

AGENDA

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

CARPINTERIA CITY HALL 5775 CARPINTERIA AVENUE CARPINTERIA, CA 93013

Wednesday, April 10, 2024 at 5:30 p.m.

BOARD OF DIRECTORS

Case Van Wingerden President Shirley L. Johnson Vice President

Casey Balch Polly Holcombe Matthew Roberts

GENERAL MANAGER

Robert McDonald, P.E. MPA

Join Zoom Meeting https://us06web.zoom.us/j/84307169382?pwd=aQb0aVqR5M3pkslUa7j0la1rpaCYcD.1

Meeting ID: 843 0716 9382 Passcode: 361463 or Dial by Phone: 1-669-444-9171

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

1. <u>Online:</u> Comments may be submitted online through the "eComments" function located in the Upcoming Events section on our website: <u>https://cvwd.net/about/our-board/meetings/</u> by 5:00 p.m. on the day of the meeting.

2. <u>Submitting a Written Comment.</u> If you wish to submit a written comment, please email your comment to the Board Secretary at <u>Public Comment@cvwd.net</u> by <u>5:00 P.M. on the day of the meeting</u>. 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. If you wish to make either a general public comment or to comment on a specific agenda item in person, please: attend the Board Meeting at the location noted above and fill out a speaker slip prior to the hearing the item.

I. CALL TO ORDER AND PLEDGE OF ALLEGIANCE, President Van Wingerden

- 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)

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

IV. CONSENT AGENDA

- A. **Minutes of the Regular Board meeting held on March 13, 2024
- V. UNFINISHED BUSINESS None
- VI. ****ADJOURN to Regular meeting of Carpinteria Groundwater Sustainability** Agency (Time Certain 5:35 p.m.)
- VII. NEW BUSINESS -
 - A. **Consider changes to the Rules and Regulations regarding Master Meters (for action, General Manager McDonald) *Presented by Maso Motlow*
 - **B.** ** Consider CAPP Project Update (for information, General Manager McDonald) *Presented by Rob Morrow, WSC*
 - C. **Consider draft Ordinance 24-1 Moving CVWD from a Drought Stage 1 to Drought Stage 0 (for action, General Manager McDonald)
 - D. **Consider adoption of Resolution 1154 Making the Commitments and Publishing the Report required by CCWA Resolutions 92-1 and 92-2(for action, General Manager McDonald)
 - E. Consider Customer Credit Request per District Rule 15(a)(4), for account 11-115505-09 in the amount of \$445.50 (for action, Assistant General Manager Rosales).
 - F. Consider Appointing Lisa Silva CVWD Board Secretary (for action, General Manager McDonald)

VIII. DIRECTOR REPORTS -

- A. ****COMB Board Meeting March 25, 2024 Director Holcombe**
- B. **CCWA Operations Committee Meeting March 14, 2024 Maso Motlow
- C. **CCWA Board Meeting March 28, 2024 Director Johnson
- **D.** **Consider attendance to the 21st Annual Water Conservation Showcase on April 4, 2024 for compensation (for action, General Manager McDonald) *Report by Shirley Johnson*
- IX. GENERAL MANAGER REPORTS (for information) none

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

X. [CLOSED SESSION]: CONFERENCE WITH LEGAL COUNSEL: EXISTING LITIGATION, [GOVERNMENT CODE SECTION 54956.9(D)(1)]: Name of Case: Central Coast Water Authority et al v. Santa Barbara County Flood Control & Water Conservation District et al. (Case No. 21CV02432)

XI. CONSIDER DATES AND ITEMS FOR AGENDA FOR:

CARPINTERIA VALLEY WATER DISTRICT BOARD MEETING OF APRIL 24, 2024, AT 5:30 P.M., CARPINTERIA CITY HALL, 5775 CARPINTERIA AVENUE, CARPINTERIA, CALIFORNIA.

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., April 7, 2024. 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.

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

	MINUTES OF THE REGULAR MEETING OF THE BOARD OF DIRECTORS			
	CARPINTERIA VA	LLEY WATER DISTRICT		
	March 13, 2024			
	Carpinteria Valley Water Di Carpinteria City Hall Chamb	President Van Wingerden called the regular meeting of the Carpinteria Valley Water District Board of Directors held in the Carpinteria City Hall Chamber to order at 5:30 p.m., Wednesday, March 13, 2024, and led the Board in the Pledge of Allegiance.		
ROLL CALL	Directors Present; Roberts, H Wingerden Directors Absent; Balch	Holcombe, Johnson, and Van		
	Others Present: Bob McDon	ald		
	Stephen Lee Lisa Silva	Carolyn Frary		
PUBLIC FORUM	No one from the public addr	essed the Board.		
MINUTES	Johnson seconded the motion Board meeting held on Febru by a 3-1-1 vote with Directo	Following discussion, Director Holcombe moved, and Director Johnson seconded the motion to approve the minutes of the Board meeting held on February 28, 2024. The motion carried by a 3-1-1 vote with Director Roberts abstaining and Director Balch absent. The minutes were approved by roll call as follows;		
	Ayes: Holcombe, Johnson an Nayes : none Abstain : Roberts Absent: Balch	Abstain : Roberts		
ADJOURN	• •	President Van Wingerden opened the regular Carpinteria Groundwater Sustainability Agency meeting at 5:32 p.m.		
RECONVENED TO REGULAR BOARD MEETING	President Van Wingerden re 6:14 p.m.	President Van Wingerden reconvened the Board meeting at 6:14 p.m.		
ORDINANCE 24-1	-	General Manager McDonald presented to consider draft Ordinance 24-1 moving CVWD from a Drought Stage 1 to Drought Stage 0.		
	For information. Will be broch	For information. Will be brought back at the next meeting for consideration.		

RULES AND	General Manager McDonald presented to consider Updates to	
REGULATIONS UPDATE	Rules and Regulations.	
	Proposed Rules & Regulations updates:	
	Rule 17.d – Revised text to allow master meter connections for residential buildings with more than ten dwelling units	
	Rule 35 – Revised language about cross connection compliance	
	Appendix C – Updating Construction deposit requirements and adding Quit Claim Deposit as well as updating Equipment and Fuel Charges	
	Following discussion, Director Roberts moved, and Director Holcombe seconded the motion to approve updates to Rule 35 and Appendix C with a request to bring back Rule 17.d to a future board meeting with all 5 Directors present. The motion carried by a 4-0-1 vote with Director Balch absent. The motion was approved by roll call as follows;	
	Ayes: Holcombe, Johnson, Roberts and Van Wingerden Nayes : none Absent: Balch	
MAVENS NOTEBOOK	General Manager McDonald presented to consider financially supporting Mavens Notebook Water News Blog.	
	Following discussion, Director Roberts moved, and Director Holcombe seconded the motion to approve financially supporting Mavens Notebook for 2 years at \$20/month. The motion carried by a 4-0-1 vote with Director Balch absent. The motion was approved by roll call as follows;	
	Ayes: Holcombe, Roberts, Johnson and Van Wingerden Nayes : none Absent: Balch	
CLOSED SESSION	None	
NEXT BOARD MEETING	The next Regular Board meeting is scheduled to be held on April 10, 2024, at 5:30 p.m., Carpinteria City Hall, 5775 Carpinteria Avenue, Carpinteria California.	
	Director Holcombe requested CAPP update. Director Johnson requested report on groundwater level at a future meeting.	

ADJOURNMENT	President Van Wingerden adjourned the meeting at 6:38 p.m.
	Robert McDonald, Secretary



AGENDA

REGULAR MEETING OF THE BOARD OF DIRECTORS OF CARPINTERIA GROUNDWATER SUSTAINABILITY AGENCY

CARPINTERIA CITY HALL 5775 CARPINTERIA AVENUE CARPINTERIA, CA 93013

Wednesday, April 10, 2024 at 5:35 p.m.

Join Zoom Meeting https://us06web.zoom.us/j/84307169382?pwd=aQb0aVqR5M3pkslUa7j0la1rpaCYcD.1

> Meeting ID: 843 0716 9382 Passcode: 361463 or Dial by Phone: 1-669-444-9171

1. CALL TO ORDER

- 2. PUBLIC FORUM (Any person may address the Board of Directors on any matter within its jurisdiction which is not on the agenda).
- **3. APPROVAL ITEMS**
 - A. **Minutes for the Meeting of the Board held on March 13, 2024
- 4. UNFINISHED BUSINESS none
- 5. NEW BUSINESS -
 - A. **Consider Draft Budget for FY 2025 and FY 2026 (for information, Executive Director McDonald)
 - **B.** Consider determination of CGSA Fee for FY 2025 and FY 2026 (for information, Executive Director McDonald)
 - C. **Consider Prop 218 Notice for mailing on April 19, 2024 for FY 2025 and FY 2026 (for action, Executive Director McDonald)
 - **D.** Consider Appointing Lisa Silva GSA Board Secretary (for action, Executive Director McDonald)
- 6. EXECUTIVE DIRECTOR REPORTS (for information) None

7. ADJOURNMENT

Robert McDonald, Secretary

The above matters are the only items scheduled to be considered at this meeting.

Note: The above Agenda was posted at Carpinteria Valley Water District Administrative Office in view of the public no later than 5:00 p.m., April 7, 2024. 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.



STAFF REPORT Item VII. A.

From: Robert McDonald, General Manager

Prepared by: Maso Motlow, Management Analyst

For Consideration: <u>Item VII. A.</u> Consider allowing master meters for high density residential developments

Background

The District is considering whether to continue to require individual meters for new multi-unit residential developments, or to revise its Rules and Regulations to allow master meters with submeters at new multi-unit residential developments. California Senate Bill 7 (SB 7) outlines the requirements for installation, operation, and billing of these submeters. The requirements of SB 7 are implemented in the Water Code (Division 1, Chapter 8, Article 5, Section 537-537.5) and the Health and Safety Code (Division 13, Part 1.5, Chapter 2, Section 17922.14).

