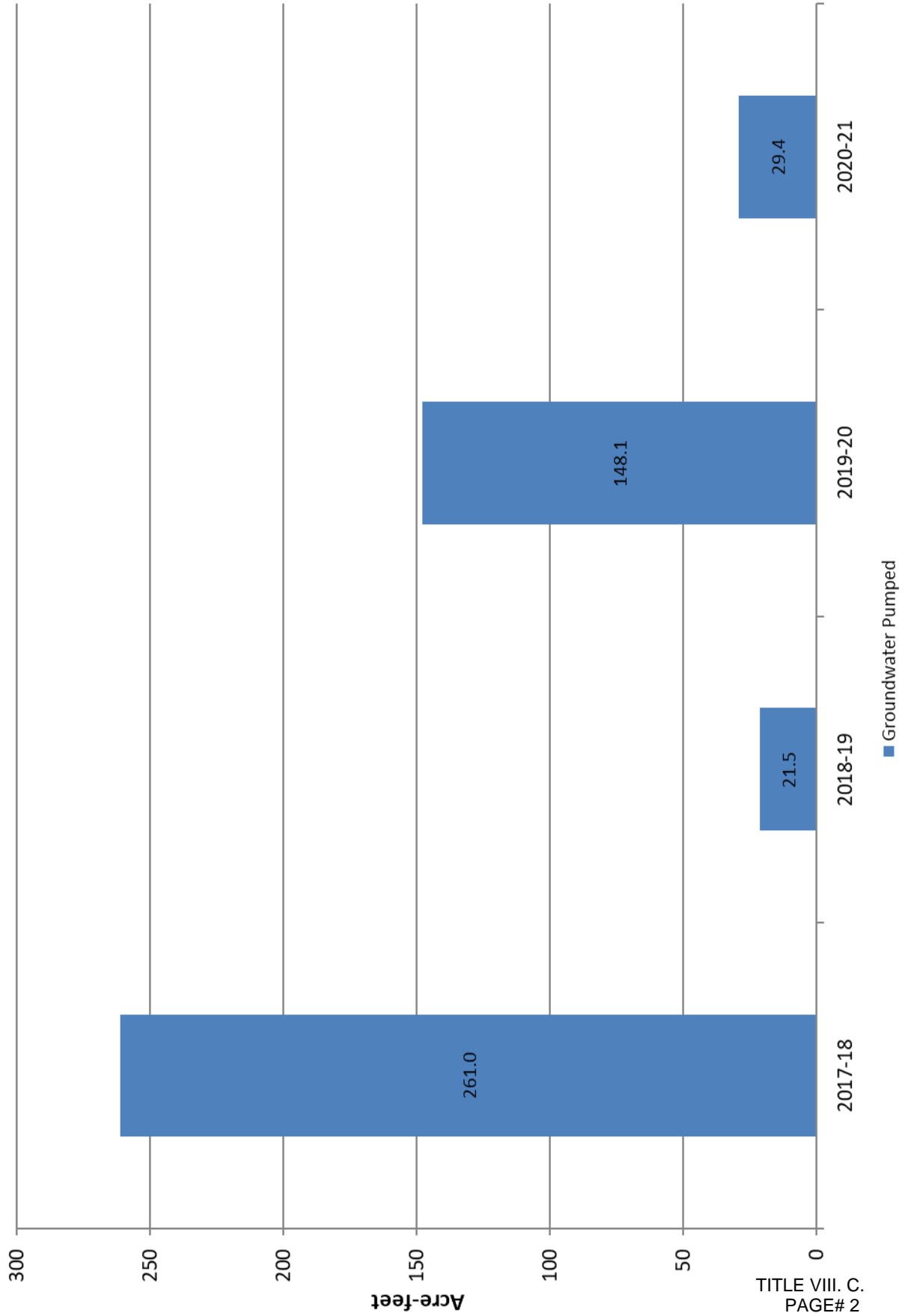
BALANCE OF WATER YEAR 2020 CARRYOVER	446
BALANCE OF WATER YEAR 2021	2,824
CACHUMA SUBTOTAL	3,270

STATE WATER PROJECT

BALANCE OF WATER YEAR ENDING 12/31/2019	525
BALANCE OF WATER YEAR ENDING 12/31/2020	110
BANKED WATER (IRWD)	544
STATE WATER SUBTOTAL	1,179

