

**Humboldt Bay Municipal Water  
District 828 7<sup>th</sup> Street, Eureka**  
**Agenda for Regular Meeting of the Board of Directors**  
 November 14, 2024  
 Meeting Start Time: 9:00 AM



**District Mission**

*Reliably deliver high-quality drinking water to the communities and customers we serve in the greater Humboldt Bay Area at a reasonable cost; reliably deliver untreated water to our wholesale industrial customer(s) at a reasonable cost; and protect the environment of the Mad River watershed to preserve water rights, water supply and water quality interests of the District.*

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**Members of the public may join the meeting online at:**

<https://us02web.zoom.us/j/86710296323?pwd=MjZldGxRa08wZ0FWOHJrUINhZnFLQT09>

**Or participate by phone: 1-669-900-9128 Enter meeting ID: 867 1029 6323 Enter password: 484138**

If you are participating via phone and would like to comment, please press \*9 to raise your hand.

**How to Submit Public Comment:** Members of the public may provide public comments via email until 5 p.m. the day before the Board Meeting by sending comments to office@hbmwd.com. Email comments must identify the agenda item in the email's subject line. Written comments may also be mailed to 828 7th Street, Eureka, CA 95501. Written comments should identify the agenda item number. Comments may also be made in person at the meeting.

**Announcement recording of meeting:** This meeting may be recorded to assist in the preparation of minutes. Recordings will only be kept 30 days following the meeting, as mandated by the California Brown Act.

**Time Set Items:**

<b>8.2 Continuing Business</b>	<b>McNamara &amp; Peepe</b>	<b>9:15 AM</b>
<b>9.b New Business</b>	<b>FERC Part 12D - Comprehensive Assessment</b>	<b>9:30 AM</b>
<b>10.2.c Financial</b>	<b>FY23 Audit</b>	<b>10:00 AM</b>
<b>10.1 Engineering</b>	<b>Engineering</b>	<b>11:00 AM</b>
<b>11.3.a ACWA-JPIA</b>	<b>State of the Pool presentation from JPIA's CEO Adrienne Beatty-discuss</b>	<b>11:30 AM</b>
<b>8.b Continuing Business</b>	<b>CLOSED SESSION- GM recruitment</b>	<b>1:30 PM</b>
<b>The Board will take a scheduled lunch break from 12:00 pm to 1:30 pm.</b>		

**1. ROLL CALL**

**2. FLAG SALUTE**

**3. ACCEPT AGENDA**

**4. PUBLIC COMMENT**

Members of the public are invited to address the Board on items not listed on the agenda that are within the scope and jurisdiction of the District. At the discretion of the President, comments may be limited to three minutes per person. The public will be allowed to address items on the agenda when the Board takes up that item. Under the Brown Act, the Board may not take action on any item that does not appear on the agenda.

**5. MINUTES**

- a. September 27, 2024, Special Joint Board Meeting with RLCSO Minutes\*-discuss and possibly approve
- b. October 10, 2024, Regular Board Meeting Minutes\*-discuss and possibly approve
- c. October 18, 2024, Special Board Meeting Minutes\*-discuss and possibly approve

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**6. CONSENT AGENDA** \*-These matters are routine in nature and are usually approved by a combined single vote unless an item is pulled for discussion

Media articles of local/water interest (Articles a-h)\*- discuss and possibly approve

**7. CORRESPONDENCE**

- a. Arcata Land Company demand letter\*-discuss

**8. CONTINUING BUSINESS**

- a. **CLOSED SESSION**- GM recruitment- pursuant to Government Code - GOV § 54957 (Brown Act)  
**Time Set (1:30 PM)**
- b. 457 Plan Document Amendment\*-discuss and possibly approve

**8.1 Water Resource Planning**\*- discuss

**8.2 McNamara & Peepe (Time Set 9:15 AM)**

- a. Status update
  - i. October Monthly Summary and Quarterly Meeting Report\*-discuss
- b. Site maps & historical sampling results (stormwater and well water)\*-reference

**9. NEW BUSINESS**

- a. RLCSD Policy 6000.546 & 6000.544 revision\*-discuss and possibly approve
- b. FERC Part 12D-Comprehensive Assessment\*-discuss and possibly approve (**Time set 9:30 AM**)
- c. CSDA Bylaw amendment and voting authority\*-discuss and possibly approve
- d. Trinity County Zoning Change to Ruth Lake Buffer Strip\*-discuss

**10. REPORTS (from STAFF)**

**10.1 Engineering** – (**Time set 11:00 AM**)

- a. Samoa Peninsula Waterline Right-of-Way Maintenance Project EIR-status report
- b. Reservoirs Seismic Retrofit Project-status report
  - i. Samoa Tank Change Order1\*-discuss and possibly approve
  - ii. Korblex Tank Change Order 1\*-discuss and possibly approve
- c. Essex Onsite Sodium Hypochlorite Generation Project-status report
  - i. Bid Award Recommendation\*-discuss and possibly award
- d. Collector Mainline Redundancy-status report
- e. TRF Generator-status report
- f. Matthews Dam Advance Assistance Seismic Stability Project\*- status report
- g. Collectors 1-3 Rehabilitation Summary\*-discuss
- h. Status report re: Other engineering work in progress

**10.2 Financial**

- a. October 2024 Financial Statement & Vendor Detail Report\*-discuss and possibly approve
- b. Fieldbrook-Glendale contract revenue and Expense Summary\*-discuss
- c. FY23 Audit\*-discuss and possibly approve (**Time set 10:00 AM**)
- d. Capitalization policy of Leases GASB 87 and GASB 96 – Subscription Based Information Technology Agreements\*-discuss and possibly approve



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10.3 **Operations**

- a. October Operations Report\*-discuss

10.4 **Management**

- a. HBMWD Easement Survey\*-discuss
- b. Dam monitoring\*-discuss

**11. DIRECTOR REPORTS & DISCUSSION**

- 11.1 a. General – comments or reports from Directors

11.2 **ACWA**

Director Report, if any

- a. Region 1 Event-report out
- b. Notice of ACWA Membership Meeting-December 4, 2024\*-discuss

11.3 **ACWA – JPIA**

Director Report, if any

- a. State of the Pool presentation from JPIA’s CEO Adrienne Beatty\*-discuss **(Time set 11:30 AM)**

11.4 **Organizations on which HBMWD Serves**

- a. RCEA\*– report out
- b. RREDC\*– report out

**ADJOURNMENT**

ADA compliance statement: In compliance with the Americans with Disability Act, if you need special assistance to participate in this meeting, please contact the District office at (707) 443-5018. Notification 48 hours prior to the meeting will enable the District to make reasonable arrangements to ensure accessibility to this meeting. (Posted and mailed November 8, 2024.)



**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

**Board of Directors Meeting**

**November 14, 2024**



**Maintenance Mechanic Justin  
At Ruth Lake**

# MINUTES

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**  
828 7<sup>th</sup> Street, Eureka**Minutes for Special Joint Meeting of HBMWD Board of  
Directors with the Ruth Lake Community Services District  
Board of Directors  
September 27, 2024**

The HBMWD and RLCSO Board of Directors held a Joint Board Meeting held at Journey's End located at 9001 Mad River Road, Mad River to discuss issues and events of mutual interest regarding Ruth Lake and the buffer strip. HBMWD Vice President Lindberg, Directors Rupp and Wheeler were present. Directors Fuller and Woo were absent. General Manager John Friedenbach, Superintendent Dale Davidsen, Business Manager Chris Harris, Regulatory Analyst Sherrie Sobol, Hydro-plant Operators Larry Raschein, Dave Perkins, Janet Bennett, and Board Secretary Contessa Dickson were present. RLCSO's General Manager Caitlin Canale, Chairman Jordan Emery, Vice Chair Ben Boak, Directors Debra Sellman, Ed Johnson, and Secretary Cindy Lofthouse were present. Guests from Southern Trinity Area Rescue (STAR), CHP, Sheriff's Department, and Ruth Lake's Leaseholders Association were also present. Vice President Lindberg called the meeting to order at 1:00 p.m.

**1. Public Comment**

No public comment was received.

**2. Introductions**

All attendees introduced themselves and their respective agencies.

**3. Updates from Guests****a) Trinity County – 5<sup>th</sup> District Supervisor and Staff**

No attendees, therefore, no updates were reported.

**b) Trinity River CHP Office**

Officer Ted Luna reported there has been substantial employee changes, with more staffing changes to come in the near future. He stated the department is close to fully staffed.

**c) US Forest Service**

No attendees, therefore, no updates were reported.

**d) Southern Trinity Volunteer Fire Department/and or STAR**

Ms. Higgins reported for STAR. Sharing the department is in the process of separating from the WECare clinic and will be a 501c3 nonprofit on their own in the near future. Ms. Higgins also provided an update for the STVFD, noting that while there are not many immediate changes, the department continues to make steady progress on the goals they established five years ago. Currently the department is focusing on more local school education and community involvement. She highlighted during the July Pickett fire event Guy Fieri was visiting Ruth Lake. After discussions with the staff, he graciously donated a piece of needed equipment the department received within a month.

**e) Trinity County Sheriff/OES**

Trinity County Sheriff Tim Saxon reported that after five years of applications to the state, they have finally secured a grant for a jet boat, and hopes to have it operational by next summer. A few questions were asked, a short discussion followed.

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
828 7<sup>th</sup> Street, Eureka



Minutes for Special Joint Meeting of HBMWD Board of  
Directors with the Ruth Lake Community Services District  
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f. Ruth Lake Leaseholders Association  
No updates were reported.

g. Any other Guests  
No other guests reported.

4. HBMWD Topics

4.1 Law Enforcement on Ruth Lake

Mr. Friedenbach had no update on this topic. Stating Sheriff Saxon covered this topic.

4.2 Healthy Forest grant closes March 2025

The District has made significant strides in reforestation efforts following the devastation caused by the August Complex fire. Three rounds of seedling planting have occurred, with the final round scheduled within the next two months. The grant concludes in March 2025. Looking forward, staff intend to reapply for reforestation grants in 4-5 years. Mr. Friedenbach noted it will take decades for full forest recovery. A few questions were asked and discussed.

4.3 Cal Fire Fuel Reduction, Defensible Space completed

Ms. Harris reported on the \$500,000 Cal Fire grant funds allocated to the District for fuel reduction initiatives. She emphasized that the District was very successful in this project, spending all but 50 cents of grant funds. Ms. Harris also acknowledged the ongoing challenges that remain in the area of fuel management, adding the District is actively working on finding funding to ensure continued progress.

4.4 Quagga Prevention Plan

a. Old Ruth Gate -restoration

RLCSD plays a vital role in the implementation of the District/RLCSD Joint Quagga prevention plan. As the Lake owner HBMWD has taken the lead and applied for Dept. of Boating and Water Ways grant funding for quagga prevention. These grant funds are instrumental in financing essential resources, including key cards, boat stickers, gate arms, mechanical mechanisms, and ongoing maintenance. The power supply to the Old Ruth gate arm was compromised during the August Complex fire event. The District was notified last week the Quagga grant they applied for to restore power at Old Ruth was approved. These grant funds will facilitate the restoration of electrical power to the gate which will aid in quagga prevention plan implementation at controlled access points to the lake.

b. Ruth Rec gate relocation completed

Recently, significant improvements have been made to enhance security and accessibility at the boat launch at Ruth Rec. The installation of a new gate, along with bollards and boulders, has been successfully completed through DBW grant funding.

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**  
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**Minutes for Special Joint Meeting of HBMWD Board of  
Directors with the Ruth Lake Community Services District  
Board of Directors  
September 27, 2024**



c. Illegal lake access points prevention efforts

Mr. Friedenbach stated the management of Ruth Lake is a collaborative effort, with the HBMWD depending on RLCSD to monitor and report any incidents of unauthorized access, and assist in minimizing the risk of Quagga mussel infestation in Ruth Lake. He expressed gratitude for their continued efforts. A clarifying question was asked and thoroughly discussed.

**5. RLCSD Topics**

5.1 Lease Lots: areas of concerns

Ms. Canale reported that several lease lot developments are currently underway; however, she stated that some projects have reached a standstill due to insufficient funding.

5.2 Other Topics

No other topics were reported on. A question regarding dead tree removal on District owned land was asked. Director Rupp responded by stating that the District is proactively pursuing grant opportunities to facilitate the funding of dead tree removal. A few more questions were asked and discussed.

**6. HBMWD Annex to Trinity County LHMP-public outreach**

Mr. Friedenbach outlined a grant opportunity from FEMA through the Hazard Mitigation Grant Program. To qualify for this program, entities must participate in the Trinity County Local Hazard Mitigation Plan (LHMP). Given that Trinity County has an established LHMP, it is essential that HBMWD be integrated into this plan via an Annex. HBMWD was involved in the previous LHMP with Trinity County. These plans are updated every 5 years. Currently, Trinity County is in the process of updating their plan, and HBMWD is preparing to submit their Annex in the coming weeks. Additionally, participation in local public outreach is a key requirement for the program, as part of HBMWD's public outreach, a draft of the HBMWD Annex to Trinity County's LHMP was circulated to the public present at the meeting. Some clarifying questions were asked and discussed.

**ADJOURNMENT**

The meeting adjourned at 2:05 pm

Attest:

\_\_\_\_\_  
David Lindberg, Vice President

\_\_\_\_\_  
Bruce Rupp, Secretary/Treasurer

**Humboldt Bay Municipal Water  
District 828 7<sup>th</sup> Street, Eureka**



**Minutes for Regular Meeting of the Board of Directors**

October 10, 2024

9:00 am

**1. ROLL CALL**

President Fuller called the meeting to order at 9:00 am. Director Rupp conducted the roll call. Directors Fuller, Lindberg, Wheeler, and Woo were present. Director Rupp attended via Zoom. General Manager John Friedenbach, Superintendent Dale Davidson, Business Manager Chris Harris, and Board Secretary Contessa Dickson were present. District Engineer Nate Stevens was present for a portion of the meeting.

**2. FLAG SALUTE**

President Fuller led the flag salute.

**3. ACCEPT AGENDA**

**ACTION: Motion to accept Agenda**

**Maker:** Director Lindberg **Second:** Director Woo **Vote:** 5-0 to approve by roll call vote.

**4. PUBLIC COMMENT**

No public comment was received.

**5. MINUTES**

a. September 4, 2024, Special Board Meeting Minutes

**ACTION: Motion to approve September 4, 2024, Special Board meeting minutes**

**Maker:** Director Lindberg **Second:** Director Wheeler **Vote:** 5-0 to approve by roll call vote.

b. September 12, 2024, Regular Board Meeting Minutes

**ACTION: Motion to approve September 12, 2024, Regular Board meeting minutes**

**Maker:** Director Lindberg **Second:** Director Wheeler **Vote:** 5-0 to approve with edits by roll call vote.

Director Woo noted two edits, add Rancheria after Blue Lake to item 8.2 and add Director Woo recused herself to item 8.3.

c. September 19, 2024, Special Board Meeting Minutes

**ACTION: Motion to approve September 19, 2024, Special Board meeting minutes**

**Maker:** Director Woo **Second:** Director Lindberg **Vote:** 5-0 to approve by roll call vote.

**6. CONSENT AGENDA**

**ACTION: Motion to approve Consent Agenda**

**Maker:** Director Woo **Second:** Director Lindberg **Vote:** 5-0 to approve by roll call vote.

**7. CORRESPONDENCE**

a. Notice of Executed agreement for 2024 Quagga & Zebra Mussel Infestation Prevention Grant  
**Non Action item**

Mr. Friedenbach shared the District was notified that the 2024 Quagga & Zebra Mussel Infestation Prevention grant application was approved. These grant funds will be used to restore electricity to the lake access gate mechanism located at Old Ruth.

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**8. CONTINUING BUSINESS**

a. College & Career Expo

**Non Action item**

Mr. Davidsen reported on his attendance at the College & Career Expo held at College of the Redwoods on September 24th. He stated the event was well attended.

b. GM recruitment-pursuant to Government Code- GOV § 54957

Closed session was conducted from 1:30 pm to 1:58 pm. The Board returned to open session. Director Fuller announced there was no reportable action.

c. Conference with Legal Counsel - Existing Litigation: pursuant to paragraph (1) of subdivision (d) of § 54956.9 (Van Duzen) Case #CV2201489

Closed session was conducted from 11:31 am to 12:11 pm with counsel William Blakemore. The Board returned to open session. Director Fuller announced there was no reportable action.

d. National Public Lands Day

**Non Action item**

Mr. Friedenbach attended the National Public Lands Day clean-up on September 28<sup>th</sup> at Ruth Lake. He noted the trash amount seems to be decreasing from past years clean up events. 2300 pounds of trash was collected during this year's clean-up. The District's \$500 support of this event was used to pay for the trash dump fee.

e. Chapter 6 HBMWD Trinity Annex

**Non Action item**

Mr. Friedenbach outlined the history of participation of the HBMWD Annex in the Trinity County Hazard Mitigation Grant Program (LHMP). The District has Annexes in both the Humboldt County and Trinity County LHMP's. Trinity County is in the process of updating their LHMP. District staff are actively working to ensure that the Annex meets the necessary standards for inclusion in Trinity County's revised LHMP.

**8.1 Water Resource Planning**

**Non Action item**

Mr. Friedenbach shared there was no reportable activity this month.

**8.2 McNamara & Peepe**

Director Woo recused herself due to a conflict of interest.

a. Status update

i. September monthly summary report

**Non Action item**

Mr. Friedenbach shared there was no new data from DTSC. There is a quarterly pre-meeting scheduled for October 22<sup>nd</sup> with the quarterly meeting scheduled for October 25<sup>th</sup>



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b. Site maps & historical sampling results

**Non Action Item**

These are included for informational purposes.

**9. NEW BUSINESS**

a. Resolution 2024-07 Annual California Water Professionals Appreciation Week

**ACTION: Approve Resolution 2024-07**

**Maker:** Director Rupp **Second:** Director Lindberg **Vote:** 5-0 to approve by roll call vote.

Traditionally the District prepares a resolution during the annual Water week to show appreciation and praise to all District employees. Resolution 2024-07 acknowledges and supports the 7<sup>th</sup> Annual California Water Professionals Appreciation Week. Director Rupp read Resolution 2024-07 and thanked all District staff for their continuing dedication and hard work at the District. Director Fuller expressed her immense gratitude to all District employees.

b. Resolution 2024-08 Dam of Water Resources & Climate Resilience Local Assistance Program

**ACTION: Approve Resolution 2024-08**

**Maker:** Director Woo **Second:** Director Lindberg **Vote:** 5-0 to approve by roll call vote.

Mr. Friedenbach reported on a new grant opportunity, Division of Water Resources Climate & Resilience Local Assistance Program. He emphasized that for the District to qualify, it must first draft and adopt a formal resolution. The District hopes to receive grant funds towards essential dredging operations at Ruth Lake. The Board asked some clarifying questions.

c. California Code, GOV § 54956.9 Confer with attorney Meredith Nikkel regarding exposure to litigation by City of Blue Lake (CLOSED SESSION)

Closed session was conducted from 10:00 am to 10:21 am. The Board returned to open session. Director Fuller announced there was no reportable action.

d. Heat Illness Prevention Plan (HIPP)

**ACTION: Approve Heat Illness Prevention Plan**

**Maker:** Director Lindberg **Second:** Director Woo **Vote:** 5-0 to approve by roll call vote.

On June 20, 2024, OSHA approved California Code of Regulations, "Heat Illness Prevention Plan in Indoor Places of Employment". Staff recommends the Board directs and authorizes the General Manager to establish, implement and maintain the updated HIPP for the District and adopt the District's HIPP effective immediately.

**10. REPORTS (from STAFF)**

**10.1 Engineering –**

a. Samoa Peninsula Waterline Right-of-Way Maintenance Project EIR

**Non Action item**

The next step in the EIR project is to characterize the mitigation plan and identify potential partners for the mitigation efforts. Staff from GHD are still actively working on this step.

b. Reservoirs Seismic Retrofit Project

i. Revised Match Commitment Letter

**ACTION: Approve revised match commitment letter**

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**Maker:** Director Woo **Second:** Director Wheeler **Vote:** 5-0 to approve by roll call vote.

Mr. Stevens reported staff prepared this match commitment letter as a formality to Cal OES. The match commitment letter that was approved and sent to CalOES last month was for 25% of the total grant funding budget requested. Cal OES stated that because the construction costs exceed the available grant budget, they are requesting that the match commitment letter include the difference that HBMWD will be paying in excess of the grant funded portion of the project. Mr. Stevens gave a brief outline of this job and specifics of the project.

Mr. Stevens shared there is another local project for a local agency the District was anticipating being withdrawn from. That project was initially funded under this same disaster declaration. The project has been withdrawn resulting in additional funds available in addition to funds requested to date. As a result, the next steps involve preparing a budget increase request for those funds.

c. Essex Onsite Sodium Hypochlorite Generation Project

**Non Action item**

The bid package for this project has been finalized and was distributed for bidding on October 1st. A Prebid meeting is set for October 15<sup>th</sup>. If the timeline proceeds smoothly, staff anticipates presenting a bid award recommendation for the Board's consideration at the regular meeting scheduled for November 14<sup>th</sup>.

d. Collector Mainline Redundancy

**Non Action item**

This project is still in FEMA's environmental review for the revised scope of work submitted in October 2023.

e. Matthews Dam Advance Assistance Seismic Stability Project

**Non Action item**

Mr. Friedenbach shared he received a notification from Congressman Huffman's office indicating that the funding awards will soon be released. Next steps in the process will be to write and publish a request for qualification for engineering services under the grant scope of work.

f. TRF Generator

**Non Action item**

No update was reported.

g. Status report re: Other engineering work in progress

**Non Action item**

No update was reported.

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**10.2 Financial**

a. September 2024 Financial Statement & Vendor Detail Report

**ACTION: Motion to approve Financial Statement & Vendor Detail Report in the amount of \$286,513.16.**

**Maker:** Director Rupp **Second:** Director Lindberg **Vote:** 5-0 to approve by roll call vote.

Ms. Harris presented the August financial statement & vendor detail report. The General Account balance is \$600,000. The various investments balance is \$14 million. The advanced charges are \$4.5 million with a general reserve of \$5.7 million.

b. Fieldbrook-Glendale contract revenue and Expense Summary

**Non Action item**

This section is presented for transparency.

**10.3 Operations**

a. September Operations Report

**Non Action item**

Mr. Davidsen presented the September operations report with significant updates. He gave a brief history of lake levels for Director Wheeler, the newest Board member's benefit.

**11 DIRECTOR REPORTS & DISCUSSION**

11.1 a. General – comments or reports from Directors

**Non Action item**

Director Woo provided a brief overview on her attendance and role as an evaluator during the Emergency Action Plan Tabletop and Functional Exercise the District put on September 23rd. Ms. Harris elaborated on the scenario and structure of the event for the benefit of Board members who were unable to attend. Mr. Friedenbach shared he received an email from the FERC Regional Engineer explaining that their staff was unable to attend due to illness. He further stated that he was informed by our facilitator that the exercise was a success. The Board asked several questions, and a lengthy discussion followed.

b. HBMWD-RLCSD Joint Board Meeting

**Non Action item**

Director Lindberg discussed the tour of the hydro plant, lake boat tour and joint Board meeting he, Director Rupp, Director Wheeler and other District staff attended. Mr. Friedenbach proposed an idea for enhancing safety on Ruth Lake: a Memorandum of Understanding with the Trinity County Sheriff's Department to secure funding for law enforcement during peak times. The Sheriff's Department recently acquired a grant for a new jet boat. Suggesting their department can possibly provide the existing boat that goes unused docked in the Ruth Lake Marina. To support this initiative, Friedenbach suggested increasing the District's contribution for lake patrol from \$5,000 to \$10,000, potentially shared with the RLCSD's match contribution. Then rotating law enforcement duties among the California Department of Fish and Wildlife, the Trinity County Sheriff's Department, and the Forest Service. The Board agreed and directed staff to move forward in pursuing this arrangement.

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9:00 am

**11.2 ACWA**

a. Region 1 Event Attendance

**ACTION: Approve funding and attendance of directors and appropriate staff of the Region 1 Event**

**Maker:** Director Woo **Second:** Director Lindberg **Vote:** 5-0 to approve by roll call vote.

Director Rupp will be attending this event representing the District and the Region 1 Board.

**11.3 ACWA – JPIA**

Director Rupp provided an overview of the meetings he attended last month, including finance, liability, and Executive Committee meetings.

**11.4 Organizations on which HBMWD Serves**

a. RCEA:

**Non Action item**

Director Fuller attended the September RCEA meeting via Zoom. At the meeting the RCEA Board discussed nuclear power allocation from Diablo Canyon.

b. RREDC:

**Non Action item**

No update reported due to the September 23<sup>rd</sup> RREDC meeting being canceled.

**ADJOURNMENT**

The meeting adjourned at 2:05 pm.

Attest:

\_\_\_\_\_  
Michelle Fuller, President

\_\_\_\_\_  
Bruce Rupp, Secretary/Treasurer

Humboldt Bay Municipal Water  
828 7<sup>th</sup> street  
Eureka, CA



Minutes for Special Meeting of the Board of Directors  
October 18, 2024

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**1. ROLL CALL**

President Fuller called the meeting to order at 3:00 pm. Director Rupp conducted the roll call. Directors Fuller, Lindberg, Rupp, Wheeler and Woo were present. General Manager John Friedenbach, Superintendent Dale Davidsen, Business Manager Chris Harris and Board Secretary Contessa Dickson were present.

**2. FLAG SALUTE**

Director Rupp led the flag salute.

**3. ACCEPT AGENDA**

**ACTION: Motion to accept agenda**

**Maker: Director Lindberg Second: Director Woo Vote: 5-0 to accept**

**4. PUBLIC COMMENT**

No public comment was received.

**5. Continuing Business**

a. Consider appointment of public employee-General Manager

**ACTION: Approve the District paying for reasonable travel expenses for out of town applicant.**

**Maker: Director Woo Second: Director Lindberg Vote: 5-0 to accept**

Closed session was conducted from 3:01 pm to 3:47 pm. The Board returned to open session. President Fuller announced there was one reportable action regarding travel expenses for an in person candidate interview.

**ADJOURNMENT**

The meeting adjourned at 3:48 pm.

Attest:

\_\_\_\_\_  
Michelle Fuller, President

\_\_\_\_\_  
David Lindberg, Assistant Secretary/Treasurer

**CONSENT**

# THE CONVERSATION

Academic rigor, journalistic flair

Serious water contaminants such as nitrate may not have any detectable taste or odor. [Willie B. Thomas/Digital Vision via Getty Images](#)

**Millions of people across the US use well water, but very few test it often enough to make sure it's safe**

Published: October 11, 2024 8:25am EDT

Author



[Gabriel Lade](#)

Associate Professor of Economics, Macalester College

## Disclosure statement

Gabriel Lade received funding from the Leopold Center for Sustainable Agriculture, the Center for Agricultural and Rural Development, and the U.S. Department of Agriculture to conduct this research. He is affiliated with the Center for Agricultural and Rural Development at Iowa State University.

About 23 million U.S. households [depend on private wells](#) as their primary drinking water source. These homeowners are entirely responsible for ensuring that the water from their wells is safe for human consumption.

Multiple studies show that, [at best, half of private well owners](#) are [testing with any frequency](#), and very few households test once or more yearly, as [public health officials recommend](#). Even in Iowa, which has some of the strongest state-level policies for [protecting private well users](#), state funds for free private water quality testing [regularly go unspent](#).

Is the water these households are drinking safe? There's not much systematic evidence, but the risks may be large.

The U.S. Environmental Protection Agency still relies on a 15-year-old study showing that among 2,000 households, 1 in 5 households' well water contained at least one contaminant at levels above the thresholds that public water systems must meet. While other researchers have studied this issue, most rely on [limited data](#) or [data collected over decades](#) to draw conclusions.

I'm an [economist studying energy and agriculture issues](#). In a recent study, I worked with colleagues at [Iowa State University](#), the [University of Massachusetts Amherst](#) and [Cornell University](#) to understand drinking water-related behaviors and perceptions of households that use private wells. We focused on rural Iowa, where runoff from agricultural production [regularly contaminates](#) public and private drinking water sources.



Basic components of a private water well. [EPA](#)



We found that few households followed public health guidance on testing their well water, but a simple intervention – sending them basic information about drinking water hazards and easy-to-use testing materials – increased testing rates. The burden of dealing with contamination, however, falls largely on individual households.

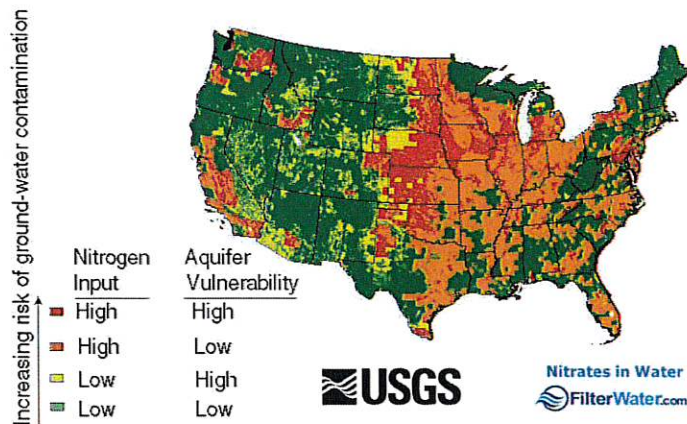
### Nitrate risks

We focused on [nitrate, one of the main well water pollutants](#) in rural areas. Major sources include [chemical fertilizers, animal waste and human sewage](#).

Drinking water that contains nitrate can harm human health. Using contaminated water to prepare infant formula can cause “[blue baby syndrome](#),” a condition in which infants’ hands and lips turn bluish because nitrate interferes with oxygen transport in the babies’ blood. Severe cases can cause lethargy, seizures and even death. The EPA limits nitrate levels in public water systems to [10 milligrams per liter](#) to prevent this effect.

Studies have also found that for people of all ages, drinking water with low nitrate concentrations over long periods of time is [strongly associated with chronic health diseases](#), including colorectal cancer and thyroid disease, as well as neural tube defects in developing fetuses.

Nitrate pollution is [pervasive across the continental U.S.](#) Fortunately, it is relatively easy to determine whether water contains unsafe nitrate concentrations. Test strips, similar to those used in swimming pools, are cheap and [readily available](#).



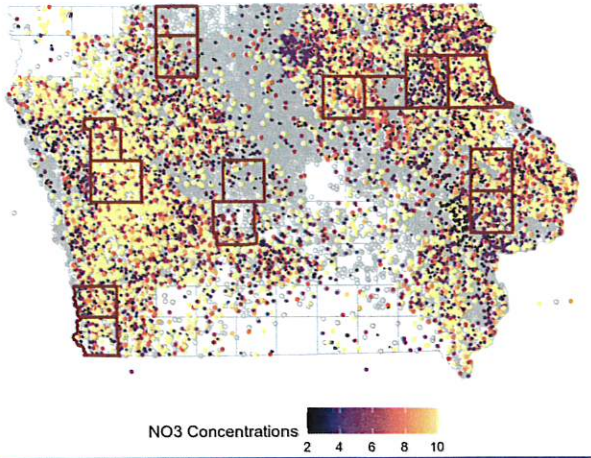
Heavily agricultural areas are vulnerable to nitrate pollution in water, especially where aquifers are shallow. Areas at the highest risk of nitrate contamination in shallow groundwater generally have high nitrogen inputs to the land, well-drained soils and high ratios of croplands to woodlands. [USGS](#)

### The water’s fine ... or not

Mailing lists of households with private wells are hard to come by, so for our study we digitized over 22,000 addresses using maps from 14 Iowa counties. We targeted counties where public water systems had struggled to meet EPA safety standards for nitrate in drinking water, and where private wells that had been tested over the past 20 years showed nitrate concentrations at concerning levels.

We received responses from over half of the households we surveyed. Of those, just over 8,100 (37%) used private wells.





Nitrate measurements in domestic wells in Iowa from 2002 to 2022, from the Iowa Department of Natural Resources public water-testing program. Counties targeted in Lade et al.'s 2024 review are highlighted in red. [Lade et al., 2024, CC BY-ND](#)

Although the Centers for Disease Control and Prevention [recommends testing annually for nitrate](#), just 9% of these households had tested their water quality in the past year.

More concerning, 40% of this group used their wells for drinking water, had not tested it in the past year, and did not filter the water or use other sources such as bottled water. They were drinking straight from the tap without knowing whether their water was safe.

Our survey also showed that, despite living in high-risk areas, 77% of households classified their well water quality as "good" or "great." This may be driven by a "not in my backyard" mentality. Households in our survey were more likely to agree with the statement that nitrate is a problem in the state of Iowa than to perceive nitrates as a problem in their local area.

Climate change is [likely to worsen nitrate contamination in well water](#). In regions including the Great Lakes basin, increases in heavy rainfall are projected to carry rising amounts of nutrients from farmlands into waterways and groundwater.

Nitrate contamination is often thought of as a rural problem, but in California it also has shown up in urban areas.

### Providing information and tools helps

To see whether education and access to testing materials could change views about well water, we sent a mailer containing a nitrate test strip, information about risks associated with nitrate in drinking water, and contact information for a [free water quality testing program run by the state of Iowa](#) to a random 50% of respondents from our first survey. We then resurveyed all households, whether or not they received the mailer.

Over 40% of households that received test strips reported that they had tested their water, compared with 24% of those that did not receive the mailer. The number of respondents who reported using Iowa's free testing program also increased, from 10% to 13%, a small but statistically meaningful impact.

Less encouragingly, households that received the mailer were no more likely to report filtering or avoiding their water than those that did not receive the mailer.

### Households bear the burden

Our results show that lack of information makes people less likely to test their well water for nitrate or [other contaminants](#). At least for nitrate, helping households overcome this barrier is cheap. We asked respondents about their willingness to pay for the program and found that the average household was willing to pay as much as US\$13 for a program that would cost the state roughly \$5 to implement.

However, we could not determine whether our outreach decreased households' exposure to contaminated drinking water. It's also not clear whether people would be as willing to test their well water in states such as [Wisconsin](#) or [Oregon](#), where testing would cost them up to a few hundred dollars.

As of 2024, just [24 states](#) offered well water testing kits for at least one contaminant that were free or cost \$100 or less. And while most states offer information about well water safety, some simply post a brochure online.

The upshot is that rural households are bearing the costs associated with unsafe well water, either through health care burdens or spending for treatment and testing. Policymakers [have been slow to address](#) the main source of this problem: nitrate pollution from agriculture.

In one exception, state agencies in southeastern Minnesota are providing free well water quality testing and offering a few households filtration systems in cases where their wells are [laden with nitrate from local agricultural sources](#). However, this effort began only after environmental advocates petitioned the EPA.

If state and federal agencies tracked more systematically the costs to households of dealing with contaminated water, the scale of the burden would be clearer. Government agencies could use this information in cost-benefit assessments of conservation programs.

On a broader scale, I agree with experts who have called for rethinking agricultural policies that encourage expanding [crops associated with high nutrient pollution, such as corn](#). More [restoration of wetlands and prairies](#), which [filter nutrients from surface water](#), could also help. Finally, while the Environmental Protection Agency can't force well owners to test or treat their water, it could provide better support for households when pollutants turn up in their drinking water.



[Home](#) [Issues](#) Snowpack

How much runoff comes from the West's snowpack?

Snowmelt dominates many Western rivers, but climate change will reduce that contribution as raindrops replace snowflakes.

[Mitch Tobin](#)

October 10, 2024



Aerial view of Paonia Reservoir on Colorado's Western Slope on December 24, 2020. Photo by Mitch Tobin, The Water Desk.

Snow is a cornerstone of the American West's water supply, but just how important is it to the region's streams, rivers and reservoirs?

In the popular press and academic papers, the sizable share of runoff that originates as snowmelt is often cited as a reason why the West's snowpack is so crucial to both cities and farms, not to mention the region's wildlife and very way of life.

But when a team of researchers set out to study the question, they found a wide range of estimates cited in 27 scientific papers. They concluded that "a detailed study of the contribution of snow to the runoff over the western U.S. has not been conducted."

To clarify the connection between the snowpack and streamflow—and project how climate change is altering the relationship—the scientists used computer simulations and hydrological modeling in a [2017 paper](#) in *Geophysical Research Letters* to estimate snow's significance for runoff across the West. Here's what they found:

- 53% of total runoff in the West originated as snowmelt, even though only 37% of the precipitation fell as snow.
- In mountainous parts of the region, snowmelt was responsible for 70% of runoff. Specifically, it was 74% for the Rockies, 73% for the Sierra Nevada and 78% for the Cascades (see graphic below).
- A quarter of the West's land area, primarily in the high country, produced 90% of total runoff on average.

Climate change will reduce the snowpack's contribution to runoff, according to the study, as warmer temperatures make it more likely that precipitation will fall as raindrops, rather than snowflakes, leaving downstream water users vulnerable.

"The snowpack is more efficient at producing runoff and streamflow than liquid precipitation," said co-author [Jennifer Adam](#), a Professor of Civil and Environmental Engineering at Washington State University. "When it's cold, you have less evaporative demand."

#### How much runoff is derived from snowmelt?

Overall, the West's snowpack provides 53% of runoff, but the figure is higher in mountainous areas, where around three-quarters originates as snowmelt.

Graphic showing data related to snowpack and runoff study



## Snowmelt

### How much runoff is derived from snowmelt?

Overall, the West's snowpack provides 53% of runoff, but the figure is higher in mountainous areas, where around three-quarters originates as snowmelt.

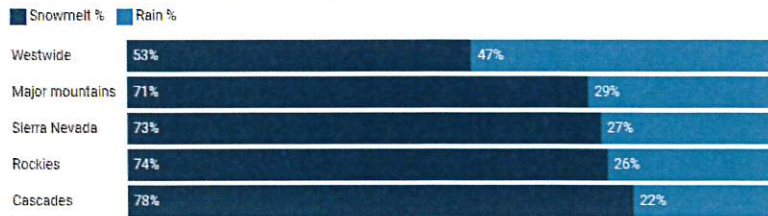


Chart: Mitch Tobin/The Water Desk • Source: Li, D., et al. (2017). How much runoff originates as snow in the western United States, and how will that change in the future? *Geophysical Research Letters*, 44(12), 6163–6172. • [Get the data](#) • [Embed](#) • [Download image](#) • Created with [Datawrapper](#)

### Climate change threatens snowpack

A diminished snowpack and less snowmelt in rivers “would likely exacerbate the dry-season water scarcity in the future,” according to the study. “In addition, the earlier snowmelt will strain storage capacity of the hydrologic infrastructure and further reduce the water availability in the prolonged dry season.”