Expected benefits of allowing master meters

The State's Regional Housing Needs Assessment requires new housing development throughout California. Master meters may take up less space at the curb line and be easier to plumb compared to individual meters, facilitating cost efficient new housing developments. Additionally, many agencies locally and throughout California already allow master meters with submeters for residential housing. By allowing master meters the District's policies would be consistent with most other local water agencies and supportive of the State's housing goals.

Potential drawbacks of allowing master meters

Billing and maintenance of submeters is the responsibility of the building manager or a third party hired by the building manager or owner. As a result, tenants will not have AMI meters and will not be able to set individualized leak alerts. Additionally, tenants must contact their billing provider, not the District, if they have concerns about their bills or maintenance of their meter. SB 7 outlines rules for billing tenants which should result in fair bills and protections for tenants. From its research the District has not found any evidence of widespread complaints by tenants. Additionally, individual meters may cause undue burden on builders due to plumping constraints.

Recommendation

Allow master meters for residential developments that meet the specific criteria outlined in the proposed Rules and Regulations.

Memo

To:	Board of Directors
From:	Norma C. Rosales, Assistant General Manager
cc:	Bob McDonald, General Manager
Date:	April 10th, 2024
Re:	Updated Rules and Regulations

Staff have proposed revisions to the following Rules:

RULE	PAGE	DESCRIPTION
17.d	35	Revised text to allow master meter connections for residential buildings with more than ten dwelling units.

17. METERS AND APPLIANCES

a. <u>Meters and Appliances</u>: All meters and appliances (such as meter boxes, valves, radios, external antennas etc.) installed by the District upon the customer's property for the purpose of delivering water to the customer shall be the property of the District, and may be repaired, replaced or removed by the District at any time. No customer may refuse the installation of any type of water meter for any reason.

Customers may opt-out of the installation of any radio transmitter associated with meter reading after completing an application for opt-out and payment of any associated fees and charges. (See <u>Appendix C</u> and <u>Appendix J</u>.)

Meters and appliances must be accessible to the District or its duly authorized agents at all times. Barriers to access – including but not limited to fences, landscaping, gates, locks, vehicles, equipment, dogs or other animals or refuse will be reported to the customer and required to be corrected immediately. Should a condition limiting access remain, the District reserves the right to discontinue service after giving written notice to the customer via certified mail with return receipt. Service may be discontinued seven days after customer receipt of written notice and remain discontinued until such time as the condition limiting access has been modified or removed and access is deemed safe and acceptable by the District.

Except as herein otherwise provided, no rent or other charge shall be made by the customer against the District nor by the District against the customer for placing or maintaining said meters and appliances upon the customer's premises. The customer shall exercise reasonable care to prevent the District's meters and equipment from being injured or destroyed. In the event customer identifies any defect in the meter, customer shall notify the District thereof immediately.

The District shall have the right to remove any and all of its facilities installed on customer's premises at the termination of the service.

b. <u>Meter Installation</u>: All meters and appliances shall be installed by the District. Meters, wherever practicable, shall be placed in suitable meter boxes located in the parkway adjacent to the curb line. When it is not practicable to place meters in the parkway, the meters shall be installed in some convenient place approved by the District upon the customer's premises, in an approved easement, and in a location that is at all times accessible for inspection, reading and testing. The District shall not install submeters. The District shall not use customer installed submeters for its metering or billing.

c. <u>Meter Tampering</u>: The customer shall not make or maintain any by-pass or other connection between the meter and the District's main. The customer shall not tamper with the meter or any other appliance or interfere with the operation of the meter or appliances in any manner or for any purpose. Penalties for tampering with a meter or appliances or bypassing a meter may include, but are not limited to, tampering fines and penalties, fees for unmeasured water consumption, meter and appliance replacement costs and labor, criminal prosecution and disconnection of District water service (see <u>Appendix C</u>).

d. <u>Number of Accounts per Water Service Connection business or dwelling</u> <u>units per water service connection</u>;

(1) In accordance with Senate Bill 7 (SB 7), the District requires all new construction of multi-family residential structures to be individually metered or master metered with submeters. The District defines multi-family residences as multiple dwelling units in one building, or dwelling units in separate buildings that share a wall.

Each building with more than 10 residential dwelling units may be eligible for a master meter with submeters (instead of individual meters). Buildings with 10 or fewer dwelling units are not eligible for master meters. However, final determination of master meter eligibility is at the District's discretion.

- (2) Hospitality developments may use master meters to serve multiple sleeping rooms. The District does not require individual meters or submeters for individual sleeping rooms.
- (3) The District recommends individual meters for each commercial, industrial, and public authority (CII) business. The District may allow master meters to serve multiple CII business if it determines individual meters are not practical.

(4) Stand-alone single family residential dwelling units must be individually metered except as follows:

(i) residential dwelling units on agricultural parcels; or

(ii) accessory dwelling units as defined below.

d. In all cases in which water is to be served to a building occupied by multiple accounts, independent services to the curb line must be provided for each independent customer.

- (1) Santa Barbara county code Section 14-23.080 and California Plumbing Code Section 608.8 adopted by the City of Carpinteria require each dwelling unit within a multi-family residential building to be separately metered for water service.
- (2) Santa Barbara county code Section 14-23.090 and the City of Carpinteria Municipal code Section 13.08.240 requires each tenant in a commercial, industrial, or institutional buildings to be separately metered for water service unless this requirement is waived by the District for good cause.
- (3) For example, a development is proposed to include four residential condominiums and three commercial stores. The proposed development would require seven appropriately-sized service connections in addition to any fire service connections deemed necessary by the responsible agency.

In all cases in which water is to be served to a parcel with multiple residential dwelling units, independent services to the curb line must be provided for each residential dwelling unit except as follows:

(1) residential dwelling units on agricultural parcels; or

(2)(5) accessory dwelling units as define below.

e. <u>Accessory Dwelling Units:</u> District rules and regulations shall comply with California and local requirements regarding Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU).

ADUs / JADUs constructed either within an existing building envelope or in a new permitted structure, will not be required to be independently metered, nor will the ADU/JADU be subject to Capital Cost Recovery Fees (CCRF). However, all ADU

/ JADU developments will be required to meet District and local agency requirements for hydraulic capacity of service, including service line capacity, water meter capacity and if applicable fire sprinkler capacity. In the event that ADU
/ JADU developments require increased service or meter capacity, costs associated with increased service will be applied as described in Rules 9 and 10 and <u>Appendix D</u>.

The District will consider ADUs with a footprint of 750 square feet or more as separate dwelling units from the main structure. The District will reclassify accounts with ADUs of 750 sqft or greater as Master Meter Residential accounts and these accounts will be subject to the rates and charges associated with this account class. The District will not consider JADUs or ADUs with a footprint of less than 750 square feet as separate dwelling units. The District will not reclassify accounts that add an ADU / JADU of less than 750 square feet.

f. <u>Irrigation Meters:</u> Facilities for irrigation of new and existing parks, medians, landscaped public area, lawns or gardens surrounding condominiums, townhouses, apartments, and industrial parks shall be designed and installed in such a way to conserve water. The rate and extent of water application shall be controlled by the owner so as to minimize water usages.

Dedicated landscape water meters are required for residential landscapes over 5,000 square feet, non-residential landscapes over 1,000 square feet, and shared landscaped common areas. Dedicated landscape meters must be installed by the District, be on a dedicated service line and be installed with approved backflow prevention.

In most cases the irrigation meter shall be sized based on the peak flow through a single valve of the irrigation system (i.e. highest producing valve). However, the District reserves the right to further evaluate the system and to select a meter size that best meets the needs of the system. The meter size may be based on multiple valves, branches of the system , square footage, or as deemed most appropriate by the District.



Carpinteria Valley Water District

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

BOARD OF DIRECTORS

Case Van Wingerden President Shirley L. Johnson Vice President

Casey Balch Polly Holcombe Matthew Roberts

GENERAL MANAGER

Robert McDonald, P.E. MPA

To: Board of Directors

From: Bob McDonald, General Manager

Date: April 5, 2024

For Consideration: Item VII. B. CAPP Project Update

Background

On March 8, 2023, the Board approved a contract with Woodard & Curran to design the Carpinteria Advanced Purification Project (CAPP). Since then, Woodard & Curran has made substantial design progress:

- CAPP Basis of Design Updated (May 2023)
- Advanced Water Purification Facility Pilot Testing (July to December 2023)
- Geotechnical Engineering Report (December 2023)
- Advanced Water Purification Facility, 50% Design (January 2024)
- CAPP Conveyance Pipeline, 50% Design (January 2024)
- Injection Wells and Monitoring Wells, 75% Design (February 2024)

In addition, the CAPP team has made progress in other program elements:

- Constructed El Carro Monitoring Well funded by SGMA grant (August 2023)
- Collected and analyzed groundwater and soil samples from El Carro monitoring well to support permit applications (December 2023)
- Executed USBR Title XVI grant agreement for \$9.9M (October 2023)
- Submitted USBR Title XVI grant application for up to an additional \$9M (December 2023)
- Negotiated SWRCB SRF loan agreement terms (December 2023)
- Requested \$650,000 in IRWM grant reimbursement (November 2023 to March 2024)
- Updated groundwater modeling using new model from Carpinteria GSP (April 2024)

- Easement acquisition discussions and negotiations for injection well and monitoring well at St. Joseph's Church
- Permitting conditions discussions and negotiations with City staff

The next phases of CAPP are completing final design, construction, and operations. The current schedule estimates the rough timeline for each as:

- Final Design through Spring 2025
- Construction Spring 2025 to Fall 2026
- Operations starting in Winter 2026/2027

Project Cost Update

In January 2024, Woodard & Curran submitted a 50% Design Construction and Operations and Maintenance Cost Estimates for CAPP that revealed a substantial cost increase from the costs presented to the Board in February 2023, prepared by Water Systems Consulting (WSC). The February 2023 cost estimate, which was presented at the February 22, 2023 Board meeting, was used for development of FY24 to FY26 Budget and rate projections (which were proposed at March 22, 2023 Board meeting; approved at Sept 13, 2023 Board meeting). The February 2023 estimate was prepared by escalating construction cost estimate from the 2019 CAPP Preliminary Design Report produced by Woodard & Curran using standard construction index – Engineering News Record's (ENR) Construction Cost Index (CCI), which had documented unprecedented cost increases following the COVID-19 event in 2020.