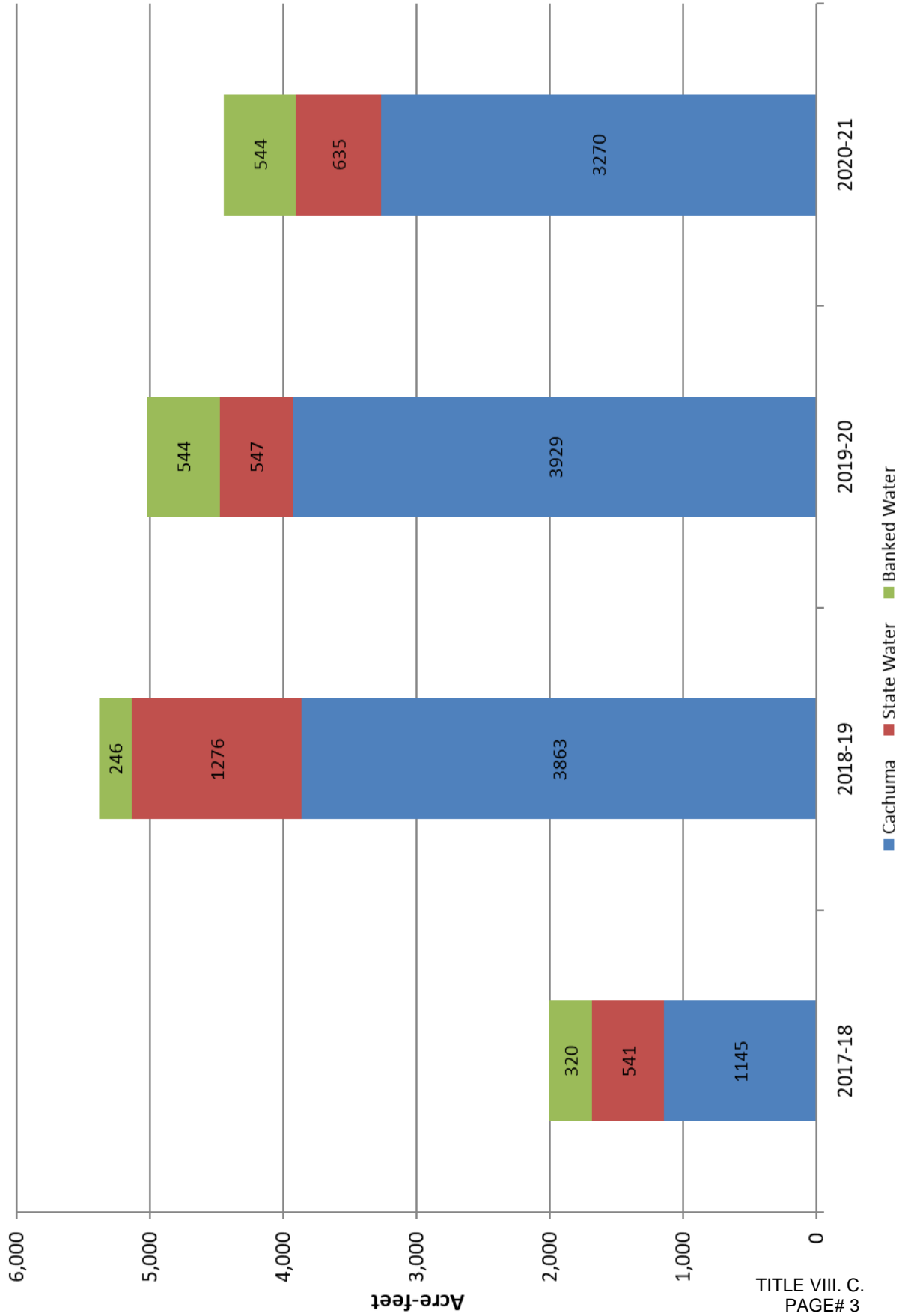
TOTAL AVAILABLE SURFACE WATER SUPPLY	4,449
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Groundwater Production - APR