Future runoff in the West will be affected by many other factors, including land-use changes, water policies and water efficiency trends. But the researchers caution that “due to the profound reliance on snow as water resources, future declines in snow accumulations in the West will pose a first-order threat directly on the regional water supply, especially in the late summer and fall” when water demand peaks.

Looking ahead, the study used two climate change scenarios—known as Representative Concentration Pathway (RCP) 4.5 and 8.5—to project how the snowpack’s contribution to streamflow will respond to warming temperatures and altered precipitation.

As I noted in a [previous post](#), RCP 8.5’s business-as-usual projections for the carbon output of the global economy now appear too pessimistic, so the more moderate emissions scenario in RCP 4.5 may be more plausible.

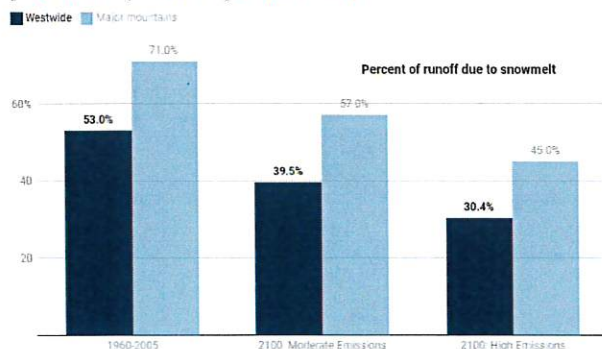
Using RCP 4.5, the study projects that by 2100, the fraction of runoff coming from the snowpack will decline from 53% to 39.5%. For streams and rivers draining the region’s major mountain ranges, the figure will drop from 71% to 57%.

The declines are even greater when using the higher-emissions RCP 8.5 scenario: snow-derived runoff in the West falls to 30.4%, and in mountainous areas, it’s down to 45%.

In other words, with enough warming and time, the West’s snowpack will no longer be responsible for the majority of runoff in the region. The change in character and timing of runoff will pose serious challenges, not only for humans who have built elaborate water infrastructure based on snowmelt but also for other species that have come to depend on snow-dominant systems.

### Snowmelt-derived runoff projected to fall due to warming

Climate change is projected to reduce snowmelt’s role in feeding Western rivers and reservoirs, with greater reductions expected under a higher-emissions scenario.



Notes: Moderate Emissions scenario is RCP 4.5 and High Emissions scenario is RCP 8.5  
 Chart: Mitch Tobin/The Water Desk • Source: Li, D., et al. (2017). How much runoff originates as snow in the western United States, and how will that change in the future? *Geophysical Research Letters*, 44(12), 6163–6172. • [Get the data](#) • [Embed](#) • [Download image](#) • Created with [Datawrapper](#)

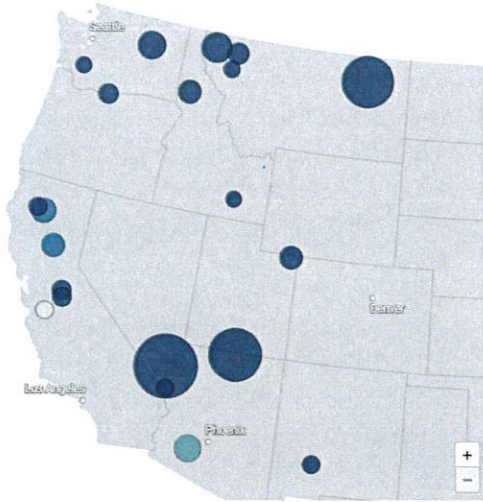
### Snowmelt’s contribution to reservoirs

The 2017 study also examined the snowpack's importance to each of the region's largest 21 reservoirs, which collectively have more capacity than the 2,300+ other reservoirs in the West combined.

Overall, snowmelt accounts for 67% of storage in these reservoirs. For the largest three in the West—Mead, Powell, and Fort Peck—the figure is 70%. In the map below, the circles are sized according to each reservoir's storage capacity and shaded by the percentage derived from snowpack (click on circles for more data).

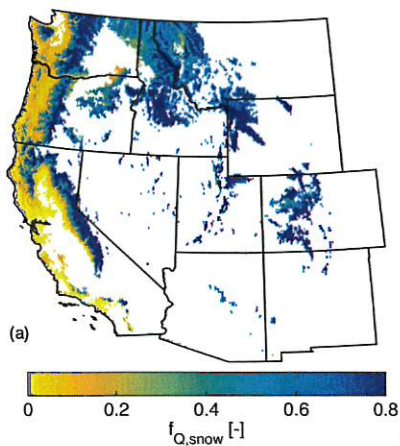
#### Role of snowmelt in filling largest Western reservoirs

The West's 21 biggest reservoirs tend to be very dependent on the snowpack. Each circle is sized according to the reservoir's capacity and shaded according to the percentage of storage derived from snowmelt.



Map: Mitch Tobin/The Water Desk • Source: Li, D., et al. (2017). How much runoff originates as snow in the western United States, and how will that change in the future? *Geophysical Research Letters*, 44(12), 6163–6172. • [Get the data](#) • [Embed](#) • [Download image](#) • Created with [Datawrapper](#)

Reservoirs are collection points for runoff, so to understand why some are more or less dependent on snowmelt, the researchers looked at the watersheds upstream. The map below shows that dependence on snowmelt varies greatly across the vast and topographically diverse region, with the bluest shading representing areas most dependent on snowmelt and the yellow shading showing places least reliant on snow.



Source: [Li, D. et al. \(2017\)](#).

What explains the geographic pattern?

“Winter temperature and then also the fraction of annual precipitation that falls in the winter are the two key pieces,” Adam said.

In some parts of the region, it's cold enough at high elevations for it to snow and most of the yearly precipitation falls in winter. But at lower elevations and in other parts of the West, there's more precipitation outside of winter, and even during the colder months rain may fall instead of snow.



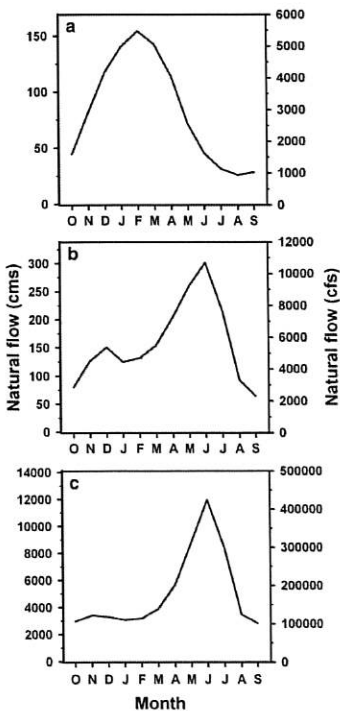
Aerial view of the San Juan Mountains snowpack, Electra Lake and the Animas River, north of Durango, Colorado, on May 26, 2024. Photo by Mitch Tobin, The Water Desk, with aerial support from LightHawk.

Warming reshapes river flows

Climate change will not only alter the snowpack’s contribution to runoff but also profoundly change the timing of those streamflows and the fundamental character of many waterways.

Adam noted that [another study](#), published in 2010 in *Climatic Change*, classified tributaries into three categories—rain-dominant, transient rain-snow, and snowmelt-dominant—based on their precipitation patterns. The graphics below show that each of these regimes lead to very different [hydrographs](#), which are visualizations of streamflow over time that essentially tell the story of a river’s discharge through the seasons.

Graph “a” shows a rain-dominant system, represented by the Chehalis River, east of Aberdeen, Washington and near the Pacific Coast. This hydrograph peaks early in the winter because rainfall quickly runs to the river. Graph “b” shows the transient rain-snow system, in this case represented by the Yakima River in south-central Washington, where the streamflow exhibits two peaks: a smaller one due to winter rains and a much larger one due to the spring snowmelt from higher elevations. Finally, graph “c” shows a snowmelt-dominant system, in this case the Columbia River at The Dalles, Oregon, where the streamflow remains low throughout the winter but then ramps up in spring and peaks in summer due to the high-country snow melting out.



Source: [Elsner M., et al. \(2010\)](#).



These three hydrographs depict very different rivers in terms of the timing and magnitude of their flows. The hydrographs also lead water agencies to pursue varying management strategies to ensure that customers get enough water, while individual species and entire ecosystems have evolved through the ages to cope with the streamflow regimes. In the 21<sup>st</sup> century, however, warming temperatures will reshape these curves by making these systems more dependent on rain than snow.

“In those places that are snowmelt dominant historically, you’re going to see a lot of vulnerability to warming temperatures,” Adam said, adding that junior water rights holders are most at risk. “More of our modeling is looking at the water rights and trying to understand where the water restriction is going to be felt.”

Ecologists have long warned that reduced streamflows pose a dire threat to [cold-water fisheries](#), such as trout. Adam said a shift from snowmelt to rain could compound the problem. “One of the problems with the loss of snowpack is that snowmelt cools down the system,” she said. “It’s not just about water volume, but it’s also about cooling the rivers.”

Looking ahead, climate models are crystal clear in projecting warmer temperatures, but the story for precipitation is clouded by uncertainty, making it especially hard to predict runoff at lower elevations.

“We don’t really know what’s going to happen to the rain dominant systems: Are they going to get wetter? Are they going to get drier? We just don’t know,” Adam said. “At least we know with confidence that the snowmelt-dominant systems are going to become more and more stressed.”



Aerial view of the Blue River, a popular trout fishery near Silverthorne, Colorado, on December 22, 2019. Photo by Mitch Tobin, The Water Desk.

## NATURE COMMUNICATION

- Published: 27 June 2024

### Storing and managing water for the environment is more efficient than mimicking natural flows

#### Abstract

Dams and reservoirs are often needed to provide environmental water and maintain suitable water temperatures for downstream ecosystems. Here, we evaluate if water allocated to the environment, with storage to manage it, might allow environmental water to more reliably meet ecosystem objectives than a proportion of natural flow. We use a priority-based water balance operations model and a reservoir temperature model to evaluate 1) pass-through of a portion of reservoir inflow versus 2) allocating a portion of storage capacity and inflow for downstream flow and stream temperature objectives. We compare trade-offs to other senior and junior priority water demands. In many months, pass-through flows exceed the volumes needed to meet environmental demands. Storage provides the ability to manage release timing to use water efficiently for environmental benefit, with a co-benefit of increasing reservoir storage to protect cold-water at depth in the reservoir.

#### Introduction

Dams and reservoirs degrade freshwater ecosystems by blocking access to high-quality upstream habitat and altering hydrology, geomorphology, and biogeochemistry downstream of dams<sup>1,2</sup>. To counteract these changes, environmental flows are sometimes released from reservoirs to augment flow, maintain water quality, and sustain aquatic species and habitats<sup>3,4,5</sup>. This creates a paradox where the major contributor to the decline of freshwater ecosystems—dams and their reservoirs—also holds the key to their survival. This paradox begs an important question: can reservoir storage be allocated and managed explicitly to revive river health?

Environmental flow prescriptions have focused on the *effectiveness* of environmental water—the degree to which flows produce desired results<sup>6,7,8,9,10</sup>. When implemented, water is typically withheld from appropriation to farms and cities to comply with water quality, flow, and endangered species regulatory requirements or negotiated compromises. This makes flow requirements a constraint on water operations, rather than a priority objective in multipurpose water management<sup>11</sup>. The *efficiency* of environmental water—the ability to accomplish ecosystem objectives with the least water, time, money, and effort—has often been overlooked. Some combination of water allocated to the environment, with storage to manage it—which we call an *environmental water budget*—might allow environmental water to be used more efficiently. This would make environmental water an operational priority with human water uses in large, multi-purpose reservoirs<sup>12</sup>.

Few dams have been built specifically for environmental water storage in the USA. An example is Nevada's Marble Bluff Dam on the Truckee River, which provides water for endangered fish migration via the Pyramid Lake fishway and curtails streambed erosion caused by Pyramid Lake level decline<sup>13</sup>. More precedent exists for allocating storage space for environmental water in Australia. The 2007 Commonwealth Water Act allows water to be purchased and stored for environmental water entitlements<sup>14</sup>. Environmental water can be released to augment streamflow, stored as carryover for the following year, or traded for equal or greater environmental benefit in regulated basins. Carryover increases the likelihood of environmental water availability in dry years and allows infrequent, high-



magnitude pulse flows to reintroduce hydrologic variability<sup>15</sup>. Similar ideas have been proposed in parts of the USA. For example, California's 2014 Water Storage Investment Program provides \$2.7 billion to support new surface and underground water storage for public benefits, including storage and management of environmental water<sup>16</sup>. Sites Reservoir, a proposed off-stream surface storage project, is under consideration and, if built, would provide 296 million cubic meters (Mm<sup>3</sup>) of storage, with around 17% of inflows passed through (or exchanged) to meet downstream environmental water demands. Additional proposals include establishing groundwater banks or raising existing dams to create storage space for environmental water<sup>16</sup>.

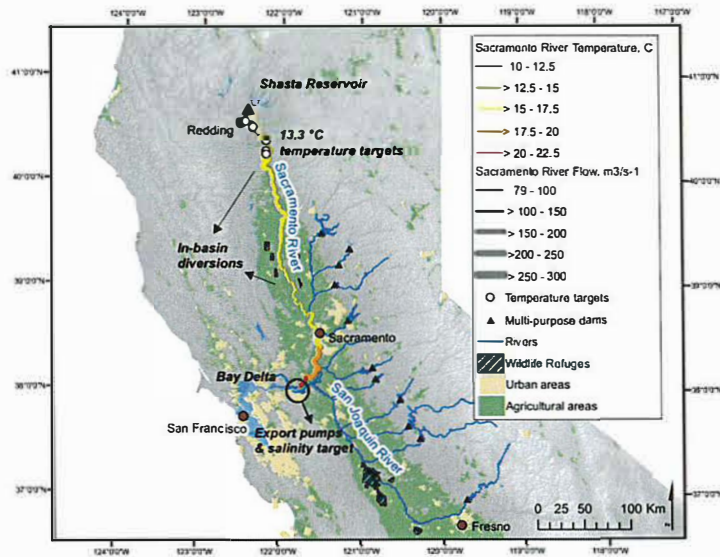
We evaluate environmental water efficiency and trade-offs to other water demands from two management approaches: (1) pass-through of 10–40% of inflows through reservoirs for downscaled natural flows<sup>17,18</sup>, or (2) allocating 10–40% of inflow and 10–40% of reservoir storage capacity for environmental demands<sup>18</sup> (not including dead pool and seasonal flood storage space). In some runs, we constrain minimum reservoir storage to increase the likelihood of cold water in storage for downstream water temperature objectives. These alternatives are exemplified by new flow objectives for California's San Joaquin River. The California State Water Resources Control Board adopted amendments that require water users to pass through or release an average of 40% of February–June unimpaired flows on the Lower San Joaquin River and its tributaries if water users fail to negotiate 'voluntary agreements' to reduce water use that is approved by the Board<sup>17</sup>. Further upstream, the San Joaquin River Restoration Program has a Restoration Administrator who manages a percentage of unimpaired inflow, which can be stored and released to provide ecosystem benefits<sup>18</sup>.

While flexible environmental water is broadly beneficial for improving ecosystem function and important across multiple taxa, we focus on the four runs of Chinook Salmon (*Oncorhynchus tshawytscha*) that spawn in and/or out-migrate through the mainstem Sacramento River to demonstrate the concept and elucidate potential benefits and trade-offs. One of these species, the endangered Sacramento River winter-run Chinook Salmon, is at high risk of extinction and in need of urgent protection<sup>19,20</sup>. We synthesize flow and temperature requirements with three environmental water demand objectives, ranked as follows: (1) environmental baseflows to account for existing minimum instream flows and water quality standards<sup>21,22</sup>, (2) flow shaping, where water for a fall pulse, winter pulse, and spring recession (Supplementary Table 1) can be shaped by water managers to mimic aspects of flow regimes that support ecological function<sup>6,7,23,24</sup>, and (3) *optimal* water temperatures, which require colder water than merely *suitable* temperatures and are deemed to be more protective and more likely to promote salmonid recovery.

We developed a simple, priority-based water balance operations model coupled with a one-dimensional reservoir temperature model that stratifies vertically, based loosely on California's 5.55 billion cubic meters (Bm<sup>3</sup>) (4.5 million acre-feet) multipurpose Shasta Reservoir (Fig. 1). We ran the model on a monthly timestep for water years 1996–2021 to capture the range of historical hydrologic variability. We estimate storage and releases for (1) environmental objectives, (2) wildlife refuge water demands—which have water rights and so are separate from environmental demands, (3) in-basin urban and agricultural uses, (4) system water for salinity maintenance through the Sacramento-San Joaquin Delta, and (5) out-of-basin exports (Fig. 2). The first four demands—environmental, refuge, in-basin urban and agricultural, and system water for salinity maintenance—share senior water right priority in the model. The last—out-of-basin exports—is junior to the other demands<sup>21,22</sup>. Water may be carried over if storage capacity exists, although carryover water is first to spill during wet periods, then spill occurs in

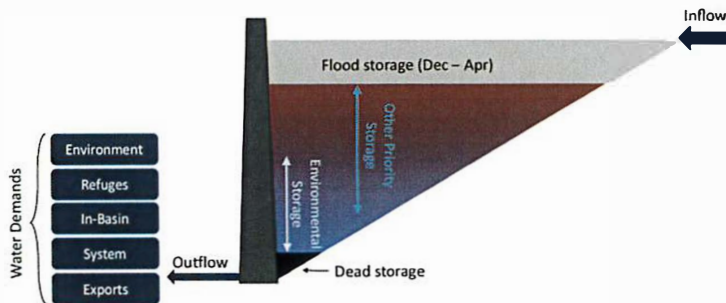
reverse-priority order. Our approach applies to large, multi-purpose reservoirs, with highly variable seasonal and interannual inflows, temperature stratification during summer, minimum operational levels (dead pool), and seasonal flood storage requirements<sup>25</sup>.

**Fig. 1: Sacramento River flows and temperatures on July 1, 2021.**



Sacramento streamflows and water temperatures are from the following California Data Exchange Center (CDEC) monitoring stations: Sacramento River at Shasta Dam-USBR (SHA), Shasta Dam-Water quality (SHD), Keswick (KWK), above Clear Creek (CCR), Balls Ferry Bridge (BSF), Jellys Ferry (JLF), Bend Bridge (BND), Red Bluff Diversion Dam (RDB), Hamilton City-main channel (HMC), Ord Ferry-main channel (ORD), Butte City (BTC), Colusa (COL), Wilkins Slough (WLK), Verona (VON), Freeport (FPT), Hood (SRH), Rio Vista Bridge (RVB), and Emmaton-USBR (EMM). Figure data sources: CDEC, USGS National Hydrography Dataset, California Dept of Fish and Wildlife, California Dept. of Transportation, California Dept of Water Resources, Consortium of International Agricultural Research Centers (CGIAR), and Sacramento River Temperature Task Force.

**Fig. 2: Modeled inflow and environmental water storage with stylized water demands.**



This diagram depicts different allocations of reservoir storage capacity for the environment and other water demands. Reservoir colors represent summer reservoir temperature stratification, with warmer water at the surface and cooler water at the depth.

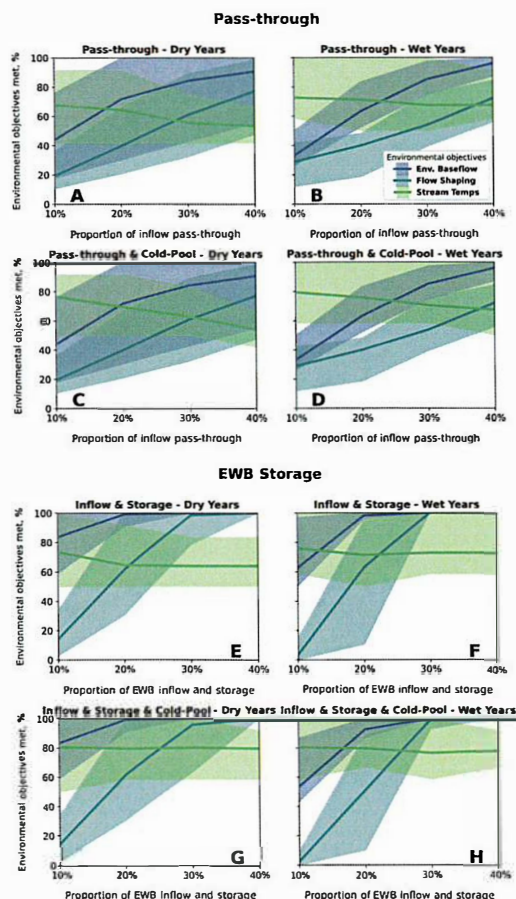
**Results**



## Inflow pass-through performance

Performance on environmental baseflow and flow shaping objectives generally improve as a larger portion of inflow passes through the reservoir (Fig. 3A, B). Larger pass-through flows come closer to mimicking natural flows and variability. Pass-through of 10% of inflows through the reservoir fails to meet environmental demands. In dry years, environmental baseflow deliveries average 44% of demand and flow shaping deliveries average 20% of demand (Fig. 3A). In wet years, the 10% pass-through delivers 32% of environmental baseflow demand, on average, and flow shaping deliveries average 30% of demand (Fig. 3B). Environmental baseflow demands are met more often in dry years than wet years because the regulatory requirements that environmental baseflows represent are smaller in dry years than wet years 21:22:26. For all years with 10% pass-through, the interquartile range of environmental baseflow shortages is 203 – 780 Mm<sup>3</sup>/yr (165-632 thousand acre-feet per year [taf/yr]) (Fig. 4A), and flow shaping shortages range from 617–762 Mm<sup>3</sup>/yr (500–618 taf/yr) (Fig. 4B).

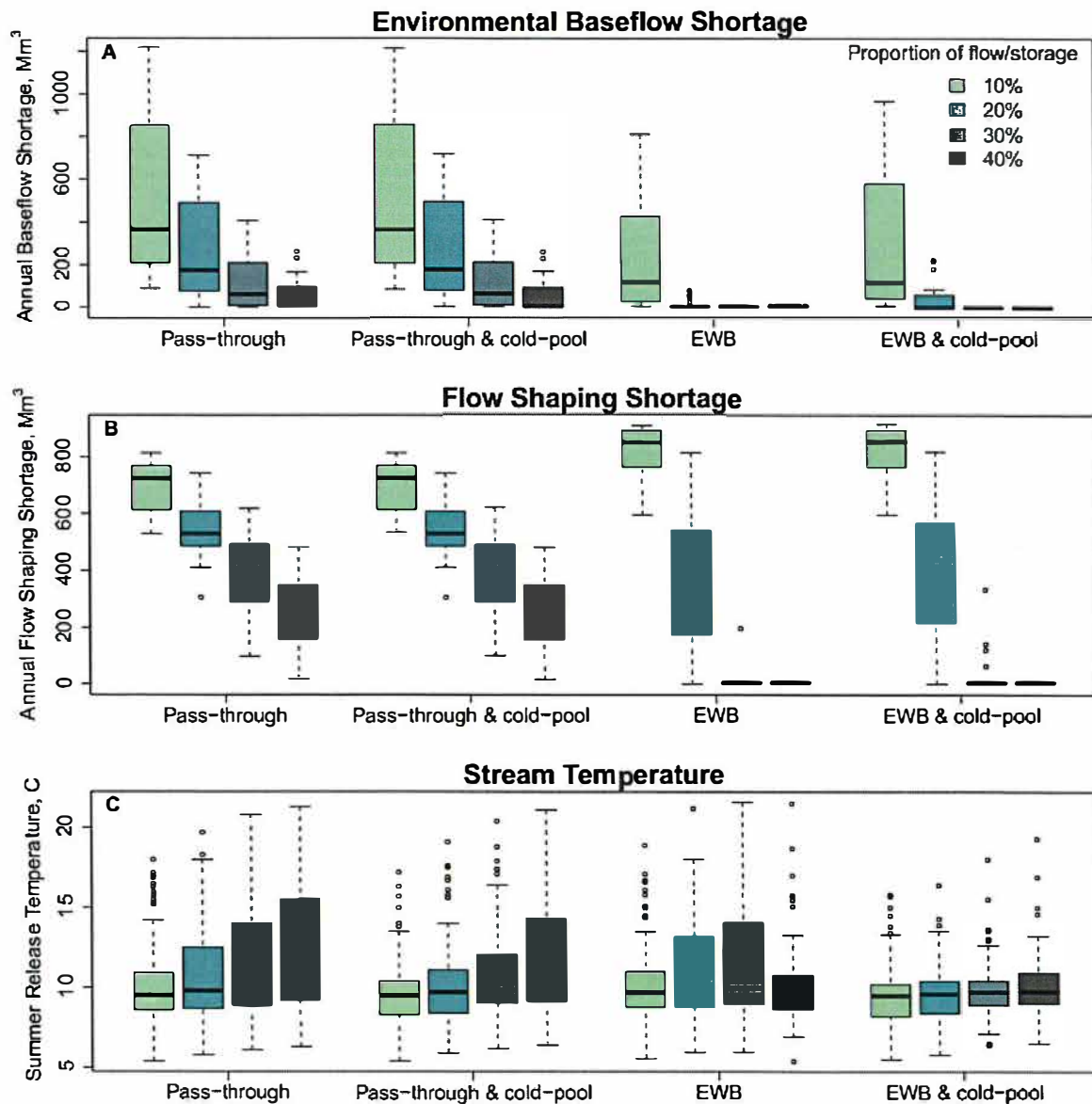
**Fig. 3: Average percentage of months that environmental water demands are met (lines) and range of months that environmental objectives are met (shaded area) from 1996–2021.**



Panels show environmental water management alternatives, with pass-through flows in dry years (A) and wet years (B), passthrough flows with 1.54 B m<sup>3</sup> of cold-water storage in dry years (C) and wet years (D), and an Environmental Water Budget (EWB) that includes equal portions of inflow and reservoir storage for dry years (E) and wet years (F), and EWB with 1.54 Bm<sup>3</sup> of cold-water storage in dry years (G)

and wet years (H). Dry years include critically dry, dry, and below-normal Sacramento River Index water year types, and wet years include above-normal and wet year types.

**Fig. 4: Environmental objective performance by water management alternative and proportion of assets.**



Panels show environmental baseflow shortages (A), flow shaping shortages (B), and July – September reservoir release temperatures (C) for all environmental water management alternatives. EWB = Environmental Water Budget. Boxes show upper and lower quartiles, bold horizontal lines show medians, whiskers show 1.5 times the interquartile range, and dots show outliers.

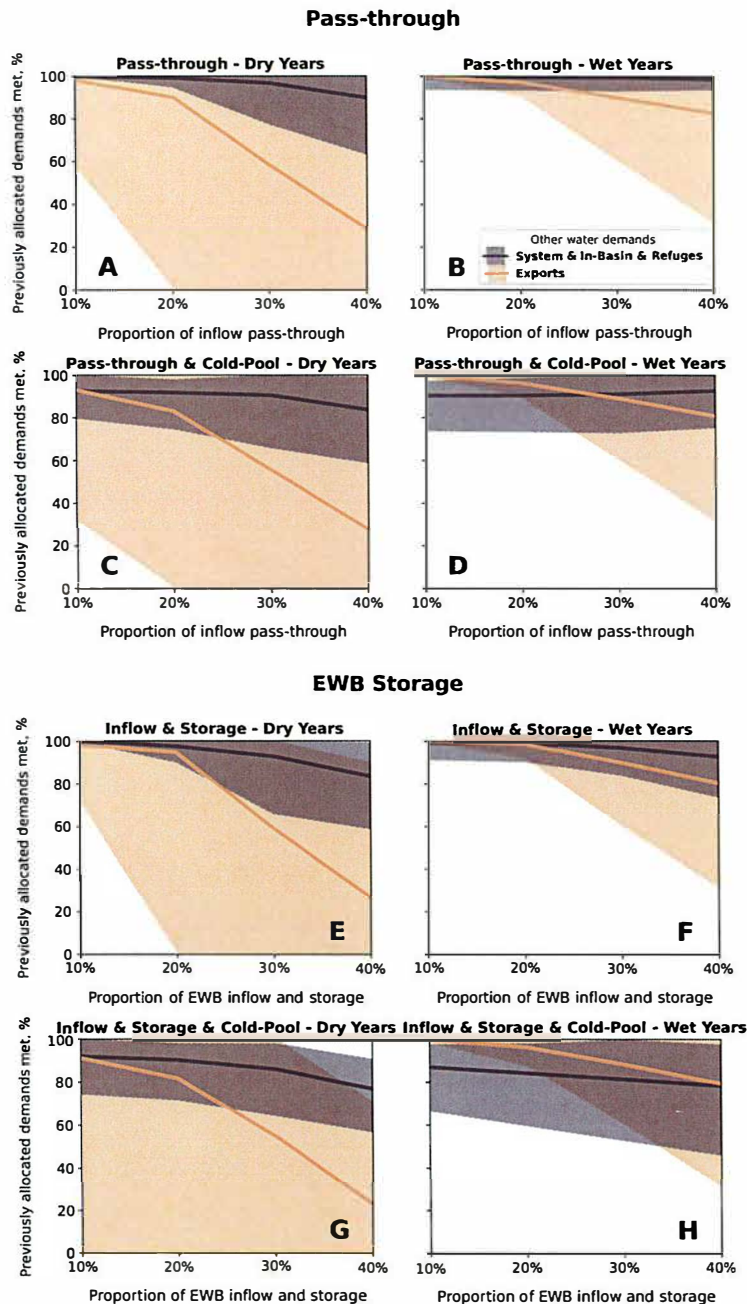
With 40% pass-through, flow performance improves. In that alternative, environmental baseflow deliveries average 90% of demand and flow shaping deliveries average 76% of demand in dry years (Fig. 3A), and environmental baseflows average 94% of demand and flow shaping average 68% of demand in wet years (Fig. 3B). The interquartile range of shortages is 12–208 Mm<sup>3</sup>/yr for baseflows

(Fig. 4A) and 153–339 Mm<sup>3</sup>/yr for flow shaping (Fig. 4B). However, in many months, pass-through flows exceed the volumes needed to meet environmental baseflow and flow shaping demands. Without storage, there is no ability to manage the timing of releases to use water efficiently for environmental benefit.

The pass-through approach results in clear trade-offs among environmental objectives. As the portion of pass-through increases, performance on temperature objectives worsens as reservoir storage drops and the cold-water pool is depleted (Fig. 3A–D, Fig. 4). In dry years, optimal stream temperature objectives are attained about 68% of all months with 10% pass-through flows, but only about 53% of the time when pass-through allocations are increased to 40% (Fig. 3A). In wet years, the trade-off between flow and temperature objectives is diminished, but not eliminated. In those years, stream temperature objectives have attained an average of 73% of months with 10% pass-through, and an average of 68% of months with 40% pass-through (Fig. 3B). Pass-through flows in conjunction with constraining minimum reservoir storage is marginally useful to preserve cold-water at depth in the reservoir (Fig. 3C and D). Since environmental deliveries are a percentage of inflows, environmental baseflow, and flow shaping objectives do not change when minimum reservoir storage is constrained.

Larger portions of environmental pass-through worsen shortages for in-basin urban and agricultural, refuge, system water, and out-of-basin export demands (henceforth called ‘other water demands’) (Fig. 5A–D). The senior water priorities (in-basin urban and agricultural, system water, and refuges) average over 90% of demands, even with 40% inflow pass-through. In dry years, system water and in-basin demands average 88% of demands, and refuge demands average over 99% of demands (Fig. 5A). But in critically dry years, even in-basin and system water demands experience large average annual shortages (Supplementary Figure 1) caused by higher in-basin demand. In contrast, environmental shortages are largest in wet year types because environmental baseflows—which are set by regulatory criteria—are the largest. Average dry year shortages to junior export demands are acute, deliveries fall to less than 30% of demands (Fig. 5A).

**Fig. 5: Average percentage of months that in-basin agricultural and urban, wildlife refuge, system water, and out-of-basin export water demands are met (lines) and range of months that each demand is met (shaded area) from 1996–2021.**



Panels show environmental water management alternatives, with pass-through flows in dry years (A) and wet years (B), passthrough flows with 1.54 Bm<sup>3</sup> of cold-water storage in dry years (C) and wet years (D), and with an Environmental Water Budget (EWB) that includes an equal portion of inflow and reservoir storage for dry years (E) and wet years (F), and EWB with 1.54 Bm<sup>3</sup> of cold-water storage in dry years (G) and wet years (H). Dry years include critically dry, dry, and below-normal Sacramento River Index water year types, and wet years include above-normal and wet year types.

When minimum reservoir storage is constrained to 1.54 Bm<sup>3</sup> (1.25 maf) to preserve cold water deep in the reservoir, average deliveries fall by 6–9% for senior water demands, depending on the portion of inflow allocated for pass-through (Fig. 5C, D). Average deliveries remain over 85% for all other demands, even when 40% of flows are passed through the reservoir. Junior priority export demands experience



considerable shortages with minimum reservoir storage when pass-through is 40%, with deliveries averaging close to 60% for all year types and declining to 27% during dry years (Fig. [5C](#)).

Environmental water budget performance: inflow plus storage capacity

Allocating a portion of reservoir inflow with storage capacity is invaluable for using environmental water efficiently because water can be stored seasonally or interannually to target environmental demands. For alternatives with 10% of inflow and 10% of reservoir capacity allocated for environmental management, reservoir inflows are insufficient to meet all flow demands (Fig. [3E, F](#)). Environmental baseflows are almost always delivered, but there is not enough water for flow shaping demands and little buffer for critically dry periods. The interquartile shortage range is 28–375 Mm<sup>3</sup>/yr (23–304 taf/yr) for environmental baseflows and 763–888 Mm<sup>3</sup>/yr (618–720 taf/yr) for flow shaping demands (Fig. [4A, B](#)). With 30% allocation of inflows and 30% of storage for the environment, 99% of environmental baseflows and 96% of flow shaping demands are delivered, on average, for wet and dry years.

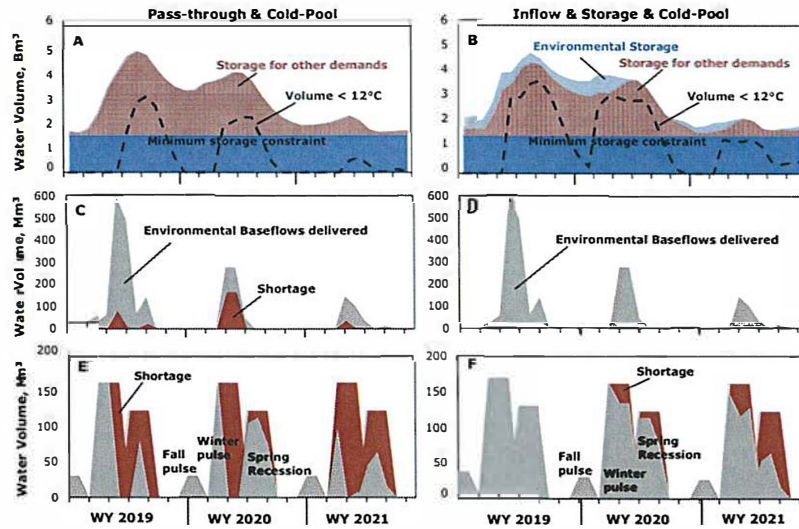
Storage for environmental water enables temperature objectives to be met more frequently—both with and without minimum storage constraints to protect the cold-water pool. Storing environmental water increases reservoir storage. Average stream temperature objectives are met 64–73% of months in dry years (Fig. [3E](#)) and 71–76% of months in wet years (Fig. [3F](#)) for all modeled proportions of environmental water and storage. A minimum reservoir storage constraint further improves stream temperature objectives, since minimum reservoir storage for cold-water preservation is effectively a third asset for environmental management. Environmental storage capacity, dedicated inflow, and a minimum storage requirement maintain optimal stream temperatures for about 77–80% of months across all alternatives and water year types (Fig. [3G, H](#)). With minimum storage to increase the likelihood of cold water at depth in the reservoir, summer stream temperatures are consistent among 10% to 40% flow and storage allocations, with summer median reservoir release temperatures ranging from 9.5–9.7 °C, and an interquartile range of 8.2 to 10.7 °C (Fig. [4C](#)).

When 30% or more of inflow and storage capacity is allocated to the environment in dry years, junior water uses face severe cutbacks (Fig. [5E–H](#)). When 40% of inflow and 40% of reservoir storage capacity are allocated to the environment in dry years, average deliveries near 80% for system water and in-basin urban and agricultural uses, and average more than 95% for refuges (Fig. [5E](#)). Increasing minimum reservoir storage to manage the cold-water pool has a large effect on other water demands because constraining minimum reservoir storage effectively shrinks storage capacity for these demands and reduces the total volume of water that can be carried over from wet years for use in later years (Fig. [5G, H](#)).

Example of environmental water storage performance in 2019–21

The three-year drought sequence beginning in 2019—a wet year followed by dry and critically dry years in 2020 and 2021—illustrates the benefits of dedicating inflow and a portion of storage capacity to environmental demands (Fig. [6](#)). In this example, we compare allocating 30% pass-through (Fig. [6](#), left side) with 30% of inflow and 30% of storage space for the environment (Fig. [6](#), right side). Both alternatives include a minimum storage requirement of 1.54 Bm<sup>3</sup> to increase the likelihood of cold water in the reservoir. Reservoir storage, the volume of water less than 12 °C, and water deliveries for environmental baseflows and flow shaping illustrate differences between the approaches.

**Fig. 6: Comparison between bypassing flows to mimic natural flows and storing water for the environment.**



Environmental storage and deliveries with 30% pass-through and 1.54 billion m<sup>3</sup> minimum reservoir storage for cold-water management (left side), and 30% of inflow, 30% of storage capacity, and 1.54 billion m<sup>3</sup> minimum reservoir storage for cold-water management (right side) during the 2019–21 water year (WY) drought. Panels **A** and **B** show water storage and volume of water <12 °C, panels **C** and **D** show environmental baseflow deliveries and shortages, and panels **E** and **F** show flow-shaping deliveries and shortages.