Item	2023 Rates Basis (February 2023) (2025\$)	50% Design (January 2024) (2025\$)
Pre-Design Services	*	\$2.0 M**
Design and Permitting	\$5.7 M	\$6.1 M**
Professional Services During Construction	\$5.3 M	\$7.3 M
Construction, Advanced Treatment Facility	\$24.0 M	\$36.4 M
Construction, Wells	\$11.5 M	\$13.1 M
Construction, Pipeline	\$2.5 M	\$6.0 M
Total Capital Cost	\$49.0 M	\$70.9 M
Operations & Maintenance	\$1.8 M/yr	\$2.0 to \$2.5 M/yr

*CAPP pre-design services totaling roughly \$2.0 M that were paid with cash-on-hand were excluded from the previous rate setting process.

** Through March 2023, the District has incurred roughly \$4.2 M in CAPP-related costs.

The cost increases are expected to be partially offset by additional grant funding, which was requested from the United States Bureau of Reclamation (USBR) Title XVI program in December 2023. The District applied for an additional \$9.0 M in grant funding from the program in December 2023 and USBR anticipates announcing awards in April 2024. CAPP is eligible for up

to 25% of capital cost reimbursement from the USBR Title XVI program with costs prior to 2020 ineligible.

However, as reported to the Board on February 28, 2024, the State Water Resources Control Board (SWRCB) reduced CAPP's Water Recycling Funding Program (WRFP) grant from \$15.0 M to \$5.0 M. The SWRCB FY2023-24 Clean Water State Revolving Fund (CWSRF) Intended Use Plan (IUP), issued in September 2023, awarded \$15.0 M to CAPP from the WRFP. The SWRCB approved the maximum award reduction to \$5.0 M at their March 19, 2024 meeting. The SWRCB did incorporate a provision that allows FY2023-24 IUP projects whose funding was reduced to "be considered for additional WRFP grant or principal forgiveness in the FY 2024-25 CWSRF IUP depending on funding availability." This provision provides some hope that some WRFP funding may be restored to CAPP next year but is certainly not guaranteed.

Item	2023 Rates Basis (February 2023) (2025\$)	50% Design (January 2024) (2025\$)
Total Capital Cost	\$49.0 M	\$70.9 M
Grant Estimate		
USBR Title XVI – Awarded	\$9.66 M	\$9.66 M
USBR Title XVI – Anticipated	\$1.19 M	~~\$7.6 M*
SWRCB WRFP	\$15.00 M	\$5.00 M
DWR IRWM	\$1.15 M	\$1.15 M
Grants Total	\$27.00 M	~~\$23.4 M*
CW-SRF Loan Amount Required	\$22.0 M	\$47.5 M

*The District applied for an additional \$9.0 M in grant funding from USBR Title XVI program in December 2023. USBR anticipates announcing awards in April 2024. CAPP is eligible for up to 25% of capital cost reimbursement from the USBR Title XVI program with costs prior to 2020 ineligible. As a result, the final grant amount is dependent on the final total program costs. The "anticipated" award value shown in the table is based on the 50% Design construction estimate.

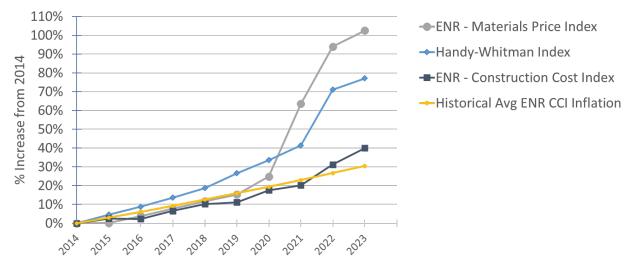
The increased loan amount of roughly \$25.5 M can be attributed to three categories:

- Project Scope Change roughly \$6.0 M
- Inflation roughly \$9.5 M
- Loss of Grant Funding \$10.0 M

Scope changes encompass changes to the project components that are then added to cost. During development of the Basis of Design Update (May 2023) and 50% AWPF Design (December 2023), several decisions increased the scope of the project components. The largest changes were: increasing the AWPF building footprint to accommodate support spaces – including staff areas, laboratories, work areas, and conditioning equipment; increasing treatment capacity to maximize yield and simplify operational complexity; locate equalization tank below ground to reduce O&M costs and reduce above ground footprint for existing WWTP operations.

O&M cost estimates have also increased by \$0.2 M to \$0.7 M per year. The largest change and uncertainty in O&M costs are a result of increased chemical usage based on recent AWPF feed water quality testing, and increased costs of chemicals. Pilot testing conducted from July to December 2023 revealed the need for additional conditioning of feed water and these chemicals have had substantial increases since the COVID-19 pandemic (as described below). A range of costs is now assumed as the design team works through treatment optimization and to account for future chemical price uncertainty. O&M costs have also increased due to increased staffing and monitoring requirements relayed by regulatory agencies.

Construction inflation costs have been far above historical averages since the COVID-19 pandemic from a combination of material price volatility, supply chain issues, and labor shortages. Several indices are shown in the figure below reflecting the issue. Construction costs have been escalated using an industry standard - Engineering News Record (ENR) Construction Cost Index (CCI), which has captured annual 10% cost increases in 2022 and 2023 – well above its historical average of 3% per year. ENR CCI inflation has historically aligned with public works projects cost inflation. However, unprecedented increases in material prices – represented by ENR Materials Price Index, which includes concrete, steel, and lumber – has disproportionately impacted CAPP costs. The Handy-Whitman index, which specifically tracks categories of water and energy project costs, has shown to better capture cost inflation for large water projects. Increased vendor quotes and materials pricing that the CAPP team has seen in the 50% Design cost estimate aligns with the Handy-Whitman index. As shown in the figure, the index has increased over 50% since 2019 and nearly 40% since 2021.



Next Steps

Since receipt of the 50% Design in January 2024, the CAPP team has been focused on opportunities for cost reduction and increasing cost certainty. Through a value engineering

CVWD

process (which is still ongoing), the team identified roughly \$3.5M in capital cost savings for the full-scale project (roughly 1,000 AFY) and identified the ability to additionally defer roughly \$9.9 M in capital costs by reducing the initial project size to 650 AFY. CAPP components deferred include treatment systems, one (of two) injection well, and two (of four) monitoring wells. The merits of deferral will be discussed at this Board meeting.

At the April 24, 2024 Board meeting, rate impacts from the latest CAPP cost estimates will be presented. The rate impacts will be used to inform discussion and decisions on design next steps for CAPP.

Recommendation:

No recommendation at this time. An updated rate impact analysis will be brought to the Board on April 24, 2024 for discussion and consideration for next steps.

Draft ORDINANCE NO. 24-1 AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE CARPINTERIA VALLEY WATER DISTRICT DECLARING A STAGE ZERO DROUGHT CONDITION

WHEREAS, the Board of Directors on November 10, 2022 approved Ordinance 22-1 moving the District into a Stage 3 Drought Condition after rainfall in 2021 was very below average; and

WHEREAS, the Board of Directors on April 26th, 2023 approved Ordinance 23-1 moving the District into a Stage 1 Drought Condition after above average;and

WHEREAS, the Carpinteria Valley Water District, demand for water in WY2024 is projected to be less than the baseline demand and no water demand reduction is needed for the immediate future; and

WHEREAS, the District's Resolution 1100 provides that when the District determines that the water supply for the current or impending water years is anticipated to be more than projected baseline demand and that water supplies are stable a Stage 0 shall be implemented; and

WHEREAS, the State Water Project (SWP) 2023 Allocation was 100% and 2024 allocation is 30%; and

WHEREAS, the Cachuma Project Allocation for WY24 is 100% and a surplus condition exists; and

WHEREAS, The Carpinteria Groundwater Basin storage has been recovering for the last two water years; and

WHEREAS, as the Board adopts this Ordinance, it finds that no restrictions are necessary to protect the water supply for human consumption, sanitation, and fire protection during the near future, the Board also finds that the uses of water that are prohibited and wasteful continue to be in effect.

NOW THEREFORE BE IT ORDAINED:

That Ordinance 23-1 is rescinded by the adoption of Ordinance 24-1; and

That pursuant to Section 31026 of the Water Code, the Carpinteria Valley Water District requires the following water waste prohibitions and practices will remain in effect during the Stage 0 period: a) Continued efforts by the public to save water, in particular continue efficient landscape water use and taking advantage of the water conservation opportunities offered by the District;

b) Avoid irrigation of turf or ornamental landscapes during and twenty-four (24) hours following measurable rainfall;

c) Free-flowing hoses for all uses should be avoided. Automatic shut-off valves or nozzles shall be attached to hoses;

d) Operators of hotels, motels and other commercial lodging establishments located within the Carpinteria Valley Water District are encouraged to post in each room a notice containing water conservation information and a separate notice with language similar to the following:

"If you wish to have your sheets changed while you are staying, please leave this notice on your pillow. If you would like your towels changed, please leave them on the floor. Housekeeping will be pleased to accommodate you."

e) Avoid irrigation of outdoor landscapes that causes runoff such that water flows onto adjacent property such as patios, decks or driveways, private and public walkways, roadways, parking lots, or structures;

- f) Equip any decorative water feature with a recirculating pump;
- g) Repair all leaks and water line breaks;

BE IT FURTHER ORDAINED that to the extent that the terms and provisions of this Ordinance are inconsistent or in conflict with the terms and provisions of any prior District ordinance, resolution, rule or regulation, the terms of this Ordinance shall prevail, and inconsistent and conflicting provisions of prior ordinances, resolutions, rules and regulations shall be suspended during the effective period of this Ordinance.

BE IT FURTHER ORDAINED that in the event the State adopts mandatory water conservation measures requiring implementation by the District during a water shortage emergency, and such State mandate measures require additional water conservation actions beyond the District's currently enforceable conservation measures, such State-mandated measures shall automatically be deemed to be fully incorporated and part of this Ordinance and enforceable by the District.

BE IT FURTHER ORDAINED that if any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions of this ordinance. The Board hereby declares that it would have passed this Ordinance and each section, subsection, sentence, clause or phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be unconstitutional or invalid.