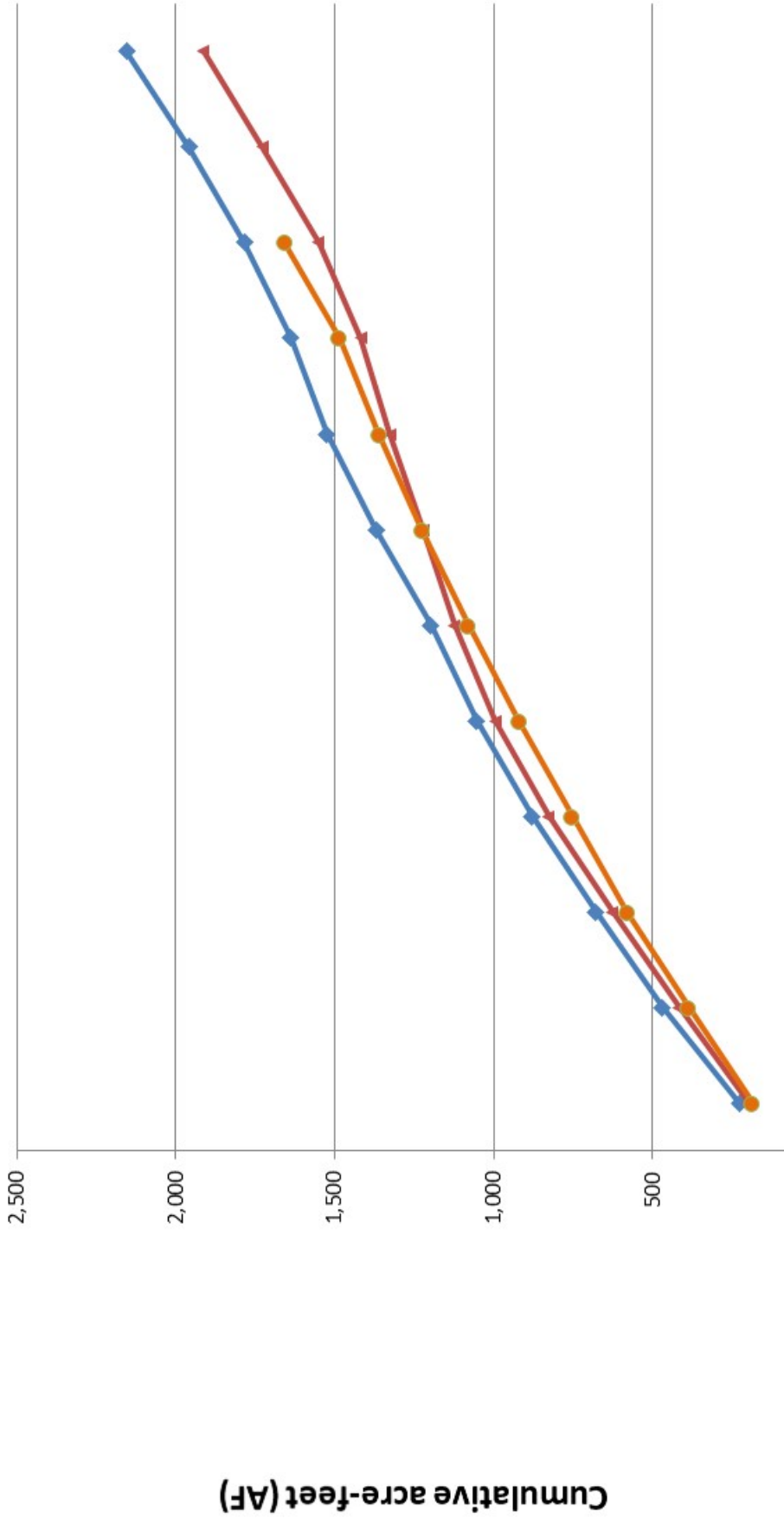


TITLE VIII. C.
PAGE# 2

Available Surface Supply - APR

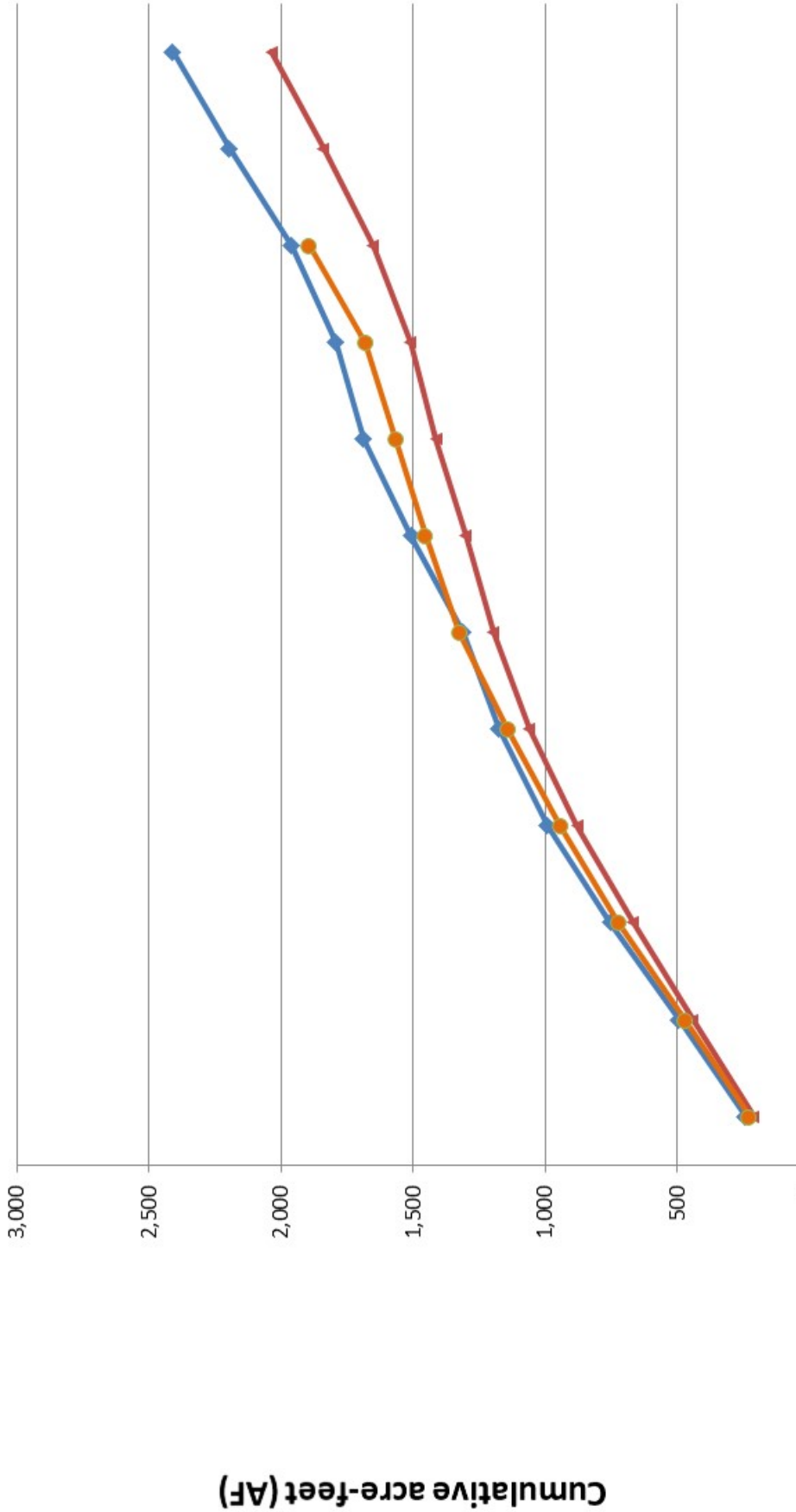


FY 2021 M&I Sales Projections vs. Actuals



TITLE VIII.C.
PAGE # 4

FY 2021 AG Sales Projections vs Actuals



TITLE VIII.C.
PAGE # 5

Water savings attributed to CVWD conservation efforts

All data in HCF unless otherwise noted

Customer Class	Water Use		Water savings (for current month)		Cumulative water savings since 2013
	Apr-13	Apr-21	HCF	%	
Commercial	13,674	10,194	3,480	25%	378,183
Industrial	3,134	2,183	951	30%	48,939
Public Auth.	5,902	6,316	-414	-7%	111,458
Single-meter Residential	35,176	36,067	-891	-3%	523,690
Master-meter Residential	18,731	16,903	1,828	10%	229,656
Landscape	2,291	3,737	-1,446	-63%	28,077
M&I TOTAL (HCF)	78,908	75,400	3,508	4%	1,320,003
M&I TOTAL (AF)	181	173	8	4%	3,030