Environmental demands are lowest during the summer dry period, so storage capacity allows water to be stored throughout summer when other water demands draw down reservoir storage (Fig. 6, right side). Increased summer storage provides dual ecosystem benefits, improving the chance of meeting winter peak and fall pulse flow shaping objectives while also raising reservoir storage to meet late summer and fall temperature objectives. With minimum reservoir storage constrained at 1.54 Bm<sup>3</sup>, the cold-water pool can be managed to meet downstream temperature standards until late summer to early autumn (Fig. 6B). Carryover storage throughout 2019 and again in the winters of 2020 and 2021 is sufficient to meet environmental baseflow demands fully (these demands are lower in dry years than wet years) (Fig. 6D). As reservoir inflows are diminished with prolonged drought from 2019 through 2021, the 30% inflow allocation cannot meet flow shaping demands, with shortages of 13% (121 Mm<sup>3</sup>) in 2020 and 37% (333 Mm<sup>3</sup>) in 2021 (Fig. 6F). The significant shortages to other demands are shown in Figs. 5G and 5H and Supplemental Fig. 2. In 2021, these shortages range from 12% for wildlife refuges to 92% for exports. Overall, non-environmental demands have an average water shortage of 45% of their annual demands during 2021, greater than would have occurred from only an environmental pass-through scenario (Fig. 5C, D).

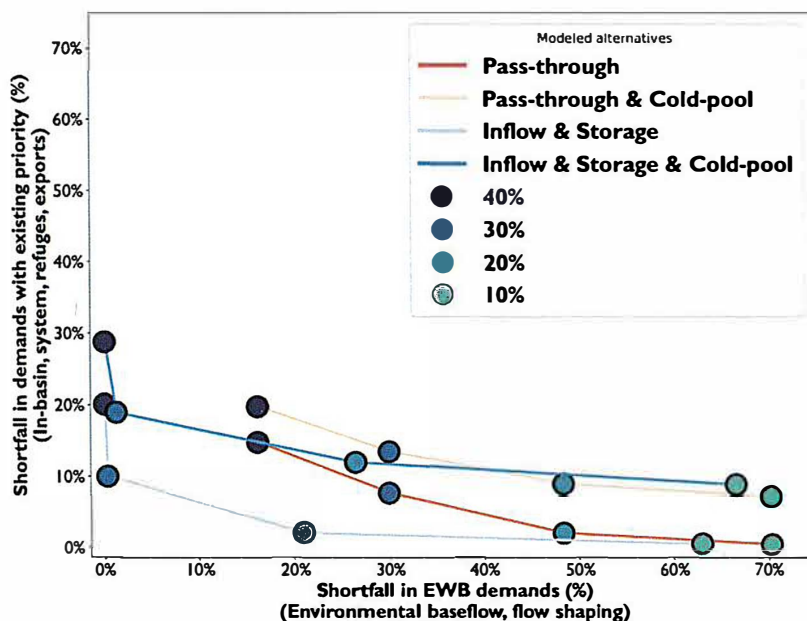
#### **Trade-offs between environmental demands and other water demands**

Trade-offs between environmental and other water demands highlight the benefits of an environmental water budget, versus reservoir pass-through (Fig. 7). When the environment is allocated 10% of inflows—whether as pass-through or with storage capacity—most shortages accrue to environmental objectives. Environmental baseflows—required to meet regulatory flow and water quality standards—



average about 8% of reservoir inflow for Shasta Reservoir<sup>27</sup>. Other water demands with water rights, which are prioritized in water management, receive the remaining average of 92% of reservoir inflows. As environmental allocations increase, shortages of other water demands increase. However, allocating inflows with storage capacity to manage water allows environmental water to be used more efficiently than pass-through. These alternatives shift tradeoff curves leftward in Fig. 7, toward a more optimal region with greater total benefit. For example, with 20% pass-through, 48% of flow objectives are unmet. The shortage drops to 21–26% when storage is used to manage environmental water, depending on the minimum reservoir storage for the cold pool. Storing water for the environment results in a much smaller chance of shortages for other water demands. These range from 2–9% with pass-through alternatives, and become 2–12% when the environment is allocated 20% of inflow and 20% of storage. We show that without storage to manage environmental allocations, larger pass-through flows are required to meet flow objectives.

**Fig. 7: Trade-offs between environmental water shortage and other demand shortage across 26 years of hydrologic conditions.**



Environmental deliveries were modeled as a portion of inflow for pass-through or a portion of inflow with reservoir storage capacity. Percentages shown with the dots are the share of the inflow or equal shares of inflow and storage capacity.

When environmental storage and flow allocations exceed 30%, considerable shortages are incurred to other demands (Fig. 7). Allocations to the environment beyond this point have little environmental benefit and incur substantial shortages to other demands. This “knee”, or breakpoint in trade-offs, suggests that 30% of inflow and storage for an environmental water budget is adequate in our simplified model to meet environmental baseflows and flow shaping objectives, while additional water and storage for the environment would improve the likelihood that water temperature targets are met. Breakpoints highlight promising areas for compromise, where decision-makers are more likely to cooperate<sup>28</sup>, which merits further exploration with more detailed modeling.

## Discussion

Our study reveals important insights into how to operate a reservoir that sets environmental water demand as a primary objective, rather than as a constraint on water supply operations. Allocating a percentage of inflow and a percentage of operable storage space for environmental management is most efficient for meeting environmental and other objectives. In our system, allocating 30% of water for the environment is enough to meet baseflow and flow shaping objectives when reservoir capacity is allocated, but is insufficient without reservoir capacity (Fig. 4). Environmental storage capacity reduces trade-offs among environmental objectives (e.g., water temperatures versus environmental baseflow versus flow shaping) that occur from reservoir pass-through. Carryover storage could be used to provide higher flows in some years or to maintain cold water at depth in reservoirs, both of which benefit species survival<sup>8,29,30,31</sup>. However, dry year shortages are profound for junior priority export demands, exacerbating existing shortages from over-allocation of available water <sup>supplies</sup><sup>32</sup>. Setting minimum reservoir levels improves water temperature management, albeit with trade-offs to other demands. While temperature management in reservoirs is always challenging, reservoir pass-through creates the greatest threat to reservoir cold-water pools. In fact, our modeling suggests that without environmental storage, allocating more water to the environment as reservoir pass-through results in a worse outcome for temperature. This approach should be avoided where temperature management is an objective. Our study demonstrates how to incorporate thermal regimes with environmental flows for more holistic environmental water management.

Our model is simple, intended as a proof-of-concept to understand and compare how portions of inflow and storage capacity allocated to the environment could benefit ecosystem objectives and impact other water demands. Our approach complements studies that prescribe environmental or functional flows<sup>7,8,30</sup>. It is not intended to be a guide for setting specific standards or determining the adequacy of environmental flows to support species and ecosystem function. Sophisticated water management and water temperature models exist for California's water <sup>system</sup><sup>33,34,35,36</sup> and most large river basins<sup>37,38</sup>. Those models could be applied to scrutinize and elucidate the potential benefits, tradeoffs, breakpoints, and impacts of inflows-plus-storage space allocation in real systems.

Storage capacity for carryover is instrumental in managing environmental water efficiently. Designer flows, which alter the timing of reservoir releases to benefit ecosystem objectives while maintaining the volume of water delivered to other water demands, implicitly use reservoir storage for environmental benefit<sup>9,10</sup>. In this way, designer flows have increased the flexibility of environmental water management, although they treat environmental water as a constraint on water supply and hydropower operations rather than an explicitly managed objective. An enlarged portfolio of environmental water management strategies like interannual carryover, water markets, in-lieu exchanges, and conjunctive management require environmental allocations and storage.

To successfully protect aquatic ecosystems, water assigned to environmental purposes must be an operational priority in large, multipurpose reservoir management, and have allocated <sup>assets</sup><sup>25</sup>. Environmental water budgets could create this with a proportion of inflow, reservoir storage space to manage it, and sometimes minimum reservoir storage levels<sup>39</sup>. A designated trustee with the authority to allocate and release water, prioritize ecosystem objectives, and coordinate with all other relevant parties could administer these environmental assets. Water and funding to support environmental water budgets could come from incorporating water that is dedicated to environmental uses under existing regulations, negotiation of agreements to enhance these allocations, purchase, new storage infrastructure, water user fees, and government <sup>support</sup><sup>25</sup>.

While allocating assets to the environment for flexible management is a major change that could reduce water availability for other water users, it would also lessen regulatory uncertainty. Environmental water should be managed like a senior water right, with the release schedule integrated into reservoir operations. Under existing law, water users' obligations to comply with water quality standards, endangered species requirements, and other environmental laws take precedence over water supply for consumptive uses—i.e., this water generally carries top priority within each river [system 11-40](#). These regulations are managed with little margin for error, however, and environmental uses bear an inordinate risk of forecasting mistakes and operational errors. Moreover, for many water systems, environmental regulations are often relaxed during periods of acute shortage to make more water available for consumptive uses. All of these factors create uncertainty for the sustainable management of environmental water [39-41](#).

The above governance, policy, and funding mechanisms are not unprecedented. Examples in California include amendments that require water users to pass through or release an average of 40% of February–June unimpaired flows on the Lower San Joaquin River and its tributaries or voluntarily reduce water use [17](#). A Restoration Administrator manages a percentage of unimpaired inflow farther upstream in the San Joaquin River, which can be stored and released to provide ecosystem benefits [18](#). California's Water Storage Investment Program funds the environmental benefit portion of private water projects in exchange for environmental water storage and releases [16](#).

This study assumes storage space in an existing large reservoir for environmental management. Underground storage also provides opportunities for water trading and exchanges that would facilitate environmental water releases and carryover storage. Studies have shown that managed aquifer recharge in hydrologically connected groundwater basins can increase river [baseflows 42](#) and maintain cool groundwater [43](#). Utilizing underground storage shows promise for capturing reservoir spills produced, in part, from increasing minimum reservoir storage [27](#) and requires little new infrastructure relative to dam construction.

The American West is in the midst of an ongoing megadrought [44](#), punctuated by wet periods [45](#). Without a change in management to set environmental water demands as priority objectives, freshwater ecosystems downstream of large dams will be increasingly vulnerable to climate warming and related changes including declining snowpack, increased hydrologic volatility, warming stream temperatures, and shifting wet and dry seasonality [46-47](#). Previous studies have shown that regulatory environmental flows are likely to be significantly affected by climate warming [40](#), and reservoirs will be relied upon to maintain environmental flows—especially during drought [22](#). We advance environmental water management by demonstrating that allocating and managing reservoir storage for the environment is more efficient than mimicking downscaled natural flows. Droughts or other crises can be an impetus for improving water management to promote healthy communities and ecosystems [48](#). For instance, Australia's Millennium Drought was a catalyst for improving the efficiency of environmental water entitlements and avoiding harm to ecosystems [15](#). Allocating water and storage space to manage it in large, multipurpose reservoirs would provide a hedge against future drought and climate variability, and allow coordinated management of flow and habitat within and among [watersheds 31](#).

## Methods

Experimental reservoir overview



To examine environmental trade-offs with other water demands and understand temperature dynamics, we represented a large, multi-purpose California reservoir using a simple priority-based water balance operations model coupled with a one-dimensional reservoir temperature model that stratifies vertically (Fig. 1). The experimental reservoir has a storage capacity of 5.55 billion cubic meters ( $\text{Bm}^3$ ), equal to Shasta Reservoir. This allowed us to use Shasta Reservoir inflow data (USBR's Shasta Dam station) for inflows, evaporation, outflows, and flood storage<sup>27</sup>.

Releases from the model reservoir were represented in a simplified way with a temperature control device that has three openings. Minimum storage of  $1.54 \text{ Bm}^3$  was a constraint in some model runs. In effect, this expanded the "dead space" in the reservoir that could not be used to meet downstream demands and helped preserve cold water in the reservoir that could be accessed with a reservoir temperature control device. Minimum reservoir storage targets have been recommended for large dams. For instance, current operations of large reservoirs like Shasta Reservoir aim for minimum storage of  $2.8 \text{ Bm}^3$  by May <sup>149</sup> and about  $1.54 \text{ Bm}^3$  by October 1 to provide sufficient cold water to meet temperature objectives for salmonids<sup>50</sup>.

#### Environmental water demands

We developed three environmental water demand objectives based on the best available science: 1) environmental baseflows to account for minimum instream flows and water quality standards, 2) flow shaping to mimic aspects of a desired flow regime that support ecological processes and functions, and 3) optimal water temperatures to restore salmonid populations, which require colder water than needed for merely suitable temperatures. Environmental water demands have senior priority in our modeling and receive a percentage (10–40%) of reservoir inflow (discussed in Model Run section below).

**Environmental baseflows** are based on ecosystem water from the Delta water accounting in Gartrell et al.<sup>21:22</sup>, which attribute partially multipurpose reservoir releases into distinct "buckets" to fulfill water demands. Ecosystem water demands are primarily determined under the federal Clean Water Act and Endangered Species Act, and state law counterparts. We scaled ecosystem water by the fraction of water that Shasta Reservoir contributes to the Delta. Environmental baseflows vary monthly and by water year type, reflecting regulatory requirements that supply more water to the environment in wetter years and less in drier years<sup>21:22</sup> (Supplementary Figure 2). Environmental baseflows average about 8% of reservoir inflow.

**Flow Shaping** provides seasonal volumes of water for a fall pulse, winter pulse, and spring recession. Water managers could shape magnitude, timing, duration, frequency, and rate of change through reservoir releases, an approach which is compatible with delivering functional flows or other prescribed environmental flows<sup>7:8:30</sup>. A spring recession flushes fine sediment and cues all runs of out-migrating juvenile Chinook Salmon, a fall pulse flushes fine sediment from spawning gravels and cues downstream movement of juvenile winter-run Chinook Salmon and upstream movement of returning fall-run Chinook Salmon, and a winter pulse cues downstream movement and inundates off-channel habitat utilized by diverse fish communities and all runs of salmon<sup>31:51:52:53</sup>. Flow shaping supplements environmental baseflows and averages about 14% of reservoir inflow volume. In our model, the total annual volume and the within-year distribution of flow-shaping demands remain constant each year. In practice, daily reservoir operations would likely alter flow shaping timing, magnitude, duration, frequency, and rate of change over the years to best meet downstream ecological objectives<sup>54</sup>.

**The stream temperature objective** provides water temperatures optimal to enhance salmonid populations, with temperatures colder than 11.5 °C from June through December to improve winter-run egg and early fry survival, temperatures colder than 12.8 °C from December through April to improve pre-spawn survival for fall and late-fall Chinook Salmon runs that spawn in the mainstem Sacramento River, and temperatures less than 15 °C all year round to improve juvenile survival for all runs [55-56-57](#) (Supplementary Table [1](#)).

#### Other water demands

Water demands outside of the environmental demands include: 1) wildlife refuge water demands, 2) in-basin urban and agricultural uses, 3) system water for salinity maintenance, and 4) out-of-basin water exports. We assigned a timeseries of monthly demands that are defined as a function of the Sacramento River Index water year type (Supplementary Figure [3](#)) [26-58](#). For simplicity, hydropower generation and recreation were ignored.

The first three demands—refuge, in-basin urban and agricultural, and system water for salinity maintenance—share senior priority in the model, and demand varies depending on the time of year. These senior demands receive 60-90% of reservoir inflows (the remainder of the 10–40% allocated to environmental demands). The last—out-of-basin exports—is junior to the other demands. Despite our simplified accounting, water for some demands is multi-purpose—for example water to meet temperature standards could be reused to meet other [demands](#) [21](#).

**Wildlife refuge water demands** are separate from environmental demands because refuge water demands have water rights. Refuge demands in wet and above normal water years are equal to 684.6 million m<sup>3</sup> (Mm<sup>3</sup>), while demands in below normal, dry, and critically dry water years are equal to 520.5 Mm<sup>3</sup>, as assigned by the federal Central Valley Project (CVP) Refuge Water Supply Program [59](#). Monthly values were estimated using seasonal deliveries to wildlife refuges managed by the CVP [60](#). Environmental water allocations do not augment refuge demands.

**In-basin urban and agricultural demands** provide water for cities and farms, which we combined for simplicity. Seasonal in-basin demands were modeled on CVP deliveries to the Sacramento Settlement Contractors and the Tehama-Colusa Canal [60](#). These demands increase relative to other demands in drier years (Supplementary Figure [3](#)).

**System water demands** are from the Delta water accounting [study](#) [21-22](#). System water is Delta outflow necessary to meet salinity standards for in-Delta urban and agricultural uses and exports. While these flows also provide ecosystem benefits, ecosystem function is not the primary objective.

**Out-of-basin export demands** are modeled after observed pumping through the Tracy and Banks pumping plants located in the Delta [60](#). Export demands are highest in wetter years, and significantly lower in critically dry years. These patterns reflect their junior water rights priority, which limits their access to water in dry years.

#### Water balance model

We demonstrate the impact of environmental water assets, including dedicated storage for the environment, using deterministic water balance simulations designed to measure the ability of a reservoir to meet downstream demands, including environmental baseflow, temperature objectives,

flow shaping, and other water demands with existing water allocations. The simplified water balance evaluates changes in reservoir storage subject to: (a) reservoir inflows, modeled after historical inflows into Shasta Reservoir, (b) monthly reservoir evaporation, modeled after historical reservoir evaporation from Shasta Reservoir, (c) reservoir releases to meet environmental and other demands, and (d) flood releases of any storage that encroached into the reservoir flood pool, as defined by US Army Corps of Engineers operating rules for Shasta Reservoir<sup>61</sup>, such that:

$$S_{t+1} = S_t + I_t - E_t - RDD_t - RFC_t$$

(1)

where  $S$  is storage (af),  $I$  is reservoir inflow (af/month),  $E$  is reservoir surface evaporation (af/month),  $RDD$  is released for downstream demands (af/month),  $RFC$  is releases for flood control (af/month), and  $t$  is the monthly timestep. We used measured historical inflows to Shasta Reservoir because historical inflows and unimpaired full natural flows into Shasta Reservoir were similar<sup>27</sup>.

Average annual water demands for in-basin users, system water, and exports comprised the balance of non-flood control releases from Shasta Reservoir during the 26-year simulation period, such that:

$$DIB + DSAL + DEX = 126 \sum_t = WY19962021 R_t - ECO_t - WET_t - RFC_t$$

(2)

where  $D$  is total demand (af/year),  $IB$  is in-basin demand (-),  $SAL$  is system water demand (-),  $EX$  is export demand (-),  $R$  is total releases from Shasta Reservoir (af/month),  $ECO$  is releases for environmental demands (af/month),  $WET$  is releases for wetland refuge habitat (af/month), and  $RFC$  is releases from Shasta Reservoir when the flood control pool is encroached upon (af/month).

On average, historical reservoir releases were split evenly among in-basin agricultural and urban demands, system water, and out-of-basin exports (e.g.,  $D_{IB} = D_{SAL} = D_{EX}$ ), although inter-annual and seasonal patterns reflected observed differences between the groups.

Flow shaping demands were added to environmental baseflow demands to create a two-tiered system of environmental water demands, where environmental baseflows were higher priority demands and flow shaping was considered lower priority. We did this to ensure that regulatory flows were maintained. When there was not enough water to meet all flow shaping objectives, water was allocated for the spring recession, then winter pulse, and finally the fall pulse flow.

To manage multipurpose operations within our modeled reservoir, each water demand group was designated a proportion of reservoir inflow and the same proportion of reservoir storage capacity (e.g., 10% inflow and 10% storage capacity, 20% inflow, and 20% storage capacity, etc.). Within each capacity allocation, a water-demand-specific water balance was conducted, such that:

$$S_{g,t+1} = S_{g,t} + k_g * (I_t - E_t) - RDD_{g,t}$$

(3)

and

$$\sum k_g = 1.0$$

(4)

where  $g$  is the water demand group (environmental, in-basin, system water, refuge, and exports) and  $k$  is the inflow allocation to water demand group  $g$ .

Critically, storage for each water demand group ( $S_g$ ) was not allowed to fall below 0, requiring water demands to experience delivery shortfalls when the volume of stored water was less than the monthly demand, such that:

$$RDD_{g,t} = \min(S_{g,t}, D_{g,t})$$

(5)

and

$$SF_{g,t} = D_{g,t} - RDD_{g,t}$$

(6)

where  $D$  is equal to the downstream demand of water demand group  $g$  in timestep  $t$  and  $SF$  is equal to the delivery shortfall of water demand group  $g$  in timestep  $t$ .

Stored water could be carried over for future use when capacity existed; however, carryover water was first to be spilled for flood control. Flood control releases, which are required when reservoir storage encroaches into the flood control pool, were divided among the storage accounts of each water demand. Responsibility for flood control releases was not assigned to all demands equally; instead, releases were assigned in proportion to the demand group's storage held in excess of their capacity allocation. This was represented as:

$$RFC_{g,t} = \max(S_{g,t} - cgFC_t, 0.0)$$

(7)

and

$$\sum g c_g = 1.0$$

(8)

where  $c$  is the capacity allocation assigned to demand group  $g$  and  $FC$  is the maximum flood control capacity of the hypothetical reservoir in timestep  $t$ .

When flood control conditions were triggered, deliveries to all demands were credited against the spilled water instead of reservoir storage accounts, and demand group storage was only impacted by their portion of the flood control release, such that:

$$S_{g,t+1} = S_{g,t} - RFC_{g,t}$$

(9)

Reservoir storage and demand shortfalls were simulated for all five water demands for a range of pass-through, environmental storage space, and minimum storage alternatives. When results were analyzed for wet and dry periods, dry years include critically dry, dry, and below normal Sacramento River Index

water year types, and wet years include above normal and wet year types. Reservoir storage volumes were subsequently linked to a one-dimensional reservoir temperature model, enabling simulations to evaluate how environmental storage could be used to manage trade-offs between downstream environmental demands and river temperature objectives.

#### Water temperature model

Reservoir temperatures were estimated with Water Quality for Reservoir-River Systems (WQRRS), a mechanistic one-dimensional Fortran model developed originally by Chen and Orlob<sup>62</sup> and later distributed by the US Army Corps of Engineers-Hydrologic Engineering Center<sup>63</sup>. Average monthly inflow, inflow stream temperature, and weather are the inputs. The model was run using a daily timestep, then averaged to a monthly timestep.

One-dimensional reservoir water quality models are appropriate for representing large reservoirs where water temperature changes most in the vertical direction based on atmospheric conditions and water density. We chose WQRRS because it runs quickly and has been widely used<sup>64-65-66-67</sup>.

WQRRS is a finite difference model based on the principles of conservation of heat and mass. Heat and mass transfer vertically through advection and effective diffusion, and water was assumed perfectly mixed laterally and longitudinally. The reservoir was segmented into 90 vertical layers and each layer was 2 m deep, for a reservoir depth of 180 m. Water temperature was the only water quality constituent modeled, and was estimated using the heat budget method given the one-dimensional form of the advection-diffusion equation:

$$V\partial C/\partial t + \Delta x Q_x \partial C/\partial x = \Delta x A_x D_c \partial^2 C/\partial x^2 + Q_i C_i - Q_o C \pm VS$$

(10)

where  $C$  is thermal energy (kcal),  $V$  is volume ( $m^3$ ),  $t$  is time (s),  $x$  is vertical distance in the reservoir (m),  $Q_x$  is advective flow ( $m^3/s$ ),  $A_x$  is surface area ( $m^2$ ),  $D_c$  is the effective diffusion coefficient ( $m^2/s$ ),  $Q_i$  is lateral inflow ( $m^3/s$ ),  $C_i$  is inflow thermal energy (kcal),  $Q_o$  is lateral outflow ( $m^3/s$ ) and  $S$  are sources and sinks (kcal/s).

Molecular and turbulent diffusion was based on temperature in WQRRS and convection was based on density gradient. Our hypothetical reservoir had one inflow at the upstream end of the reservoir, making the advection rate slower than if the inflow occurred near the dam. Inflows were instantaneously mixed within the reservoir layer of similar density<sup>63</sup>. Stratification was based on the relationship between density and water temperature.

Atmospheric conditions drove temperature exchange at the air-water interface and surface layer mixing. Inflow temperatures were from the Sacramento River at Delta (DLT) station (California Data Exchange Center). Air temperature, wind speed (m/s), and relative humidity (%) were from the Remote Automated Weather Station (RAWS) at Redding Airport for 2002–21 and Lincoln, California, prior to 2002. Atmospheric pressure was based on elevation and was constant at 29.15 Hg. Cloud cover (% of sky) was unavailable and was estimated to be uniform at 0.5%.

We represented a generalized temperature management infrastructure with a basic temperature control outlet. Outflows were modeled using the selective withdrawal allocation method developed by the US ACE Waterways Experiment Station to estimate the vertical limit of the withdrawal zone and vertical



velocity distribution within that zone<sup>63</sup>. We modeled one withdrawal outlet with three opening ports and one spillway. The deepest withdrawal port was 25 m above the reservoir bed, the middle port was 65 m above the bed, and the upper port was 95 m above the bed. The spillway elevation was even with the surface of the dam when it was at capacity. In comparison, Shasta Reservoir has temperature control gates approximately 46 m, 61 m, 91 m, and 122 m above the reservoir bed, and the upper three gates have multiple shutters that can be opened to manage release temperatures.

#### Model runs

Sixteen model runs were completed to understand performance on environmental objectives and to quantify trade-offs with other demands (Supplementary Table [2](#)). Below we summarize model runs:

- **Pass-through of a percentage of inflow.** Four model runs represented pass-through of 10%, 20%, 30%, and 40% of inflows with no minimum reservoir storage constraint. Four more runs represented 10–40% pass-through for the environment with 1.54 Bm<sup>3</sup> minimum storage (Supplementary Table [2](#)).
- **Percentage of inflow and percentage of storage capacity.** Four runs varied inflow allocations between 10 and 40% and allocated reservoir storage capacity by the same proportion, for example, pairing 10% inflow to 10% storage, 20% inflow to 20% storage, etc. (Supplementary Table [2](#)). Four additional runs allocated the above inflow and storage capacity percentages with minimum storage constrained to 1.54 Bm<sup>3</sup> to increase the likelihood of cold water in storage that could be accessed with a reservoir temperature control device.

## CALmatters

### 'Immediate Threat': Mussel Invades California's Delta, First Time in North America

Alastair Bland Nov 3, 2024



Golden mussel (*Limnoperna fortunei*), an invasive, non-native freshwater bivalve, was recently discovered in the Port of Stockton by California Department of Water Resources staff while conducting routine operations. *(Courtesy of California Department of Fish and Wildlife)*

From the glittery bling of its name, the golden mussel sounds like it could be California's state bivalve.

Unfortunately, the creature's only connection to the Golden State is the fact that it is California's most recently identified invasive species — and it's a bad one, with the capacity to clog major water supply pipes.

On Oct. 17, the tiny freshwater mollusks, which have already laid siege to waterways of southern South America, were found at Rough and Ready Island, near Stockton. Since then, state officials said, it has been in at least one other location, O'Neill Forebay, in Merced County.

Its appearance in the Sacramento-San Joaquin Delta is the mussel's first confirmed detection in North America, according to a news release from the California Department of Fish and Wildlife.

It's also very possibly just the beginning of a long battle ahead to slow its spread. The top concerns at the moment include potential impacts to the environment and to the Delta pumping stations that send water to 30 million people and millions of acres of farmland.

Unless it is contained and eliminated immediately, said UC Davis biologist Peter Moyle, there might be no getting rid of it.

"If we're lucky, and we stage a real eradication effort in the area where it's presently found, it might not be too costly and would be worth it," he said.

But if such efforts fail, it could become a major problem for native species that the mussels outcompete for food.

The Department of Fish and Wildlife is already considering these worst-case outcomes.

"The species poses a significant immediate threat to the ecological health of the Delta and all waters of the state, water conveyance systems, infrastructure and water quality," staff officials wrote.

The Department of Water Resources is already conducting vessel inspections in the hopes of preventing spread of the mussels. In the San Luis State Recreation Area, officials have been inspecting watercraft exiting O'Neill Forebay, San Luis Reservoir, and Los Banos Creek Reservoir, said Tanya Veldhuizen, the department's special projects section manager. The inspections are to "ensure all water is drained from live wells and bilges to prevent spread of invasive species to other water bodies."

The department, she said, is also taking heightened measures to protect the State Water Project — the system of pumps, pipes, and canals that exports water south from the Delta. This enhanced vigilance to mitigate "mussel biofouling," she said, requires more frequent inspections, as well as cleaning and flushing. The mussels, she said, are likely to build up in screens, strainers, and trash racks.

A native of China and Southeast Asia, [the golden mussel](#) — taxonomically *Limnoperna fortunei* — fixes itself to underwater surfaces, forming thick "reefs" built of millions of the animals. They feed by filtering nutrients and plankton from the water and, by this passive action, can have devastating impacts. Essentially, they filter the nutrition out of the native food web. In Argentina and southern Brazil, where golden mussels appeared in the 1990s, they have pushed out other species and smothered river beaches and native vegetation. Scientists have watched them spread north as rapidly as 150 miles per year, and they fear the invaders will find their way into the world's largest river system and the hottest hotspot of biodiversity on Earth, the Amazon basin.

They've also wreaked mayhem with underwater infrastructure, from hydroelectric plants to water supply systems. The mussels, for example, reportedly clogged the intake pipes of an urban water supply system in Brazil's Lake Guaíba.



No one can be certain how the mussels got to California, but sources suspect they arrived the same way they are believed to have traveled to South America — in the bowels of commercial ships, where ballast water used to stabilize vessels at sea is often drained in the port of arrival.

Not everyone is particularly surprised, either. Moyle, for one, said he's been expecting the golden mussel to arrive in the state for years. The California Delta, he noted, has been described as one of the most invaded estuaries in the world. It has been colonized by [at least 185](#) foreign species, from Himalayan blackberries and fig trees to black bass, striped bass, and water hyacinth. According to one estimate, invasive species account for an astounding [95% or more of the estuary's total biomass](#). The nutria — a large water-loving rodent from South America — has spread through the estuary in recent years amid concerns that it could, among other things, damage levees with its burrows.

There are even some Asian bivalves already living in the Bay and Delta. The [Eurasian overbite clam](#), for one, spread through the waterway [in the 1980s](#). Biologists say the species has likely played a role in the downfall of native fishes by absorbing the tiny food particles that they depend on. The failed recovery of the Delta smelt, for example, has been linked to the spread of these clams.

Now, scientists fear the golden mussel could add to these pressures.

But not necessarily. Moyle said the Delta is so heavily impacted already, and its food resources already claimed, by other species — notably the filter-feeding clams — that there may be no room for the golden mussel to move in.

"The invasive clams take up a lot of niche space," he said.

On the other hand, Moyle said, "it could be a super-invader" — an invasive species so adaptable and persistent that it replaces other invaders that came before it. The Delta's average range of water temperatures and salinity, he said, are just right for the golden mussel.

But in such an [ecologically ransacked](#) place as the Delta, not everyone is concerned about another bump in the road. Brett Baker, a water attorney with the Central Delta Water Agency and a sixth-generation resident on Sutter Island — and a former biology student of Moyle — isn't fazed by the golden mussel's appearance.

"I've heard alarms all my life about quagga mussels, zebra mussels, mitten crabs, and nutria," he said. "I just don't think there's enough slack in the system, or enough niche space, particularly for a species that isn't evolved to live here. ... I'm pretty sure we won't be talking about the golden mussel in 20 years, but I could be wrong."



# Times Standard

## Can a \$10 billion climate bond address state's water contamination problem?

By [KFF Health News](#) | KFF Health News

UPDATED: November 5, 2024 at 4:15 PM PST

When Cynthia Ruiz turns on her kitchen faucet, she hears a slight squeak before cloudy fluid bursts out of the spout. The water in her Central Valley town of East Oroquieta is clean enough most of the time to wash dishes, flush toilets, and take showers, but it's not safe to swallow. Drinking water is trucked in twice a month.

"There are times where the water is so bad you can't even wash dishes," said Ruiz, who is advised not to drink the tap water, which is laden with nitrates — runoff from orange and nectarine fields surrounding the town of roughly 400. "We need help to fix our water problem."

Tucked in a \$10 billion climate bond on the November ballot is an earmark to improve drinking water quality for communities such as East Oroquieta. [Proposition 4](#) would allocate \$610 million for clean, safe, and reliable drinking water and require at least 40% be spent on projects that benefit vulnerable populations or disadvantaged communities. But it's a fraction of what the state says is needed.

While most Californians have access to safe water, roughly 750,000 people as of late October are served by 383 failing water systems, many clustered in remote and sparsely populated areas. A June assessment by the California State Water Resources Control Board pegged the cost of repairing failing and at-risk public water systems at about \$11.5 billion.

"We have communities in California that are served drinking water that has been out of compliance with regulatory standards for potent toxins like arsenic for years," said Lara Cushing, an associate professor in UCLA's Department of Environmental Health Sciences.

And climate change is eroding people's access to clean water, she said. "There is kind of a perfect storm, if you will, of compounding hazards."

The video player is currently playing an ad.

Supporters say Proposition 4, to enact the Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024, would jump-start upgrades by authorizing grants and loans for local governments to repair water systems contaminated with lead, arsenic, nitrates, or other chemicals tied to cancer, liver and kidney problems, and other serious health issues.

Water priorities vary by region, and the bond would give communities flexibility to address their needs, said MJ Kushner, a policy advocate at the Community Water Center, a statewide nonprofit. "It isn't a one-size-fits-all solution," Kushner said.

A taxpayer group opposing the bond says the state will go further into debt on piecemeal projects. It says the state is increasingly addressing its climate-related programs with bonds, which it calls the most expensive way for government to pay for things, rather than within the state budget.

Lawmakers in July added Proposition 4 to the ballot after Democratic Gov. Gavin Newsom, facing a \$47 billion deficit, cut \$6.6 billion in climate spending from the state budget, according to Department of Finance spokesperson H.D. Palmer. The reductions followed \$3.1 billion in climate cuts Newsom and lawmakers enacted in 2023.

Susan Shelley, a spokesperson for the Howard Jarvis Taxpayers Association, said the state has already borrowed billions and that now isn't the time to add more debt given the deficit.

"If the legislature chose to cut these from the budget, they should not go on the credit card," Shelley said. "It's irresponsible."

According to the nonpartisan Legislative Analyst's Office, the state has routinely allocated state funds for climate-related programs, with about 15% coming from bonds. The office estimates it would cost taxpayers \$400 million a year for the next 40 years to repay the bond — a total of \$16 billion.

Since 2000, California voters have approved eight water bonds totaling \$27 billion, for projects involving flood management, habitat restoration, drought preparation, and drinking water improvement, according to the Public Policy Institute of California.

Scientists say climate change has led to more severe weather, including devastating floods and droughts; the spread of infectious diseases such as West Nile virus; and earlier deaths from respiratory illnesses. Public health experts add that as climate change worsens, its impact on people's health will grow more severe and could cost the state more in the long run.

"If we quantify the damages associated with the do-nothing policy, you'll see that typically, at the end of the day, the bill plus the interest costs are going to be less than the cost if we do nothing," said Kurt Schwabe, an environmental economics and policy professor at the University of California-Riverside.

If approved, Ruiz hopes Proposition 4 can help East Orosi, a predominantly Latino and low-income community. Though she receives 25 gallons of drinking water twice a month, she sometimes runs out. The last time the 47-year-old drank tap water at home was when she was in high school.

"I don't think any community anywhere in California should have to wait this long to get clean water," Ruiz said.

*This article was produced by KFF Health News, which publishes California Healthline, an editorially independent service of the California Health Care Foundation.*

*KFF Health News is a national newsroom that produces in-depth journalism about health issues and is one of the core operating programs at KFF—an independent source of health policy research, polling, and journalism. Learn more about KFF.*

*Originally Published: November 5, 2024 at 12:00 PM PST*

## Researchers hope to rescue California coast by zapping sand with electricity

By: Tim Didion and Drew Tuma 

Sunday, November 3, 2024 4:41PM

SAN FRANCISCO (KGO) -- A team of researchers is hoping it can future-proof the California coastline against erosion by zapping the sand with electricity.

Our California coastline is eroding at a pace that some experts fear could accelerate as sea levels rise in the face of climate change.

"We're talking about anywhere between about a foot of sea level rise to somewhere closer to two, three feet or even more by the end of the 21st century. And, you know, just ballpark estimates, what that means in terms of mean shoreline change rates, you know, we're talking between somewhere in the ballpark of, you know, 40 to 50 feet for the low ends upwards of well over 100 to 150 feet for the higher ends," said Oregon State professor Peter Ruggiero, Ph.D.

For decades construction crews have fought to shore up beaches and cliffsides, saving homes, and in some cases entire neighborhoods, with technologies ranging from cement to rocky sea walls. But now, a research team from Northwestern University believes it may have another solution: essentially gluing the sand into place by zapping it with electricity.

"In a nutshell, these work allows us to cement sand by using electrical energy," said Professor Alessandro Rotta Loria, Ph.D.

To understand the process, he says we should look to clams and mussels -- creatures that use their metabolism to transform elements like the calcium found in sea water into hardened shells. He says those same chemical building blocks exists in abundance along the coast, waiting to be transformed.

"By using electricity, we can actually convert these minerals, which are dissolved inside water into solid forms. So, we can basically transform them into solids, and we can transform it into cementing agents. So basically, we are really using the natural ingredients of seawater to cement soils," Rotta Loria said.

In controlled experiments, researchers used mild electrical currents to solidify sandy material into a rock-like substance. Rotta Loria believes the hardened sand could be cheaper and more efficient in holding off coastal erosion than current engineering methods. And, he says the team has concepts for a mesh-like delivery system that could electrify and harden even larger coastal areas.

"They are highly scalable, because as a matter of fact, you can engineer that with a given size, and then you can just copy and paste and deploy it over very wide surfaces," Rotta Loria said.

And you can potentially use the technique in combination with other engineering solutions.

"Bolster some sand dunes or some sea cliffs backing some coastline and serve similar purposes that some of the great engineering examples do, but for maybe a lower cost," Ruggiero said.

Many researchers believe a combination of techniques will be needed just to buy time, including perhaps shoring up the coast by literally hardening sand. Regarding environmental concerns, the Northwestern team believes the low-level electricity would not be a threat to marine life. And they say the process is actually reversable.