BE IT FURTHER ORDAINED that this Ordinance 24-1 shall take effect on April 26, 2024 and terminate only after rescinded by Vote.

Vote on the Ordinance 24-1 by roll call resulted as follows:

AYES: NAYES: ABSENT: ABSTAIN:

PASSED AND ADOPTED by the Board of Directors of the Carpinteria Valley Water District, this 10th day of April, 2024.

APPROVED:

Case Van Wingerden, President

Robert McDonald, Secretary

RESOLUTION NUMBER 1154

RESOLUTION OF THE BOARD OF DIRECTORS CARPINTERIA VALLEY WATER DISTRICT MAKING THE COMMITMENTS AND PUBLISHING THE REPORT REQUIRED BY CENTRAL COAST WATER AUTHORITY RESOLUTIONS 92-2 AND 92-11

WHEREAS, the Carpinteria Valley Water District ("District") has a Water Supply Agreement with the Central Coast Water Authority; and

WHEREAS, one of the conditions of approval of the Santa Ynez and Mission Hills Extensions to the Coastal Branch Phase II of the State Water Project as found in Central Coast Water Authority Resolutions 92-2 and 92-11 requires the following commitments:

- A. Prior to the District's use of State Project water, the District will commit that the use of that water will be used first to offset the District's proportionate share of groundwater basin overdraft, if any, and to improve water quality for its consumers, if appropriate, before being made available for other purposes.
- B. Beginning in the year that State Water Project water is first delivered and annually thereafter the District will commit to prepare and publish an annual report on its long-term water supply. This report shall include a calculation which quantifies:
 - (1) the obligation to offset groundwater use due to overdraft and improve water quality, if any, set forth in the prior condition; and
 - (2) reasonable estimates of total supplies available to the District including but not limited to local supplies and the District's prediction regarding State Water Project urban delivery capacity, determined from DWR operations studies; and
 - (3) the available water supply for the ensuing year and the amount of State Water Project water necessary to fulfill the District's obligations; and
 - (4) Sufficient information to monitor compliance.

WHEREAS, the District committed to such use of State Water, if and when appropriate, by Resolution Number 673, and does hereby provide the required annual report; and

WHEREAS, this Resolution has been presented for adoption to the District's Board of Directors at a public meeting and has been distributed to local libraries and available at the District office for public review for a period of time in excess of 30 days prior to the hearing.

NOW THEREFORE IT IS HEREBY FOUND, DETERMINED, RESOLVED AND REPORTED AS FOLLOWS:

A. Estimated average annual Long-term overdraft in the Carpinteria Valley Groundwater Basin is determined to be 407 acre-feet as shown below:

-Estimated long term average annual safe yield	3711 AF
-District *long-term average extraction through WY2022	1455 AF
-Private Pumper *long term average through WY 2022	2663 AF
- Average *long term overdraft through WY 2022	407 AF
- Total groundwater extracted in WY 2023	4572 AF

*Average taken from WY1985 to WY2012 estimated private pumping, recent drought omitted and 1988-91 drought included. CVWDs pro-rata share of long-term overdraft is ~144 AFY. On average CVWD has taken 369 AFY from 1996 to 2023

- B. The District is using State Project water within the District's service area in lieu of pumping by the District from the Carpinteria Valley Groundwater Basin to the extent State Water is available and it is necessary to offset overdraft. The District has reduced its groundwater extractions to the extent possible from previous levels in order for the basin to recover.
- C. There has been no determination for a need to import State Water for the purpose of improving water quality for the benefit of District consumers.
- D. The water supplies reasonably available to the District during the Water years 2023-24 and 2024-25 and for the long term (five years) are estimated to be:

	2023-24	2024-25	Long Term
1. Cachuma Project Water	2813 AF	2813 AF	2250 AF
2. Groundwater Basin	1000 AF	1000 AF	1000 AF
3. State Water Project	1334 AF	1320 AF	1320 AF
Total Water Available	5147 AF	5133 AF	4570 AF

E. The amount of water estimated to be required to meet demands within the District's service area during the next two water years and over the long term (five years) is estimated to be:

Water Year	<u>2023-24</u>	<u>2024-25</u>	Long Term
Demand	*3070 AF	*3500 AF	3800 AF
SWP Req	0AF	0 AF	0 AF

*Assumes som e continued voluntary water use reduction from CVWD customers during the drought recovery period.

Vote on the Resolution by roll call resulted as follows:

AYES: NAYES: ABSENT: ABSTAIN:

The Resolution was thereupon declared, carried and adopted.

Dated: March 13, 2024

APPROVED:

Case Van Wingerden, President

ATTEST:

Robert McDonald, Secretary



REGULAR MEETING OF THE CACHUMA OPERATION AND MAINTENANCE BOARD

Monday, March 25, 2024 1:00 P.M.

HOW TO OBSERVE THE MEETING

Join by Teleconference or Attend in Person

COMB follows Centers for Disease Control and Prevention (CDC), California Department of Public Health (CDPH) and local public health guidelines with respect to COVID-19 protocols and masking requirements, based on local conditions and needs. COMB will have available masks for use during public meetings.

Members of the public may observe the meeting electronically as set forth below.

Join via Video Conference

https://us02web.zoom.us/j/86987718785?pwd=MVI3cTh3d2poSkQ3cVowRDVvRU1XQT09 Passcode: 715882

Join via Teleconference

US +1 669 900 6833 Webinar ID: 869 8771 8785 Passcode: 715882

HOW TO MAKE A PUBLIC COMMENT

Any member of the public may address the Board on any subject within the jurisdiction of the Board of Directors. 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.

In person: Those observing the meeting in person may make comments during designated public comment periods.

By Video: Those observing the meeting by video may make comments during designated public comment periods using the "raise hand" feature. Commenters will be required to unmute their respective microphone when providing comments.

By Telephone: Those observing the meeting by telephone may make comments during the designated public comment periods by pressing *9 on the key pad to indicate such interest. Commenters will be prompted to press *6 to unmute their respective telephone when called upon to speak.

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.

REGULAR MEETING OF THE CACHUMA OPERATION AND MAINTENANCE BOARD held at 3301 Laurel Canyon Road Santa Barbara, CA 93105

Monday, March 25, 2024

1:00 PM

AGENDA

NOTICE: This Meeting shall be conducted in-person and through remote access as authorized and in accordance with Government Code section 54953, AB 361 and AB 2449.

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 to be 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 February 26, 2024 Regular Board Meeting
- b. Investment of Funds
 - Financial Reports
 - Investment Reports
- c. Review of Paid Claims

4. VERBAL REPORTS FROM BOARD COMMITTEES

Receive verbal information regarding the following committee meetings:

- Fisheries Committee Meeting March 19, 2024
- 5. PROPOSED COMMENT LETTER TO THE CALIFORNIA FISH AND GAME COMMISSION

Action: Recommend approval by motion and roll call vote of the Board

6. PROPOSED FISH PASSAGE AND HABITAT ENHANCEMENT PROJECTS – FISCAL YEAR 2024-25 OPERATING BUDGET

Action: Recommend approval by motion and roll call vote of the Board

7. GENERAL MANAGER REPORT

Receive information from the General Manager on topics pertaining to COMB, including but not limited to the following:

- Administration
- U.S. Bureau of Reclamation

8. ENGINEER'S REPORT

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

- Climate Conditions
- Lake Elevation Projection
- Winter Storm Damage Repairs and Reimbursement
 - Infrastructure Improvement Projects Update

•

9. OPERATIONS DIVISION REPORT

<u>Receive verbal information regarding the Operations Division, including but not limited to the following:</u>

- Lake Cachuma Operations
- Operation and Maintenance Activities

10. FISHERIES DIVISION REPORT

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

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

11. PROGRESS REPORT ON LAKE CACHUMA OAK TREE PROGRAM

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

• Maintenance and Monitoring

12. 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

13. DIRECTORS' REQUESTS FOR AGENDA ITEMS FOR FUTURE MEETING

14. MEETING SCHEDULE

- Regular Board Meeting April 22, 2024 at 1:00 PM
- Board Packages available on COMB website <u>www.cachuma-board.org</u>

15. 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. 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.



Eric Friedman Chairman

Jeff Clay Vice Chairman

Ray A. Stokes Executive Director

Brownstein Hyatt Farber Schreck General Counsel

Member Agencies

City of Buellton

Carpinteria Valley Water District

City of Guadalupe

City of Santa Barbara

City of Santa Maria

Goleta Water District

Montecito Water District

Santa Ynez River Water Conservation District, Improvement District #1

Associate Member

La Cumbre Mutual Water Company

255 Industrial Way Buellton, CA 93427 (805) 688-2292 Fax (805) 686-4700 www.ccwa.com

A REGULAR MEETING OF THE OPERATING COMMITTEE of the CENTRAL COAST WATER AUTHORITY

will be held at 9:00 a.m., on Thursday, March 14, 2024 at 255 Industrial Way, Buellton

Members of the public may participate by video call or telephone via URL: <u>https://meetings.ringcentral.com/j/1494829862</u> or via telephone by dialing 1 (623) 404-9000 and entering code 149 482 9862 #

Public Comment on agenda items may occur via video call or telephonically, or by submission to the Board Secretary via email at <u>Ifw@ccwa.com</u> no later than 8:00 a.m. on the day of the meeting. In your email, please specify (1) the meeting date and agenda item (number and title) on which you are providing a comment and (2) that you would like your comment read into the record during the meeting. If you would like your comment read into the record during the meeting (as either general public comment or on a specific agenda item), please limit your comments to no more than 250 words.

Every effort will be made to read comments into the record, but some comments may not be read due to time limitations. Please also note that if you submit a written comment and do not specify that you would like this comment read into the record during the meeting, your comment will be forwarded to Board members for their consideration.

Pursuant to Government Code section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Board less than seventy-two (72) hours prior to the meeting will be available on the CCWA internet web site, accessible at https://www.ccwa.com.

Call to Order and Roll Call

II. CLOSED SESSION

I.

III.

V.