Agriculture (HCF)	90,662	92,721	-2,059	-2%	856,395
Agriculture (AF)	208	213	-5	-2%	1,966
District Total (HCF)	169,570	168,121	1,449	1%	2,176,398
DISTRICT TOTAL (AF)	389	386	3	1%	4,996

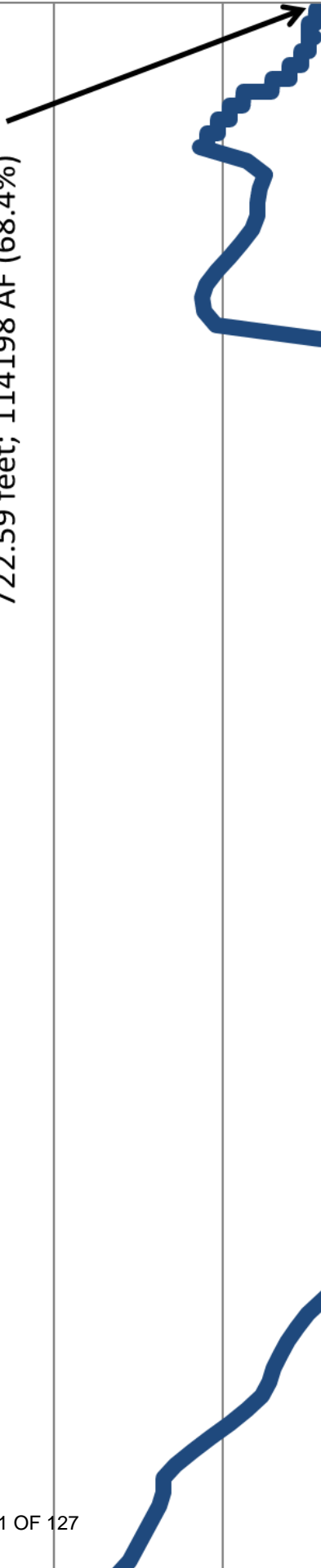
Check 2,176,398

Totals Match

Gallons per capita per day	93	86
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Lake Cachuma Volume Over Time

May 20, 2021:
722.59 feet; 114198 AF (68.4%)





Santa Barbara County - Flood Control District

130 East Victoria Street, Santa Barbara CA 93101 - 805.568.3440 - www.countyofsb.org/pwd

Rainfall and Reservoir Summary

Updated 8am: 4/19/2021

Water Year: 2021

Storm Number: NA

Notes: Daily rainfall amounts are recorded as of 8am for the previous 24 hours. Rainfall units are expressed in inches.

All data on this page are from automated sensors, are preliminary, and subject to verification.