The Chronicle

California Wildfires

Are California's forests becoming more resilient to wildfire? State leaders say yes

By Kurtis Alexander, Reporter Oct 10, 2024

A firefighter ignites vegetation with a drip torch during a 30-acre prescribed fire in the Mitchell Canyon area of Mount Diablo State Park in May.

Stephen Lam/The Chronicle

As California sees yet another year of devastating wildfires, state and federal officials on Thursday reported headway on boosting the health and fire-resiliency of forests — but perhaps not quite enough.

Nearly 700,000 acres of wildlands across California were “treated” last year with prescribed burning, tree cutting, grazing or some combination of these and other forestry tactics designed to clear out burnable vegetation and reduce wildfire risk, according to newly released state data.

The amount of forestry work is up over prior years, the data show, and fire officials say it is already helping temper the severity of wildfires. Still, the treated acreage represents only about 2% of California's forested lands. Experts have estimated that at least 1 million acres of forestry projects annually are needed to significantly improve conditions on the ground and put a major dent in the wildfire crisis.

State agencies under Gov. Gavin Newsom and the U.S. Forest Service have each committed to performing 500,000 acres of work by 2025, which would bring the state to the 1 million-acre annual goal. Whether California will hit that mark this year or next remains to be seen.

“We hope you can see we're making steady progress toward those targets,” said Patrick Wright, director of the Governor's Wildfire and Forest Resilience Task Force, which is overseeing the effort to increase California's forest management.

The 2023 totals were higher than the 559,356 acres treated in 2022 and the 548,260 acres treated in 2021.

Wright stopped short of guaranteeing the targets would be met by 2025. He says it depends on fire staffing and many conditions beyond the control of state and federal land managers. Weather, for example, is a key determinant for when and how much prescribed burning gets done.

What is certain is that the condition of California's forests has led to a dangerous spike in wildfires over the past decade. This year the state has already seen 1 million acres burn in unplanned blazes, a significant total that is becoming increasingly common. The Park Fire in Butte and Tehama counties over the summer grew into the fourth-largest wildfire in state history, and a more recent series of big blazes has tormented Southern California.

Overgrown vegetation, due largely to decades of misguided fire suppression policy, along with trees weakened by drought, disease and warming temperatures are responsible for worsening the fire situation.



The need to turn the tide on the problem prompted the commitments by the state and federal governments.

The new data on forestry practices show that work was done on 306,433 acres of federal lands and 389,886 acres of state, private and other lands in 2023, for a total of 696,319 treated acres.

An uptick in prescribed fire helped drive an increase over prior years. Proactive burning more than doubled between 2021 and 2023.

“Thousands of wildfire resilience projects have been completed across California to protect our communities and landscapes from catastrophic wildfire in recent years, and more are underway,” said Wade Crowfoot, secretary of the California Natural Resources Agency and co-chair of the Wildfire and Forest Resilience Task Force.

Still, he said, “We have to move faster. We have to move on a larger scale.”

The data released this year was accompanied by a tighter accounting of the forestry projects included in the state and federal resiliency targets. The Wildfire and Forest Resilience Task Force has identified 60 activities that reduce fire risk, with forest thinning and burning among the most popular. Data on these activities were collected from a range of government agencies, private organizations and companies. The results are cataloged in a newly created [online dashboard](#).

The accounting by the task force has been criticized in the past. Perhaps most controversial is allowing commercial logging projects to count toward forest resiliency projects, which continues to be the case. More than 200,000 acres of the reported work in 2023 was done by timber companies.

What hasn't yet been included in the totals is forestry work by utilities and land conservancies. The task force is still figuring out methodology for doing this.

The release of the new data also was accompanied by an initiative to evaluate how much the forest resiliency activities are helping tame wildfires. Some initial analysis of the work showed that fires sparked in treated areas had shorter flame lengths while state firefighting officials [have been reporting](#) that the work has assisted with suppression.

“It's really important for us, as a department, to evaluate the effectiveness of our fuels treatment,” said Frank Bigelow, a deputy director at Cal Fire. “It allows for us to determine exactly which activities are the most effective.”

Reach Kurtis Alexander: [kalexander@sfchronicle.com](mailto:kalexander@sfchronicle.com) X: @kurtisalexander

October 11<sup>th</sup> 2024**ECONEWS REPORT: Is Humboldt a “climate refuge”?**

People often say that Humboldt County is a climate refuge. But what does that mean? And after Hurricanes Helene and Milton slammed the Southeast—including communities like Asheville, North Carolina, which was also described as a climate refuge—what is still safe in the age of climate-driven megastorms? Luckily, we have Michael Furniss, local climate nerd, and Troy Nicolini, Meteorologist-In-Charge at US National Weather Service, Eureka, on the show to discuss what is known about how climate change may affect Humboldt County. The good news: We are fortunate to have a very stable climate, even in the face of climate change, and that’s not likely to change much. The Pacific is likely to continue to act as our natural air conditioning. The bad news: Warmer temperatures elsewhere are going to increase moisture in the air and energy in storm events, bringing larger and more unpredictable weather. (But nothing like Hurricanes Helene or Milton.)

Full recording here:

[https://open.spotify.com/episode/4T0Qml9UTYhNL1ozt9jDGU?go=1&sp\\_cid=84878e1a9dd51fc0beb8fe904e401397&utm\\_source=embed\\_player\\_p&utm\\_medium=desktop&nd=1&dlsi=564b27baa15a499f](https://open.spotify.com/episode/4T0Qml9UTYhNL1ozt9jDGU?go=1&sp_cid=84878e1a9dd51fc0beb8fe904e401397&utm_source=embed_player_p&utm_medium=desktop&nd=1&dlsi=564b27baa15a499f)

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NANCY K. DELANEY (1930 - 2022)

November 7, 2024

Lane Devries  
Arcata Land Company, LLC  
3160 Upper Bay Road  
Arcata, CA 95521

Re: Encroachment on water line easement

Dear Mr. Devries:

My name is Ryan Plotz, and our firm, The Mitchell Law Firm, LLP, serves as District Counsel for the Humboldt Bay Municipal Water District. It has come to the District's attention that Arcata Land Company, LLC has caused or allowed to be constructed large greenhouses over the District's water line easement and related above and below ground infrastructure. **This encroachment results in a substantial interference with the District's rights and must be removed.** The property where encroachment is occurring is APN 506-231-019-000.

The encroachment violates the District's rights under that recorded Grant of Right of Way and Agreement dated August 23, 1961. Specifically, this agreement prohibits any unreasonable interference with the District's free use and enjoyment of the easement and also prevents the erection of any permanent building or other structure over the 30-foot wide easement. The greenhouses, some of which enclose the above ground waterline vaults, clearly violate the District's rights.

The District requires the removal of these encroachments in due course. The failure to remedy the encroachments may result in legal action.

November 7, 2024  
Page 2

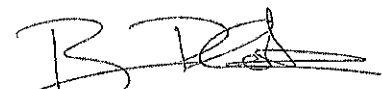
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Thank you for your prompt attention to this issue. The protection of the District's critical infrastructure is paramount.

If you or your counsel would like to discuss this matter, please contact me at your earliest convenience.

Respectfully,

THE MITCHELL LAW FIRM, LLP



Ryan T. Plotz

RTP/rg





# **CONTINUING BUSINESS**

To: Board of Directors

Date: November 14, 2024

From: John Friedenbach

RE: HBMWD Section 457 Deferred Compensation Plan

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### History

One of the employee benefits that the Board has approved is a Section 457 Deferred Compensation Plan (Plan). This basically allows employees to voluntarily defer pre-tax compensation into a tax deferred retirement account. The District has a sliding scale employer match based on employment longevity with the District. Currently our Plan is administered by Corebridge Financial, successor to Valic. The employee accounts with Corebridge are administered as individual accounts, not a group account.

### Current HBMWD 457 Plan details with Corebridge

- Total assets within plan as of 6/30/2024: \$1,850,408.35
- Total participants 45
- Total active participants 31
- Current NET crediting rate of fixed account 2.6% (fixed savings account rate vs others at 3.90%)
- Current fee
  - Record keeping fee assessed to all participants
    - 1.34%
  - Weighted investment expense
    - 0.54%
- Fiduciary oversight in place: no

### Discussion

At the September Board meeting, staff proposed hiring Burnham Gibson Wealth Advisors, LLC (BGWA) as an ERISA 3(21) or an ERISA 3(38) fiduciary. Based on the discussion that ensued, the Board tabled the item and directed staff to have further internal discussions regarding this topic. The staff management team has discussed this topic in detail and employee meetings were conducted at both Essex and Eureka to explain the topic and to receive employee feedback. A follow-up meeting with BGWA and employees was planned but had to be re-scheduled and has not occurred yet. After that meeting occurs, staff will bring back for consideration the proposal to hire BGWA as a plan fiduciary for the District's 457 Plan, should the employee feedback affirm that course of action.

**If a transition away from Corebridge is chosen, the District will need to execute a plan amendment to allow all participants to move as a trustee-to-trustee transfer.** This will allow for all participants to migrate through one conversion. The District will evaluate the best interest of the participants while doing this transfer. Some key metrics the District will be reviewing is overall costs and choice of quality investments offered.

Throughout this process, the District's primary objective is to enhance the Plan's offerings with a focus on optimizing employees' retirement accounts and services. To achieve this, BGWA will formulate an investment policy statement to establish a formal procedure, ensuring the proposed investment options are of the highest quality.

Some of the anticipated benefits to the investments are set to include:

- Lower recordkeeping costs
- Target date investment options selected through a glidepath analysis
- Enhanced fixed account crediting rates
- Certation of Managed account solution for participants

**Recommendation**

Staff recommends authorization to submit the attached HBMWD 457 Plan Amendment request to Corbridge Financial to allow for the group transfer of our individual employee accounts from Corbridge to another financial custodian, should that become desirable by the District.





# HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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**GENERAL MANAGER**  
JOHN FRIEDENBACH

Re: 457 Plan of HBMWD  
Group Plan ID: 24508

To Whom It May Concern:

The 457 Plan of Humboldt Bay Municipal Water District (the "Plan") and Plan Sponsor after discussing with the Plan's legal counsel, hereby instruct and authorize Corebridge Financial and its affiliates (hereinafter referred to as "Corebridge Financial"), in its capacity as a nondiscretionary directed services provider to the Plan, to prepare a draft amendment to the Plan for the Sponsor's review, approval and adoption, as appropriate and in accordance with the terms of the services agreement. The Plan amendment should reflect the terms below effective Date:

*Transfer Between Plan Investment Options: Notwithstanding anything else contained herein, the Employer may elect to cease making deposits of some or all contributions to one or more investment options under the Plan and to direct the transfer of Plan funds accumulated in such investment option(s) as well as future contributions into one or more other investment options available within the Plan as selected by the Employer. Upon the Employer's election to transfer all such available amounts, the issuer or custodian of the Plan investment option(s) will value all participant Accounts on the date of transfer and transfer such Accounts, less any applicable contractually imposed surrender charges and restrictions on transfer, as directed by the Employer.*

**For the Plan**

I represent that I am an authorized signer on behalf of the Plan. I hereby authorize the instructions contained in this letter and I hereby acknowledge the Plan has relied upon representations and advice of the Plan's legal counsel with respect to the terms, conditions, operations and effect of the instructions contained herein.

\_\_\_\_\_  
Authorized Plan Representative Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Authorized Plan Representative Name (please print)

\_\_\_\_\_  
Title

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

To: Board of Directors  
From: John Friedenbach  
Date: November 14, 2024  
Subject: Water Resource Planning (WRP) – Status Report

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The purpose of this memo is to summarize recent activities and introduce next steps for discussion.

**1) Top-Tier Water Use Options**

**a) Local Sales**

- i) Nordic Aquafarms. No update.
- ii) Trinidad Rancheria mainline extension. Engineering route design continues.
- iii) Blue Lake Rancheria mainline extension. Engineering Design continues.
- iv) Offshore Wind Heavy Lift Multipurpose Marine Terminal Project. No update.

**b) Transport – no update.**

**c) Instream Flow Dedication –** The District received Notice of Acceptance from the Water Board. The District committee, counsel and staff met with Water Board staff to review their request for additional information. A supplemental request for information was received after the meeting.

GAVIN NEWSOM  
GOVERNORYANA GARCIA  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

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## State Water Resources Control Board

October 17, 2024

In Reply Refer to:  
MV:A016454 et al.**VIA EMAIL**John Friedenbach, General Manager  
Humboldt Bay Municipal Water District  
friedenbach@hbmwd.com

Dear John Friedenbach:

ACCEPTANCE AND REQUEST FOR INFORMATION FOR PETITIONS FOR CHANGE AND INSTREAM FLOW DEDICATION FOR WATER RIGHT PERMITS 11714 AND 11715 (APPLICATIONS A016454 AND A017291) OF HUMBOLDT BAY MUNICIPAL WATER DISTRICT TO APPROPRIATE WATER FROM THE MAD RIVER STREAM SYSTEM IN HUMBOLDT COUNTY

You received this letter because you are the owner of two water right petitions on file with the State Water Resources Control Board (State Water Board), Division of Water Rights (Division). The purpose of this letter is to inform you that your petitions have been accepted and request information from you.

Division staff reviewed your petitions and developed the following summary of significant process items that may be necessary to make a decision regarding your submittal. As part of the process, you may be required to provide information to the Division and any current requests for information are provided at the end of this letter.

Since the time when your water right permits were issued, new listings of species may have occurred under the federal Endangered Species Act and the California Endangered Species Act. The required environmental or public trust evaluation of your petitions may result in modifications to your water rights. Continued development and use of water, beyond the authorized uses in your water rights, should not occur until your petitions are approved. In addition, if the authorized permit development period to develop full beneficial use under your water right has ended, additional diversion of water beyond the maximum annual amount diverted during the permit development period should not occur unless a time extension is approved.

---

E. JOAQUIN ESQUIVEL, CHAIR | ERIC OPPENHEIMER, EXECUTIVE DIRECTOR

John Friedenbach, General Manager - 2 -

October 17, 2024

**Fees**

All initial filing fees have been paid in full. In addition to the initial filing fees all active applications, petitions, permits and licenses may be subject to annual fees. If a fee is required, the Division will calculate the annual fee, and the California Department of Tax and Fee Administration will send you a Notice of Determination requesting payment. For more information, please visit this web site:

[https://www.waterboards.ca.gov/waterrights/water\\_issues/programs/fees/](https://www.waterboards.ca.gov/waterrights/water_issues/programs/fees/)

**Environmental Review**

According to the information in the record, it appears that all of the features of your water right petitions were in place before the Division began its environmental review, and only negligible or no expansion of an existing use will occur. This class of project has been determined not to have a significant effect on the environment and is therefore categorically exempt from the requirement for the preparation of environmental documents pursuant to the California Environmental Quality Act (CEQA). (Cal. Code Regs., tit. 14, § 15301.) Division staff will therefore recommend that your water right petitions be considered categorically exempt from CEQA; however, the final determination regarding the level of CEQA review required for your water right petitions can only be made when the Division makes a decision regarding your petitions.

In addition to any consideration under CEQA, the Division must consider the effect of your water right petitions on public trust resources and avoid or minimize harm to those resources where feasible. Public trust resources may include, but are not limited to, wildlife, fish, aquatic dependent species, streambeds, riparian areas, tidelands, and recreation. Similarly, the Division may require environmental analysis needed to demonstrate compliance with applicable requirements of the Water Code, the Fish and Game Code or the Federal Endangered Species Act.

**Potential Cumulative Impacts on Threatened Fish**

The State Water Board has adopted a Policy for Maintaining Instream Flows in Northern California Coastal Streams (policy), whose geographic scope includes Marin, Sonoma, and portions of Napa, Mendocino and Humboldt counties. The policy applies to water diversions from all streams and tributaries discharging to the Pacific Ocean from the mouth of the Mattole River south to San Francisco, and all streams and tributaries discharging to northern San Pablo Bay. The policy focuses on measures that protect native fish populations, with a particular focus on anadromous salmonids (e.g. steelhead trout, coho salmon, and Chinook salmon) and their habitat. The policy prescribes protective measures regarding the season of diversion, minimum bypass flow, and maximum cumulative diversion. As your project has been determined to be located within the geographic scope of the policy, the Division is required to comply with the policy when considering your petitions. For more information about the policy, please visit this web site:

[https://www.waterboards.ca.gov/waterrights/water\\_issues/programs/instream\\_flows/](https://www.waterboards.ca.gov/waterrights/water_issues/programs/instream_flows/)

John Friedenbach, General Manager - 3 -

October 17, 2024

**Responsibility for Completing Technical Activities**

While the Division may complete some of the technical activities required for processing of your water right petitions, you are ultimately responsible for ensuring the activities are completed. The activities may result in decisions to require specific project modifications or actions (water right terms and/or mitigation measures) to: 1) prevent your project from contributing to significant cumulative impacts on aquatic resources (including anadromous fisheries, if applicable) in the watershed; 2) prevent your project from causing or contributing to other significant environmental impacts; and 3) resolve protests against the project.

**Request for Information**

Division staff require additional information to better understand your water diversion activities and your proposal for instream flow dedication. Pursuant to Water Code section 1701.3, please submit to the Division the following items within 60 days from the date of this letter:

1. A summary of water diversion data for permits 11714 and 11715 from Water Year 2009 through Water Year 2023. The data should be presented in a manner that distinguishes between the following:
  - a. diversions under each permit, with water attributed to the most senior water right first; and,
  - b. diversions to storage at Matthews Dam and both direct diversion and rediversion of released stored water at Essex.
2. Information to demonstrate how you manage the operation of Matthews Dam and account for water inflow, diversion to storage, withdrawal of water for use in the area surrounding Ruth Lake, evaporation and seepage losses, bypass flows, and releases of stored water including hydropower releases.
3. Information to demonstrate how you account for water diversions at Essex, including the differentiation of water diversions between the direct diversion of water and the rediversion of stored water releases from Matthews Dam.
4. Information to demonstrate how you account for the diversion of water to storage, direct diversion of water, and rediversion of stored water releases at both Matthews Dam and Essex for the City of Eureka's licenses 9527 (A007621) and 9528 (A016452).

If you have any questions, please contact Monica Vazquez at (916) 319-0613 or [monica.vazquez@waterboards.ca.gov](mailto:monica.vazquez@waterboards.ca.gov). Written correspondence or inquiries should be addressed as follows: State Water Resources Control Board, Division of Water Rights, Attn: Monica Vazquez, PO Box 2000, Sacramento, CA, 95812-2000.



John Friedenbach, General Manager - 4 -

October 17, 2024

Sincerely,

 Digitally signed by  
Matthew McCarthy  
Date: 2024.10.17  
15:47:02 -0700  
Water Boards

**Matthew McCarthy**  
Senior Environmental Scientist (Supervisory)  
Coastal and Inland Watersheds Permitting Unit  
Division of Water Rights

ec: Humboldt Bay Municipal Water District  
c/o Downey Brand  
Attn Meredith Nikkel  
mnikkel@downeybrand.com

California Department of Fish and Wildlife  
Northern Region  
Attn Monty Larson  
monty.larson@wildlife.ca.gov

National Marine Fisheries Service  
West Coast Region  
Attn Margaret Tauzer  
margaret.tauzer@noaa.gov

Wildlife Conservation Board  
Stream Flow Enhancement Program  
Attn Aaron Haiman  
wcbstreamflow@wildlife.ca.gov

**Department of Toxic Substances Control  
Former McNamara and Peepe Lumber Mill  
Monthly Summary Report**

**October 2024**

This monthly summary report summarizes environmental site investigation, and remediation activities conducted by the Department of Toxic Substances Control (DTSC) or by their contractor, SHN Consulting Engineers and Geologists, Inc. (SHN) at the former McNamara and Peepe Lumber Mill Site.

- a. Actions during this calendar month (October 2024).
  - First Semi-Annual 2024 Groundwater Sampling Report. A summary of activities and results for the first semi-annual groundwater sampling event was submitted by SHN and is currently being reviewed by DTSC.
  - Virtual Quarterly Update Meeting. The virtual quarterly update meeting with DTSC, EPA, Humboldt Bay Municipal Water District, and Humboldt Waterkeeper was held on October 25, 2024 at 11:00 AM.
- b. Planned activities for the next month (November) and beyond.
  - Data Gap Investigation Report of Findings. Fieldwork was completed in August. SHN will submit a report documenting activities implemented in accordance with the data gap workplan.
  - Health and Human Risk Assessment (HHRA). SHN has subcontracted Lynn Spence to work on the HHRA which will evaluate the human health risk associated with potential exposures to the Site's soil, stormwater, and groundwater under a residential scenario.
  - The HHRA results will be considered to evaluate whether further soil and/or groundwater remedial actions are needed to mitigate the human health risks at the Site. The HHRA Report shall be consistent with USEPA December 1989 Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual (Part A) 3 and DTSC October 2015 Preliminary Endangerment Assessment Guidance Manual's sections 2.4.5 (Data Evaluation), 2.5 (Human Health Screening Risk Evaluation) 4 and 3.2.8 (Human Health Screening Evaluation). SHN shall submit the draft HHRA report to DTSC for review and comment prior to completing the final version.
- c. Funding Updates
  - The California budget deficit has resulted in severe cuts in funding for the Cleanup in Vulnerable Communities Initiative (CVCI), where the McNamara and Peepe site was receiving funding. The May revise of the Governor's proposed budget was released on May 15, 2024, and DTSC is still working to understand the distribution of funds.
  - Funding in future years is likely to come from the Site Remediation Account (SRA), which was the funding source before CVCI.

d. Royal Gold.

- Soil and Groundwater Management Plan. DTSC granted conditional approval of the revised soil and groundwater management plan contingent upon minor revisions. DTSC is reviewing the final report.

To file an anonymous complaint with California DTSC  
(Department of Toxics and Substance Control)

<https://calepa.my.salesforce-sites.com/complaints/>

CalEPA Environmental Complaint System

Language Preference/Preferencia de Idioma  
English

SELECT AN IMAGE TO REPORT A PROBLEM

Air Water Toxic Substances Pesticides Solid Waste

IS THIS AN EMERGENCY?  
ARE YOU REPORTING WATER WASTE?  
IS THIS REGARDING PROPOSITION 65?

Complaint Details →

Select this Topic:  
Toxic Substances  
to submit to  
DTSC.

Click here to enter Complaint Details.

DTSC website for McNamara & Peepe Lumber Mill (12240115)




1619 Glendale Drive



Humboldt County

[https://www.envirostor.dtsc.ca.gov/public/profile\\_report?global\\_id=12240115](https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=12240115)

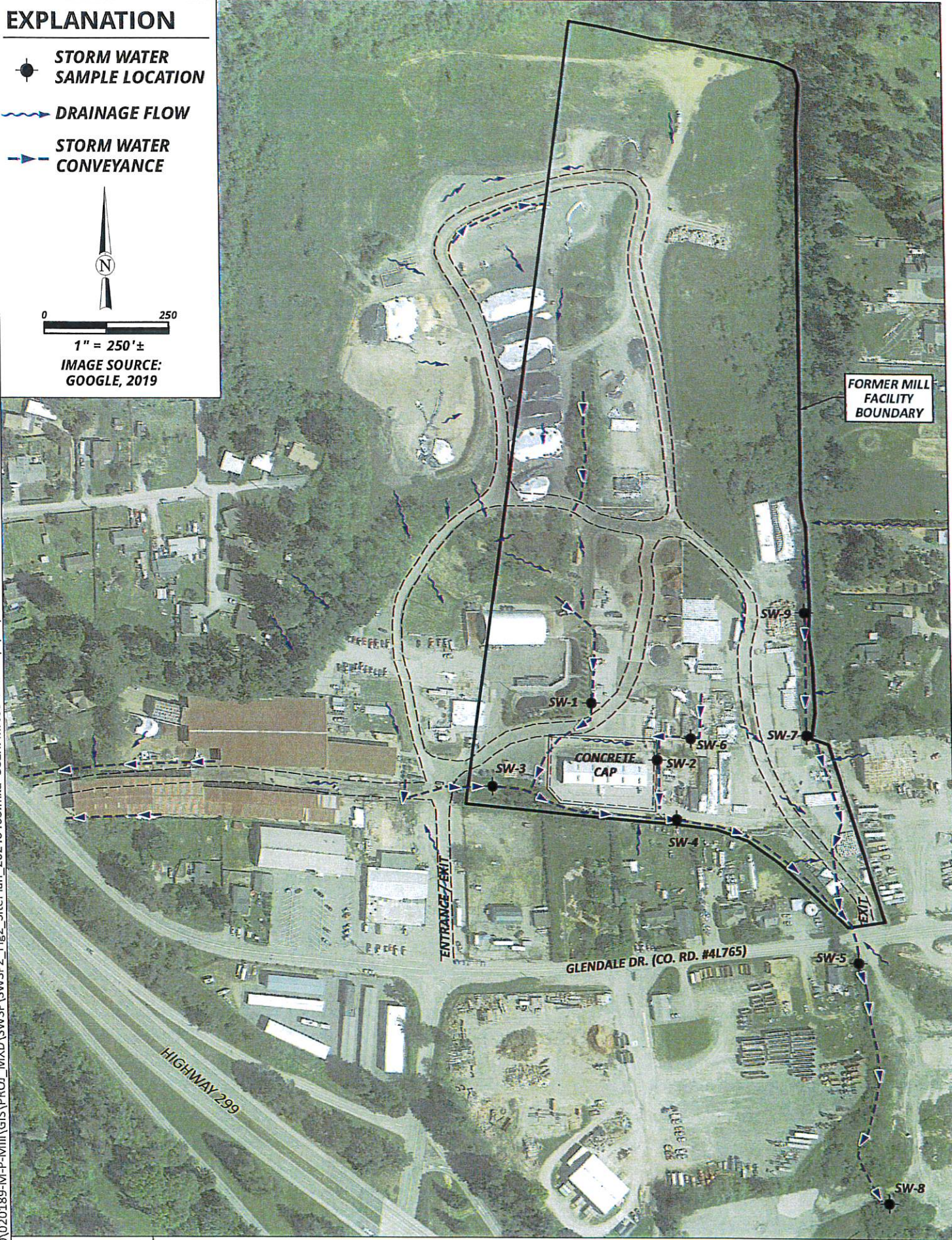


**EXPLANATION**

-  **STORM WATER SAMPLE LOCATION**
-  **DRAINAGE FLOW**
-  **STORM WATER CONVEYANCE**

1" = 250'±  
IMAGE SOURCE:  
GOOGLE, 2019



Y:\Eureka\2020\020189-M-P-Mill\GIS\PROJ\_MXD\SWSP\SWSP2\_Fig2\_SitePlan\_20240403.mxd USER: mrose DATE: 4/3/24, 1:12PM



Former McNamara & Peepe Lumber Mill  
Storm Water Sampling Plan  
1619 Glendale Drive, Arcata, California

Site Plan with  
Storm Water Sample Locations  
April 2024 - 020189.050

Figure  
**2**



Vanessa Davis, PG

**March 2024 Stormwater Sample Results, Former McNamara and Peepe Lumber Mill, 1619 Glendale Drive, Arcata, California; EnviroStor ID: 12240115**

May 23, 2024

Page 3

Temperature, pH, and turbidity were documented at each sample location using portable instrumentation. A stormwater sample was then collected from each sampling location using an extendable pole sampler or hand-held scoop. The water samples were collected in laboratory-supplied containers, labeled, immediately placed in an ice-filled cooler, and submitted to the laboratory for analyses under the appropriate chain-of-custody documentation.

Monitoring and sampling equipment was cleaned prior to arriving on site and between use at each sampling location. Small equipment that required onsite cleaning was washed in a water solution containing Liquinox® cleaner, followed by two distilled-water rinses. Appendix 1 presents field notes for stormwater sample collection.

### 3.0 Laboratory Analysis

Stormwater samples collected were analyzed for:

- chlorinated phenols (pentachlorophenol [PCP] and tetrachlorophenol [TCP]) by Canadian Pulp Report/National Council for Air and Stream Improvement, Inc. (NCASI) Method 86.07; and
- chlorinated dibenzodioxins and chlorinated dibenzofurans (dioxins and furans) by U.S. Environmental Protection Agency (EPA) Method 8290.

Microbac Laboratories, Inc. (formerly North Coast Laboratories, Ltd.) a state-certified analytical laboratory located in Arcata, California, performed the PCP and TCP analysis. The reporting limits (RLs) for each constituent are as follows:

- PCP = 0.30 micrograms per liter (ug/L)
- 2,3,4,6-TCP = 1.0 ug/L

Dioxins were analyzed by McCampbell Analytical, Inc. (MAI), a state-certified analytical laboratory located in Pittsburg, California. The RL for 2,3,7,8-tetrachlorobenzene-p-dioxin (TCDD) ranged from 4.69 to 4.76 picograms per liter (pg/L). The method detection limit (MDL) for 2,3,7,8-TCDD analysis for stormwater samples analyzed was 1.22 pg/L to 1.24 pg/L.

### 4.0 Stormwater Sampling Results

Table 1 (on the next page) summarizes the March 11, 2024, stormwater analytical results for dioxins, PCP, and TCP.



Vanessa Davis, PG

**March 2024 Stormwater Sample Results, Former McNamara and Peepe Lumber Mill, 1619 Glendale Drive, Arcata, California; EnviroStor ID: 12240115**

May 23, 2024

Page 4

**Table 1. Stormwater Analytical Results, March 11, 2024  
Former McNamara and Peepe Lumber Mill, Arcata, California**

Sample Location	2,3,7,8-TCDD <sup>a</sup> (pg/L) <sup>b</sup>	2005 WHO TEQ <sup>c</sup> (pg/L)	PCP <sup>d</sup> (ug/L) <sup>e</sup>	TCP <sup>d</sup> (ug/L)
SW-1	<4.76 <sup>f</sup>	0.0123 J <sup>g</sup>	<0.30	<1.0
SW-2	<4.72	0.358 J	<0.30	<1.0
SW-3	<4.69	0.135 J	<0.30	<1.0
SW-4	<4.76	1.45 J	<0.30	<1.0
SW-5	<4.69	2.37 J	<0.30	<1.0
SW-6	<4.74	2.08 J	<0.30	<1.0
SW-7	<4.72	3.31 J	<0.30	<1.0
SW-9	<4.72	0.120 J	<0.30	<1.0
<b>MCL<sup>h</sup></b>	<b>30</b>	<b>NR<sup>i</sup></b>	<b>1.0</b>	<b>NR</b>
<b>PHGs<sup>j</sup></b>	<b>0.05</b>	<b>NR</b>	<b>0.3</b>	<b>NR</b>

- a. 2,3,7,8-TCDD: 2,3,7,8-Tetrachlorodibenzodioxin was analyzed in general accordance with EPA Method 8290
- b. pg/L: picograms per liter
- c. 2005 WHO TEQ: 2005 World Health Organization's Toxic Equivalency Quotient, TEF calculations. TEQs are J-flagged as they are calculated from one or more result with a J-flag (Analyte concentration below calibration range).
- d. Pentachlorophenol (PCP) and 2,3,4,6-Tetrachlorophenol (TCP) were analyzed in general accordance with Canadian Pulp Report/National Council for Air and Stream Improvement, Inc. Method 86.07
- e. ug/L: micrograms per liter
- f. <: "less than" the stated laboratory reporting limit
- g. J: Result is less than the reporting limit but greater than the method detection limit. The reported concentration is an estimated value.
- h. MCL: maximum contaminant level, State Water Resources Control Board, August 16, 2023
- i. NR: no reference
- j. PHGs: California public health goals, Office of Environmental Health Hazard Assessment, August 16, 2023

Appendix 2 includes the complete analytical test results, chain-of-custody documentation, and laboratory quality control data. Multipliers used for the 2005 World Health Organization (WHO) Toxic Equivalency Factors (TEFs) for dioxins and furan compounds are additionally provided in Appendix 2. Appendix 3 presents historical stormwater sample results for the former McNamara and Peepe Lumber Mill.

## 5.0 Discussion of Results

PCP, TCP, and 2,3,7,8-TCDD were not identified above laboratory MDLs in any stormwater samples collected during the March 11, 2024, sampling event. Stormwater with the highest toxic equivalency quotient (TEQ) value came from SW-7, located along the eastern property boundary within the former planar chain footprint, with a value of 3.31 J. All TEQs are J-flagged as they are calculated from one or more result with a J-flag (analyte concentration is below the RL but greater than the MDL; the reported concentration is an estimate value).





*From 5/23/24 Report*

# Historical Stormwater Sample Results

**3**

Table 3-1 Historical Storm Water Sample Results Former McNamara and Peepe Lumber Mill, Arcata, California					
Sample Location	Date	2,3,7,8-TCDD <sup>a</sup> (pg/L) <sup>b</sup>	2005 WHO TEQ <sup>c</sup> (pg/L)	PCP <sup>d</sup> (ug/L) <sup>e</sup>	TCP <sup>d</sup> (ug/L)
SW-1	2/18/21	<0.512 <sup>f</sup>	0.0736 J <sup>g</sup>	<0.30	<1.0
	12/15/21	<0.721	0.351 J	<0.30	<1.0
	4/14/22	<0.743	0.181 J	<0.30	<1.0
	12/08/22	<0.592	4.37 J	<0.30	<1.0
	2/27/23	<1.69	0.00	<0.30	<1.0
	12/07/23	<1.69	0.00	<0.30	<1.0
	3/11/24	<4.76	0.0123 J	<0.30	<1.0
SW-2	2/18/21	<0.609	7.79 J	<0.30	<1.0
	12/15/21	<0.508	2.70 J	<0.30	<1.0
	12/15/21 (F) <sup>h</sup>	<0.645	0.308 J	--	--
	4/14/22	5.18	96.1 J	<0.30	<1.0
	12/08/22	<0.604	2.58 J	<0.30	<1.0
	2/27/23	<1.70	1.73 J	<0.30	<1.0
	12/07/23	<1.69	0.643 J	<0.30	<1.0
3/11/24	<4.72	0.358 J	<0.30	<1.0	
SW-3	2/18/21	<0.530	4.44 J	0.099 J	<1.0
	12/15/21	<0.688	6.82 J	0.091 J	<1.0
	4/14/22	<0.745	0.179 J	<0.30	<1.0
	12/08/22	<0.733	4.47 J	<0.30	<1.0
	2/27/23	<1.70	0.262 J	<0.30	<1.0
	12/07/23	<1.69	0.0477 J	<0.30	<1.0
	3/11/24	<4.69	0.135 J	<0.30	<1.0
SW-4	2/18/21	<0.459	11.4 J	0.11 J	<1.0
	12/15/21	<0.731	5.87 J	<0.30	<1.0
	12/15/21 (F)	<0.715	0.945 J	--	--
	4/14/22	<0.817	0.233 J	<0.30	<1.0
	12/08/22	<0.715	3.30 J	<0.30	<1.0
	2/27/23	<1.69	0.255 J	<0.30	<1.0
	12/07/23	<1.69	0.945 J	<0.30	<1.0
3/11/24	<4.76	1.45 J	<0.30	<1.0	
SW-5	2/18/21	<0.762	8.04 J	0.14 J	<1.0
	12/15/21	<0.602	4.06 J	<0.30	<1.0
	12/15/21 (F)	<0.785	1.39 J	--	--
	4/14/22	<0.697	3.74 J	<0.30	<1.0
	12/08/22	1.55 J	19.1 J	<0.30	<1.0
	2/27/23	<1.69	0.483 J	<0.30	<1.0
SW-5, Cont'd	12/07/23	<1.70	1.67 J	<0.30	<1.0