*

CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION Government Code section 54956.9(d) (1) Name of case: Central Coast Water Authority, et al. v. Santa Barbara County Flood Control and Water Conservation District, et al. (Case No. 21CV02432)

Public Comment – (Any member of the public may address the Committee relating to any matter within the Committee's jurisdiction. Individual Speakers may be limited to five minutes; all speakers to a total of fifteen minutes.)

IV. * Consent Calendar

A. Minutes of the January 11, 2024 Operating Committee Meeting *Staff Recommendation:* Approve Consent Calendar.

Executive Director's Report

- A. Operations Update
 - Staff Recommendation: Informational item only.
- B. Water Supply Situation Report
- Staff Recommendation: Informational item only.
- C. DRAFT Administrative Rules for the Transfer and Exchange of Water *Staff Recommendation:* Informational item only.
- * D. CCWA FY 2024/25 Preliminary Budget Staff Recommendation: Informational item only.
- VI. Reports from Committee Members for Information Only
- VII. Date of Next Regular Meeting: July 11, 2024

VIII. Adjournment

- * Indicates attachment of document to agenda packet
- The CCWA FY 2023/24 Preliminary Budget has been provided to Committee members and is available on-line at www.CCWA.com, if you require a hard copy please contact Lisa Watkins at Ifw@ccwa.com.



A Meeting of the

BOARD OF DIRECTORS OF THE CENTRAL COAST WATER AUTHORITY

will be held at 9:00 a.m., on Thursday, March 28, 2024 at 255 Industrial Way, Buellton, California 93427

Members of the public may participate by video call or telephone via URL: <u>https://meetings.ringcentral.com/j/1448312655</u>

or by dialing (623)404-9000 and entering access Code/Meeting ID: 144 831 2655 #

Please note: public participation by video call or telephone is for convenience only and is not required by law. If technical interruptions to the video call/telephone occur, the chair has the discretion to continue the meeting and participants are invited to take advantage of the other participation options above.

Public Comment on agenda items may occur via video call or telephonically, or by submission to the Board Secretary via email at lfw@ccwa.com no later than 8:00 a.m. on the day of the meeting. In your email, please specify (1) the meeting date and agenda item (number and title) on which you are providing a comment and (2) that you would like your comment read into the record during the meeting. If you would like your comment read into the record during the meeting (as either general public comment or on a specific agenda item), please limit your comments to no more than 250 words.

Every effort will be made to read comments into the record, but some comments may not be read due to time limitations. Please also note that if you submit a written comment and do not specify that you would like this comment read into the record during the meeting, your comment will be forwarded to Board members for their consideration.

Pursuant to Government Code section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Board less than seventy-two (72) hours prior to the meeting will be available on the CCWA internet web site, accessible at https://www.ccwa.com.

I. Call to Order and Roll Call

II. Closed Session

- A. CONFERENCE WITH LEGAL COUNSEL ANTICIPATED LITIGATION Initiation of litigation pursuant to Government Code section 54956.9(d) (4): 1 case
- B. CONFERENCE WITH LEGAL COUNSEL EXISTING LITIGATION Government Code section 54956.9(d) (1)
 Name of case: Central Coast Water Authority, et al. v. Santa Barbara County Flood Control and Water Conservation District, et al. (Case No. 21CV02432)

III. Return to Open Session

IV. Public Comment – (Any member of the public may address the Board relating to any matter within the Board's jurisdiction. Individual Speakers may be limited to five minutes; all speakers to a total of fifteen minutes.)

V. Consent Calendar

- * A. Minutes of the February 22, 2024 Regular Meeting
- **∗**Β. Bills
- *C. Controller's Report
- * D. Operations Report
- *E. Budget Transfer
 - Staff Recommendation: Approve the Consent Calendar

CVWD

Continued

- Indicates attachment of document to original agenda packet.
- The CCWA FY 2024/25 Preliminary Budget has been provided to Board members and is available on-line at www.CCWA.com, if you require a hard copy please contact Lisa

PACKET PAGE 30 **Watkins at Ifw@ccwa.com**.

Eric Friedman Chairman

Jeff Clay Vice Chairman

Ray A. Stokes Executive Director

Brownstein Hyatt Farber Schreck General Counsel

General Counsel Member Agencies

City of Buellton

Carpinteria Valley Water District

City of Guadalupe

City of Santa Barbara

City of Santa Maria

Goleta Water District

Montecito Water District

Santa Ynez River Water Conservation District, Improvement District #1

Associate Member

La Cumbre Mutual Water Company

255 Industrial Way Buellton, CA 93427 (805) 688-2292 Fax (805) 686-4700 www.ccwa.com

VI. Executive Director's Report

- * A. Water Supply Situation Report
 - Staff Recommendation: Informational item only.
- *B. Final Draft Proposed Administrative Rules for the Transfer or Exchange of Water *Staff Recommendation:* For discussion only.
- ♦ C. CCWA FY 2024/25 Preliminary Budget
- * Staff Recommendation: Informational item only.
- D. State Water Contractors Report Staff Recommendation: Informational item only.
- * E. Legislative Report Staff Recommendation: Informational item only.

VII. Reports from Board Members for Information Only

- VIII. Items for Next Regular Meeting Agenda
- IX. Date of Next Regular Meeting: April 25, 2024
- X. Adjournment



Water Conservation Showcase

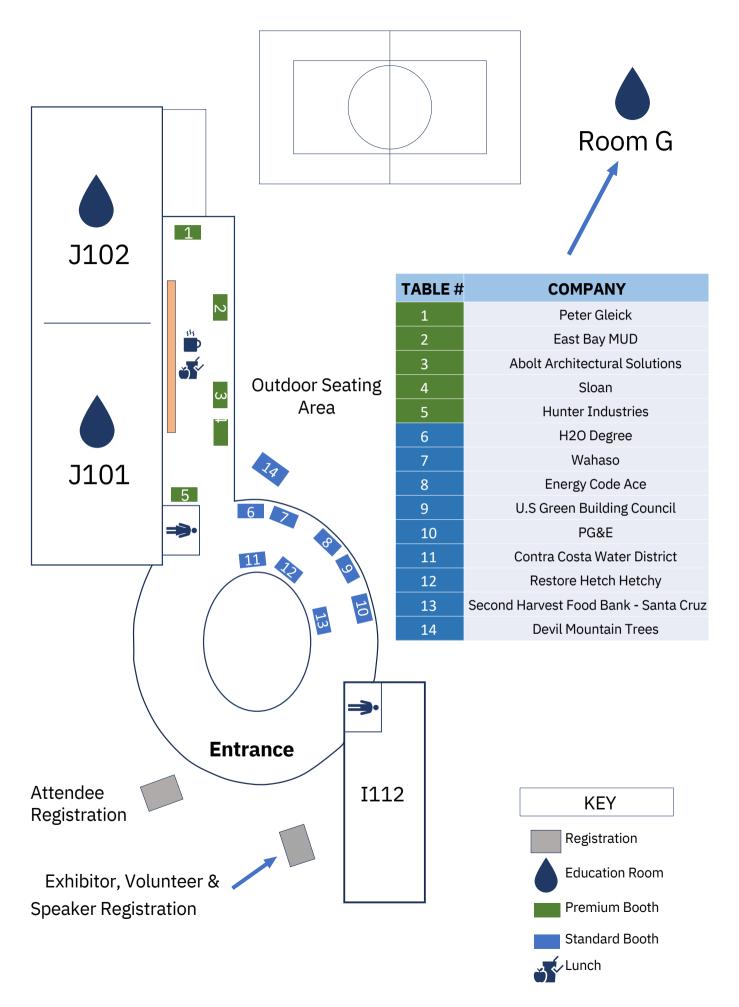
SAN RAMON VALLEY CONFERENCE CENTER

April 4, 2024 | 9AM In-Person and Virtual

Table of Contents

Map	3
Schedule	4
Session Descriptions	5
Speaker Bios	17





Item VIII. D. WCS 2024

3

Schedule of Events

Time	Room J101	Room J102	Room G
9:00 - 9:30	Kick-Off and Coffee with WCS Host Committee		
10:00 - 11:00	Past, Present, and Future of Water Peter Gleick, Pacific Institute	Case Studies Featuring Innovation in Stormwater Management Brent Bucknum, Hyphae Design Lab Rob Dusenbury, Lotus Water Engineering	SmartLandscapes (a) UC Davis: Actual Water Applied Study Dave Fujino, CA Center for Urban Horticulture Emily Finch, CA Center for Urban Horticulture Abigail Bleichner, Student Anthony La, Student
11:30 - 12:30	Tending the Urban Forest: Long-term Planning and Climate Solutions Gordon Matassa, City of Oakland Dave Muffly, Oaktopia	Updating the UC Water Policy: Strategies for Successful Policy Development Eli Perszyk, UC San Francisco Wes Sullens, U.S. Green Building Council	Transforming Urban Landscapes: Effective Policies and Programs Paul Lander PhD, University of Colorado Lourdes Camarena, Save Our Water Forrence McCarthy, P.E., Los Angeles Department of Water and Power
12:30 - 1:30	L	unch - Provided to all Attendee	S
1:30 - 2:30	California's Unprecedented Push for Increased Water Efficiency Heather Cooley, Pacific Institute Karina Herrera, SWRCB Maureen Erbeznik, Maureen Erbeznik and Associates Joe Berg, Municipal Water District of Orange County	The Cost and Water Savings Potential for Detecting Leaks Sonali Abraham, Pacific Institute Lindsay Kinsler, East Bay Municipal Utility District	Source to Sea: Plastic Pollution in our Oceans Kasie Regnier, Monterey Bay Aquarium Eben Schwartz, CA Coastal Commission Miho Ligare, Surfrider Foundation
3:00 - 4:00	Decorative Lawn No More: Navigating The New Non-Functional Commercial Turf Irrigation Ban Krista Guerrero, Metropolitan Water District John Tawaststjerna, Rossmoor	Water-Energy Nexus: Products that Save Water and Energy Kendra Olmos, InPipe Energy Gerald Van Decker, RenewAbility Energy Claire Xiao, Rainstick Shower	Laundry to Landscape: Lessons Learned Kristin Bowman, EBMUD Anya Kamenskaya, EBMUD Holly Nadeau, City of Santa Rosa Christina Mountanos, Marin Water Nicholas Simard, Santa Clara Valley Water District
4:00 - 4:30	Closing & Door Prizes		

Item VIII. D. WCS 2024

Session Descriptions

Return to Full Schedule

10:00 - 11:00 am

The Past, Present, and Future of Water

Room: J101

Speakers: <u>Peter Gleick</u>, Co-founder, Senior Fellow, Pacific Institute Host: Julie Ortiz, San Francisco Public Utilities Commission

From the very creation of the planet, water has been central to existence on Earth and a defining force in the story of humanity. In this presentation, Peter Gleick guides us through the long, fraught history of our relationship to this precious resource. Water has shaped civilizations and empires and driven centuries of advances in science and technology—from agriculture to aqueducts, steam power to space exploration—and progress in health and medicine. The achievements that have propelled humanity forward, however, also brought consequences including unsustainable water use, ecological destruction, and global climate change that now threaten to send us into a new dark age. We must change our ways, and quickly, to usher in a new age of water for the benefit of everyone. Drawing from the lessons of our past, Gleick charts a visionary path toward a sustainable future for water and the planet.