*Each Water Year (WY) runs from Sept 1 through Aug 31 and is designated by the calendar year in which it ends

County Real-Time Rainfall and Reservoir Website link: > <http://www.countyofsb.org/hydrology>

Rainfall	ID	24 hrs	Storm Oday(s)	Month	Year*	% to Date	% of Year*	AI
Buellton (Fire Stn)	233	0.00	0.00	0.00	8.54	53%	51%	
Cachuma Dam (USBR)	332	0.00	0.00	0.00	10.51	55%	53%	
Carpinteria (Fire Stn)	208	0.00	0.00	0.01	4.52	27%	26%	
Cuyama (Fire Stn)	436	0.00	0.00	0.00	3.62	51%	47%	
Figueroa Mtn. (USFS Stn)	421	0.00	0.00	0.00	8.37	41%	39%	10.3
Gibraltar Dam (City Facility)	230	0.00	0.00	0.00	10.63	42%	40%	9.4
Goleta (Fire Stn-Los Cameros)	440	0.00	0.00	0.00	9.14	52%	50%	
Lompoc (City Hall)	439	0.00	0.00	0.00	10.68	77%	73%	8.0
Los Alamos (Fire Stn)	204	0.00	0.00	0.00	8.41	58%	55%	
San Marcos Pass (USFS Stn)	212	0.00	0.00	0.00	14.17	43%	42%	
Santa Barbara (County Bldg)	234	0.00	0.00	0.00	7.31	42%	40%	
Santa Maria (City Pub. Works)	380	0.00	0.00	0.00	7.16	57%	54%	
Santa Ynez (Fire Stn /Airport)	218	0.00	0.00	0.00	8.31	55%	53%	
Sisquoc (Fire Stn)	256	0.00	0.00	0.00	6.31	44%	42%	

County-wide percentage of "Normal-to-Date" rainfall :

50%

County-wide percentage of "Normal Water-Year" rainfall :

47%

County-wide percentage of "Normal Water-Year" rainfall calculated assuming no more rain through Aug. 31, 2021 (End of WY2021).

AI (Antecedent Index / Soil Wetness)

6.0 and below = Wet (min. = 2.5)

6.1 - 9.0 = Moderate

9.1 and above = Dry (max. = 12.5)

Reservoirs

Reservoir Elevations referenced to NGVD-29.

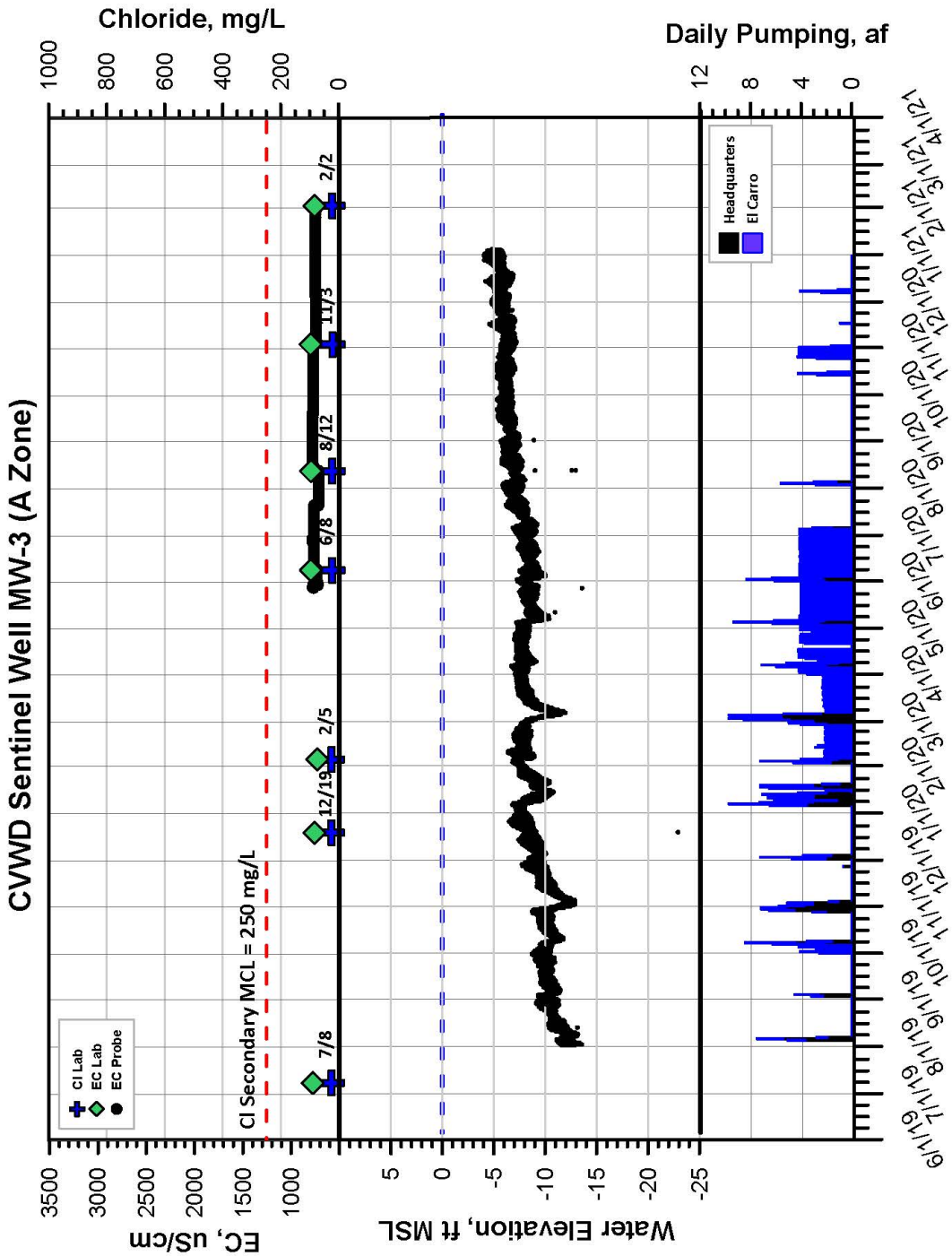
**Cachuma is full and subject to spilling at elevation 750 ft.