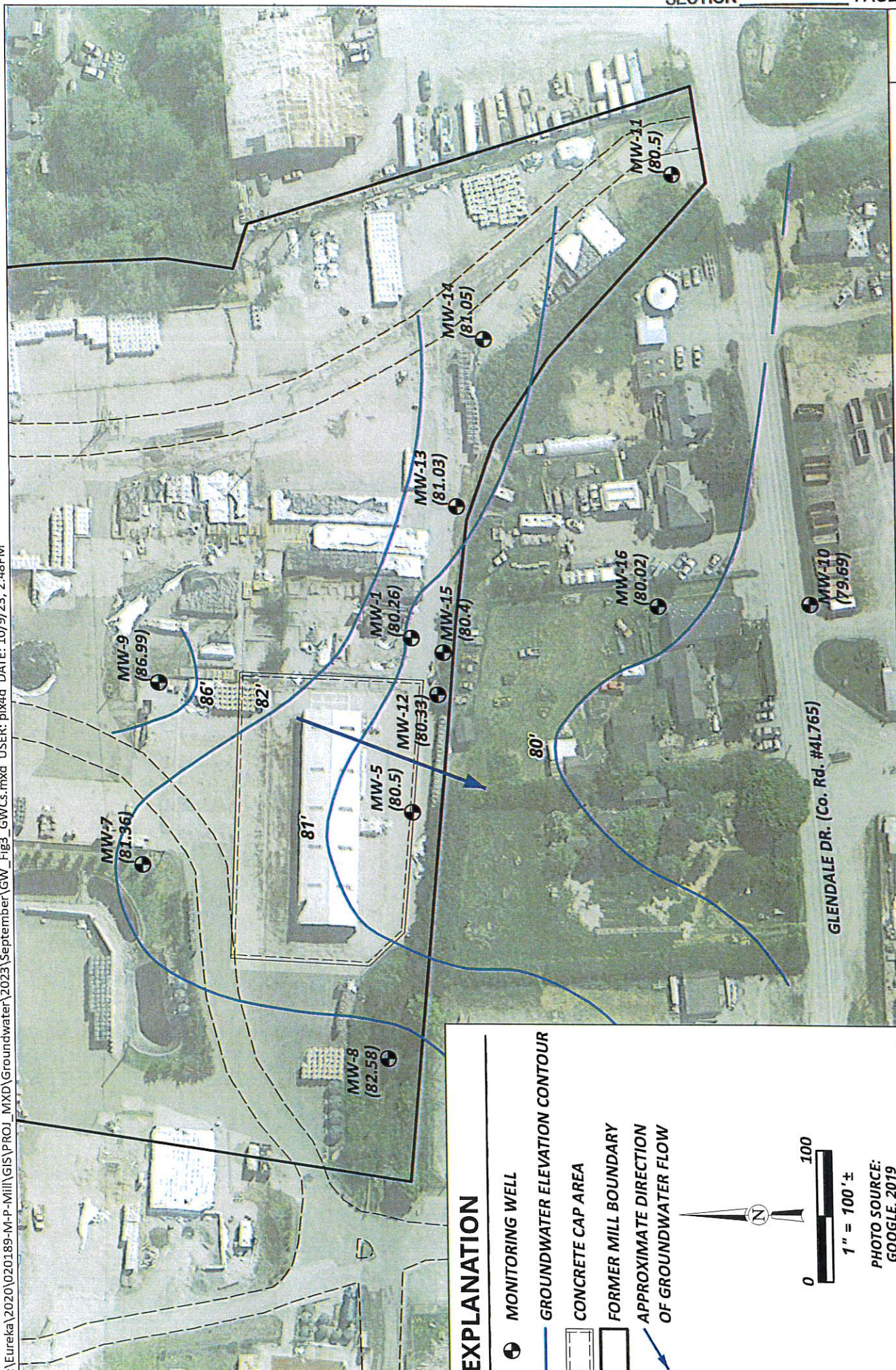
<b>Table 3-1</b> <b>Historical Storm Water Sample Results</b> <b>Former McNamara and Peepe Lumber Mill, Arcata, California</b>					
Sample Location	Date	2,3,7,8-TCDD <sup>a</sup> (pg/L) <sup>b</sup>	2005 WHO TEQ <sup>c</sup> (pg/L)	PCP <sup>d</sup> (ug/L) <sup>e</sup>	TCP <sup>d</sup> (ug/L)
	3/11/24	<4.69	2.37 J	<0.30	<1.0
SW-6	12/15/21	5.12	63.9 J	<0.30	<1.0
	12/15/21 (F)	<0.713	0.0572 J	--	--
	4/14/22	4.95	121 J	0.48	<1.0
	12/08/22	<0.700	8.54 J	<0.30	<1.0
	2/27/23	<1.69	6.10 J	<0.30	<1.0
	12/07/23	<1.70	1.36 J	<0.30	<1.0
	3/11/24	<4.74	2.08 J	<0.30	<1.0
SW-7	12/15/21	<0.634	4.87 J	0.21 J	<1.0
	12/15/21 (F)	<0.728	0.970 J	--	--
	4/14/22	<0.771	0.317 J	0.15 J	<1.0
	12/08/22	2.59 J	36.8 J	0.12 J	<1.0
	2/27/23	<1.69	1.66 J	<0.30	<1.0
	12/07/23	<1.70	3.23 J	<b>0.31</b>	<1.0
	3/11/24	<4.72	3.31 J	<0.30	<1.0
SW-8 <sup>i</sup>	12/15/21	<0.797	3.80 J	<0.30	<1.0
	12/15/21 (F)	<0.733	2.38 J	--	--
	4/14/22	<0.715	1.35 J	<0.30	<1.0
SW-9	3/11/24	<4.72	0.120 J	<0.30	<1.0
<b>MCL<sup>j</sup></b>		<b>30</b>	<b>NR<sup>k</sup></b>	<b>1.0</b>	<b>NR</b>
<b>PHGs<sup>l</sup></b>		<b>0.05</b>	<b>NR</b>	<b>0.3</b>	<b>NR</b>

- a. 2,3,7,8-TCDD: 2,3,7,8-Tetrachlorodibenzodioxin was analyzed in general accordance with EPA Method 8290
- b. pg/L: picograms per liter
- c. 2005 WHO TEQ: 2005 World Health Organization's Toxic Equivalency Quotient, TEF calculations. TEQs are J-flagged as they are calculated from one or more result with a J-flag (Analyte concentration below calibration range).
- d. Pentachlorophenol (PCP) and 2,3,4,6-Tetrachlorophenol (TCP) were analyzed in general accordance with Canadian Pulp Report/National Council for Air and Stream Improvement, Inc. Method 86.07
- e. ug/L: micrograms per liter
- f. <: "less than" the stated laboratory reporting limit
- g. J: Result is less than the reporting limit but greater than the method detection limit. The reported concentration is an estimated value.
- h. (F): Field filtration prior to sample collection using a new 0.45-micron filter
- i. Permission to access stormwater sample location SW-8 is no longer granted, therefore samples have not been collected as of April 2022.
- j. MCL: maximum contaminant level, State Water Resources Control Board, August 16, 2023
- k. NR: no reference
- l. PHGs: California public health goals, Office of Environmental Health Hazard Assessment, August 16, 2023





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- EXPLANATION**
- MONITORING WELL
  - GROUNDWATER ELEVATION CONTOUR
  - ▭ CONCRETE CAP AREA
  - ▭ FORMER MILL BOUNDARY
  - APPROXIMATE DIRECTION OF GROUNDWATER FLOW

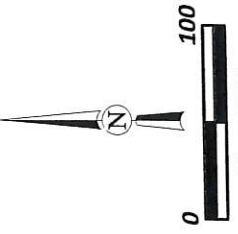


PHOTO SOURCE:  
GOOGLE, 2019

Groundwater Elevation Contours  
August 22, 2023  
Figure 3  
October 2023 - 020189.030

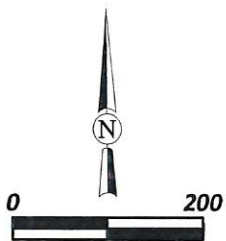
Former McNamara & Peepe Lumber Mill  
Groundwater Monitoring  
1619 Glendale Drive, Arcata, California





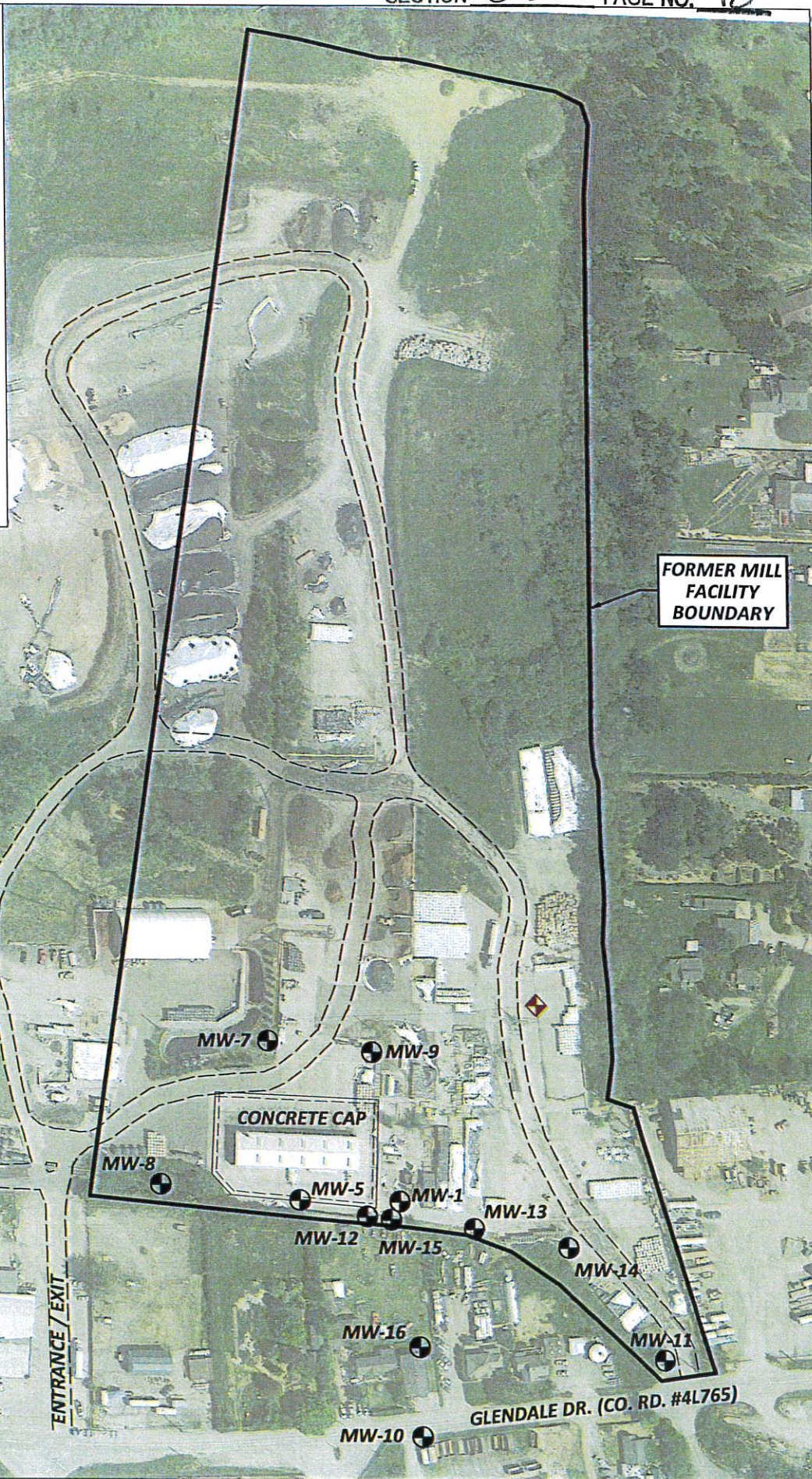
**EXPLANATION**

-  **PRODUCTION WELL**
-  **MONITORING WELL**
-  **FIRE ACCESS ROAD**
-  **CONCRETE CAP AREA**
-  **FORMER MILL BOUNDARY**



1" = 200'±

PHOTO SOURCE:  
GE, 2019



Y:\Eureka\2020\020189-M-P-Mill\GIS\PROJ\_MXD\Groundwater\2023\September\GW\_Fig2\_SitePlan.mxd USER: pix4d DATE: 10/9/23, 2:30PM





\\Eureka\2020\020189-M-P-Mill\GIS\PROJ\_MXD\Groundwater\2023\September\GW\_Fig4\_Concentrations.mxd USER: pix4d DATE: 10/9/23, 2:31PM

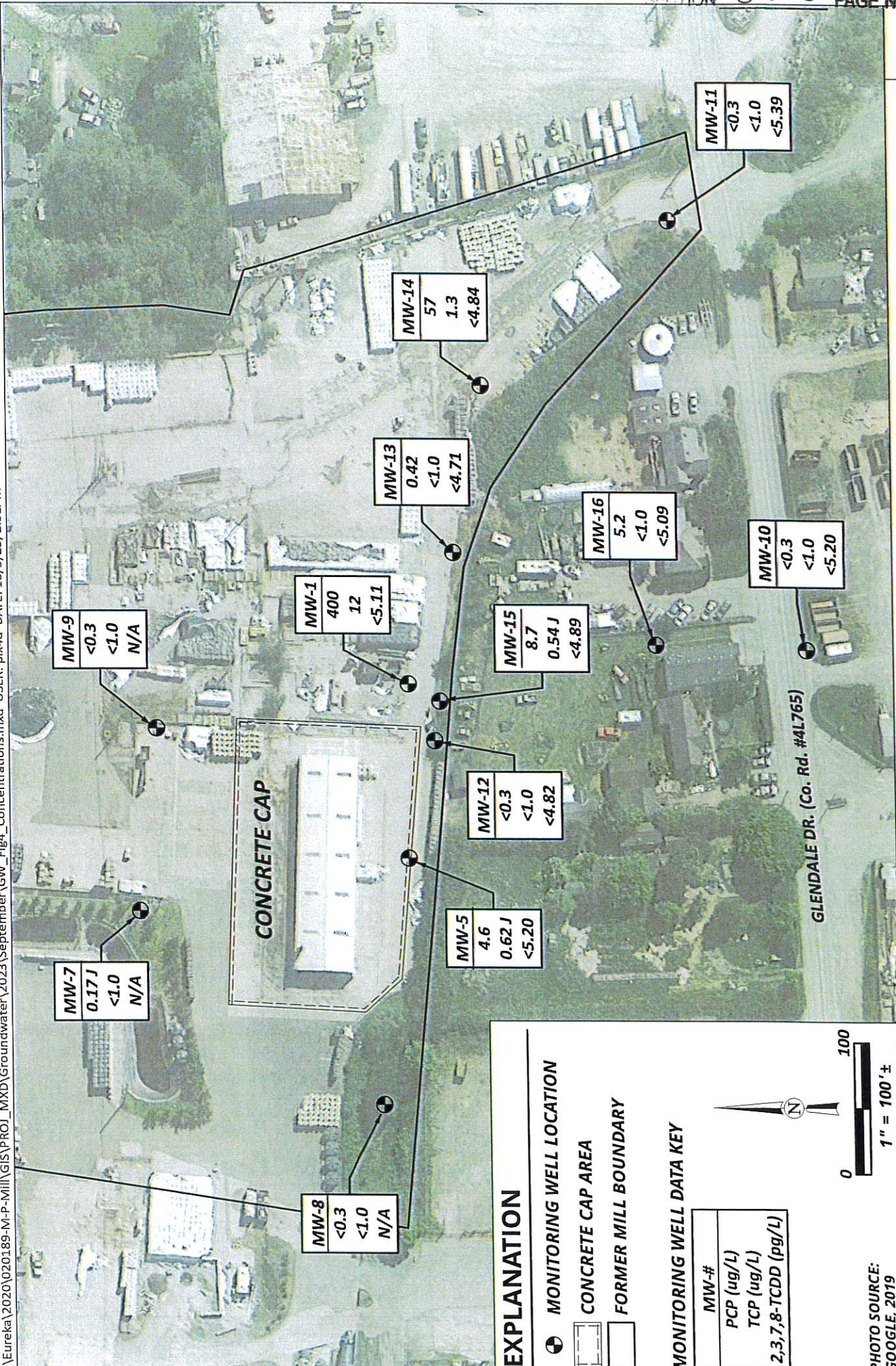


Figure 4

Select Groundwater Concentrations  
August 22, 2023  
020189.030

MW-9  
PCP <0.3  
TCP <1.0  
TCDD N/A

MW-7  
PCP 0.17 J  
TCP <1.0  
TCDD N/A

MW-1  
PCP 400  
TCP 12  
TCDD <5.11

MW-8  
PCP <0.3  
TCP <1.0  
TCDD N/A

MW-13  
PCP 0.42  
TCP <1.0  
TCDD <4.71

MW-14  
PCP 57  
TCP 1.3  
TCDD <4.84

MW-5  
PCP 4.6  
TCP 0.62 J  
TCDD <5.20

MW-12  
PCP <0.3  
TCP <1.0  
TCDD <4.82

MW-15  
PCP 8.7  
TCP 0.54 J  
TCDD <4.89

MW-16  
PCP 5.2  
TCP <1.0  
TCDD <5.09

MW-10  
PCP <0.3  
TCP <1.0  
TCDD <5.20

MW-11  
PCP <0.3  
TCP <1.0  
TCDD <5.39

**EXPLANATION**

- MONITORING WELL LOCATION
- ▭ CONCRETE CAP AREA
- ▭ FORMER MILL BOUNDARY

**MONITORING WELL DATA KEY**

MW-#
PCP (ug/L)
TCP (ug/L)
2,3,7,8-TCDD (pg/L)



PHOTO SOURCE:  
GOOGLE, 2019

Former McNamara & Peepe Lumber Mill  
Groundwater Monitoring  
1619 Glendale Drive, Arcata, California





**Table 2. Groundwater Analytical Results, August 22-23, 2023  
Former McNamara and Peepe Lumber Mill, Arcata, California**

Sample Location	2,3,7,8-TCDD <sup>a</sup> (pg/L) <sup>b</sup>	2005 WHO TEQ <sup>c</sup> (pg/L)	PCP <sup>d</sup> (µg/L) <sup>e</sup>	TCP <sup>d</sup> (µg/L)
MW-1	<5.11 <sup>f</sup>	48.3 J <sup>g</sup>	<b>400<sup>h</sup></b>	12
MW-5	<5.20	0	<b>4.6</b>	0.62 J
MW-7	NA <sup>i</sup>	NA	0.17 J	<1.0
MW-8	NA	NA	<0.3	<1.0
MW-9	NA	NA	<0.3	<1.0
MW-10	<5.20	0	<0.3	<1.0
MW-11	<5.39	0.0300 J	<0.3	<1.0
MW-12	<4.82	0.0408 J	<0.3	<1.0
MW-13	<4.71	0.0146 J	<b>0.42</b>	<1.0
MW-14	<4.84	0.0399 J	<b>57</b>	1.3
MW-15	<4.89	0.0257 J	<b>8.7</b>	0.54 J
MW-16	<5.09	0.0175 J	<b>5.2</b>	<1.0
Dup (MW-10)	<4.84	0	NA	NA
MCL <sup>j</sup>	30	NR <sup>k</sup>	1.0	NR
PHGs <sup>l</sup>	0.05	NR	0.3	NR

<sup>a</sup> 2,3,7,8-TCDD: 2,3,7,8-Tetrachlorodibenzodioxin was analyzed in general accordance with EPA Method 8290A

<sup>b</sup> pg/L: picograms per liter

<sup>c</sup> 2005 WHO TEQ: 2005 World Health Organization's Toxic Equivalency Factor

<sup>d</sup> Pentachlorophenol (PCP) and 2,3,4,6-Tetrachlorophenol (TCP) were analyzed in general accordance with National Council for Air and Stream Improvement, Inc. Method 86.07.

<sup>e</sup> µg/L: micrograms per liter

<sup>f</sup> <: "less than" the stated reporting limit

<sup>g</sup> J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

<sup>h</sup> **Bold** values indicate an exceedance of the MCL or PHGs.

<sup>i</sup> NA: not analyzed

<sup>j</sup> MCL: maximum contaminant level, State Water Resources Control Board (March 13, 2019).

<sup>k</sup> NR: no reference

<sup>l</sup> PHGs: California public health goals, Office of Environmental Health Hazard Assessment (March 13, 2019).

Appendix 3 includes the complete analytical test results, chain-of-custody documentation, and laboratory quality control data.

### 4.3 Field Measured Parameters

Measurements for groundwater field parameters collected from site wells during the August 2023 sampling event are included in Table 3.





**Table 3. Field Measured Parameters, August 22-23, 2023  
Former McNamara and Peepe Lumber Mill, Arcata, California**

Sample Location	DCO <sub>2</sub> <sup>a</sup> (mg/L) <sup>b</sup>	DO <sup>a</sup> (mg/L)	ORP <sup>a</sup> (mV) <sup>c</sup>	EC <sup>a</sup> (umhos/cm) <sup>d</sup>	pH <sup>a</sup> (standard units)	Turbidity <sup>a</sup> (NTU) <sup>e</sup>
MW-1	170	0.27	31	372.3	5.79	4.07
MW-5	195	0.26	29	321.0	5.55	0.75
MW-7	100	2.22	35	109.6	5.61	1.13
MW-8	235	0.41	28	557.3	6.12	6.53
MW-9	150	0.32	30	247.1	5.82	0.41
MW-10	90	0.30	31	115.2	5.56	58.1
MW-11	140	1.93	31	209.6	5.09	2.50
MW-12	180	0.39	30	275.1	5.47	25.4
MW-13	210	0.34	33	399.2	6.00	11.61
MW-14	215	0.32	30	220.2	5.65	94.2
MW-15	250	0.66	30	275.7	5.72	285
MW-16	35	4.23	175	208.2	5.31	8.44

<sup>a</sup> DCO<sub>2</sub>: dissolved carbon dioxide, DO: dissolved oxygen, ORP: oxidation-reduction potential, EC: specific conductance, pH, turbidity, and temperature were measured using portable instrumentation.

<sup>b</sup> mg/L: milligrams per liter

<sup>c</sup> mV: millivolts

<sup>d</sup> umhos/cm: micromhos per centimeter

<sup>e</sup> NTU: Nephelometric turbidity unit

## 5.0 Summary of Results

The results of the August 2023 groundwater monitoring event at the former McNamara and Peepe Mill are summarized below.

- World Health Organization (WHO) 2005 toxic equivalency factors (TEQs) calculated using dioxin/furan concentrations were highest in monitoring well MW-1 at 48.3 pg/L. There is no maximum contaminant level (MCL) or California public health goal (PHG) reference for WHO 2005 TEQ.
- 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCDD) was not detected at concentrations above the reporting limit in any samples collected during the August 2023 sampling event.
- Chlorinated phenols:
  - PCP was detected at concentrations exceeding the state maximum contaminant level (MCL) of 1 microgram per liter (µg/L) in wells MW- 1, MW-5, MW-13, MW-14, MW-15, and MW-16.
  - The highest concentration of PCP detected in groundwater was in monitoring well MW-1 at a concentration of 400 µg/L, located southeast of the cap.
  - Chlorinated phenols were identified in newly installed site monitoring wells MW-15 and MW-16 located further downgradient of the cap but not in well MW-10 located on Glendale Drive.
  - TCP was detected in wells MW-1, MW-5, MW-14, and MW-15, at concentrations of 12 µg/L, 0.62 J µg/L, 1.3 µg/L, and 0.54 J µg/L, respectively.



The August 2023 monitoring event continued to show the highest PCP concentrations in groundwater are in well MW-1. Levels show a decrease by two orders within a short distance at recently installed well MW-15 (approximately 25 feet downgradient). Similar PCP levels were detected in the groundwater sample collected from well MW-16 on private property downgradient the cap. Testing results obtained from wells MW-15 and MW-16 are considered initial to assessing contamination in the area downgradient of the cap and future monitoring events will help further define the extent. Contaminant concentrations in site wells are generally consistent with historical trends with the highest levels near the cap. Low levels of phenols continue to be detected in wells located east of the cap by the old planer mill and presumably outside the influence of buried waste material.

## 6.0 References Cited

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Table 2-2 Historical Groundwater Elevations		
Well Name	Date	Groundwater Elevation (ft msl)
MW-1	4/8/1998	80.67
	7/8/1998	72.04
	1/26/1999	79.97
	7/14/1999	73.37
	4/13/2000	78.23
	10/19/2000	69.06
	6/7/2001	70.62
	12/26/2002	84.22
	12/12/2003	82.87
	3/15/2004	86.17
	6/10/2004	83.44
	1/28/2005	85.70
	8/3/2005	83.72
	1/11/2006	88.67
	1/24/2007	85.22
	6/7/2010	85.32
	10/18/2010	80.50
	11/3/2011	82.12
	4/11/2012	87.73
	5/13/2015	83.60
	11/10/2015	79.77
	5/23/2016	84.05
	12/14/2016	87.92
	5/8/2017	85.92
	8/22/2019	81.56
	3/5/2021	85.84
2/22/2022	83.71	
8/23/2022	80.75	
2/22/2023	85.67	
8/22/2023	80.26	
MW-5	1/12/1998	84.44
	4/8/1998	80.33
	7/8/1998	72.59
	1/26/1999	80.20
	7/14/1999	73.68
	4/13/2000	77.71
	10/19/2000	69.12
	6/7/2001	71.12
	12/26/2002	84.18
	12/12/2003	82.31
	1/28/2005	85.66
	8/3/2005	83.68
	1/11/2006	88.34
1/24/2007	85.36	

Table 2-2 Historical Groundwater Elevations		
Well Name	Date	Groundwater Elevation (ft msl)
MW-5 cont'd	6/7/2010	86.05
	10/18/2010	80.60
	11/3/2011	82.26
	4/11/2012	88.04
	5/13/2015	83.85
	11/10/2015	81.10
	5/23/2016	84.35
	12/14/2016	88.05
	5/8/2017	86.50
	3/5/2021	86.12
	2/22/2022	83.97
	8/23/2022	80.94
	2/22/2023	85.68
	8/22/2023	80.50
MW-7	1/12/1998	83.88
	4/8/1998	73.90
	7/8/1998	68.34
	1/26/1999	71.82
	7/14/1999	70.30
	4/13/2000	72.31
	10/19/2000	67.73
	6/7/2001	66.43
	12/26/2002	84.12
	12/12/2003	82.83
	1/28/2005	86.37
	8/3/2005	84.68
	1/11/2005	88.53
	1/24/2007	86.00
	6/7/2010	92.40
	10/18/2010	82.40
	11/3/2011	83.94
	4/11/2012	89.23
	5/13/2015	85.27
	11/10/2015	81.10
	5/23/2016	84.35
	12/14/2016	89.08
	5/8/2017	87.52
	8/21/2019	83.06
3/5/2021	87.37	
2/22/2022	85.39	
8/23/2022	82.43	
2/22/2023	86.87	
8/22/2023	81.36	



Table 2-2 Historical Groundwater Elevations		
Well Name	Date	Groundwater Elevation (ft msl)
MW-8	1/12/1998	84.73
	4/8/1998	81.24
	7/8/1998	73.72
	1/26/1999	81.99
	7/14/1999	75.73
	4/13/2000	78.87
	10/19/2000	71.06
	6/7/2001	72.74
	12/26/2002	85.14
	12/12/2003	88.46
	1/28/2005	89.50
	8/3/2005	85.08
	1/11/2006	89.91
	1/24/2007	87.87
	6/7/2010	no reading
	10/18/2010	no reading
	11/3/2011	no reading
	4/11/2012	no reading
	5/13/2015	87.56
	11/10/2015	84.64
	5/23/2016	87.32
	12/14/2016	90.14
	5/8/2017	88.24
	8/21/2019	82.91
	3/5/2021	88.41
	2/22/2022	87.49
8/23/2022	82.33	
2/22/2023	88.28	
8/22/2023	82.58	
MW-9	1/12/1998	86.88
	4/8/1998	83.50
	7/8/1998	81.21
	1/26/1999	82.48
	7/14/1999	81.14
	4/13/2000	82.19
	10/19/2000	78.90
	6/7/2001	79.70
	12/26/2002	86.30
	12/12/2003	85.68
	1/28/2005	89.26
	8/3/2005	87.85
	1/11/2006	90.89
	1/24/2007	89.04
	6/7/2010	92.55
	10/18/2010	89.70
11/3/2011	88.52	
4/11/2012	93.38	
5/13/2015	87.56	
11/10/2015	84.64	
5/23/2016	88.68	



Table 2-2 Historical Groundwater Elevations		
Well Name	Date	Groundwater Elevation (ft msl)
MW-9 cont'd	12/14/2016	91.56
	5/8/2017	90.66
	8/21/2019	83.81
	3/5/2021	90.93
	2/22/2022	89.37
	8/23/2022	86.84
	2/22/2023	90.61
	8/22/2023	86.99
MW-10	6/7/2010	84.55
	10/18/2010	89.70
	11/3/2011	81.32
	4/11/2012	85.91
	5/13/2015	82.21
	11/10/2015	79.50
	5/23/2016	82.29
	12/14/2016	89.95
	5/8/2017	84.71
	8/21/2019	81.01
	3/5/2021	84.58
	2/22/2022	83.02
	8/23/2022	79.80
	2/22/2023	89.15
8/22/2023	79.69	
MW-11	10/18/2010	81.50
	11/3/2011	83.47
	4/11/2012	86.50
	5/13/2015	83.90
	11/10/2015	81.73
	5/23/2016	84.45
	12/14/2016	87.46
	5/8/2017	85.55
	8/21/2019	82.18
	3/5/2021	85.51
	2/22/2022	84.34
	8/23/2022	81.24
	2/22/2023	86.13
8/22/2023	80.50	
MW-12	11/3/2011	82.10
	4/11/2012	87.81
	5/13/2015	83.53
	11/10/2015	79.68
	5/23/2016	83.98
	12/14/2016	87.93
	5/8/2017	85.98
	8/21/2019	81.55
	3/5/2021	85.93
	2/22/2022	83.75
	8/23/2022	80.76
	2/22/2023	85.51
	8/22/2023	80.33

Table 2-2 Historical Groundwater Elevations		
Well Name	Date	Groundwater Elevation (ft msl)
MW-13	2/22/2022	84.44
	8/23/2022	84.31
	2/22/2023	86.29
	8/22/2023	81.03
MW-14	2/22/2022	84.66
	8/23/2022	81.39
	2/22/2023	86.34
	8/22/2023	81.05
MW-15	8/22/2023	80.40
MW-16	8/22/2023	80.02

Table 2-3  
Groundwater Analytical Results  
2016 to 2023

Well Name	Date	PCP	TCP	Chromium	Hexavalent Chromium	Nitrate	Total Iron	Forrous Iron	Arsenic	Sulfate	Chloride	TPHD	VOCs (DPE)
	Units			µg/L		mg/L		µg/L		mg/L		µg/L	
MW-1	5/13/2015	630 <sup>a</sup>	14	--	--	--	--	--	--	--	--	--	--
	5/13/2015 (FD)	560 <sup>a</sup>	12	--	--	--	--	--	--	--	--	--	--
	11/11/2015	610 <sup>a</sup>	120	--	--	--	--	--	--	--	--	--	--
	11/11/2015 (FD)	670 <sup>a</sup>	120	--	--	--	--	--	--	--	--	--	--
	5/23/2016	830 <sup>a</sup>	7.1	--	--	--	--	--	--	--	--	--	--
	5/23/2016 (FD)	1,100 <sup>a</sup>	8	--	--	--	--	--	--	--	--	--	--
	12/14/2016	1.2 <sup>a</sup>	<1.0	<5.0	<5.0	0.99	25	<100	<10	18	19	--	--
	12/14/2016 (FD)	1.2 <sup>a</sup>	<1.0	--	--	--	--	--	--	--	--	--	--
	5/8/2017	570 <sup>a</sup>	8.4	--	--	--	--	--	--	--	--	--	--
	5/8/2017 (FD)	530 <sup>a</sup>	7.9	--	--	--	--	--	--	--	--	--	--
	8/21/2019	1,200 <sup>a</sup>	29	--	<1.0	--	--	--	--	--	--	740 A	1.7
	3/5/2021	460 <sup>a</sup>	5.6	--	--	--	--	--	--	--	--	--	--
	2/22/2022	920 <sup>a</sup>	9.7	--	--	--	--	--	--	--	--	--	--
	8/23/2022	1300 <sup>a</sup>	<1,000 B9	--	--	--	--	--	--	--	--	--	--
	2/22/2023	0.34 <sup>a</sup>	<1.0	--	--	--	--	--	--	--	--	--	--
8/23/2023	400	12	--	--	--	--	--	--	--	--	--	--	
MW-5	5/13/2015	35 <sup>a</sup>	4.3	--	--	--	--	--	--	--	--	--	--
	11/11/2015	65 <sup>a</sup>	3.3	--	--	--	--	--	--	--	--	--	--
	5/23/2016	56 <sup>a</sup>	1.6	--	--	--	--	--	--	--	--	--	--
	12/14/2016	39 <sup>a</sup>	2.3	<5.0	<5.0	<0.10	330	600	<10	12	45	--	--
	5/8/2017	46 <sup>a</sup>	2.3	--	--	--	--	--	--	--	--	--	--
	8/21/2019	--	--	--	--	--	--	--	--	--	--	--	--
	3/5/2021	18	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2022	19	1.1	--	--	--	--	--	--	--	--	--	--
	8/23/2022	0.63	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2023	5.5 <sup>a</sup>	0.65 J	--	--	--	--	--	--	--	--	--	--
	8/23/2023	4.5	0.62 J	--	--	--	--	--	--	--	--	--	--
	MW-7	5/13/2015	0.39	<1.0	--	--	--	--	--	--	--	--	--
11/11/2015		<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
5/23/2016		<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
12/14/2016		<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
5/8/2017		<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
8/21/2019		<0.3	<1.0	--	<1.0	--	--	--	--	--	--	<50	<0.5
3/5/2021		<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
2/22/2022		0.26 J	<1.0	--	--	--	--	--	--	--	--	--	--
8/23/2022		0.12 J	<1.0	--	--	--	--	--	--	--	--	--	--
2/22/2023		<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
8/22/2023		0.17 J	<1.0	--	--	--	--	--	--	--	--	--	--
MW-8		5/13/2015	<0.3	<1.0	--	--	--	--	--	--	--	--	--
	11/11/2015	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	5/23/2016	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	12/14/2016	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	5/8/2017	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	8/21/2019	<0.3	<1.0	--	--	--	--	--	--	--	--	--	<0.5
	3/5/2021	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2022	0.13 J	<1.0	--	--	--	--	--	--	--	--	--	--
	8/23/2022	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2023	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2023	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	MW-9	5/13/2015	<0.3	<1.0	--	--	--	--	--	--	--	--	--
11/11/2015		<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
5/23/2016		<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
12/14/2016		<0.3	<1.0	--	<5.0	<5.0	1.4	<15	<100	1.9	10	--	--
5/8/2017		<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
8/21/2019		<0.3	<1.0	--	--	--	--	--	--	--	--	--	<0.5
3/5/2021		<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
2/22/2022		0.21 J	<1.0	--	--	--	--	--	--	--	--	--	--
8/23/2022		<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
2/22/2023		<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
8/22/2023		<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
MW-10		5/13/2015	<0.3	<1.0	--	--	--	--	--	--	--	--	--
	11/11/2015	<0.6	<2.0	--	--	--	--	--	--	--	--	--	--
	5/23/2016	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	12/14/2016	<0.3	<1.0	<5.0	<5.0	0.11	58	<100	<10	1.5	0.56	--	--
	5/8/2017	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	8/21/2019	<0.3	<1.0	--	<1.0	--	--	--	--	--	--	280 A	<0.5
	8/21/2019 (FD)	<0.3	<1.0	--	<1.0	--	--	--	--	--	--	210 A	<0.5
	3/5/2021	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	3/5/2021 (FD)	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2022	0.12 J	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2022 (FD)	0.26 J	<1.0	--	--	--	--	--	--	--	--	--	--
	8/23/2022	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	8/23/2022 (FD)	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2023	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2023 (FD)	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
8/22/2023	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--	
MW-11	5/13/2015	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	11/11/2015	0.67	<1.0	--	--	--	--	--	--	--	--	--	--
	5/23/2016	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	12/14/2016	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	5/8/2017	1.9 <sup>a</sup>	<1.0	--	--	--	--	--	--	--	--	--	--
	8/21/2019	<0.3	<1.0	--	--	--	--	--	--	--	--	--	<0.5
	3/5/2021	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2022	0.14 J	<1.0	--	--	--	--	--	--	--	--	--	--
	8/23/2022	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2023	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2023	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	MW-12	5/13/2015	53 <sup>a</sup>	<1.0	--	--	--	--	--	--	--	--	--
11/11/2015		51 <sup>a</sup>	<1.0	--	--	--	--	--	--	--	--	--	--
5/23/2016		120 <sup>a</sup>	<1.0	--	--	--	--	--	--	--	--	--	--
12/14/2016		46 <sup>a</sup>	<1.0	<5.0	<5.0	0.13	<15	<100	<10	5.4	28	--	--
5/8/2017		81 <sup>a</sup>	<1.0	--	--	--	--	--	--	--	--	--	--
8/21/2019		110 <sup>a</sup>	1.7	--	--	--	--	--	--	--	--	--	--
3/5/2021		120 <sup>a</sup>	<1.0	--	--	--	--	--	--	--	--	--	--
2/22/2022		120 <sup>a</sup>	0.49 J	--	--	--	--	--	--	--	--	--	--
8/23/2022		130 <sup>a</sup>	<100 B9	--	--	--	--	--	--	--	--	--	--
2/22/2023		9.4 <sup>a</sup>	0.51 J	--	--	--	--	--	--	--	--	--	--
8/22/2023		<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
MW-13		2/22/2022	0.27 J	<1.0	--	--	--	--	--	--	--	--	--
	8/23/2022	0.77	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2023	0.17 J	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2023	0.42	<1.0	--	--	--	--	--	--	--	--	--	--
MW-14	2/22/2022	85 <sup>a</sup>	1.7	--	--	--	--	--	--	--	--	--	--
	8/23/2022	84 <sup>a</sup>	<10 B9	--	--	--	--	--	--	--	--	--	--
	2/22/2023	49 <sup>a</sup>	<1.0	--	--	--	--	--	--	--	--	--	--
8/22/2023	57 <sup>a</sup>	1.3	--	--	--	--	--	--	--	--	--	--	
MW-15	8/22/2023	8.2 <sup>a</sup>	0.54 J	--	--	--	--	--	--	--	--	--	--
MW-16	8/22/2023	5.2 <sup>a</sup>	<1.0	--	--	--	--	--	--	--	--	--	--







\\Eureka\2020\020189-M-P-Mill\GIS\PROJ\_MXD\090\_TechMemo\TechMemo\_Fig3\_SoilBorings.mxd USER: mrose DATE: 5/9/24, 3:01PM



Former McNamara & Peepe Lumber Mill  
 Technical Memo  
 1619 Glendale Drive, Arcata, California