Gleick is the author or editor of many scientific papers and fourteen books, including The World's Water series; Bottled and Sold: The Story Behind Our Obsession with Bottled Water; and A Twenty-First Century U.S. Water Policy. His most recent book is The Three Ages of Water: Prehistoric Past, Imperiled Present, and a Hope for the Future (2023 PublicAffairs/Hachette).

Return to Full Schedule

10:00 - 11:00 am

Case Studies Featuring Innovation in Stormwater Management

Room: J102

Speakers:

- 1. Brent Bucknum, Founder, Hyphae
- 2. Robert Dusenbury, Principal Design Engineer, Lotus Water

Host: Mark Kelly, BAR Architects and AIA Committee on the Environment

This case study panel features the work of two engineering firms that specialize in creative stormwater solutions. Robert Dusenbury of Lotus Water will present The Orange Memorial Park Stormwater Capture Project that retains, cleans, and redirects stormwater in South San Francisco. Brent Bucknum of Hyphae will describe the depaving masterplan for the cities and counties of Los Angeles that limit stormwater run-off, reduce heat island effect, support biodiversity, and curb water and air pollution.

The Orange Memorial Park Stormwater Capture Project is located along the Colma Creek flood control channel within Orange Memorial Park in the City of South San Francisco. The Project captures and treats approximately 15 percent of the annual drainage from 6,500 acres of land including multiple municipalities.

De-Paving, or the removal of concrete and asphalt from our cities, has been hard to achieve, as it requires coordination to optimize and address a multitude of environmental interests from water, to heat island, that relies on novel data and community driven processes, and complex interdepartmental, inter-city and interagency collaboration. Developing the de-paving masterplan required a novel, topdown geospatial analysis approach as well as a bottom up, intervention typology process.

Return to Full Schedule

10:00 - 11:00 am

Room: G

Speakers:

1. Dave Fujino, Executive Director, CA Center for Urban Horticulture

2. Emily Finch, CA Center for Urban Horticulture

- 3. Abigail Bleichner, Sustainable Environmental Design Student
- 4. Anthony La, Sustainable Environmental Design Student

Host: William Granger, City of Sacramento

In 2019, the California Center for Urban Horticulture, UC Davis, created the SmartLandscape initiative to determine if low water use landscapes could be designed, installed, managed, and maintained to meet the Model Water Efficient Landscape Ordinance (MWELO). While MWELO compliance is determined by estimating water use for a specific landscape area, the SmartLandscape initiative will validate compliance by measuring Actual Water Applied (AWA). For this analysis, SmartLawn demonstration plots (cool and warm season turf) and SmartScape I and II were designed and planted then irrigated by sub-surface and surface irrigation dispersion and smart controller technology.

This presentation will provide data confirming MWELO compliance of SmartLawn and SmartScape landscapes by utilizing AWA versus ETWU and using AWA data to calculate the actual plant factors for SmartLawn and SmartScape landscapes. Calculated AWA plant factors from this study will be compared to the plant factors assigned by WUCOLS IV. Measuring and employing AWA data is the definitive method for confirming MWELO compliance versus using ETWU for both SmartLawn and SmartScape demonstration landscapes.

Return to Full Schedule

11:30 am - 12:30 pm

Tending the Urban Forest: Long-term Planning and Climate Solutions

Room: J101

Speakers:

- 1. Dave Muffly, Senior Arborist, Oaktopia
- 2.<u>Gordon Matassa</u>, Urban Forestry Project Coordinator, City of Oakland Host: Jolene Bertetto, East Bay Municipal Utility District

In 2023, The City of Oakland released the first of its kind Draft Urban Forest Plan to create a data driven process for growing and maintaining Oakland's tree canopy. This presentation will discuss the essential role of long-term planning for managing urban forests to ensure the benefits of trees are distributed equitable throughout the community. While urban forests can help mitigate the effects of climate change, Oakland's trees are also threatened by extreme heat, high winds, flooding, drought, and wildfires. New plantings will need to consider suitability for warmer temperatures and changing precipitation patterns.

This presentation combines the on-the-ground experience from Oakland's Parks & Tree Division with innovative solutions from Oaktopia to explore ideas for a thriving urban forest under future climate scenarios. We'll discuss various perspectives on the role of native plants, review the performance of rare, drought-adapted trees, and discuss key concepts in urban/wildland biodiversity preservation and enhancement.

Join Dave Muffly (Oaktopia) after the talk at the Devil Mountain Tree display to learn more about some of the tree species highlighted in the presentation.

Return to Full Schedule

11:30 am - 12:30 pm

Updating the UC Water Policy: Strategies for Successful Policy Development

Room: J102

Speakers:

- 1. <u>Eli Perszyk</u>, Conservation Program Manager, University of California San Francisco
- 2. <u>Wes Sullens</u>, Director, LEED, U.S. Green Building Council

Host: Geneva Gondak, East Bay Municipal Utility District

The presentation will cover successful policy development strategies, from early concept development, stakeholder engagement, and achieving consensus on actionable policy language. Eli Perszyk, from University of California San Francisco, will showcase how the UC system worked to update and strengthen their water policy in a yearlong effort through the UC Water Working Group. Approved in 2023, the updates include requirements for water recycling and stormwater evaluations, the addition of bottle filling stations for large construction projects, increasing LEED water credits requirements in new buildings, and setting a timeline to establish guidelines on drinking water access. Eli will also highlight new and innovative water efficiency projects underway at the UCSF campus.

Wes Sullens, a Director of LEED at the U.S. Green Building Council, will then dive into the world of LEED and discuss how LEED addresses water, including LEED's water efficiency credits and innovative pilot water credits. Wes will talk about how LEED can be used by policy makers in creative ways to strengthen institutional water, and sustainability policy. He'll also unveil the highly anticipated LEED v5, which is currently open for public comment and should be launched in early 2025.

Return to Full Schedule

11:30 am - 12:30 pm

Transforming Urban Landscapes: Effective Policies and Programs

Room: G

Speakers:

- <u>Paul Lander</u>, PhD, Principal, Dakota Ridge Partners; Adjunct Associate Professor University of Colorado
- Lourdes Camarena, Campaign Strategist, Save Our Water
- <u>Terrence McCarthy</u>, P.E., Los Angeles Department of Water and Power

Host: Julie Ortiz, San Francisco Public Utilities Commission

Transforming urban landscapes is a key way California can continue to reduce water use and fight climate change. Replacing grass with climate-appropriate plants, putting stormwater to beneficial use, and maintaining healthy trees are important parts of this strategy. Many studies show that making such changes at widespread levels across residential areas of the state would yield huge benefits, but getting people to pursue these transformations and do them effectively can be challenging. This session will include presentations from three speakers with different roles in the field of urban landscape transformation. First, we'll get an academic analysis from the University of Colorado's recent broad review of how different states and communities are tackling these challenges. Then, we will hear from the California Governor's Office Save our Water campaign on what market research shows are the specific factors that motivate and deter people from replacing residential lawns. Last, we will hear about a popular and successful new program by the Los Angeles Department of Water and Power (LADWP). After many years of providing turf replacement rebates, LADWP found that lack of design know-how is the biggest obstacle to successful lawn transformation. The agency now provides single family homes going through turf replacement with the services of landscape architects. The designs feature principles from rain capture to California native plants selections.

Return to Full Schedule

1:30 - 2:30 pm

California's Unprecedented Push for Increased Water Efficiency

Room: J101

Speakers:

- 1. <u>Karina Herrera</u>, Senior Environmental Scientist, State Water Resources Control Board
- 2. <u>Heather Cooley</u>, Director of Research, Pacific Institute
- 3. <u>Joe Berg</u>, Director of Water Use Efficiency, Municipal Water District of Orange County
- 4. Maureen Erbeznik, Principal, Maureen Erbeznik and Associates

Host: Amy Talbot, Water Efficiency Program Manager, Regional Water Authority

In 2018, the state enacted Senate Bill 606 and Assembly Bill 1668 to create a new framework for increased urban water efficiency across the state. The framework includes a volumetric water budget approach to urban residential indoor and outdoor use, commercial, industrial, and institutional dedicated irrigation water use, and water supplier system water loss. While the state and stakeholders finalize the implementation requirements (expected to be complete by mid/late 2024), this panel will discuss the basic components of the water supplier specific water budgets, implementation actions needed to achieve the projected savings, long term benefits to our urban environment, financial impacts, and potential for new and expanded partnerships. Attendees will leave the session with a balanced understanding of the new law and what to expect in the years to come from its implementation.