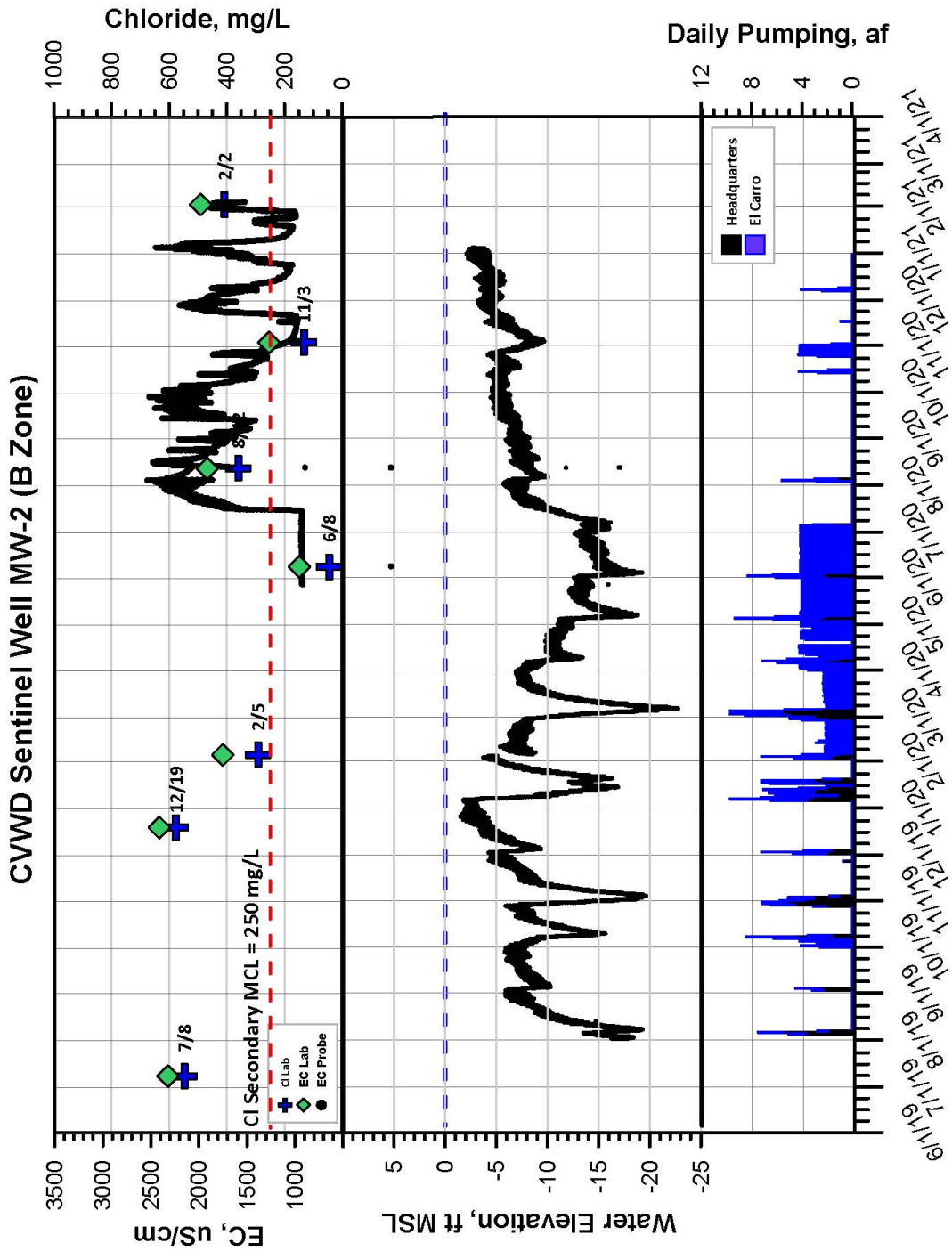
However, the lake is surcharged to 753 ft. for fish release water.