CAP Area Soil Boring Locations

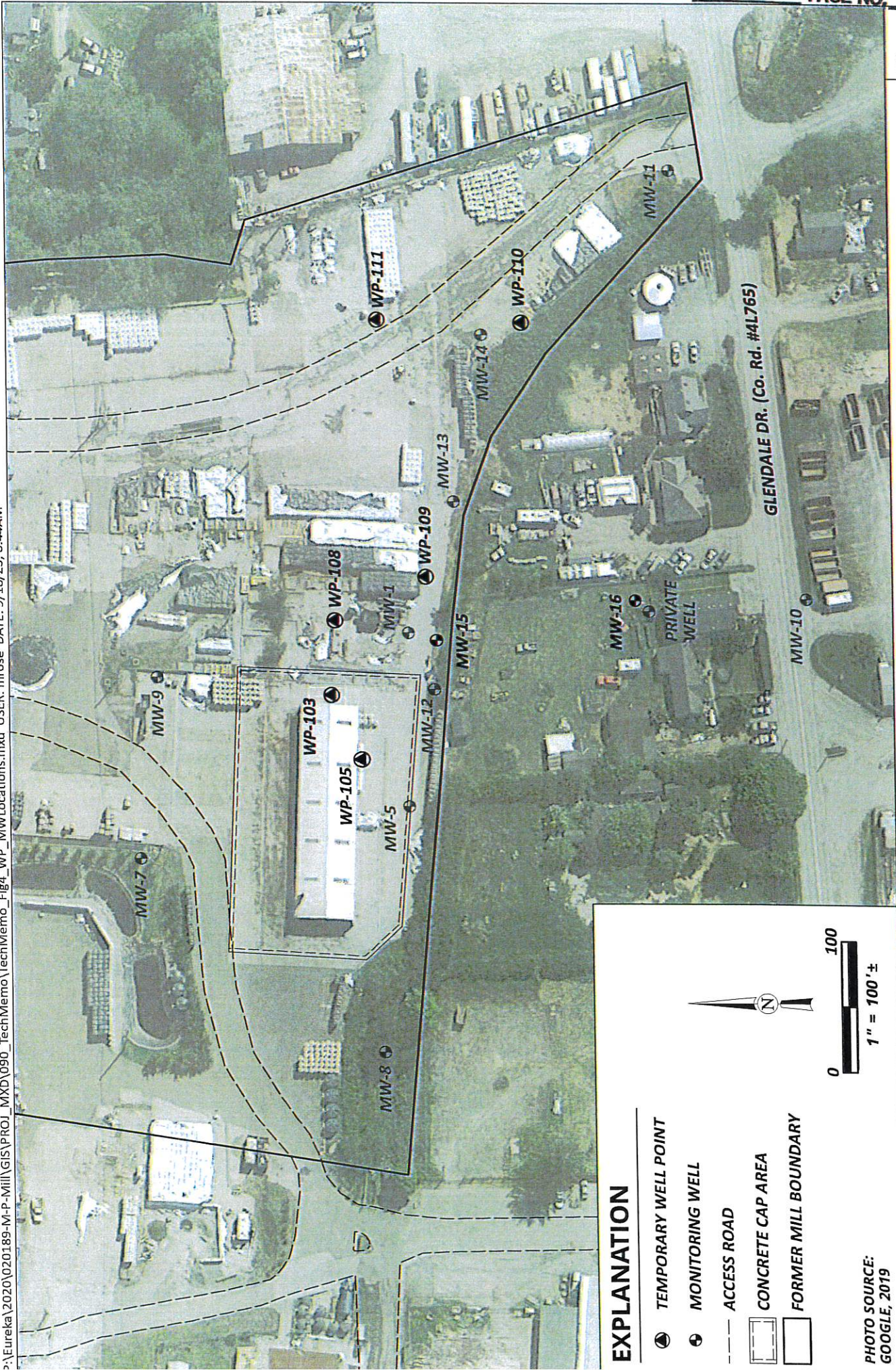
Figure **3**

May 2024 - 020189.090





G:\Eureka\2020\020189-M-P-Mill\GIS\PROJ\_MXD\090\_TechMemo\TechMemo\_Fig4\_WP\_MWLocations.mxd USER: mrose DATE: 9/18/23, 8:44AM



**EXPLANATION**






-  TEMPORARY WELL POINT
-  MONITORING WELL
-  ACCESS ROAD
-  CONCRETE CAP AREA
-  FORMER MILL BOUNDARY



PHOTO SOURCE:  
GOOGLE, 2019

Former McNamara & Peepe Lumber Mill  
Technical Memo  
1619 Glendale Drive, Arcata, California



Well Point and Monitoring Well Locations

September 2023 - 020189.090



\\Eureka\2020\020189-M-P-Mill\GIS\PROJ\_MXD\090\_TechMemo\TechMemo\_Fig5\_SitePlan2.mxd USER: mrose DATE: 9/14/23, 2:25PM

### EXPLANATION







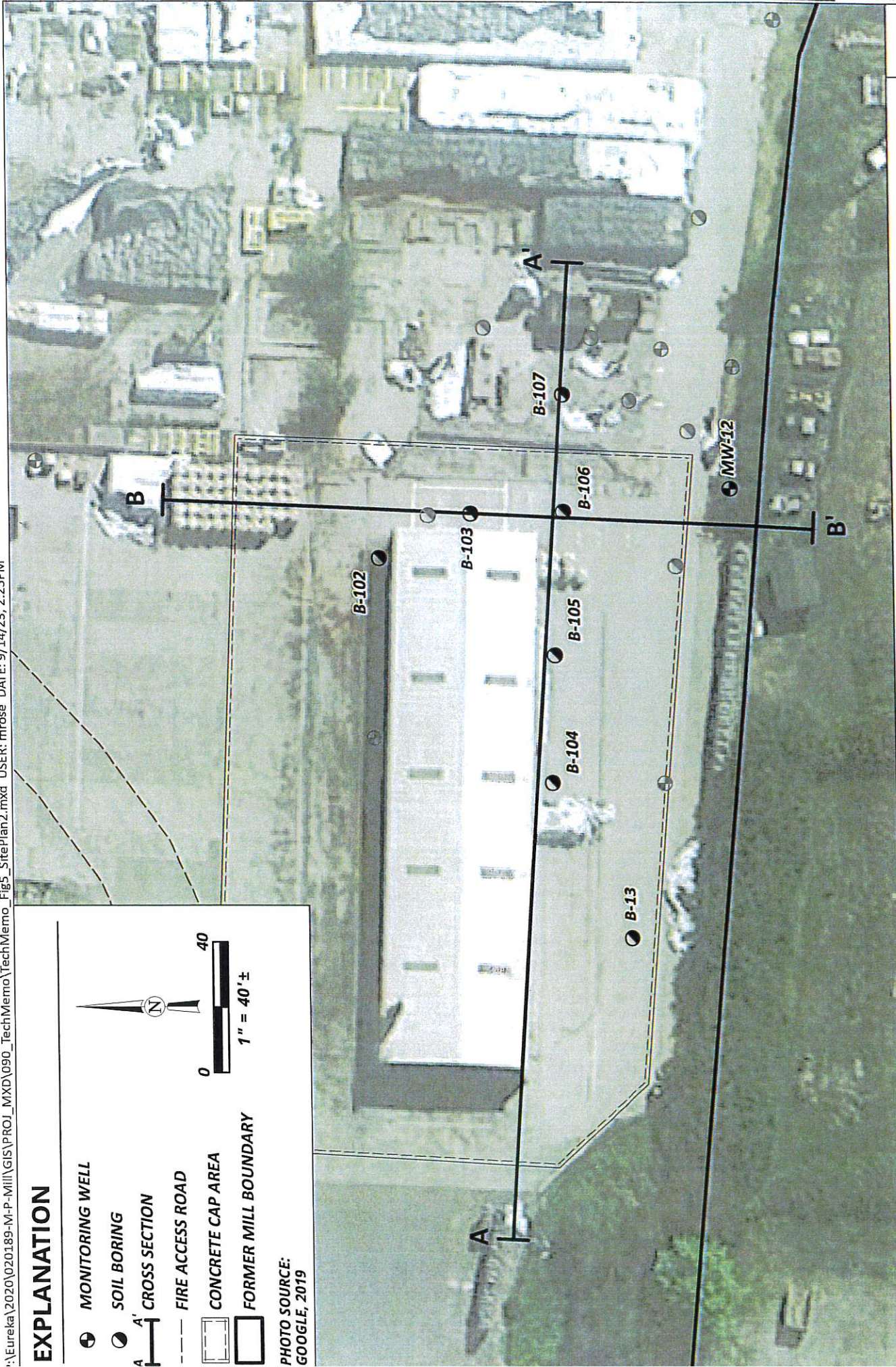
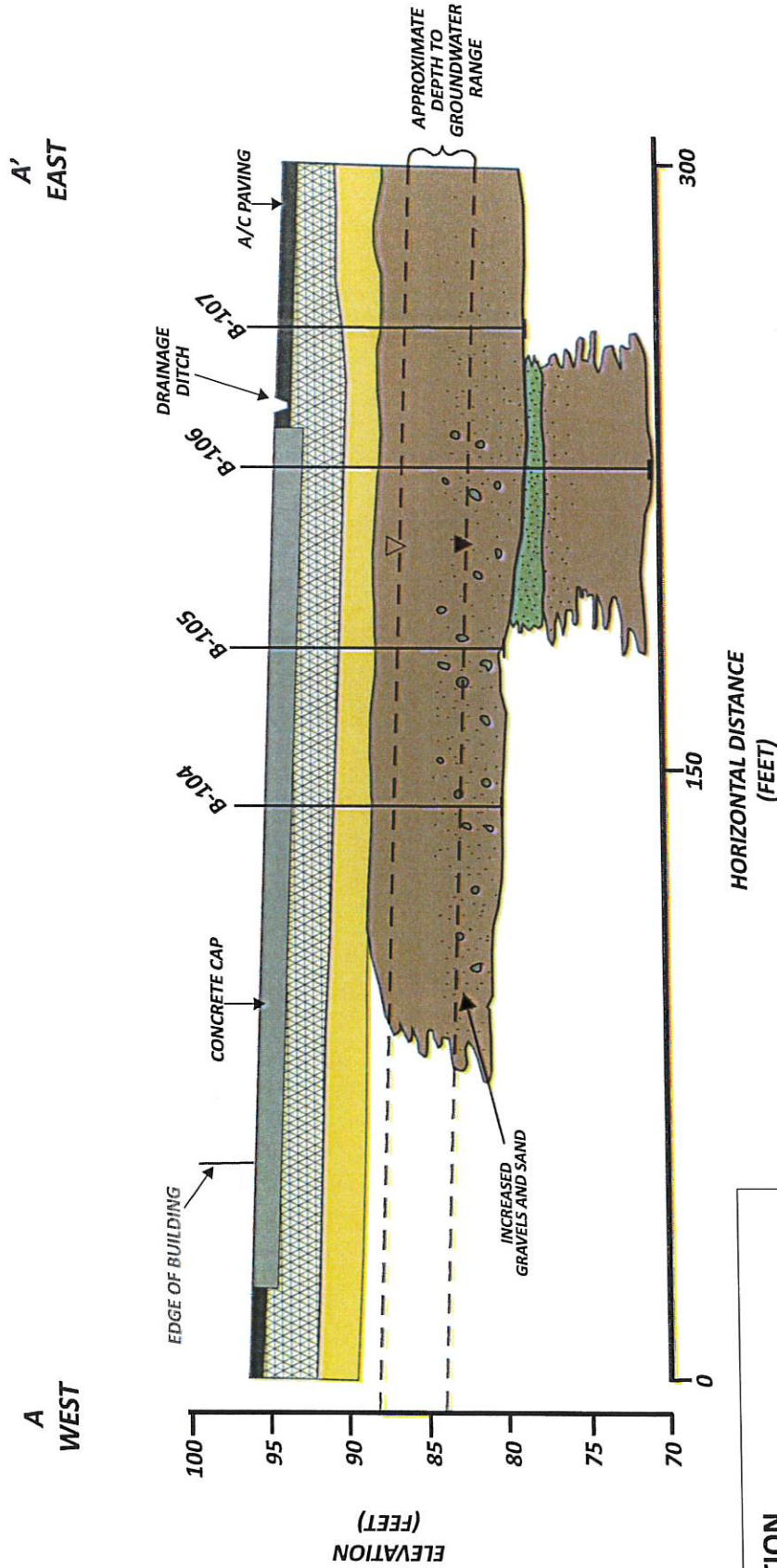
-  MONITORING WELL
-  SOIL BORING
-  CROSS SECTION
-  FIRE ACCESS ROAD
-  CONCRETE CAP AREA
-  FORMER MILL BOUNDARY

PHOTO SOURCE:  
GOOGLE, 2019





### GEOLOGIC CROSS-SECTION A-A'



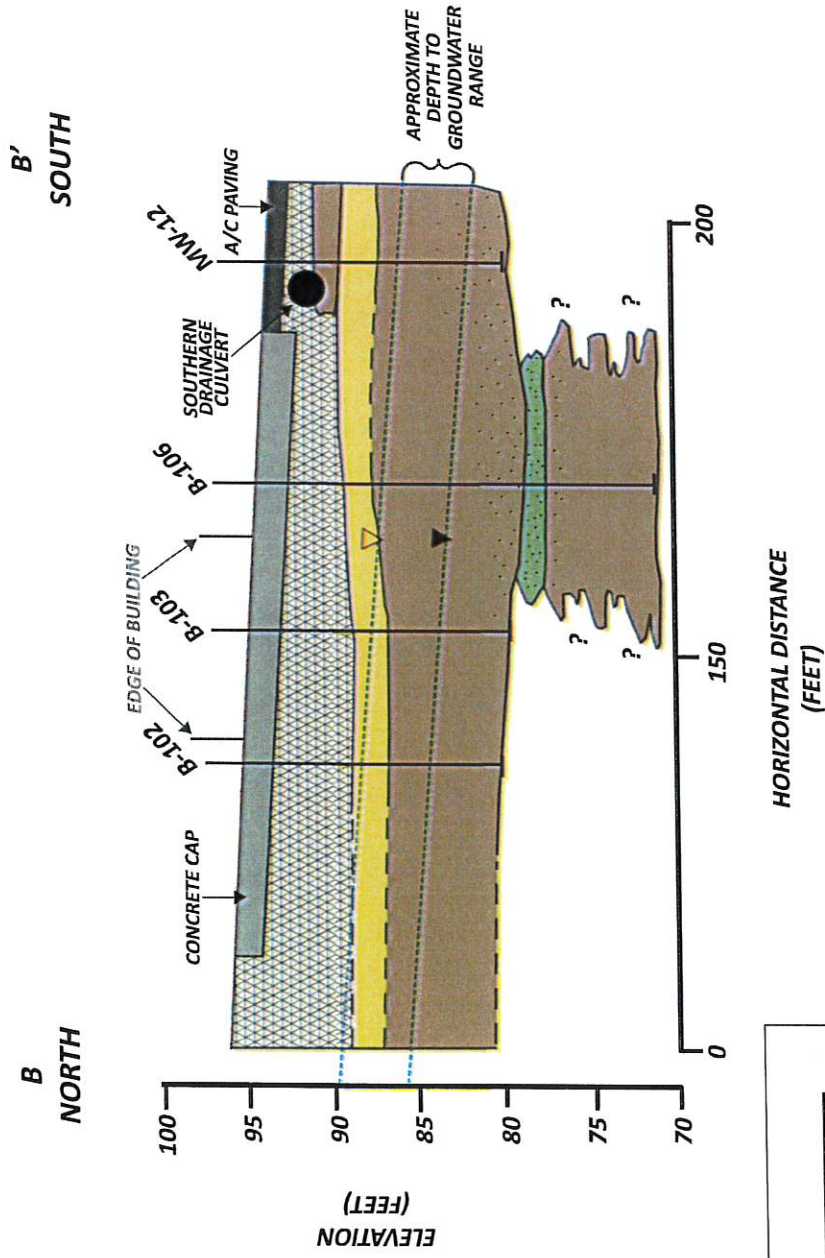
EXPLANATION	
	FILL
	CLAYEY SAND
	CLAY to CLAY with SAND
	SILT to SILT with SAND and GRAVEL

V.E. = 1:4



\\leureka\Projects\2020\020189-M-P-Mill\GIS\FIGURES\090TechMemo\Fig6\_GeologicCrossSectionB-B' USER: atroia DATE: 9/14/2023 4:00PM

**GEOLOGIC CROSS-SECTION  
B-B'**



EXPLANATION	
FILL	
CLAYEY SAND	
CLAY to CLAY with SAND	
SILT to SILT with SAND and GRAVEL V.E. = 1:4	

Geologic Cross Section B-B' Figure 7  
September 2023- 020189.090

Former McNamara & Peepe Lumber Mill  
Technical Memo  
1619 Glendale Drive, Arcata, California



**NEW  
BUSINESS**



## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

To: Board of Directors  
From: Contessa Dickson  
Date: November 14, 2024  
Subject: RLCSO policy 6000.543 & 6000.544 revision

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**Discussion**

RLCSO is requesting the approval of changes to Policy 6000.543 & 6000.544-Recreational Lease Site standards, see attached letter. Amendment 3 June 1, 2023 to the Master Lease between RLCSO and HBMWD states HBMWD will approve policy changes regarding Ruth Lake Lease Lots before they are approved by RLCSO's Board. Attached are the proposed changes with additions in red and deletion stricken through.

The significant change is the policy previously stated signs were not allowed on recreational sub lease sites. The update is no trespassing signs are allowed on all recreational sub lease sites. Per the updated policy, only signs purchased from RLCSO may be used. RLCSO supplies two versions of the no trespassing sign. One version for docks and the other for any other type of entry. RLCSO recommends placing one sign on lease lot docks, at road access entry point or walking path, and/or any other place bordered by the lake or non-private lands.

Sign placement must be approved by RLCSO prior to installation. Determination of appropriate placement per *Ca. Civ. Code § 830*- "The owner takes to the edge of the lake or stream, at low-water mark; when it borders upon any other water, the owner takes to the middle of the lake or stream."

*Ca. Civ. Code § 1008*- "No use by any person or persons, no matter how long continued, of any land, shall ever ripen into an easement by prescription, if the owner of such property posts at each entrance to the property or at intervals of not more than 200 feet along the boundary a sign reading substantially as follows: "Right to pass by permission, and subject to control, of owner: Section 1008, Civil Code."

**Recommendation**

Staff recommends the Board approve the proposed amendments to the RLCSO Policy 6000.543 & 6000.544 -Recreational Lease Site Standards, in accordance with the provisions of Master Lease Amendment 3.



**Ruth Lake Community Services District**

12200 Mad River Road

P.O. Box 6

Mad River, CA 95552

Telephone: 707-574-6332 Fax: 707-574-6080

Email: [ruthlakecsd@yahoo.com](mailto:ruthlakecsd@yahoo.com) Website: [www.ruthlakecsd.org](http://www.ruthlakecsd.org)

October 11, 2024

John Friedenbach, General Manager  
Humboldt Bay Municipal Water District  
PO Box 95  
Eureka, CA 95502-0095

Re: RLCSD Policy 6000.543 & 6000.544 revision

Dear John,

At our September 10, 2024, board meeting the RLCSD board approved a few draft changes to Policy 6000.543 and 6000.544, Recreational Lease Site Standards. I would like to request these proposed changes to be presented at your next board meeting to your board of directors for possible approval.

These revisions are to help with the grey area that 6000.544 shares and to be in line with Civil Codes 830 and 1008. If you have any questions about the proposed changes to Policy 6000, please let me know.

Sincerely,

A handwritten signature in cursive script that reads "Caitlin Canale".

Caitlin Canale  
General Manager

**RUTH LAKE COMMUNITY SERVICES DISTRICT**  
**Policy Handbook**

**POLICY TITLE:** Recreational Lease Site Standards (DRAFT)

**POLICY NUMBER:** 6000

**6000.00 Purpose:** The purpose of this policy is to guide development and use on recreational sublease sites within the buffer strip around Ruth Lake. It also provides some direction on identifying and correcting deficiencies on existing structures and sites.

**6000.01 Need:** These standards provide a framework for the district administration to guide development around the lake. As the lake becomes more popular, the actions of individual leaseholders increasingly impact the sites and users around them. Environmental concerns of development are receiving more attention and regulation. State and County health, building, planning, and fire safe codes and laws are becoming ever stricter and are being increasingly aggressively enforced. The subleases, although the sub-leaseholder's individual responsibility, are collectively and ultimately RLCSD's responsibility.

**6000.02 Philosophy:** Use of the buffer strip is recreational in nature.

A. Development will be controlled to the extent that it will encourage recreational, part-time use, and not allow full-time residential use.

B. Development will be designed to minimize impact on the "view shed" from the lake and the road.

C. Development will also be guided by the philosophy exemplified by the statement that one well-designed small garage is preferable to several small storage sheds.

D. Some sites will not support even this much development, and all development will be addressed on a case-by-case basis.

E. It is acknowledged that these guidelines will permit some types of development on some lease sites and prohibit the same type and extent of development on other sites. What was allowed in the past is not necessarily acceptable practice today.

F. All development shall be as non-invasive as possible, blending in with the natural surroundings as much as possible.

G. All projects are considered on a case-by-case basis. Approval at one site does not imply approval at another site.

**6000.03 Existing development:** Structures which have been previously approved by RLCSD, HBMWD and Trinity County (as appropriate), which may otherwise appear to violate this policy, shall be allowed to remain unless they present a safety or other hazard, or are being maintained so poorly they become unsightly.

A. If a leaseholder wishes to construct a new structure, he may be required to remove an existing structure of similar use even if previously approved, as is consistent with paragraph 6000.02C above.

**6000.04 Use:** Ruth Lake is an artificial impoundment of water created primarily for municipal and industrial purposes and any recreational use of the water is subordinate to such uses.



A. Recreational sub-lease sites shall not be used for residential purposes or become the domicile of the lessee. Policy 6010 addresses this topic.

**6000.05** The standards for **boat access only leases** are further guided by policy 6400.

**6000.10 Maintenance:** The sublease contract requires that the lease site be maintained in good condition and kept in a clean and sightly condition and in as good of condition as when possession was delivered to sublessee.

**6000.11 Trash and garbage:** The lease site will be free of visible garbage at all times. Trash and garbage will be stored in rigid containers, with tight fitting lids, not plastic garbage bags, and all trash and garbage will be removed when the site is unoccupied. The Ruth Lake area is home to many wild and feral animals which will be happy to make a mess for you. Disposing of trash or garbage on the buffer strip either in trash cans (other than their own), dumpsters, or outright dumping is prohibited, and may result in prosecution and loss of the lease.

**6000.12 Building materials:** Building materials may only be stored on the site if a project has been approved and is under construction. Any lease holder found to be dumping construction debris in campground, marina, day use areas, including dumpsters, or any undeveloped portion of the buffer strip will be subject to prosecution, and may lose their lease.

**6000.13 Structures:** Structures of all types shall be maintained in good condition. Broken windows, railings, stairs, structures that pose a safety hazard, do not meet current standards because of age or wear must be repaired or removed within the time limit set by the administrator.

**6000.14 Trees and Brush:** All trees and brush remain the property of HBMWD under the provisions of the master lease and the sublease contract. Cutting of trees is prohibited without prior written permission of RLCSD and HBMWD (see policy #6350). Trimming of limbs and brush for fire safety, and around roads and structures is permitted as maintenance. Debris must be disposed of as soon as possible by burning. Burn permits are required and enforced.

**6000.15 Gardens:** Gardens are specifically prohibited on leases using water from the lake by the lake water lease addendum. It is the philosophy of both the HBMWD and RLCSD Board of Directors that the areas around the lake remain as natural as possible.

**6000.151** Areas away from the lake, such as the Rodeo grounds and Holly Creek, have developed differently, and shall be allowed to have small flower gardens. Vegetable gardens are prohibited as they are more residential in nature.

**6000.16 Vehicles:** Excessive numbers of cars, boats, trailers, recreational and other types of vehicles shall not be stored on the lease. All such vehicles shall be in working order, well maintained and be neat in appearance. See para. 6000.27 regarding recreational vehicles.

**6000.17 Propane:** Propane and other fuel tanks must be secured to a solid post or structure if not designed to be free standing.

**6000.18 Firearms:** The shooting of firearms is prohibited on lease sites except when legally taking waterfowl during waterfowl season.

**6000.19 Fireworks:** Fireworks shall not be used on the buffer strip.

**6000.20 Development and improvement:**

**6000.21** The Buffer strip was developed to provide recreational opportunities for local residents and visitors to the area.

**6000.22 Extent:** Development will generally be limited to one dwelling, one bath facility if not provided for in dwelling (i.e.: primary dwelling is an RV which is intended to be moved regularly), one storage building, one water storage or pumping structure if necessary, and one temporary RV for a guest (see para. 6000.27 below and para. 6000.02C, above).

**6000.23 Placement:** No structure shall be placed at an elevation less than 2675 ft. (spillway level plus 21 ft.). The horizontal setback (from the 2675 ft level) must be 20 feet. Side and back lot line spacing shall not be less than 30 feet. Lease lots wishing improvements but not able to meet all of these requirements must be considered and approved on an individual basis by both the RLCSD and the HBMWD Board of Directors.

**6000.24 Permission:** The recreational sublease (Para 17), requires that the sublease holder gain the written consent of both RLCSD and HBMWD before any alteration, addition, or improvement be made to the lease site. According to the Master Lease, HBMWD has up to 45 days to consider the project, plan accordingly.

**6000.25 Approval:** Approval of a project by RLCSD and HBMWD means only that the improvement appears not to interfere with RLCSD or HBMWD activities on the buffer strip. It does not imply that the project design and engineering is proper or safe. It does not imply that the project is acceptable to Trinity County or other agencies. All projects are considered on a site-specific basis, what is suitable on one site may not be allowed on another.

**6000.26 Insurance:** Since all structures must be insured against fire hazard, now is a good time to ensure your insurance policy will cover the proposed improvement. The district will ensure a current, valid, and acceptable certificate of insurance, which includes the appropriate amount of fire and liability insurance as stated in the sublease contract, is on file in the district office before approving any project.

**6000.27 Recreational vehicles:** Recreational vehicles are defined as vehicles designed or capable of being dwelt in.

- a. Are limited to one per lease site,
- b. Must remain capable of being moved,
- c. If intended or allowed to remain longer than fourteen days, must have the written permission of RLCSD.
- d. Any RV on a lease site is considered at least one extra bedroom, and the septic tank must be sized to accept the additional load. This must be considered by the District when considering this kind of request.
- e. Under special circumstances, more than one unit will be allowed on a temporary basis, again with written permission in advance obtained from RLCSD.
- f. A recreational vehicle that functions as the main dwelling unit must have a Trinity County Planning Department Directors use permit.

**6000.28 Process for obtaining approval for improvements:**

A. The sublease holder submits the project to RLCSD for approval. The application must include:

1. A written description of the project, including type of construction, dimensions, materials, and colors proposed.
2. A site map indicating where on the site the project will be located
3. Timetable to start and finish project
4. Who will be doing the project.

B. The Administrator has authority to approve any project he feels complies with the lease site standards, county, state, and federal laws, and other guidance provided by the Board of Directors. If the Administrator feels that the project is not consistent with the guidance provided, the Administrator is directed to make the objections known to the leaseholder, and work with them to achieve the goal of the project if at all possible. If the sublease-holder feels the project does meet the guidelines, or that compelling reasons exist for the project to be completed as requested, he may ask the Board of Directors to approve the project.

C. Things for the Administrator to consider when reviewing a project.

1. Does the project fit into the guidelines outlined.
2. Is the project appropriate to the specific lease site and the area
3. Effect the project will have on the immediate neighbors
4. Effect project has on the view shed from the lake and road.
5. Effect project will have on the operations of HBMWD and RLCSD uses and projects at the lake.
6. Effect project will have on other recreational lake users.
7. Amount and type of insurance coverage required.

D. If approved, the project documents are forwarded by RLCSD to HBMWD for their review and approval. Copies of RLCSD and HBMWD approvals will be forwarded to the leaseholder by RLCSD when obtained. Because environmental and building conditions can change quickly, the project must be begun within one year and substantial progress made or the permission of RLCSD and HBMWD for the project will expire.

E. The applicant may then apply to the appropriate Trinity County department for permits. Trinity County will not issue a permit until it has RLCSD and HBMWD permission on file. Copies of the Trinity County permits shall be forwarded to RLCSD prior to beginning work on the project, and copies of the completed permits must be filed with RLCSD when the project is complete.

F. Building Permits: Building permits are required by Trinity County for any structure larger than 120 square feet, including eaves; any structure with plumbing or electricity, and any structure intended for human habitation regardless of size. Decks may need a permit as well. It is the leaseholders' responsibility to determine the need. RLCSD will assume a building permit is required for all projects unless otherwise notified. No project may begin until a copy of the permit is on file with RLCSD.

**6000.29 Utilities:** Both electrical and telephone connections require a utility easement between the utility provider and Humboldt Bay MWD before installation. HBMWD charges a fee of one



hundred dollars (\$100) to cover their costs in establishing the easement. Please contact RLCSD prior to contacting the utility company. Policy 6300 applies.

**6000.30 Water:**

**6000.31 Lake Water:** HBMWD and RLCSD prohibit water diversion from Ruth Lake Reservoir without proper permits. Lake water is defined as any surface water gathered within the flood level of Ruth Lake, determined to be below elevation 2674, 20 feet above the current spillway elevation, and between the Matthews Dam and the Ruth-Zenia Bridge. Policy 8100 and 8110 refer.

**6000.32 Well water:** Wells must be located at least 100 feet from the high-water mark of the Ruth Lake reservoir. Previous permission of RLCSD, HBMWD and a permit and inspection from the Trinity County Health Department are required. A copy of the well drillers report must be forwarded to RLCSD.

**6000.33 Surface water:** taken from rivers, creeks or springs located above the flood level within the buffer strip are not regulated, however both RLCSD and HBMWD strongly recommend filtration and disinfection before any type of use. This water may contain contaminants which are harmful to humans.

**6000.40 Sewage disposal systems:** No lease site shall be used until an approved sewage disposal system is in place and approved by Trinity County. This prohibition includes self-contained RV's and tent camping. Policies 6220 and 6225 provide guidance on this topic.

**6000.50 Roads:** Roads are becoming a controversial topic nationwide and within Trinity County. Roads must be maintained to the standard they were originally built and may be required to be upgraded as use increases, drainage patterns emerge or change, or for other reasons. Expect to have to upgrade your road as a condition of your Trinity County building permit. Encroachment permits are required wherever a private driveway intersects with a county road. California Fire Safe requirements have a great impact on road design and may well influence where you can place a dwelling or make significant improvements to it. Erosion control must be maintained.

Roads and drainage must be well maintained. See the "Ruth Lake Buffer Strip Road and Lease Site Standards for further information."

**6000.501 Road names:** Any driveway serving more than one dwelling must have a signpost if it intersects a county road. All road names must be approved by Trinity County.

**6000.502 Shared roads:** Shared roads are a shared responsibility of the leaseholders who access it. Culverts and side drains must be cleaned throughout the year. RLCSD does not maintain any roads but may require work to be done.

**6000.51 Gates:** Requests for gates will be considered on an individual basis. All gates must be approved by RLCSD and HBMWD prior to installation. Chain and cable gates are not acceptable or permissible.

**6000.52 Locks:** All gates if locked must have a lock keyed to the RLCSD master. Master keys are provided to fire, medical, law enforcement agencies, and utility companies that serve the ar-

ea. If the administrator or any of the above cannot open a gate because of an unapproved or non-functioning lock, they have permission to cut the lock, and the leaseholder must replace it at their expense. Providing a copy of an individual lock key to the RLCSD office does not meet this requirement.

**6000.53 Fences:** Are not allowed except for guarding against an unsafe condition, and only with prior approval.

**6000.54 Signs:**

**6000.541 Street signs:** Each road or driveway serving more than two dwellings must have a street sign if it intersects with a county road. All road names must be approved by Trinity County.

**6000.542 Address signs:** Each dwelling must have its lease number, or an address assigned by Trinity County posted on it, or at the driveway entrance that serves that individual dwelling if it will be more visible to emergency vehicles.

~~**6000.543 No trespassing** signs are not allowed on recreational sub lease site.~~

**6000.543 No Trespassing/Private Lease Signs:** No trespassing signs are allowed on all recreational sub lease sites. However, only signs purchased from RLCSD may be used. No other signs may be placed along the boundary of the sub lease sites for the purposes of indicating that the property is private. RLCSD supplies two versions of the typical "No Trespassing" sign. One version is for use on docks. One version is for any other type of entry, i.e. road, path, or drive. RLCSD recommends placing "No Trespassing" signs at the following locations (if applicable):

1. One sign on your dock
2. One sign at your road access entry point or walking path
3. Any other place bordered by the lake or non-private lands, i.e. road, parking lot, or public lands

Sign placement must be approved by the RLCSD prior to installation by the sub lease holder. "No Trespassing" signs are recommended by the RLCSD to be placed along the boundary of sub lease sites because they will stop the public from having any claimed right to park at, go across, dock at, fish from, sleep on, or otherwise use your sub lease site when placed correctly. If you have questions concerning the boundary of your sub lease site or would like help determining where the appropriate place is to install "No Trespassing" signs, please speak with RLCSD staff. (*Civil Code § 830 and § 1008*)

~~**6000.544** You may place "**Private lease**" signs. You may not impede access along the waters edge to 100 feet above it.~~

**6000.60 Erosion Control:** All lease sites, roads and trails will be constructed and maintained to minimize erosion into the lake, river, and other water courses. RLCSD or HBMWD may require modifications to proposed projects, maintenance or repair work to be done as necessary to ensure erosion control. The Trinity County Building and Planning Departments have final approval on all projects and may require additional mitigations, engineering documentation, and permits.

**6000.70 Boat or swimming docks:** Boat or swimming docks may be placed only with the advance written permission of RLCSD and HBMWD, policies number 6100, 6110, and 6120 apply.

**6000.80 Inspections:** The Administrator or designee may conduct a formal inspection of a lease site when:

1. A proposed assignment is received.
2. The Sublease contract is to be renewed within one year of renewal.
3. A major improvement project is requested.
4. A violation is noticed or reported.

A formal inspection will be documented in the lease file and a copy of the inspection report sent to the leaseholder.

The Administrator may make an informal (or walk through) inspection at any time. This may be followed up with no action, a telephone call, a letter, or a formal inspection.

**Approved by the RLCSD Board of Directors: 7/24/2003**

**Revisions to 6000.23; approved by the Board of Directors: 8/10/2006**

**Revisions to 6000.543; approved by the Board of Directors:**



**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: John Friedenbach  
Date: November 14, 2024

**Re: FERC Part 12D Comprehensive Assessment (CA)**

**Discussion**

As the Board is aware, one of the FERC dam safety requirements is an independent consultant's (IC) review of the dam construction, operating history, and maintenance every 5 years. This is referred to as a Part12D report after the FERC regulatory code reference. Our last Part12D report was completed in October 2021 and submitted to FERC for review and approval. The report contains information about the R. W. Matthews dam that is classified as critical energy infrastructure and therefore is not available for public review.

FERC issued a final rule amending its dam safety regulations on December 16, 2021. The new regulations became effective April 11, 2022. The new requirements basically revised the Independent Consultant inspection requirements, formally incorporated PFMA's (Potential Failure Mode Analysis) and Owner's Dam Safety Program, and adds Level 2 Risk Analysis. In addition, the types and frequency of IC inspections were modified as follows:

- Periodic Inspection (PI) – a "performance-focused" inspection of the dam features
- Comprehensive Assessment (CA) – a "deep dive" into the project
- Frequency is every 10 years with an alternating inspection  
(i.e. PI in years 1 and 10. CA in years 5 and 15. And so on...)

The IC qualifications and team concept have been updated. The IC must have at least 10 years of experience and expertise in dam design, construction, and the investigation of the safety of existing dams. The supporting team members must be subject matter experts in the various applicable disciplines such as: geologists, hydraulic structures engineers, mechanical engineers, etc. No IC Team member can be responsible for reviewing and evaluating their own work.

As part of the CA, significant revisions were made to the PFMA with the added requirement of a risk analysis referred to as a Level 2 Risk Analysis (L2RA). In addition to the current Supporting Technical Information Document (STID), a Digital Project Archive (DPA) which contains all pertinent reference material (photographs, drawings, instrumentation data, analysis/study/investigation reports, etc.) must be compiled and provided, preferably in searchable PDF's if possible.

There are many more new requirements detailed in the regulations that are too numerous to list here.

Staff has been communicating with Drew Kennedy and Elizabeth Landowski of Gannett Fleming regarding our Part12D Comprehensive Assessment which is due on November 1, 2026. Both will be present at the Board meeting to answer questions. They have prepared the attached proposal to lead the IC team for HBMWD's Comprehensive Assessment.

**Staff Recommendation**

Staff recommends authorization to enter into a contract in the amount of \$538,621 with Gannett Fleming to perform a FERC Part12D Comprehensive Assessment for the R. W. Matthews dam to be submitted to FERC by November 1, 2026. Total current fiscal year funding need is projected to be approximately \$100,000. The current year funding for the project will be from existing budget line item of \$20,000 plus one of these funds: ReMat reserves or Budget Reallocation or General Reserves. Additional project funding will be included in our annual budgets for the 2025-26 and 2026-27 fiscal years.



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November 6, 2024

Mr. John Friedenbach, General Manager  
Humboldt Bay Municipal Water District  
P.O. Box 95  
Eureka, CA 95502  
[friedenbach@hbmwd.com](mailto:friedenbach@hbmwd.com)

**Re: Proposal for R. W. Matthews Dam Part 12D Comprehensive Assessment  
FERC Project No. 3430-CA  
Trinity County, California**

Dear Mr. Friedenbach:

In response to your request, Gannett Fleming, Inc. has prepared this proposal to perform the Tenth Part 12D Comprehensive Assessment (CA) for R.W. Matthews Dam (Project), which is owned and operated by Humboldt Bay Municipal Water District (HBMWD). The dam and the associated hydroelectric facility are licensed as Federal Energy Regulatory Commission (FERC) Project No. 3430. HBMWD is in need of an Independent Consultant (IC) Team to perform the Part 12D safety inspection, facilitate a Potential Failure Mode Analysis (PFMA) and Level 2 Risk Analysis (L2RA) workshop; and perform a CA as required in a letter from the FERC, dated October 17, 2024. The Comprehensive Assessment Report (CAR) is due to FERC on November 1, 2026.

Gannett Fleming has provided dam safety engineering services for FERC-regulated projects in California and across the United States for more than two decades. We understand the strict requirements dam owners face when meeting regulatory requirements and will work closely with HBMWD staff to help make this an efficient and valuable process.

The IC Team we propose will include Co-ICs, one of which will have a geotechnical engineering background given the dam is a zoned earthfill embankment with a central impervious core and chimney drain. Based on our understanding of the Project and experience proposing IC Teams for other FERC Part 12D CAs, we propose the IC Team will include Subject Matter Experts (SMEs) with expertise in Engineering Geology, Hydrology and Hydraulics (H&H), Seismicity, Structural Engineering, Mechanical Engineering, and Consequences. Additionally, our proposed Facilitation Team will include a FERC-approved Facilitator and Recorder.

We have summarized our understanding of the Project, scope, schedule, and estimated fees.

## **BACKGROUND**

The Project impounds Ruth Reservoir and is located on the Mad River in Trinity County, California. The dam, completed in 1961, provides vital water supply for domestic, industrial, and municipal use in the Humboldt Bay area. Additionally, a 2-megawatt hydroelectric facility, the Gosselin Hydroelectric Project, was added in 1983 to generate power from discharged flows.

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R.W. Matthews Dam is classified as a High Hazard Potential dam due to its size and potential downstream impacts. The dam has a maximum height of 150 feet, a crest length of 630 feet, and a crest width of 30 feet. Ruth Reservoir has a storage capacity of 48,030 acre-feet at its spillway crest elevation of 2,654 feet.