Return to Full Schedule

1:30 - 2:30 pm

The Cost and Water Savings Potential for Detecting Leaks

Room: J102

Speakers:

- 1. <u>Sonali Abraham</u>, Senior Researcher, Pacific Institute
- 2. Lindsay Kinsler, Water Conservation Representative, EBMUD

Host: Kurt Elvert, San Jose Water Company

This panel will explore two leak detection studies: One by Pacific Institute, a research organization based in Oakland, and one by East Bay Municipal Utility District (EBMUD), a local water utility. The Pacific Institute study looked at toilet leaks, a leading source of water waste in multi-family homes. The EBMUD study used Advanced Metering Infrastructure (AMI) data to identify water use anomalies and leaks across a range of customer types. This panel session will also cover insights on building partnerships, understanding customer motivations, and water and financial savings from leak repair programs.

The Pacific Institute study partnered with the Housing Authority of the City of Los Angeles (HACLA), Sensor Industries, and the Los Angeles Better Buildings Challenge to install leak sensors on 1,200 toilets across eight HACLA-owned buildings. Leak sensors installed in-line on toilets and connected to an online dashboard and alert system send real-time leak alerts to the property manager, and automatically open work orders for the maintenance team.

The East Bay Municipal Utility District (EBMUD) study leveraged AMI data to detect irrigation patterns, irrigation anomalies, and potential leaks. The presentation will share results from a large commercial site with a complex irrigation system, a large housing complex with multiple irrigation meters, and a large municipal account.

Return to Full Schedule

1:30 - 2:30 pm

Source to Sea: Plastic Pollution in our Oceans

Room: G

Speakers:

- Kasie Regnier, Monterey Bay Aquarium
- Eben Schwartz, CA Coastal Commission
- <u>Miho Ligare</u>, Plastic Pollution Policy Manager, Surfrider Foundation

Host: Stephanie Hallinan, USGBC

This topic will explore the intersection of potable water, microplastics, and our Ocean. Plastic is the most prevalent type of marine debris found in our Ocean. Marine wildlife continues to be negatively impacted by the infiltration of microplastics in our Ocean; what is contributing to this at the consumer level? Discuss measures/ policies that each represented organization is working towards to mitigate further pollution.

Return to Full Schedule

3:00 - 4:00 pm

Decorative Lawn No More: Navigating the New Non-Functional Commercial Turf Irrigation Ban

Room: J101

Speakers:

- 1. Krista Guerrero, Metropolitan Water District
- 2. John Tawaststjerna, Rossmoor Landscape Manager

Host: Geneva Gondak, East Bay Municipal Utility District

This presentation will explore how recently passed California legislation banning irrigation of decorative lawns on commercial sites addresses the critical issue of water conservation and opens doors to creative and sustainable solutions in the realm of commercial landscaping.

Krista Guerrero, a representative from the Metropolitan Water District of Southern California, will delve into the implications of the recently enacted legislation prohibiting irrigation of non-functional turf in commercial spaces. As a co-sponsor of this legislation signed into law in 2023, Metropolitan Water District has been working actively to identify and determine how to work with their suppliers to convert all of the non-functional commercial lawns in their service area. The presentation will review the definition of non-functional turf, what the legislation means, and Met's approach to compliance including mapping non-functional turf areas.

Following Krista, John Tawaststjerna will share successful HOA non-functional turf conversion projects from Rossmoor, a retirement community of 10,000 residents. John will discuss overcoming challenges when balancing competing interests, and present on how much water these landscapes are actually saving.

Return to Full Schedule

3:00 - 4:00 pm

Water-Energy Nexus: Products that Save Water and Energy

Room: J102

Speakers:

- 1. Kendra Olmos, Director of Water, InPipe Energy
- 2. Gerald Van Decker, President and CEO, RenewAbility Energy Inc.
- 3. <u>Claire Xiao</u>, Operations Director, Rainstick Shower

Host: Jolene Bertetto, East Bay Municipal Utility District

This panel presentation will explore products from three companies working on novel and inventive strategies to save both water and energy:

InPipe Energy's innovative technology allows water utilities to generate an abundant, predictable, and secure source of renewable energy from excess pressure in water pipelines while managing pressure, saving water, and reducing carbon emissions all without impacting water system operations.

Passive Drain Water Heat Recovery (DHWR) Technologies, like those available from RenewAbility Energy Inc., are ubiquitous in some jurisdictions but virtually unknown in many others. While these technologies have proven themselves to be robust with a very long service-life, they also substantially increase effective hot water capacity and are cost-effective in a wide-range of applications: from homes, to multi-unit residential, to industrial facilities.

RainStick captures, circulates, and purifies water in real-time during a shower to save water and energy while doubling the flow rate. Learn how the technology is installed and works, including differences between other re-use opportunities (greywater, rainwater, blackwater).

Return to Full Schedule

3:00 - 4:00 pm

Laundry to Landscape: Lessons Learned from Residential Graywater Rebate Programs

Room: G

Speakers:

- 1. <u>Nicholas Simard.</u> Water Conservation Specialist, Valley Water
- 2. <u>Kristin Bowman</u>, Water Conservation Program Manager, East Bay Municipal Utility District
- 3. <u>Anya Kamenskaya</u>, Water Conservation Program Manager, East Bay Municipal Utility District
- 4. Holly Nadeau, Water Resources Specialist, City of Santa Rosa
- 5. Christina Mountanos, Water Conservation Specialist III, Marin Water

Host: Kurt Elvert, San Jose Water Company

This panel presentation will explore residential graywater rebate programs available from four Bay Area water utilities. We'll look at the benefits and barriers to implementing a successful program with a focus on the metrics used to gauge success and outreach strategies for increasing customer implementation,

The panel will share Valley Water's efforts to increase education of laundry to landscape systems. EBMUD will present on their 10-year residential graywater rebate program assessment which used an online survey and historic water use data to track program success. MMWD will explore how their rebate program evolved from incentivizing system components to offering a discount on pre-assembled laundry-tolandscape "kits," in partnership with a local irrigation supplier, and their most recent pilot direct install program, eliminating the burden of hiring both a plumber and landscape professional to complete a full L2L system installation. The City of Santa Rosa will share their program challenges and recommendations.

16

Return to Full Schedule



Abigail Bleichner

Abigail is a third-year student at UC Davis. She is pursuing a major in Sustainable Environmental Design as well as a double minor in US History and Sustainability in the Built Environment. Abigail currently works at the California Center for Urban Horticulture as a SmartLandscape Co-Coordinator. Abigail hopes to pursue a career in water conservation and management in urban environments.



Amy Talbot

In November 2012, Amy Talbot joined the Regional Water Authority (RWA), a coalition of more than 20 water purveyors and associated agencies in the greater Sacramento Region. Amy is the manager of the Regional Water Efficiency Program's award-winning public outreach campaign and school education program. She currently oversees several grants that collectively provide \$4.5 million to increase water use efficiency in the region.



Anthony La

Anthony is a 4th year student at UC Davis studying Sustainable Environmental Design and Environmental Policy and Planning. Currently he holds the position of SmartLandscape Co-Coordinator at the California Center for Urban Horticulture and is also a zoning/GIS analyst for the UC Davis Center for Regional Change. In September 2023 he was awarded the distinguished merit scholarship by the California Planning Foundation for dedication in the field of planning. As such, his current goal is to become an urban planner.



Anya Kamenskaya

Anya is a water conservation program manager focused on water efficiency in the commercial, industrial and institutional sectors. Previously they operated in the decentralized wastewater reuse space as co-owner of a rainwater catchment and greywater recycling firm.



Brent Bucknum

Brent is the founder of Hyphae Design Lab, an Oakland based multi-disciplinary engineering and innovation firm started in 2008. Brent also co-founded Urban Biofilter, an environmental justice and health focused research and policy joint venture developed with neighborhood environmental justice groups. Brent brings a systems thinking perspective to environmental health and urban infrastructure challenges, by building diverse teams to create practical solutions to global challenges through academic research, community participation, design innovation, earth systems engineering and public policy.



Christina Mountanos

Christina is a Water Efficiency Specialist III at Marin Water, working in Water Efficiency for 10+ years. She manages Marin Water's Graywater Rebate Program, among others. Christina has a bachelor's degree in Biology from University of California Los Angeles and is a certified landscape irrigation auditor.

Claire Xiao

Return to Full Schedule

Claire is the Operations Director at RainStick, a clean technology Canadian company committed to building products that drive the future of water conservation and allow people to thrive with only 13 gallons of water per day without compromise. Previously, Claire worked as an energy & resources consultant for large utilities across the UK and Europe.



Dave Fujino

Dave has served for more than 17 years as the director of the California Center for Urban Horticulture (CCUH), Co-Director of the UC Nursery and Floriculture Alliance at UC Davis and past Chair of the Saratoga Horticultural Research Endowment. He earned his B.S. in Plant Science at UC Riverside, and his M.S. and Ph.D. from UC Davis in Environmental Horticulture and Plant Physiology. In 2017, he was inducted into the Green Industry "Hall of Fame" for having a positive impact in the horticulture industry. His current focus is on the implementation of the SmartLandscape initiative at UC Davis.



Dave Muffly

Dave has been planting trees (especially oaks) in the Bay Area and other California locations for 35 years. Dave began his tree career where he received his undergraduate degree in mechanical engineering, Stanford University. Moving from engineering to ecology, Dave managed native oak plantings at Stanford, in a project that has yielded more than 4,000 established oaks in 40 years. Dave then branched into urban tree plantings and became a Master Arborist, overseeing the 101 Freeway Soundwall planting for the non-profit Canopy in East Palo Alto. Today Dave works as a senior arborist.



Eben Schwartz

Eben has over 20 years of experience with the CA Coastal Commission where he runs Marine Debris and Public Outreach programs. Eben has a lengthy history of work on plastic pollution and marine debris, topics on which he has become one of the state's leading authorities. He leads California Coastal Cleanup Day, California's largest volunteer event, as well as the year-round Adopt-A-Beach Program. Eben serves as the Chair of the West Coast Marine Debris Alliance, an organization that he helped found in 2008, initially as part of the West Coast Governors' Alliance on Ocean Health.



Eli Perszyk

Eli works at UC San Francisco Facilities Services to conserve water and energy. He cochairs the University of California Sustainable Water Systems working group, and is vicechair of the San Francisco Public Utilities Commission Citizen's Advisory Committee. Prior to joining UC San Francisco, he was the building manager for the UC Berkeley College of Environmental Design.