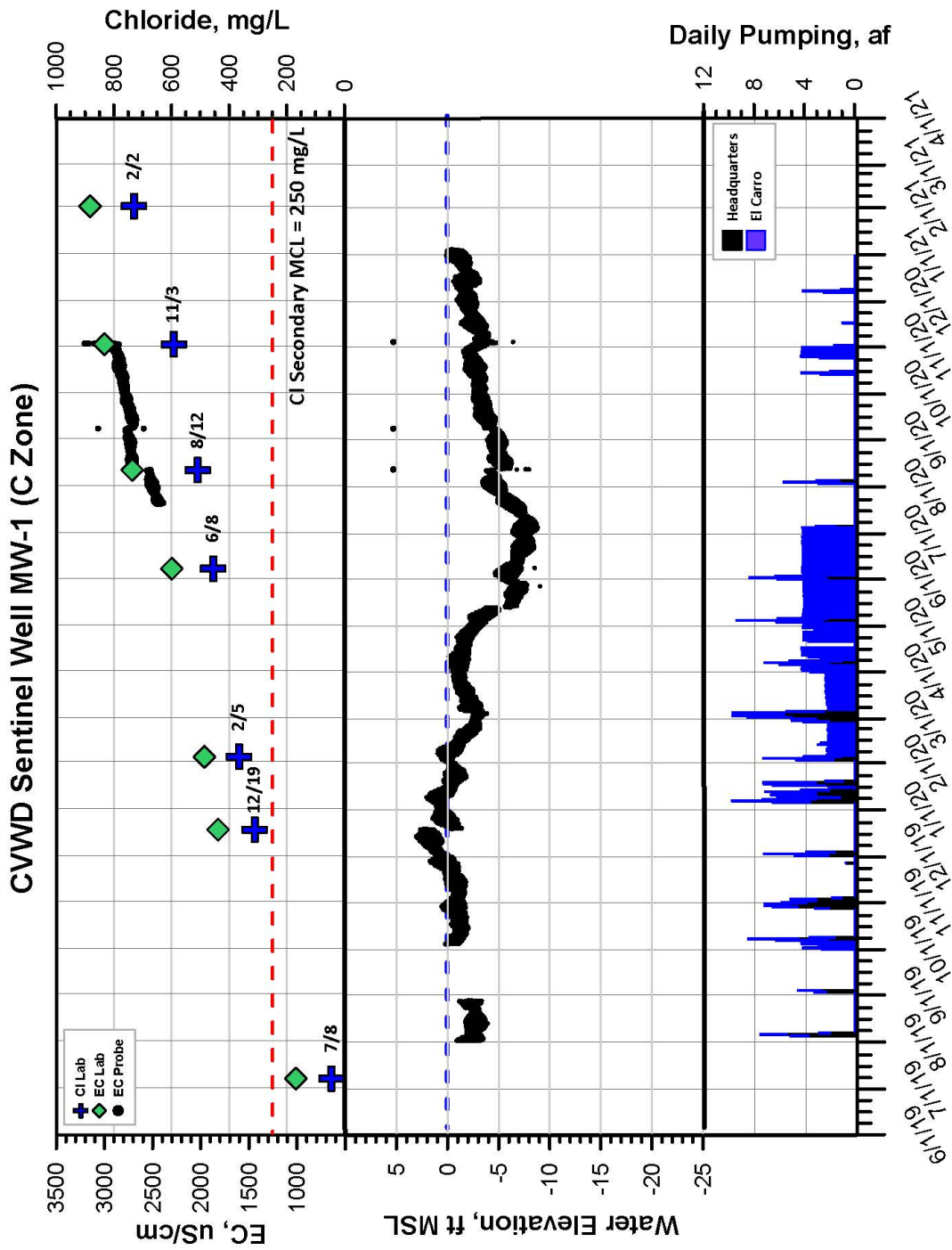
(Cachuma water storage is based on Dec 2013 capacity revision)

	Spillway Elev. (ft)	Current Elev. (ft)	Max. Storage (ac-ft)	Current Storage (ac-ft)	Current Capacity (%)	Storage Change Mo.(ac-ft)	Storage Change Year*(ac-ft)
Gibraltar Reservoir	1,400.00	1,375.67	4,559	602	13.2%	-22	-1,608
Cachuma Reservoir	753.**	724.26	193,305	117,798	60.9%	-2,047	-25,977
Jameson Reservoir	2,224.00	2,213.18	4,848	3,588	74.0%	-19	-700
Twitchell Reservoir	651.50	540.62	194,971	2,960	1.5%	-165	-860

[Previous Rainfall and Reservoir Summaries](#)