The most recent (Ninth) Part 12D safety inspection for the Project was completed in 2021 and included a review and update of the PFMA. Since the completion on the Ninth Part 12D, the FERC has implemented significant changes to the Part 12D Program as outlined in the *Engineering Guidelines for Hydropower Projects (Engineering Guidelines)* which prescribes the scope of inspections, reports, qualifications of IC Team personnel, and related procedures.

### **SCOPE OF WORK**

The CA will follow the framework prescribed in Chapter 16 of the updated FERC *Engineering Guideline* for a Comprehensive Assessment, which includes preparation of an Inspection Plan, participating in a coordination call with the FERC, reviewing project documentation, performing hydrologic hazard assessment, conducting a life loss consequence assessment, preparation of a CA Pre-Inspection Preparation Report (CA-PIPR), performing the field inspection, conducting the PFMA and L2RA workshop, and preparation of the CAR. Details related to these tasks are outlined below.

Based on discussions with HBMWD and our understanding and experience with the updated FERC *Engineering Guidelines*, we anticipate performing the tasks as described below.

#### **Task 1 – Inspection Plan**

We will prepare an Inspection Plan (IP) for suitable for submittal to FERC. The IP will cover the specific features of R.W. Matthews Dam that require inspection, including the embankment, spillway, foundations, and hydroelectric facility. Special access requirements will be identified, including any confined space entries for certain features. The IC Team proposal, proposed schedule, and IC Team resumes will be included. Our proposed schedule, included in this proposal, considers the need to submit the IP to the FERC at least 180 days prior to the first proposed in-person activity. It is our understanding that HBMWD would like to submit the Inspection Plan in advance of the 180 days.

The ICs and Facilitator will participate in a FERC Second Coordination Call, which we understand will take place within six weeks after approval (or conditional approval) of the IP. The purpose of this call is to confirm roles and responsibilities for the IC Team activities and is an opportunity to discuss project-specific concerns that might help guide the IC Team review of supporting documents.

#### **Assumptions**

- The IP will be developed in coordination with HBMWD to confirm the plan captures the appropriate special conditions and concerns for the Project.

#### **Deliverables**

- Tenth Part 12D Comprehensive Assessment Inspection Plan for R.W. Matthews Dam (PDF format). A draft copy will be provided to HBMWD for review prior to finalizing. A two-week review period has been included in the schedule for HBMWD review.

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### **Task 2 – Existing Documentation Review**

The IC Team will perform a detailed review of existing information to prepare for the site inspection and the PFMA and L2RA workshop. Findings from this review will be documented in the CA-PIPR under Task 4 below.

The IC Team will perform a review of the available documentation pertaining to the basis of design and project construction. The review will comment on the project design, evaluate as-built conditions relative to modern state of practice, and comment on implications to dam safety.

The review of existing analyses of record will focus on seismic analysis, hydrology and hydraulic studies, dam breach analysis, earth embankment seepage and stability analyses, and studies pertaining to the spillway outlet works and powerhouse. The IC Team will conduct an in-depth review of the methods and assumptions of the analyses and comparison to current state of practice. Independent calculation checks (as appropriate) will be performed by the IC Team to evaluate the existing analyses. The review of the existing analyses of record will also help inform the IC Team on the adequacy of the spillway to safely pass flows.

A review of the existing monitoring data contained in the last five years of Dam Safety Surveillance and Monitoring Reports (DSSMRs) will be performed. An interpretation of the data, including any unusual or adverse trends in the data, will be discussed in the CA-PIPR and ultimately in the CAR. The current threshold and action levels will also be reviewed for appropriateness.

A comprehensive review of the Supporting Technical Information Document (STID) will be performed to assess its completeness and appropriateness for the Project. The STID will be evaluated to make sure that the information provided accurately represents the source material, fulfills the requirements of the FERC Chapter 15 *Engineering Guidelines*, and is sufficiently comprehensive to be useful in the event of a dam safety emergency and during future project reviews.

The IC Team will also review prior annual FERC Operational Inspection Reports, prior Part 12 Consultant's Safety Inspection Reports (CSIRs), and the existing PFMA last updated in 2021 to understand prior concerns and prepare for the site inspection and the PFMA and L2RA workshop.

In addition, the IC Team will review the Dam and Public Safety Programs for the Project. This will include a review of the Owners Dam Safety Program (ODSP), Dam Safety Surveillance and Monitoring Plan (DSSMP), Hazard Potential Classification, Emergency Action Plan (EAP), Public Safety Plan, and Operations and Maintenance Programs. Review of these documents is intended to familiarize the IC Team with the documents to the extent that allows the Team to evaluate whether the programs are being implemented appropriately and are not a replacement for more detailed evaluations, such as the ODSP External Audit.

#### Assumptions

- Documents can be provided electronically to Gannett Fleming and do not require travel to obtain the documents.
- HBMWD (or others) will update the STID to the current FERC Chapter 15 of the *Engineering Guidelines*. This effort would also include the preparation of the Digital Project Archive.

#### Deliverables

- No formal deliverables are anticipated for this task. The review will assist the IC Team in preparation for the following tasks.



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### **Task 3 – Technical Studies**

In anticipation of the PFMA and L2RA workshop, Gannett Fleming will develop hydrologic hazard curves and perform a life loss consequence study as broken down in Tasks 3.1 and 3.2 below.

#### **Assumptions**

- HBMWD will engage a separate firm to perform the seismic hazard assessment for use during the PFMA and L2RA workshop.

#### **Task 3.1 – Hydrologic Hazard Assessment**

Gannett Fleming will develop a hydrologic hazard curve in accordance with Chapter 18 of the FERC *Engineering Guidelines* and as recommended in the U.S. Bureau of Reclamation (USBR) and U.S. Army Corps of Engineers (USACE) Best Practices in Dam and Levee Safety Risk Analysis guidance. Gannett Fleming will use the USACE Risk Management Center's (RMC) inflow-volume based approach according to RMC TR-2018-03.

An initial review of available data indicates that daily and peak streamflow records from the Mad River above and below Ruth Reservoir near Forest Glen, CA (USGS 11480390, USGS 11480410, and possibly 11480500) are available for the period from at least 1981 to the present. The USGS gage data does not need to be adjusted to account for regulation.

The USACE RMC's Reservoir Frequency Analysis (RMC-RFA) software will be used to develop the hydrologic hazard curve based on historic streamflow and reservoir storage data and accounting for seasonality within the watershed. In addition to documenting the assessment, we will develop meaningful plots, tables, and discussion of uncertainty in the analysis to aid in the understanding and use of the data by the IC Team during the PFMA and L2RA workshop.

#### **Assumptions**

- HBMWD will provide digital records of reservoir level.

#### **Deliverables**

- Hydrologic Hazard Assessment for R.W. Matthews Dam (PDF format). A draft copy will be provided to HBMWD for review prior to finalizing.

#### **Task 3.2 – Life Loss Consequence Study**

Gannett Fleming will perform a consequence study for R.W. Matthews Dam to generate loss of life estimates for a representative range of loading conditions and failure scenarios. The available dam break inundation mapping for the dam is based on 2022 dam break analysis completed using two-dimensional HEC-RAS models. The inundation mapping extends 78 miles downstream from the dam and depicts both sunny day and 100-year failure (rainy day) conditions.

We propose generating life loss estimates for the dam by applying a simulation approach using HEC-LifeSim which evaluates loss of life based on location of people when water arrives, spatial and temporal flooding information, and important factors related to building, vehicle, and human stability. Key inputs to the HEC-LifeSim model include hydraulic data, population at risk, the road network, and evacuation points as well as

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additional assumptions about how warning notifications are disseminated and the effectiveness of the warnings. The National Structure Inventory (NSI), a point-based dataset developed by the USACE will be used for this consequence assessment. Hydraulic models from the 2022 dam break analysis will be used to generate the hydraulic data needed for the consequence analysis.

It is assumed the two-dimensional HEC-RAS model for the 100-year failure conditions can be modified to be used to evaluate failure and non-failure conditions for the PMF (representative of an extreme event) for the purposes of this analysis. The sunny day hydraulic data will be obtained directly from the 2022 dam break analysis. We will also elicit information from the Trinity County Office of Emergency Management and Humboldt County Office of Emergency Services to ascertain their level of preparedness and public perception of risk. This will inform the warning and protective action parameters used within LifeSim rather than relying on default or assumed values that may not be representative of the downstream communities.

Life loss consequence analysis results will be documented in a way that aids the understanding and use of the data by the IC Team during the L2RA. Documentation will also address sensitivity and uncertainty associated with these consequence estimates.

#### Assumptions

- HBMWD will provide the sunny day and rainy day two-dimensional HEC-RAS models with all supporting files necessary to run the models for additional scenarios.
- HBMWD will provide input on the dissemination of warning notifications.

#### Deliverables

- Life Loss Consequence Study for R.W. Matthews Dam (PDF format). A draft copy will be provided to HBMWD for review prior to finalizing.

#### **Task 4 – Comprehensive Assessment Pre-Inspection Preparation Report**

We will prepare a CA-PIPR to document the preliminary findings from the IC Team review of the Project documentation. The CA-PIPR will include the outline and content described in Chapter 16 of the *Engineering Guidelines*, but we will format it to align with the requirements for the CAR. On prior CAs, we have found efficiencies can be gained by preparing the CA-PIPR in this manner. In addition to summarizing the relevant information required in the CA-PIPR, the report will present the IC Team's assessment of the content. For the CA, the PIPR requires documentation of:

- Potential deficiencies in the previous description and/or understanding of project works.
- Potential design or construction-related issues.
- Potential deficiencies (accuracy, relevance, current state-of-the-practice) in the analyses of record.
- Project status, including a list of recent modifications to project works, operations, and the status of previous Part 12D recommendations.
- Review and interpretation of instrumentation data.

The CA-PIPR will also include the final composition of the IC Team (if changes were required following comments from FERC on the Inspection Plan).

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Our proposed schedule considers that the CA-PIPR needs to be submitted to the FERC at least 30 days prior to the first proposed in-person activity.

#### Assumptions

- No specific assumptions are noted for this task.

#### Deliverables

- Tenth Part 12D Comprehensive Assessment Pre-Inspection Preparation Report for R.W. Matthews Dam (PDF format). A draft copy will be provided for review prior to finalizing. A three-week review period has been included in the schedule for HBMWD review.

### **Task 5 – Field Inspection**

The ICs and select SMEs (Engineering Geology and Mechanical/Structural SMEs) of the IC Team will perform an inspection of all dam safety related project features including the spillway, outlet works, powerhouse, and reservoir rim. The inspection will focus on a review and assessment of settlement, movement, erosion/scour, seepage, cracking/deterioration, instrumentation, stability, local and site geologic conditions, and spillway adequacy.

The IC Team will give specific attention to the overall condition and functionality of the dam, spillway, outlet works, powerhouse, instrumentation, and to any changes that have taken place since the last safety inspection. The IC Team will plan to observe gate operations during full travel by all power sources during the Field Inspection. A driving or boat inspection of the reservoir rim will also be performed (if a boat is required, the boat and a trained operator will be provided by HBMWD).

The Field Inspection process is anticipated to occur concurrently with the May 2026 maintenance period (first week of May 2026) and require two days to complete. Prior to performing the inspection, the IC Team will plan logistics with HBMWD regarding items to be inspected and specific safety requirements related to the inspection. Gannett Fleming will provide HBMWD with a Project Specific Safety Plan (PSSP) for the Field Inspection. Special considerations for the inspection such as confined space, ladder safety, fall protection, and potential lock-out tag-out requirements will be communicated in the PSSP.

#### Assumptions

- The Field Inspection can be completed in two days. Travel to Eureka, CA the site will be completed the day prior to the inspection, with the Team traveling from Eureka to the Project the morning of the inspection. Travel from the site to Eureka will occur on the final day of the inspection. Upon returning to Eureka, the PFMA and L2RA workshop will begin (see Task 6 below).
- The IC Team will stay at the HBMWD cabin while performing the inspection. We understand that amenities at the cabin are limited, and the IC Team will need to bring food, toiletries, and bedding.
- Representatives from HBMWD will be present during the Field Inspection so that the IC Team can gain a thorough understanding of operating and maintenance procedures for the Project.
- The scope of the Field Inspection is limited to visible elements only and excludes covered, buried, or hidden conditions. The Field Inspection will not include any special investigations, geotechnical investigations, or materials testing.

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### Deliverables

- Project Specific Safety Plan for anticipated field activities.

### **Task 6 – PFMA and L2RA Workshop**

In anticipation of the PFMA and L2RA workshop, the Gannett Fleming Facilitator will hold a virtual risk workshop training session for HBMWD personnel. The training will review the requirements of the PFMA and L2RA, familiarize participants with the workshop terminology, and provide participants the opportunity to practice estimating likelihood of failure. We anticipate this training session to last up to four hours.

Gannett Fleming will work with HBMWD to schedule the PFMA and L2RA workshop. We anticipate the workshop to take place over the course of eight days in two working sessions. The first session (three days) will be conducted in-person during the same week as the Field Inspection. In the event the Field Inspection is completed in less than two days, the first working session will begin early and allow for more in person time. The second session (up to five days) will be held virtually, ideally with at least a one-week break in between. We anticipate the Facilitator and Recorder will attend the Field Inspection to observe the site in accordance with FERC's *Engineering Guidelines* and in preparation of the risk workshop, but the site visit will be limited to one day.

During the workshop, our Facilitation Team will be staffed by our FERC-approved Facilitator and experienced Recorder. Throughout the workshop, the Recorder will document the discussions and the brainstormed PFMs. We will use previously developed templates and spreadsheets to capture the sessions efficiently and document the proper information for inclusion in the PFMA and L2RA report. We have found proper documentation during the workshop greatly reduces the report preparation effort following the workshop.

The IC Team will participate as SMEs in this workshop and provide expertise according to their associated disciplines. At the beginning of the workshop, members of the IC Team will give presentations to familiarize workshop participants with the Project features. In addition, the Seismic SME (anticipated to be from another firm) will present the seismic hazard for the project and our H&H/Consequence SME will present the results of the hydrologic hazard assessment and the life loss consequences study.

The PFMA will focus on identifying potential failure modes (PFMs) for the facility to enhance understanding and insight on the vulnerabilities related to performance associated with the Project. The process will include brainstorming and screening of PFMs in a systematic approach anticipated to thoroughly evaluate potential risks during the L2RA. PFMs anticipated to be identified include those associated with internal erosion, landslides, instability, misoperation, and overtopping.

The L2RA will follow the PFMA and will evaluate the PFMs found to be credible during the PFMA. The L2RA will use a semi-quantitative approach and risk characterization system that allows the SMEs to assign likelihood of failure and potential consequences to each PFM believed to result in potential loss of life or financial consequences to Humboldt Bay. The results of the L2RA will be summarized on a risk matrix and present the total risk for the Project.

To optimize cost, PFMs will be evaluated systematically to gain efficiency and optimize use of SMEs time and participation during the workshop (for example, review structural features first and then move to mechanical, and so on). In addition, and to reduce costs, it has been assumed that the IC Team members who participate in the field inspection will attend in person for the PFMA. Other SMEs can be available to attend virtually, as



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needed. We plan to hold the second session virtually, with the ICs fully in attendance and SMEs available on an as-needed basis.

Once the risk workshop is complete, the Facilitation Team will prepare the combined PFMA and L2RA report in accordance with the *Engineering Guidelines*. This report will summarize the process followed and the results of both the PFMA and L2RA portions of the workshop. The report will include the IC Team's likelihood of failure and potential consequence estimations, justification for each estimate, potential risk reduction measures, areas of uncertainty in the estimations, major findings and understandings, an overall plot of the risk on the appropriate risk matrix, and recommended actions following the risk analysis.

#### Assumptions

- The PFMA and L2RA workshop can be completed eight days. The workshop will be held in-person for the first session at HBMWD's headquarters in Eureka, CA, immediately following the Field Inspection and virtually for the second session.
- Gannett Fleming's IC Team will prepare a presentation on the Project features, probabilistic hydrologic hazard analysis, and consequence analysis. Gannett Fleming Facilitation Team will prepare a presentation to inform the team of the FERC risk process and the intended approach of the PFMA and L2RA workshop.
- HBMWD will engage a separate firm to perform the seismic hazard assessment in anticipation of the L2RA workshop, and the separate firm will prepare a seismic hazard analysis presentation. The seismic SME from the separate firm will attend the PFMA and L2RA (virtually for both sessions) on an as-needed basis.
- HBMWD will have personnel available to share project data (e.g., photos, construction records, etc.) as reference material during the workshops.

#### Deliverables

- Tenth Part 12D Comprehensive Assessment PFMA and L2RA Report for R.W. Matthews Dam (PDF format). A draft copy will be provided to HBMWD and the IC Team for review prior to finalizing.

#### **Task 7 – Comprehensive Assessment Report**

Following the Field Inspection and the PFMA and L2RA workshop, the CA-PIPR will be expanded into the CAR. We will prepare the CAR following the outline provided in Chapter 16 of the *Engineering Guidelines*. The preliminary findings documented in the CA-PIPR may be updated based on findings made during the Field Inspection, and/or the PFMA and L2RA workshop.

HBMWD is scheduled to deliver the CAR to the FERC on November 1, 2026. Our proposed schedule allows time for Humboldt Bay to thoroughly review and process this document before submitting to FERC.

Following submittal of the CAR to FERC, the Co-ICs will prepare for and attend a CAR Review Meeting to present their findings to the FERC. While FERC permits this meeting to occur within 60 days, we have found planning this meeting for no more than 45 days following the CAR submission allows additional time for licensees to adjust their Plan and Schedule based on FERC's comments. In addition, the CAR presentation must be submitted to FERC at least 7 days before the CAR Review Meeting. Gannett Fleming will prepare the CAR presentation and submit it to HBMWD to allow for review. The Co-ICs and Facilitator will attend the virtual CAR Meeting with HBMWD.

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#### Assumptions

- No specific assumptions are noted for this task.

#### Deliverables

- Tenth Part 12D Comprehensive Assessment Report for R.W. Matthews Dam (PDF format). A draft copy of the report will be provided for review prior to finalizing. A four-week review period has been included in the schedule for HBMWD review.
- Tenth Part 12D Comprehensive Assessment Report Meeting Presentation for R.W. Matthews Dam (PDF format). A draft copy of the presentation will be provided for review prior to finalizing. A one-week review period has been included in the schedule for HBMWD review.

### **Task 8 – Project Management / Coordination**

The CA process includes several important, intermediate milestones involving multiple stakeholders. Communication is paramount to the success of the CA process. Project progress meetings will be held regularly between HBMWD and key personnel from the project team to discuss plans and logistics for the key milestones of the CA. In addition, Gannett Fleming will provide monthly project progress reports which will include details pertaining to work completed, project schedule and budget status, project issues and/or concerns, and the status of upcoming milestones and/or deliverables.

In addition to project progress meetings, anticipated meetings under this task will include a Project Kick-Off Call with HBMWD. The Project Kick-Off Call will be held shortly following notice to proceed under this task.

#### Assumptions

- No specific assumptions are noted for this task.

#### Deliverables

- Meeting notes and monthly progress reports will be provided.

### **ESTIMATED SCHEDULE**

The following preliminary project milestone schedule was developed based on a final CAR due to FERC on November 1, 2026. Once authorization is received, we will coordinate with Humboldt Bay to adjust the schedule as appropriate.

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<b>Description</b>	<b>Estimated Milestone Date</b>
HBMWD receives FERC Letter	October 21, 2024
Obtain Notice to Proceed (NTP)	December 2, 2024
Project Kick-Off Call	December 16, 2024
HBMWD provides project records	January 3, 2025
Initial Coordination Call (HBMWD Only)	January 2025
Draft Inspection Plan	February 28, 2025
Final Inspection Plan	March 28, 2025
HBMWD submits Inspection Plan to FERC	March 31, 2025
FERC Response to Inspection Plan	April 30, 2025
Second Coordination Call	June 2025
Draft Technical Studies Reports	May 29, 2025
Final Technical Studies Reports	June 26, 2025
Draft CA-PIPR	February 20, 2026
Final CA-PIPR	March 29, 2026
HBMWD submits CA-PIPR to FERC	April 4, 2026
Field Inspection	May 4-5, 2026
PFMA and L2RA Workshop – Session 1	May 6-8, 2026
PFMA and L2RA Workshop – Session 2	May 18-22, 2026
Draft CAR (including PFMA and L2RA Draft Report)	August 17, 2026
Final CAR (including PFMA and L2RA Final Report)	October 16, 2026
HBMWD submits CAR to FERC	November 1, 2026
Draft CAR Review Meeting Slides	November 15, 2026
Final CAR Review Meeting Slides	November 29, 2026
HBMWD submits CAR Review Slides to FERC	December 9, 2026
CAR Review Meeting	December 16, 2026

### ESTIMATED FEES

Based on the Scope of Work and Estimated Schedule, we estimate the following fees:

<b>Activity</b>	<b>Estimated Fees</b>
Task 1.0 – Inspection Plan	\$ 9,988
Task 2.0 – Existing Documentation Review	\$ 48,824
Task 3.0 – Technical Studies	\$ 42,968
Task 4.0 – CA-PIPR	\$ 92,320
Task 5.0 – Field Inspection	\$ 124,709
Task 6.0 – PFMA and L2RA Workshop	\$ 111,360
Task 7.0 – Comprehensive Assessment Report	\$ 84,676
Task 8.0 – Project Management/Coordination	\$ 23,776
<b>Total Estimated Fee</b>	<b>\$ 538,621</b>

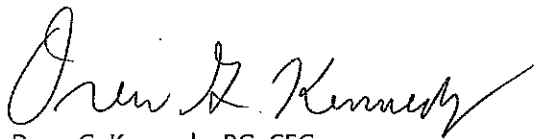
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Our services will be performed on a 'time and expenses,' not-to-exceed basis. We will not exceed the budget presented above to perform the proposed Scope of Work without prior approval from HBMWD. Should additional work be required in addition to the Scope of Work above, or should significant changes be required due to reasons beyond the control of Gannett Fleming, the additional time required for these items will be billed on a 'time and expenses' basis, in accordance with the rates provided herein.

#### **CLOSURE**

We greatly appreciate the opportunity to provide HBMWD this proposal for the R.W. Matthews Dam CA. We look forward to discussing and clarifying this proposal, as necessary. In addition, we will work with HBWMD to develop a contract with mutually agreeable terms following acceptance of the general scope discussed in this proposal.

Sincerely,  
Gannett Fleming, Inc.



Drew G. Kennedy, PG, CEG  
Vice President / Chief Engineering Geologist



## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

To: Board of Directors  
From: Contessa Dickson  
Date: November 14, 2024  
Subject: CSDA Bylaw amendment and voting authority

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**BACKGROUND**

As you are aware, the District is a member of the California Special Districts Association (CSDA) as well as a charter member of the CSDA Humboldt chapter.

The last CSDA bylaws updates were made in 2021 with the primary changes being Rights of Regular Membership, Retiree Membership, use of "member", Procedure for Termination of Membership, Annual Report, and dual directorships with CSDA's Alliance partner, Special District Risk Management Authority (SDRMA).

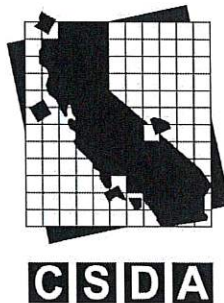
Following receipt of feedback and suggestions over the last few years from members, CSDA has conducted a review of the CSDA Bylaws making the necessary updates as well as additions or improvements. There are numerous verbiage and grammar updates as well as more significant proposed updates that include:

- Clarification that Retired Members as non-voting members
- Clarification related to termination of membership
- New Section under Article III, Section 2: Early Assumption of Office
- New Section under Article III, Section 2: Change in Regular Voting Member Affiliation
- Update noticing, balloting and election timeframes to allow some additional flexibility in the Board election process
- New Section under Article III, Section 7: A CSDA director shall be disqualified from serving on the CSDA Board if they are no longer a board member or managerial employee of a Regular Member district in the Network they were elected or appointed from
- Committee structure: amend to allow that Committee Vice-Chairs, with the exception of the CSDA Finance Corporation Committee, may be individuals from Regular Members districts in good standing

Votes must be received no later than 5:00 pm on November 20, 2024.

**STAFF RECOMMENDATION**

The Board can either review the detailed bylaw changes and take action on its voting choice or delegate this task and voting discretion to the General Manager.



## **BYLAWS**

### **California Special Districts Association**

#### **Approved Bylaw Revision Dates:**

**Revised 1996**

**Revised 1999**

**Revised 2004**

**Revised October 1, 2009**

**Revised August 2, 2010**

**Revised August 1, 2011**

**Revised July 1, 2014**

**Revised July 1, 2016**

**Revised November 15, 2021**

**Revised XXXXX XX, 2024**

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**ARTICLE I – GENERAL****Section 1. Purpose:**

In addition to the general and specific purposes set forth in the Articles of Incorporation of the California Special Districts Association (hereinafter referred to as "CSDA"), CSDA will provide outreach, advocacy, professional development, information, and other various services to member districts. CSDA will interact and collaborate, where appropriate, with the associations and groups that support or oppose its membership's interests. The control and governance of CSDA shall be the responsibility of CSDA's Board of Directors (the "Board of Directors").

**Section 2. CSDA Networks:**

The state of California shall be divided ~~along county boundaries~~ into six voting networks, using county boundaries to shape the respective networks. The areas of the networks are determined by the Board of Directors of CSDA. A map of the six (6) networks of CSDA is attached as Exhibit A.

**Section 3. Principal Office:**

The principal business office of CSDA is located at 1112 I Street, Suite 200, Sacramento, California 95814. The Board of Directors shall have authority to change the principal office from one location to another.

**ARTICLE II – MEMBERSHIP****Section 1. Qualification of Membership:**

There may be several classes of membership in CSDA, as determined by the Board of Directors. The following classes have been adopted:

**A. Regular Voting Members:**

Regular voting members shall be any public agency formed pursuant to either general law or special act for the local performance of governmental or proprietary functions within limited boundaries, and which meets any one of the following criteria:

1. Meets the definition of “independent special district” set forth in Government Code Section 56044 by having a legislative body comprised entirely of elected members, or which members are appointed to fixed terms; or
2. The following public agencies: (a) air quality management districts; (b) air pollution control districts; (c) county water agencies or authorities; (d) transit or rapid transit districts, or transportation authorities; (e) metropolitan water districts; (f) flood control or water conservation districts; (g) sanitation agencies.

Regular voting members shall not include any state, cities, counties, school districts, community college districts, local agency formation commissions (LAFCOs), dependent districts, or joint powers authorities (JPAs) except as may be specifically referenced above.

Rights of Regular Membership: Regular voting members have voting privileges and may [have a member of the Board of Directors or a managerial employee](#) hold [a seats](#) on the Board of Directors. All Regular Members shall have the right to vote, as set forth in these bylaws, on the election of directors, on the disposition of all or substantially all of the corporation’s assets, on any merger and its principal terms and any amendment of those terms, and on any election to dissolve the corporation. In addition, Regular Members shall have all rights afforded members under the California Nonprofit Public Benefit Corporation Law.

**B. Associate Non-Voting Members:**

Associate members shall be public agencies such as dependent districts composed of appointees from a single public agency, cities, counties, joint powers authorities, and other public agencies that do not satisfy the criteria for regular voting membership specified in Section A above.

Associate members have no voting privileges, except as approved members on a CSDA committee, and may not hold a seat on the Board of Directors.

**C. Business Affiliate Non-Voting Members:**

Business Affiliate members shall be those businesses or organizations that provide [products or](#) services to special districts and have evidenced interest in the purposes and goals of CSDA. Business Affiliates have no voting privileges, except as approved members on a CSDA committee, and may not hold a seat on the Board of Directors.

**D. Retired Non-Voting Member (Individual Membership):**

Retired Individual members shall be those persons that are retired from service as a staff or board member at a special district and have at least 1 year of previous service.

Retired members shall not be affiliated with or serve as a consultant to any agency eligible for regular, associate, or business affiliate membership in CSDA. Retired members cannot be employed by a company that provides services or products to special districts.

Retired members have no voting privileges and may not hold a seat on the CSDA Board of Directors or any CSDA committees.

CSDA benefits available to retired members shall be determined by the CSDA Board of Directors.

**Section 2. Membership Application:**

Application for membership to CSDA will be directed to staff, who will determine if the applicant's interest and purpose is in common with CSDA. If the applicant meets the requirements of membership, the Board of Directors shall approve the new member by a majority vote of the Board [at the next regularly scheduled Board meeting](#). Acceptance to membership shall authorize participation in CSDA activities as specified in these Bylaws. The Board shall retain the authority to deny membership in CSDA at its discretion.

**Section 3. Membership Dues:**

The membership dues of CSDA shall be established annually by a majority vote of the Board of Directors at a scheduled Board meeting. Authority to adjust the dues shall remain with the Board of Directors.

**Section 4. Membership Voting:**

Matters to be voted upon by the authorized voting membership shall be determined by the Board of Directors in accordance with these Bylaws. Only those matters of which notice has been given to voting members by CSDA may be voted upon.

**A. Voting Designee:**

In accordance with these Bylaws, regular voting members in good standing shall have voting privileges. The governing body of each regular voting member shall designate one representative from their respective district who shall have the authority to exercise the right of the regular voting member to vote. Such voting designee shall be a Board ~~member~~ [Member](#) or managerial employee of the regular voting member.



**B. Voting Authorization:**

Regular voting members who have paid the required dues as set by the Board of Directors are members in good standing. Each regular voting member in good standing shall be entitled to one vote on all matters brought before the membership for vote at any meeting or by ballot.

**C. Non-Voting Members:**

CSDA may refer to Associate Members, [Retired Members](#) and Business Affiliate Members or other persons or entities associated with it, as "members", even though those persons or entities are not voting Regular Members as set forth in Article II Section I A ~~hereof~~. No such reference as "members" shall constitute anyone as a voting member of this corporation unless that person or entity has qualified for voting Regular Membership pursuant to Article II Section I A of these Bylaws. The Board of Directors may adopt policies which grant some or all of the rights of a Regular Member, other than voting rights, to an Associate Member, [Retired Member](#) or Business Affiliate Member, but no such person or entity shall be a Regular Member by virtue of such grant of rights.

**Section 5. Membership Quorum:****A. Meeting Quorum:**

Twenty-five voting designees, as defined in Article II, Section 4, present at any annual or special meeting of the CSDA shall constitute a quorum. No regular voting member shall have the right to vote by means of an absentee or proxy ballot.

**B. Mailed or Electronic Ballot Quorum:**

Mail ballots or electronic ballots received from 25 voting designees officially designated by each regular voting member shall constitute a quorum. Each regular voting member shall be entitled to one vote. No regular voting member shall have the right to vote by means of a proxy.

**Section 6. Membership Meetings:****A. Annual Business Meeting:**

The annual business meeting of the members shall be held at the [CSDA Annual CSDA Conference](#) at such time and place as determined by the Board of Directors [or Staff](#). Written notice of the annual business meeting distributed by mail or electronically shall include all matters that the Board intends to present for action and vote by the members [if such a vote is required](#).

**B. Special Meetings:**

Special meetings of the members may be called at any time by the President, by a majority of the Board of Directors, or at least a quorum of the members (25 members). Such a special meeting may be called by written request, specifying the general nature of the business proposed to be transacted and addressed to the attention of and submitted to the President of the Board. The President shall direct the Chief Executive



Officer to cause notice to be given promptly to the members stating that a special meeting will be held at a specific time and date fixed by the Board. No business other than the business that was set forth in the notice of the special meeting may be transacted at a special meeting.

**C. Notice of Meetings:**

~~Whenever members are permitted~~In any case that members are requested to take any action at any annual or special meeting, written notice of the meeting distributed by mail or electronically shall be ~~given~~sent to each member entitled to vote at that meeting. The notice shall specify the place, date and hour of the meeting, and the means of communication to be utilized by and between CSDA and its members, if any, through which members may participate in the meeting. For the Annual Membership Meeting, the notice shall state the matters that the Board intends to present for action by the members. For a special meeting the notice shall state the general nature of the business to be transacted and shall state that no other business may be transacted. The notice of any meeting at which directors are to be elected shall include the names of all persons who are nominees when notice is given.

1. Notice Requirements. Written notice of any annual membership meeting shall be given at least 45 days before the meeting date either personally, by first class registered or certified mail, or by electronic transmission.

2. Electronic Notice. Notice given by electronic transmission by CSDA shall be valid if delivered by either (a) facsimile telecommunication or electronic mail when directed to the facsimile number or electronic mail address for that main contact member on record with CSDA; (b) posting on an electronic message board or network-website community that CSDA has designated for such communications, together with a separate electronic notice to each member of the posting; or (c) any other means of electronic communication. Such electronic transmission must be directed to each member which has ~~provided to CSDA an unrevoked~~not revoked consent to the use of electronic transmission for such communications. The method of electronic communication utilized must create a record that is capable of retention, retrieval and review by CSDA.

All such electronic transmissions shall include a written statement that each member receiving such communication has the right to have the notice provided in non-electronic form. Any member may withdraw its consent to receive electronic transmissions in the place of written communications by providing written notice to CSDA of such withdrawal of consent.

Notice shall not be given by electronic transmission by CSDA if CSDA is unable to deliver two (2) consecutive notices to a member by that means, or otherwise becomes aware of the fact that the member cannot receive electronic communications.

**D. Electronic Meetings:**

Members not physically present in person at either an annual or special meeting of members may participate in such a meeting by electronic transmission or by electronic video-screen communicationuse of web-based video communication software by and between such members and CSDA. Any eligible member participating in a meeting

electronically shall be deemed present in person and eligible to vote at such a meeting, whether that meeting is to be held at a designated place, conducted entirely by means of electronic transmission, or conducted in part by electronic communication between CSDA and those members who are not capable of being physically present at such designated meeting place.

Annual and special meetings of the members may be conducted in whole or in part by electronic transmission or by use of web-based video communication software ~~electronic video screen communication~~ by and between CSDA and its members if all of the following criteria are satisfied: (1) CSDA implements reasonable procedures to provide members participating by means of electronic communication a reasonable opportunity to participate in the meeting and to vote on matters submitted to the members, including an opportunity to hear the proceedings of the meeting including comments of members participating in person substantially concurrent with such proceedings; and (2) any votes cast by a member by means of electronic communication by and between CSDA and a member must be recorded and maintained in the minutes by CSDA.

**E. Majority Vote:**

Any matter submitted to the membership for action or approval shall constitute the action or approval of the members only when: (1) the number of votes cast by regular voting members present at the meeting equals or exceeds the quorum requirement of 25 registered voters~~regular voting members~~; and (2) the number of votes approving the action or proposal equals or exceeds a majority (i.e., 50% plus one) of the regular voting members present and casting votes on the issue.

**F. Solicitation of Written Ballots from Members:**

All solicitations of votes by written ballot, whether by means of electronic communication or first class mail, shall: (1) state the number of returned ballots needed to meet the quorum requirement ; (2) state, with respect to returned ballots other than for election of directors, that the majority of returned ballots must indicate approval of each measure in order to adopt such measure; and (3) specify the time by which the written ballot must be received by CSDA in order to be counted. Each written ballot so distributed shall: (1) set forth the proposed action; (2) give members an opportunity to specify approval or disapproval of each proposal; and (3) provide a reasonable time in which to return the ballots to CSDA either electronically or by first class mail.

Each written ballot distributed by first class mail shall be mailed to each regular voting member at least 45 days in advance of the date designated for return of the ballot by each such member to CSDA. Written ballots transmitted electronically to members shall be electronically communicated at least 45 days in advance of the date designated for return of the ballot by each member to CSDA.

**G. Return of Ballots:**

Written ballots shall be returned either by first class mail or by electronic communication to either the principal business address of CSDA or CSDA's designated electronic format specified on the ballot prior to the close of business (5:00 pm) on the designated election date. Written ballots received either by first class mail or electronic



communication from regular voting members after the specified date shall be invalid and shall not be counted.

**H. Number of Votes Required for Approval of Action on Written Ballot:**

Approval by written ballot shall be valid only when (1) the number of votes cast by written ballot either by means of electronic communication or first class mail within the specified time equals or exceeds the quorum required to be present at a meeting authorizing the action (25 votes); and (2) the number of ~~approvals~~ votes in favor of the action equals or exceeds the number of votes that would be required for approval at a meeting of members, (i.e. 50% plus one) of those participating members casting written ballots either electronically or by first class mail.

**Section 7. Termination of Membership:**

~~A member shall not be in good standing, and membership may be terminated,~~ On occurrence of any of the following events, a member shall no longer be in good standing, and membership may be terminated:

- A. Any member delinquent in the payment of dues for a period of three months after said dues are due and payable, shall be notified in writing of such arrearage, and shall be given written notice of possible termination. If such delinquent dues remain unpaid for 45 days after notice, the delinquent member shall automatically cease to be a member of CSDA. CSDA's Chief Executive Officer may approve special payment arrangements if deemed necessary including with those districts that may be members of the Special District Risk Management Authority (SDRMA).
- B. Determination by the Board of Directors that a member has failed in a material and serious degree to observe the rules of conduct or operational policies of CSDA, including but not limited to the Corporation's Anti-Trust Policies, or has engaged in conduct materially and seriously prejudicial to ~~this~~ CSDA's purposes and interests.

**Section 8. Procedure for Termination of Membership:**

If grounds exist for terminating the membership of a member under Section 7 ~~hereof~~ these bylaws, the following procedures shall be followed:

- A. The Board of Directors shall give the member at least 15 days prior written notice of the proposed termination and the reasons for the proposed termination of membership. Notice ~~shall~~ may be given by any method reasonably calculated to provide actual notice. Notice given by mail shall be sent by first-class mail to the member's last address as shown on CSDA records.
- B. The member shall be ~~given an opportunity to be heard~~ provided an opportunity to contest the termination, either orally or in writing, at least 5 days before the effective date of the proposed termination of \_\_\_\_\_ membership. ~~The A hearing meeting~~ shall be held in a time and manner determined by the Chief Executive Officer, or the written statement considered, by the Board of Directors which is responsible for determining in its sole discretion whether the termination of membership should occur.

- C. The Board of Directors shall determine whether the membership shall be terminated. The decision of the Board of Directors shall be final.

## ARTICLE III – DIRECTORS

### **Section 1. Number of Directors:**

The authorized number of elected directors to serve on the Board of Directors shall be 18. Each regular voting member shall be limited to one seat on the Board.