Emily Finch

Emily is currently serving as the Program Manager for the California Center for Urban Horticulture (CCUH), where she works to further the program's goals, while also managing the paid student leads and team of student interns of the SmartLandscape program at UC Davis. Emily earned her B.S. in Environmental Horticulture, her teaching credential, and M.A. in Education all from UC Davis. Before working at the CCUH, Emily taught science for 5 years in the public school system.

Return to Full Schedule



Gerald W Van Decker

Gerald founded RenewABILITY Energy Inc. in 2000, invented the Power-Pipe® and drives expansion of the Drain Water Heat Recovery markets. While at Natural Resources Canada, he was involved with Active Solar Energy Technologies and managed International Energy Agency projects. Gerald also contributed to early-stage development of large-cell honeycomb translucent insulation used in the highly successful Solera® and was Research Engineer for the SuperSpacer® high-performance window technology. Gerald holds a Master's Degree in Mechanical Engineering from the University of Waterloo.



Gordon Matassa

Gordon is the Urban Forestry Project Coordinator for the City of Oakland where he coordinates the development of the city's equity-focused Urban Forest Plan, writes and manages grants to fund urban forestry work, and supports volunteer tree-planting projects. He is the chair of the Bay Area Urban Forests Ecosystem Council, a California Urban Forests Council board member, and a committee chair for the Western Chapter of the International Society of Arboriculture (ISA). Gordon has a master's degree in public administration and holds several certifications, including ISA Board Certified Master Arborist, ISA Municipal Specialist, and ISA's Tree Risk Assessment Qualification.



Heather Cooley

Heather is Director of Research at Pacific Institute. In this role, she conducts and oversees research on Water Efficiency and Reuse, Nature-Based Solutions, Water and Climate Equity, and Corporate Water Stewardship. Heather received a B.S. in Molecular Environmental Biology and a Master's degree in Energy and Resources from the University of California, Berkeley. She has served on several state-level workgroups, including the California Commercial, Industrial, and Institutional Task Force and Urban Stakeholder Committee.



Holly Nadeau

Holly is a Water Resources Specialist for the City of Santa Rosa. She develops and manages water use efficiency programs for the Santa Rosa community and assists customers with indoor and outdoor water use efficiency projects. She has a Bachelors Degree in Botany from Cal Poly Humboldt and is a Qualified Water Efficient Landscaper.



Joe Berg

Joe is the Director of Water Use Efficiency for the Municipal Water District of Orange County (MWDOC). For more than 32 years Joe has developed, implemented and evaluated a variety of urban water use efficiency and distribution system water loss programs in Orange County. Joe is currently on the Board of Directors for the California Water Efficiency Partnership. Joe graduated from San Diego State University in 1991 with a Bachelors degree in Resource and Environmental Geography. Joe is the 2013 Llana Sherman Excellence Award recipient form the California Urban Water Conservation Council for his local and community innovations in water use efficiency.



John Tawaststjerna

John is the current Landscape Manager at Rossmoor, a retirement community of 10,000 people in Walnut Creek. He studied BioResource and Agricultural Engineering at Cal Poly



Karina Herrera

Return to Full Schedule

Karina has worked for the State Water Resources Control Board since 2020. She was an Environmental Fellow with the William Penn Foundation and graduated from Harvard University and Bren School of Environmental Science & Management - University of California, Santa Barbara.



Kasie Regnier

Kasie is the Director of Applied Water Science at the Monterey Bay Aquarium. She has been at the Monterey Bay Aquarium for 8 years where her team runs the water laboratory chemistry and microbiology testing and research. Kasie has a Masters degree from University of Hawaii in Marine Zoology, with a focus on fish neuroscience and a Masters degree from Harvard University Extension School in Sustainability, with a focus on water resource management.



Kendra Olmos

Kendra is the Director of Water for InPipe Energy and has over 15 years experience in the water and wastewater sector in engineering consulting and academic research. Most recently she was the Executive Director of the UC Davis Center for Water-Energy Efficiency. Her focus is on the water-energy-climate nexus and water system efficiency. She holds a masters in Civil & Environmental Engineering and a bachelor's in Environmental Engineering.



Krista Guerrero

Krista Guerrero has over 20 years of experience in the drinking water industry. She received a Bachelor's degree from Cornell University and a Master's from the University of Florida. She has experience in source water protection, stormwater management, water efficiency, and water resource management. She specializes in outdoor conservation and water policy and currently manages several outdoor efficiency programs for the Metropolitan Water District while also assisting in the development of state and federal water regulations and legislation.



Kristin Bowman

As an East Bay Municipal Utility District Water Conservation Program Manager, Kristin facilitates partnerships with the landscape industry, oversees commercial landscape rebates projects, supports the development of demonstration gardens, creates public programs, and manages the graywater rebate program. Prior to joining EBMUD, Kristin served as the San Francisco Recreation and Parks Department's Director of Volunteer Services, and Park Services Manager. Kristin holds a MA in Geography: Resource Management and Environmental Planning from San Francisco State University.



Lindsay Kinsler

Lindsay is a Certified Landscape Irrigation Auditor, ReScape Qualified Professional, and holds a QAL from the CA DPR. Her current role as a Water Conservation Representative at East Bay Municipal Utility District entails working with commercial clients to optimize irrigation practices by conducting irrigation audits, assessing landscape and irrigation systems, and implementing conservation strategies. With a background spanning two decades in the landscape industry, Lindsay's expertise encompasses residential and commercial landscape construction, wholesale plant nursery management, and commercial landscape maintenance.

Return to Full Schedule



Lourdes Camarena

Lourdes Camarena works at Office of Community Partnerships and Strategic Communications (OCPSC), in partnership with the Department of Water Resources, to comanage the Save Our Water Campaign. Save Our Water is California's statewide water conservation program with the goal to make water conservation a California way of life. Save our Water teaches Californians how to use water more efficiently inside and outside their homes and how to transform their yards into water-wise landscapes.



Maureen Erbeznik

Maureen has thirty-one years of experience designing, implementing and evaluating water efficiency programs. Recognized for outstanding strategy design and problem assessment capabilities. Proven consensus builder with leadership style based on goal attainment and personal credibility. Maureen has strong organizational skills and coordinates all the aspects of water conservation plans and projects ensuring each project meets its goals on time and within budget.



Miho Ligare

Miho works to stop plastic pollution at the source through effective advocacy and outreach amongst Surfrider Foundation's grassroots network, within coalitions, and the public. She brings over twenty years of policy, research, and management experience, working at non-profits, government agencies, and academic institutions. She has a Masters in Environmental Science and Management from the University of California, Santa Barbara. Miho is based near Sacramento, and in her spare time enjoys spending time with her family, surfing, hiking, trying new recipes, and going down the river.



Nicholas Simard

Nicholas Simard has been a water conservation specialist with Valley Water (Santa Clara Valley Water District) for over 2 years. They have worked with local water retailers, communities, and non-profits to implement various water conservation programs such as Valley Water's Landscape Rebate Program, Graywater Laundry to Landscape Program, Water Wise Outdoor Surveys, and the Landscape Maintenance Consultation Program. Through engaging talks and practical advice, they empower residents to adopt water-saving habits and contribute to a more water-resilient world.





Paul Lander

Paul W. Lander, PhD, M.Larch., LEED A.P. has worked in the fields of water, energy, and land conservation for over 40 years. For 16 years, he led the City of Boulder's Water Conservation Office, directing the city's award winning program for a community of over 100,000 people. He is an Adjunct Professor of Geography, and Faculty in the professional Masters of the Environment Program, both at the University of Colorado. He teaches courses in Water of the Western U.S, Conservation Practice, Landscape Sustainability, One Water, and Green Infrastructure. Paul earned his B.A. in Environmental Conservation and Ph.D. in Geography from CU Boulder and an M.L.A. from the University of Washington.

Peter Gleick

Dr. Peter Gleick is a leading scientist, innovator, and communicator on water and climate issues. He co-founded the Pacific Institute in Oakland in 1987, one of the most innovative, independent research centers, creating and advancing solutions to the world's most pressing water challenges. He is currently President-emeritus and Senior Fellow at the Institute. Dr. Gleick is a MacArthur Fellow, an elected member of the U.S. National Academy of Sciences and the American Academy of Arts and Sciences. In 2018 he received the Carl Sagan Prize for Science Popularization. Gleick received his B.S. from Yale University and an M.S. and Ph.D. from University of California, Berkeley.

Return to Full Schedule



Robert Dusenbury

Robert is a registered civil engineer with 25 years of experience in sustainable water resources planning and design. His areas of expertise include: green stormwater infrastructure (GSI) and low impact development (LID) stormwater management design; NPDES permit compliance; municipal capital planning and implementation; rainwater and graywater reuse systems; computer modeling for surface water hydrology, hydraulics, and water quality; and watershed management planning. He has been planning and designing GSI projects in the Bay Area since 2006.



Sonali Abraham

Dr. Sonali Abraham is a Senior Researcher at the Pacific Institute. She conducts qualitative and quantitative research into urban water use trends, development of watershed-scale metrics, the role of multi-benefit projects in water and climate resiliency, and associated policy solutions. Sonali received a master's degree in Environmental Engineering from Johns Hopkins University, and a doctorate in Environmental Science and Engineering from the University of California, Los Angeles



Terrence McCarthy

Terrence is a professional engineer for the Los Angeles Department of Water and Power and his responsibilities include management and development of water conservation programs, monitoring and evaluating regulatory and legislative issues, pursuing external funding and support for programs, participation in statewide and nationwide organizations to leverage opportunities, and coordinating with many regional partners for water sustainability in Los Angeles.



Wes Sullens

Wes Sullens, LEED Fellow, is the Director for Building Codes and leads Materials & Resources activities at the U.S. Green Building Council. He has worked in the public, private and nonprofit sectors for more than 20 years on broad topics including waste management, recycling, supply chain sustainability, and chemicals transparency. Mr. Sullens specializes in green building rating system development, circular materials economies, and progressive green building codes advocacy. Prior to USGBC, Mr. Sullens worked for 10 years in California local government where he managed sustainability programs and helped develop California's statewide Green Building Code (CALGreen).