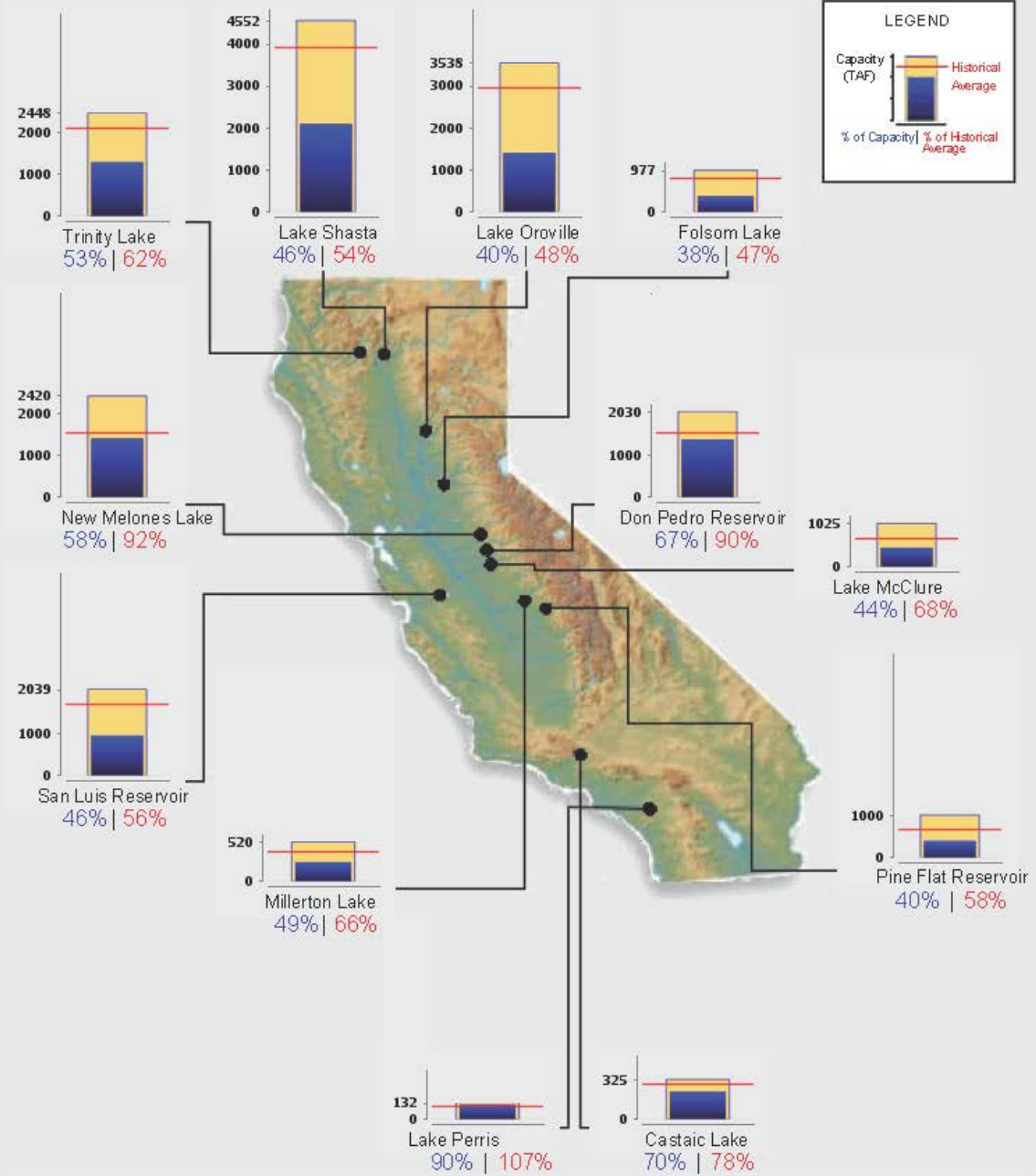




Reservoir Conditions

Ending At Midnight - May 19, 2021

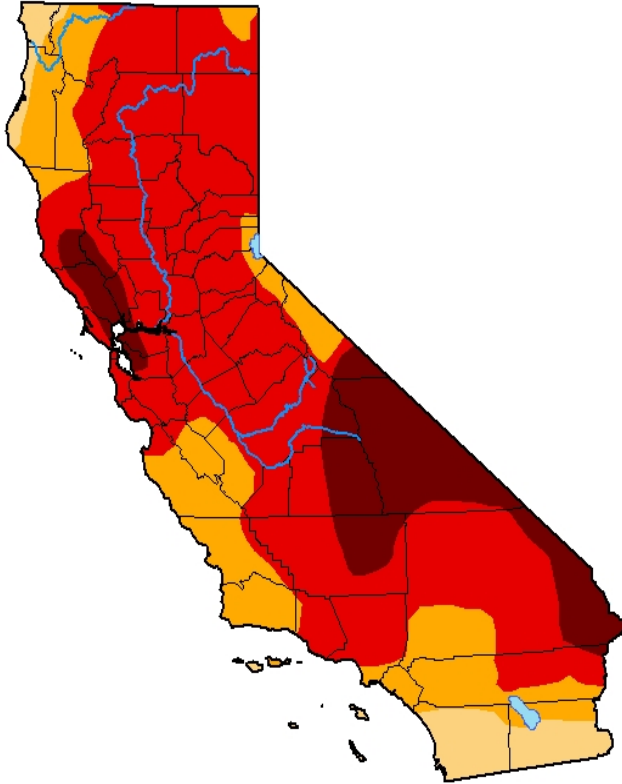
CURRENT RESERVOIR CONDITIONS









Graph Updated 05/20/2021 04:48 PM

**U.S. Drought Monitor
California**

May 18, 2021
(Released Thursday, May. 20, 2021)
Valid 8 a.m. EDT



Intensity:

-  None
-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
-  D3 Extreme Drought
-  D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Adam Hartman
NOAA/NWS/NCEP/CPC



droughtmonitor.unl.edu