There shall be three directors elected from three different regular voting members in each of the six CSDA networks. Directors elected from each of the six networks shall hold staggered three-year terms.

### **Section 2 Term of Office:**

Directors elected from each of the six networks shall hold staggered three-year terms. After the annual election of directors, a meeting of the Board shall be held to ratify the election results. The term of office of the newly elected persons shall commence on the following January 1 and shall automatically terminate three years thereafter unless a newly elected or appointed Director is completing the remaining balance of an incomplete term due to a vacancy in a respective Director seat.

Early Assumption of Office.: In such cases, if there is a candidate-elect who has won the election and is willing to assume office early to fill a vacant seat, the Board of Directors may allow the candidate-elect to assume office prior to the regular January 1 start date.

Conditions: The candidate-elect assuming office early shall meet all eligibility requirements for Board membership.

Ratification: The early assumption of office by the candidate-elect shall be subject to ratification by the Board of Directors at its next regularly scheduled meeting following the completion of the election.

Change in Regular Voting Member Affiliation.: Any Director that is a board member or managerial employee of a member district and subsequently transitions to a board member or managerial employee position at another regular voting member district in the same Network, shall retain their seat and term.

Conditions: In order to retain voting rights on the CSDA Board of Directors, the Director shall provide a resolution or minute action from their new district within two months of the change affirming the individual Directors continued service on the CSDA Board of Directors.

### **Section 3. Nomination of Directors:**

Nomination of Directors seeking to serve on the Board shall be by network. Any regular voting member in good standing is eligible to nominate one person from their district to run for director of CSDA. The CSDA director nominee shall be a member of the board of directors of the district or a managerial employee as defined by that district's board of directors. Nomination of the director designee shall be made by a resolution or minute action of the regular voting member's



Board of Directors. Only one individual from each regular voting member district may be nominated to run at each election.

CSDA staff will review all nominations received and accept all that meet the qualifications set by these Bylaws. A slate of each network's qualified nominees will be transmitted by mail or electronic ballot to that network's regular voting membership for election pursuant to Article III, Section 4

#### **Section 4. Election of Directors:**

The Election and Bylaws Committee shall have primary responsibility for establishing and conducting elections for the Board of Directors. The Committee may enforce any regulation to facilitate the conduct of said elections. Directors shall be voted upon and elected by the regular voting members from the network from which they are nominated.

The Election and Bylaws Committee shall meet each year to review, with [CSDA](#) staff, the networks where election of directors will be necessary. The Committee will coordinate, with staff, the dates nomination requests shall be mailed to the regular voting members, the official date for the nomination requests to be received at the CSDA office, and set the date of the election.

##### **A. Written Notice:**

Written notice requesting nominations of candidates for election to the Board of Directors shall be sent by first class mail or electronically to each regular voting member in good standing on the date specified by the Election and Bylaws Committee, which shall be at least ~~420-100~~ days prior to the election. The nominations must be received either by mail or electronically by CSDA before the established deadline which shall be no later than 60 days prior to the election. Nominations received after the deadline date shall be deemed invalid. In the event an incumbent does not re-run for their seat, the nomination period for that network shall be extended by ten days.

##### **B. Balloting and Election:**

Voting for directors shall be by written ballot distributed by mail or by electronic transmission by CSDA directly or via authorized third-party to members eligible to vote in each network.

After the nomination period for directors is closed, a written ballot specifying the certified nominees in each network shall be distributed by first class mail or electronically to each regular voting member in that network. Each such regular member in good standing in each network shall be entitled to cast one vote for each of that network's open seats on the Board. In the event there is more than one seat available for election, regular members shall be entitled to a number of votes equal to the seats available for election in their network.

The ballot for each network shall contain all nominations accepted and approved by CSDA staff. In the event there is only one nomination in a network, the nominee shall automatically assume the Seat up for election and a ballot shall not be mailed or electronically transmitted. Staff will execute a Proof of Service certifying the date upon which all regular voting members of each network were sent a ballot, either by first class

mail or by electronic transmission. The form of written ballot and any related materials sent by electronic transmission by CSDA and completed ballots returned to CSDA by electronic transmission by participating members must comply with all of the requirements of Article II, Section 6(F-H) of these Bylaws. If a member does not consent to electronic communication for balloting purposes, a form of written ballot will be mailed to such participating member no later than 45 days prior to the date scheduled for such election. All written ballots shall indicate that each participating member may return the ballot by electronic communication or ~~first class~~first-class mail.

All solicitations of votes by written ballot shall: (1) state the number of returned ballots needed to meet the quorum requirement ; (2) state, with respect to ballots for election of directors, that those nominees receiving the highest number of votes for each Board position subject to election will be certified as elected to that Board position.

Election of a nominee to a Board position shall be valid only when: (1) the number of votes cast by written ballot, transmitted either electronically or by first class mail, within the time specified, equals or exceeds the quorum required to be present at a meeting of members authorized in such action ; and (2) the number of written ballots approving the election of a nominee must be the highest number of votes cast for each respective Board position subject to election. ~~as would be required for an election of a nominee at a meeting of the members.~~

Written ballots shall be returned either by first class mail or by electronic mail communication to either the principal business address of CSDA or CSDA's designated electronic format specified on the ballot prior to the close of business (5:00 pm) on the designated election date, which shall be at least ~~45~~30 days prior to the Annual Conference. Written ballots received either by first class mail or electronic communication after the specified date shall be invalid and shall not be counted.

All written ballots received by mail shall remain sealed until opened in the presence of the Election and Bylaws Committee chairperson or their designee. All electronic ballots will be prepared, distributed, authenticated, received, tabulated, and kept secure and confidential. Election documents will be retained as outlined in CSDA's Board approved records retention policy.

#### **Section 5. Event of Tie:**

In the event of a tie vote, a supplemental written ballot containing only the names of those candidates receiving the same number of votes shall be distributed either by first class mail or electronically to each regular voting member in the network where the tie vote occurred.

Those written ballots received by mail or electronically prior to the close of business (5:00 pm) on the date designated by the Election and Bylaws Committee shall be considered valid and counted. All supplemental written ballots received after the designated date whether by first class mail or electronically shall be deemed invalid. All written ballots received either by mail or electronically shall remain sealed as provided in Article III, Section 4.B of these Bylaws.

In the event the supplemental written ballot also results in a tie vote, the successful candidate will be chosen by a drawing by lot.



**Section 6. Director Vacancy:**

In the event of a director vacating their seat on the Board of Directors, an individual who meets the qualifications as specified in [these Article III Section 3 of these Bylaws](#) may be appointed or elected to complete the director's unexpired term.

**A. Two or Three Vacant Seats in the Same Network:**

In the event more than one seat on the CSDA Board of Directors in any one network is vacant at the same time, such vacancies shall be filled by election. A written ballot shall be prepared; listing all nominees for that network accepted and approved by CSDA and distributed to each regular voting member in each such network either by first class mail or by electronic communication pursuant to the provisions of Article III, Section 4.A and B of these Bylaws

Regular members of each network shall be entitled to cast one vote for each open seat in that network by returning a completed written ballot to CSDA either by first class mail or by electronic communication. The candidate receiving the most votes will be elected to the vacant seat with the longest remaining term. The candidate receiving the second highest number of votes will be elected to fill the vacant seat with the second longest remaining term. The candidate receiving the third highest number of votes will be elected to fill the vacant position with the third longest remaining term.

**B. Vacancy Outside of Nomination Period**

In the event of a vacancy occurring outside of the nomination period timeframe, at the discretion of the CSDA Board, the vacancy may be filled by appointment or special election. The CSDA Board at its discretion may leave a vacancy that occurs outside of the nomination period unfilled until the next regularly scheduled election.

Should the CSDA Board choose to fill the vacancy by appointment, notification of the vacancy and request for nominations shall be sent by regular mail or electronic communication to all regular members in good standing in the network in which the vacancy occurred. The network's existing directors sitting on the CSDA Board shall interview all interested candidates of that network and bring a recommendation to the CSDA Board of Directors for consideration. The Board shall make the appointment to fill the unexpired term of the vacated Board position.

Should the CSDA Board choose to fill the vacancy by special election, written notification of the vacancy and request for nominations shall be sent either by first class mail or electronically to each regular member in good standing in the network in which the vacancy occurred. Nominations will be accepted for the vacant seat by first class mail or by electronic communication and shall be placed on the written ballot for election in that network. Such election shall be conducted pursuant to the provisions of Article III, Section 4.A and B hereof.

**C. Vacancy During Nomination Period:**

In the event of a vacancy occurring during the nomination period, the vacancy shall be filled by election. Written notification of the vacancy and request for nominations shall be sent either by first class mail or electronically to each regular member in the network

in which the vacancy occurred. Nominations will be accepted for the vacant seat by first class mail or by electronic communication and shall be placed on the written ballot for election in that network. Such election shall be conducted pursuant to the provisions of Article III, Section 4.A and B [hereof of these bylaws](#).

### **Section 7. Director Disqualification:**

A. A director shall ~~become~~ be disqualified from further service on the Board of Directors or any committee upon the occurrence of any of the following:

1. A director's district is no longer a member of CSDA;
- ~~2.~~ A director is no longer a board member or an employee of a member district;
- ~~2-3.~~ [A director is no longer a board member or an managerial employee of a regular member district in the Network they were elected or appointed from;](#)
- ~~3-4.~~ A director is elected or appointed to the Board of Directors of the Special District Risk Management Authority (SDRMA) or
- ~~4-5.~~ A director's resignation [from CSDA](#).

Any officer or director may resign at any time by giving written notice to the President or CEO. Any such resignation shall take effect at the date of the receipt of such notice or at any time specified therein.

B. The position of a director may be declared vacant by a majority vote of the CSDA Board of Directors when a director is unexcused and fails to attend three consecutive meetings of the Board or has not completed the Board Member requirements and expectations as outlined in policy.

### **Section 8. Powers of Directors:**

Subject to the limitations of these Bylaws, the Articles of Incorporation, and the California General Nonprofit Corporation Law, all corporate powers of the CSDA shall be exercised by or under the authority of the Board of Directors.

Directors shall serve without compensation. However, they shall be allowed reasonable reimbursement for pre-approved expenses incurred in the performance of their duties as Directors.

**Annual Report:** The Board of Directors shall cause an annual report to be sent to the members within 120 days after the end CSDA's fiscal year. That report shall contain the following information, in appropriate detail:

- The assets and liabilities of CSDA as of the end of the fiscal year;
- The principal changes in assets and liabilities;
- CSDA's revenue or receipts, both unrestricted and restricted to particular purposes;
- CSDA's expenses or disbursements for both general and restricted purposes.

The CSDA Annual Financial Audit shall serve as the Annual Report of CSDA.



**Section 9. No Dual Directorships:**

During any period that CSDA is a participant in the Alliance Executive Council Memorandum of Understanding (MOU), the Board of Directors of CSDA shall appoint three (3) members of its board to serve as members of the Alliance Executive Council. No member of the Board of Directors of CSDA shall serve as a director on the board of SDRMA during the term of the MOU. In the event a director is elected to SDRMA, that director shall immediately be disqualified from further service on the Board of Directors of CSDA.

**ARTICLE IV – DIRECTOR MEETINGS****Section 1. Place of Meetings:**

Meetings of the Board of Directors shall be held in the state of California, at such places as the Board may determine. Directors may participate and have voting privileges remotely from other states and countries.

**Section 2. Ratification Meeting:**

Following the election of Directors, the Board shall hold a meeting at such time and place as determined by the Board for the purpose of ratifying the newly elected directors and to transact other business of CSDA.

**Section 3. Organization Meeting:**

After the ratification meeting, an organizational meeting of the Board shall be held at such time and place as determined by the Board for the purpose of electing the officers of the Board of Directors and the transaction of other business of CSDA.

**Section 4. Planning Session:**

As directed by the Board of Directors, a special Strategic Planning Meeting shall be held to review, evaluate, and update the plans, policies and activities related to the business interests of CSDA. Timing and intervals of the Strategic Planning Meeting shall be determined by the Board of Directors.

**Section 5. Regular Meetings:**

The dates of the regular meetings of the Board of Directors on an annual basis shall be ratified at the last Board meeting of the previous year. The meetings shall be held at such time and place as the Board may determine. The dates and places of the Board meetings shall be published in the CSDA's publications for the benefit of the members.

**Section 6. Special Meetings:**

A special meeting of the Board of Directors may be called for any purpose at any time by the President or by any group of 10 directors or as described in Article II, Section 6.B.

Such meetings may be held at any place designated by the Board of Directors. In the event directors are unable to personally attend the special meeting, teleconferencing means will be made available.

Notice of the time and place of special meetings shall be given personally to the ~~directors,~~ directors or sent by written or electronic communication. All written notices shall be sent at least ten days prior to the special meeting and electronic notices at least five days prior.

**Section 7. Board of Directors Meeting Quorum:**

A quorum of the Board of Directors for the purpose of transacting business of the CSDA shall consist of ten directors. A majority vote among at least ten directors present at a duly noticed meeting shall constitute action of the Board of Directors.

**Section 8. Board Meetings by Telephone and Electronic Communications:**

Any Board meeting may be held by conference telephone, use of web-based video communication software ~~video screen communication~~ or other electronic communications equipment. Participation in such a meeting under this Section shall constitute presence in person at the meeting if both of the following apply: (a) each Board member participating in the meeting can communicate concurrently with all other Board members; and (b) each member of the Board is provided a means of participating in all matters before the Board, including the capacity to propose or interpose an objection to a specific action to be taken by CSDA, and the capacity to vote on any proposal requiring action of the Board.

**Section 9. Official Records:**

All official records of the meetings of the CSDA shall be maintained at the principal business office of the CSDA or on official CSDA electronic file server(s).



**ARTICLE V – OFFICERS****Section 1. Number and Selection:**

The officers of CSDA shall be the President, Vice President, Secretary, Treasurer and the Immediate Past President. The officers shall be elected annually from the members of the Board of Directors without reference to networks. All officers shall be subordinate and responsible to the CSDA Board of Directors and shall serve without compensation.

Each officer shall hold office for the term of one year, or until resignation or disqualification.

The Board of Directors may appoint such other officers as the business of CSDA may require. Each of the appointed officers shall hold office for such period, have such authority, and perform such duties as are provided in these Bylaws or as the Board of Directors may determine.

**Section 2. Duties of the President:**

The President shall be the chief officer of the CSDA and shall, subject to the approval of the Board of Directors, give supervision and direction to the business and affairs of CSDA.

The President shall preside at all Board of Director and membership meetings. The President shall be an ex-officio member of all Standing Committees. The President shall appoint committee chairs and vice-chairs and members of the Standing Committees, subject to confirmation by the Board of Directors.

The President shall have the general powers, duties and management usually vested in the office of the president of a corporation. The President shall have such other powers and duties as may be prescribed by these Bylaws or by the vote of the Board of Directors.

**Section 3. Duties of the Vice President:**

In the absence of, or disability of the President, the Vice President shall perform all of the duties of the President. When so acting, the Vice President shall have all the powers of the President, and be subject to all the restrictions upon the President.

The Vice President shall be an ex-officio member of all of the Standing Committees.

**Section 4. Duties of the Secretary:**

The Secretary or a designee appointed by the Board of Directors shall give notice of meetings to the Board of Directors, and notices of meetings to the members as provided by these Bylaws.

The Secretary or designee shall record and keep all motions and resolutions of the Board. A record of all meetings of the Board and of the members shall be maintained. All written records of the Secretary shall be kept at the business office of CSDA.

A list of the membership of CSDA shall be maintained by the Secretary or such designee. Such record shall contain the name, address and type of membership, of each member. The date of membership shall be recorded, and in the event the membership ceases, the date of termination.

The Secretary or designee shall perform such other duties as may be required by law, by these Bylaws, or by the Board of Directors.

**Section 5. Duties of the Treasurer:**

The Treasurer or a designee appointed by the Board of Directors shall keep and maintain adequate and correct accounts of the properties and the business transactions of CSDA, including accounts of its assets, liabilities, receipts, disbursements, gains and losses. The books of account shall at all times be open to inspection by any director or member of the CSDA.

The Treasurer or designee shall be responsible to cause the deposit of all moneys of the CSDA, and other valuables in the name and to the credit of CSDA, with such depositories as may be designated by the Board of Directors.

The Treasurer or designee, shall disburse, or cause to be disbursed by persons as authorized by resolution of the Board of Directors, the funds of CSDA, as ordered by the Board of Directors.

The Treasurer or designee shall serve as chair of the CSDA Fiscal Committee. The Treasurer shall render to the President and the Board of Directors an account of all financial transactions and the financial condition of CSDA at each Board meeting and on an annual basis, or upon request of the Board.

The Treasurer or designee shall, after the close of the fiscal year of CSDA, cause an annual audit of the financial condition of CSDA to be done.

The Treasurer or such designee shall perform such other duties as may be required by law, by these Bylaws, or by the Board of Directors.

**Section 6. Disbursement of Funds:**

No funds shall be disbursed by CSDA unless a check, draft or other evidence of such disbursement has been executed on behalf of CSDA by persons authorized by resolution of the Board of Directors.

**Section 7. Removal of Officers:**

Officers of the Board may be removed with or without cause at any meeting of the Board of Directors by the affirmative vote of a majority of the Board of Directors present at such meeting.



**ARTICLE VI – COMMITTEES****Section 1. Committee Structure:**

Each committee shall have a chair and a vice-chair. Committee chairs shall be a member of the Board of Directors, except for the CSDA Finance Corporation Committee. Committee Vice-Chairs may be individuals from Regular Member districts in good standing upon appointment by the CSDA Board President and ratification by the CSDA Board of Directors. Each committee shall have at least two Board members and no more than nine Board members. Directors may be appointed as alternate members of a committee, in the event of an absent committee member.

Other members of any committee may include designees of regular, associate or Business Affiliate members.

**Section 2. Committee Actions:**

All actions of any committee of the CSDA shall be governed by and taken in accordance with the provisions of these Bylaws. All committees shall serve at the pleasure of the Board and have such authority as provided by the Board of Directors. Minutes of each committee meeting shall be kept maintained and each committee shall present a report to the Board of Directors at each regularly scheduled Board meeting.

No committee may take any final action on any matter that, under these Bylaws, or under the California Nonprofit Public Benefit Corporation Law, also requires approval of the members of the CSDA.

All committees, regardless of Board resolution, are restricted from any of the following actions as imposed by the California Nonprofit Public Benefit Corporation Law:

- No committee may fill vacancies on the Board of Directors or on any committee that has authority of the Board, establish any other committees of the Board, or appoint the members of the committees of the Board.
- No committee may fix compensation of the directors for serving on the Board or on any committee, expend corporate funds to support a nominee for director, or approve any contract or transaction to which CSDA is a party and in which one or more of its directors has a material financial interest.
- No committee may amend or repeal Bylaws or adopt new Bylaws or amend or repeal any resolution of the Board that by its express terms is not subject to amendment or repeal.

**Section 3. Committee Meetings:**

Meetings of the committees of CSDA shall be held in accordance with the provisions of these Bylaws. The time and place for regular meetings of such committees may be determined by the Board or by such committees. Special meetings of the committees may be called by the chair of such committee, or by the Board of Directors.

Written notice of any regular or special committee meeting may be given either personally, by first class mail, or by electronic transmission as specified in Article II, Section 6.C.2 of these Bylaws. Any committee meeting may also be held by conference telephone, [use of web-based video communication software](#)~~web conference~~ or other electronic communication equipment. Participation in such a meeting under this Section shall constitute presence in person at the committee meeting if both of the following apply: (a) each committee member participating in the meeting can communicate concurrently with all other committee members; and (b) each member of the committee is provided a means of participating in all matters before the committee, including the capacity to propose or interpose an objection to a specific action to be taken by that committee, and the capacity to vote on any proposal requiring action or recommendation by the committee.

#### **Section 4. Standing Committees:**

Standing Committees of CSDA shall be advisory in nature except for the Finance Corporation (see Section 4D). The Standing Committees are: Executive, Professional Development, Elections and Bylaw, Finance Corporation, Fiscal, Legislative, Member Services and Audit.

The President shall recommend the appointment of committee officers and members of each Standing Committee except the Executive Committee. All committee members are subject to ratification by the Board of Directors.

##### **A. Executive Committee:**

The Executive Committee shall consist of all officers of CSDA: the President, Vice President, Secretary, Treasurer and the Immediate Past President of CSDA. If the Immediate Past President is no longer a member of the Board of Directors, a previous past president may be appointed. If there are no directors who have served previously as President, the President shall appoint a current director to serve as a member of the Executive Committee.

Subject to these Bylaws and approval of the Board of Directors, the Executive Committee shall have full power, authority and responsibility for the operation and function of the CSDA.

##### **B. Professional Development Committee:**

The Professional Development Committee shall provide advice, feedback and general guidance for CSDA professional development programs and events.

##### **C. Election and Bylaws Committee:**

The Election and Bylaws Committee shall be responsible for conducting all elections for the CSDA Board of Directors as provided in these Bylaws. The Committee shall annually review the Bylaws and shall be responsible for membership vote on any bylaw changes and approval of election materials.

##### **D. Finance Corporation Committee:**



The Finance Corporation Committee shall serve as ex officio members of the Board of Directors of the CSDA Finance Corporation, a California non-profit public benefit corporation organized to provide financial assistance to CSDA members in acquiring, constructing and financing various public facilities and equipment for the use and benefit of the public. The Finance Corporation Committee is not an advisory committee, but rather has all of the powers described in the CSDA Finance Corporation Bylaws, which are incorporated herein by this reference. Such powers include the powers to manage and control the business affairs of the corporation, to approve policies for the corporation's operations, and to enter into all contracts necessary to provide financial assistance to CSDA members.

**E. Fiscal Committee:**

The Treasurer shall serve as the chair of the Fiscal Committee and shall, with the Committee, be responsible for oversight of all the financial transactions of the CSDA. An annual budget shall be reviewed by the committee and ratified by the Board of Directors.

**F. Legislative Committee:**

The Legislative Committee shall be responsible for the development of CSDA's legislative agenda and advocacy priorities. The Legislative Committee shall review, direct and assist the CSDA Advocacy and Public Affairs Department with legislative and public policy issues.

**G. Member Services Committee:**

The Member Services Committee shall be responsible for recruitment and retention activities as well as recommendation of new members and benefits to the CSDA Board of Directors. All new members shall be ratified by the Board of Directors.

**H. Audit Committee:**

The Audit Committee is responsible for maintaining and updating internal controls. The Committee selects the Auditor for Board of Directors approval and provides guidance to the auditors on possible audit and fraud risks. The Committee reviews the audit and management letter and makes recommendation to the Board of Directors for action.

**Section 5. Ad Hoc Committees:**

The President may appoint other Ad Hoc Committees and their officers as may be determined necessary for the proper operation of the CSDA. The Standing Committees and the Ad Hoc Committees shall plan and authorize such programs as may be directed by the Board of Directors.

The Ad Hoc Committees shall be advisory in nature and shall be composed of at least two members of the Board of Directors. Other members of such committees may include designees of regular, associate or professional members, or members of the public, as approved by the Board of Directors.

**Section 6. Special Committee of the Board:**

A Special Committee may be granted authority of the Board as a Committee of the Board, as required by the California Nonprofit Public Benefit Corporation Law, provided by a specific resolution adopted by a majority of the Board of Directors then in office. In such case, the Special Committee shall be composed exclusively of two or more directors, but less than a quorum of the Board of Directors.

**ARTICLE VII – INDEMNIFICATION****Section 1. Right of Indemnity:**

To the fullest extent permitted by law, the CSDA shall defend, indemnify and hold harmless both its past and present directors, officers, employees and other persons described in Section 5238(a) of the California Corporations Code, against any and all actions, expenses, fines, judgments, claims, liabilities, settlements and other amounts reasonably incurred by them in connection with any “proceeding”, as that term is used in the Section 5238(a) of the California Corporations Code.

“Expenses”, as used in these Bylaws, shall have the same meaning as in Section 5238(a) of the California Corporations Code.

**Section 2. Approval of Indemnity:**

On written request to the Board by any person seeking indemnification under Section 5238(b) or Section 5238(c) of the California Corporations Code, the Board shall promptly determine under Section 5238(e) of the California Corporations code whether the applicable standard of conduct set forth in Section 5238(b) or Section 5238(c) has been met, and if so, the Board shall authorize indemnification.

If the Board cannot authorize indemnification because the number of directors who are parties to the proceeding with respect to which indemnification is sought prevents the formation of a quorum of directors who are not parties to that proceeding, the Board shall promptly call a meeting of the members.

At the request for indemnification meeting, the members shall determine under Section 5238(e) of the California Corporations Code whether the applicable standard or conduct set forth in Section 5238(b) or Section 5238(c) has been met, and, if so, the members present at the meeting in person or by proxy shall authorize indemnification.

**Section 3. Insurance:**

CSDA shall have the right to purchase and maintain insurance to the full extent permitted by law, on behalf of its officers, directors, employees, and agents, against any liability asserted against or incurred by any officer, director, employee or agent in such capacity, or arising out of the officer's, director's, employee's, or agent's status as such.



**Section 4. Liability:**

No member, individual, director, or staff member of the CSDA shall be personally liable to the CSDA's creditors, or for any indebtedness or liability. Any and all creditors shall look only to the CSDA's assets for payment.

**ARTICLE VIII – AFFILIATED CHAPTERS****Section 1. Purpose:**

The purpose of affiliated chapters is to provide local forums of members for the discussion, consideration and interchange of ideas concerning matters relating to the purposes and powers of special districts and the CSDA.

The affiliated chapters may meet to discuss issues bearing upon special districts and the CSDA. The chapters may make recommendations to the CSDA's Board of Directors.

**Section 2. Organization:**

The regular voting members of CSDA are encouraged to create and establish affiliated chapters. In order to be recognized as a CSDA Chapter, each Chapter must approve and execute a Chapter Affiliation Agreement in order to obtain the right to use the CSDA name, logo, membership mailing list, intellectual property, endorsements, and CSDA staff support and technical assistance in conducting Chapter activities. The terms and conditions of the Chapter Affiliation Agreement are incorporated herein by this reference.

Each chapter formed prior to August 1, 2011 must have at least one CSDA member in their membership at all times, including but not limited to the following chapters: Alameda, Butte, Contra Costa, Kern, Marin, Monterey, Orange (ISDOC), Placer, Sacramento, San Bernardino, San Diego, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara and Ventura. Such existing chapters may include as members: local organizations and businesses, districts and professionals who are not members of CSDA.

New chapters formed after August 1, 2011, are required to have 100 percent of their special district members as current members of CSDA in order to be a chapter affiliate of CSDA. Such chapters may include as members: local organizations/businesses and professionals who are not members of CSDA.

Affiliated chapters shall be determined upon approval and execution of the Chapter Affiliation Agreement by the chapter and approval and ratification of the Chapter Affiliation Agreement by the CSDA Board of Directors. The chapters shall be required to provide updated membership lists to the CSDA at least annually or upon request by the President or CEO.

No partnership or joint venture shall be established between CSDA and its affiliated chapters by reason of the provisions of these Bylaws or the Chapter Affiliation Agreement.

**Section 3. Rules, Regulations and Meetings:**

Each affiliated chapter shall adopt such rules and regulations, meeting place and times as the membership of such affiliated chapter may decide by majority vote. Rules and regulations of the affiliated chapter shall not be inconsistent with the Articles of Incorporation or Bylaws of CSDA.

**Section 4. Financing of Affiliated Chapters:**

No part of CSDA's funds shall be used for the operation of the affiliate chapters. CSDA is not responsible for the debts, obligations, acts or omissions of the affiliate chapters.

**Section 5. Legislative Program Participation:**

Affiliate chapters may function as a forum regarding federal, state and local legislative issues. The chapters may assist CSDA in the distribution of information to their members.

**ARTICLE IX – AMENDMENTS TO THE BYLAWS****Section 1. Amendment Proposals:**

Any regular voting member in good standing may propose changes to these Bylaws. The proposed amendments shall be reviewed by the Board of Directors and submitted to the Election and Bylaws Committee for their study.

After examination by the Election and Bylaws Committee and upon approval by the Board of Directors the amendment proposals may be submitted for vote at the Annual Business meeting of the members held by CSDA, at a specially called meeting, or by mail or electronic ballot.

**Section 2. Amendment Membership Meeting:**

Prior notice in writing of the proposed amendments to these Bylaws shall be given either by first class mail or by electronic transmission by the Board of Directors to the regular voting members in good standing, not later than 45 days in advance of the amendment meeting pursuant to the provisions of Article II, Section 6.C of these Bylaws. The electronic notice shall include copies of the proposed amendments.

Electronic copies of the proposed amendments shall also be available on the CSDA website for review by the regular voting members prior to the meeting. Copies of the proposed amendments shall also be available for the regular voting members at the amendment membership meeting.

The amendment membership meeting may be conducted as an electronic meeting pursuant to the provisions of Article II, Section 6.D of these Bylaws.

**Section 3. Written Bylaw Amendment Ballot:**

The Board of Directors of CSDA may submit Bylaw amendments for approval of regular voting members by mail or electronic ballot rather than by means of an amendment membership meeting.

When a written ballot is used to amend these Bylaws, the ballot shall include the text of all proposed Bylaw amendments the Board of Directors intends to present for vote by the members. Such written ballot shall contain the information specified in Article II, Section 6.F of these Bylaws and shall be distributed to regular voting members either by first class mail or by electronic transmission at least 45 days in advance of the date designated for return of the ballot.

Written ballots shall be returned either by first class mail or by electronic communication to either the principal business address of CSDA or CSDA's designated electronic format specified on the ballot prior to the close of business (5:00 pm) on the designated election date. Written ballots received either by first class mail or electronic communication after the specified date shall not be counted and will be deemed invalid.



**Section 4. Bylaw Amendment Ratification:**

**A. Membership Meeting:**

The proposed Bylaw amendments shall be deemed adopted by the members when the number of votes cast by regular voting members present at such membership meeting meets or exceeds the required quorum of 25 regular voting members, and the number of votes cast approving the Bylaw amendments constitutes a majority of votes cast, i.e., 50% plus one of regular voting members casting ballots at such meeting.

**B. Mail or Electronic Ballot:**

The proposed Bylaw amendment/s shall be deemed adopted by a majority of the regular voting members by mail or electronic ballot when the provisions of Article II, Section 6.H of these Bylaws have been satisfied.

EXHIBIT A

Updated November 1, 2019



California Special Districts Association  
**DISTRICT NETWORKS**



## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

To: Board of Directors  
From: John Friedenbach  
Date: April 11, 2024  
Subject: Trinity County Zoning Change to Ruth Lake Buffer Strip

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**History**

In 2001, the Trinity County Board of Supervisors approved an application filed by the RLCSD to rezone the buffer area surrounding Ruth Lake from Unclassified (U) to the Specific Unit Development (SUD) District. As outlined in Trinity County Code (TCC) Chapter 17.24 (Specific Unit Development (SUD) District), the purpose of SUD District is the following:

*“To provide for developments that, because of a mixture of building types, land uses, or lot sizes, do not fit within the parameters of standard zoning regulations. Specific Unit Developments are subject to a special set of site specific guidelines and schematic land use design which allow a mixture of uses that might otherwise create land use conflicts. Such developments often incorporate common areas or other amenities not normally found in standard developments.”*

The rezoning action of the Board stated that no new development would occur until the Planning Commission adopted SUD Development Guidelines for the buffer area. As outlined in TCC Section 17.24.020(B), SUD Guidelines are *“A written set of guidelines, which address architectural design, signage, utility information and other such information as deemed necessary by the planning director.”*

The purpose of the Ruth Lake Specific Unit Development (SUD) Guidelines is to provide a written set of guidelines for development on the recreational lease lots within the buffer area surrounding Ruth Lake, in accordance with TCC Section 17.24. Additionally, the RLCSD developed a separate policy handbook based on a draft of the SUD Guidelines. This handbook serves as a guide for development within the RLCSD and will work in tandem with the SUD Guidelines. These SUD Guidelines outline the approval process for improvements on the lease lots, provide a list of permitted uses and improvements allowed on the lots, and prescribe the development standards applicable to improvements on the lots. These Guidelines identify the existing development on the lease lots as principally permitted uses and identify subsequent uses and improvements that are principally permitted. These Guidelines also provide specific requirements for RV use and explain that uses or improvements not listed as principally permitted in these Guidelines may be allowed with approval from the HBMWD and RLCSD.

**Discussion**

Apparently, Trinity County did not complete its processing of the SUD in the early 2000's. The issue of development around Ruth Lake post August Complex Wildfire has brought the need for the SUD back to Trinity County's attention. RLCSD is considering the draft language for the SUD at their board meeting on November 12, 2024. HBMWD staff will attend that meeting with a report out at our Board meeting on November 14<sup>th</sup>.

**Recommendation**

Staff does not currently have a recommended action for our Board, other than to closely monitor the progress of the SUD and have the proposed language of the SUD reviewed by HBMWD's legal counsel. This item could be referred to our Master Lease subcommittee for monitoring and input.



## Ruth Lake Specific Unit Development Guidelines

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### 1. BACKGROUND

Ruth Lake is a reservoir that is owned and operated by the Humboldt Bay Municipal Water District (“HBMWD”) ~~that and~~ provides water to over 94,000 customers in the Humboldt Bay region. A portion of the water stored in Ruth Lake is released each summer and fall to satisfy the HBMWD’s downstream diversion requirements, as well as maintain minimum bypass flow requirements in the Mad River below Essex.<sup>1</sup> ~~The reservoir was created to primarily provide water for municipal and industrial purposes; any other use of the water is subordinate to such uses.~~ The HBMWD owns approximately 75 percent of the land surrounding the lake and the remaining portion is owned by the U.S. Forest Service. In 1964, the HBMWD leased the property within ~~an approximately 300 foot~~ buffer strip surrounding Ruth Lake (“~~B~~uffer ~~A~~area”) to Trinity County to develop a recreational area for the benefit of the citizens of the County and visitors to the area. The County then assigned the lease to the Ruth Lake Community Services District (“RLCSD”). Under this arrangement, the ~~B~~uffer ~~A~~area was subdivided into lots for the purpose of ~~sub~~leasing them for recreational purposes. Consistent with the policies of ~~the HBMWD and~~ RLCSD, the ~~sub~~leased lots were developed over time with management and facility offices, a marina, campgrounds, day use areas, public facilities, part-time/non-permanent residential uses for recreational purposes, and associated infrastructure.

In 2001, the Trinity County Board of Supervisors approved an application filed by the RLCSD to rezone the ~~B~~uffer ~~A~~area surrounding Ruth Lake from Unclassified (U) to the Specific Unit Development (SUD) District. As outlined in Trinity County Code (TCC) Chapter 17.24 (Specific Unit Development (SUD) District), the purpose of SUD District is the following:

*“To provide for developments that, because of a mixture of building types, land uses, or lot sizes, do not fit within the parameters of standard zoning regulations. Specific Unit Developments are subject to a special set of site-specific site-specific guidelines and schematic land use design which allow a mixture of uses that might otherwise create land use conflicts. Such developments often incorporate common areas or other amenities not normally found in standard developments.”*

The rezoning action of the Board stated that no new development would occur until the Planning Commission adopted SUD Development Guidelines for the buffer area. As outlined in TCC Section 17.24.020(B), SUD Guidelines are “A written set of guidelines, which address architectural design, signage, utility information and other such information as deemed necessary by the planning director.”

<sup>1</sup> <https://www.hbmwd.com/beautiful-ruth-lake>

## 2. PURPOSE

The purpose of the Ruth Lake Specific Unit Development (“SUD”) Guidelines is to provide a written set of guidelines for development on the recreational Lease Lots within the Buffer Area surrounding Ruth Lake, in accordance with TCC Section 17.24. ~~Additionally, the RLCS~~D developed maintains a separate policy handbook ~~based on a draft of the SUD Guidelines that is updated as needed and review by the HBMWD.~~ This handbook serves as ~~a guide~~RLCSD rules and regulations for development within the RLCS D and will work in tandem with the SUD Guidelines. These SUD Guidelines outline the approval process for improvements on the Lease Lots, provide a list of permitted uses and improvements allowed on the lots, and prescribe the development standards applicable to improvements on the lots. These Guidelines identify the existing development on the Lease Lots as principally permitted uses and identify subsequent uses and improvements that are principally permitted. These Guidelines also provide specific requirements for RV use and explain that uses or improvements not listed as principally permitted in these Guidelines may be allowed with approval from ~~the~~ HBMWD and RLCS D.

## 3. DEFINITIONS

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“Buffer Area” means the property owned by the Humboldt Bay Municipal Water District and leased to Trinity County and RLCS D ~~within an approximately 300-foot buffer strip~~ surrounding Ruth Lake (see Attachment 1 – Buffer Area map). This area has been subdivided into ~~lease~~ Lease lots-Lots for the purpose of developing a recreational area for the benefit of the County’s residents and visitors.

“Humboldt Bay Municipal Water District or HBMWD” means a regional water agency that owns the majority of land surrounding Ruth Lake Reservoir and is the lessor of the property within the ~~buffer~~ Buffer areaArea.

“Lease Lots” means the individual lots available for sublease from RLCS D pursuant to the Master Lease from HBMWD assigned to RLCS D within the Buffer Area surrounding Ruth Lake.

“Long-Term/Permanent” means staying on a Lease Lot while working or commuting to work, conducting business, going to school, or engaging in other non-recreational activities long enough to qualify for certain rights, privileges, etc. Retirement is not considered a recreational pursuit (RLCS D Policy 6010.11).

“Part Time/Nonpermanent” means a residential use that allows individuals to engage ~~in~~ in some form of play, amusement, or relaxation related to use of the lake or the surrounding environment (RLCS D Policy 6010.10).



“Ruth Lake Community Services District or RLCSD” means the special district that provides recreation services at Ruth Lake Reservoir and who was assigned the “Master Lease” by Trinity County for the management and regulation of use of the Lease Lots within the Buffer Area surrounding the lake.

“Sublease Holder” means a sublessee of a Lease Lot within the Buffer Area surrounding Ruth Lake.

#### 4. APPROVAL PROCESS FOR IMPROVEMENTS ON LEASE LOTS

The process for obtaining approval from Trinity County for improvements on the Lease Lots within the Buffer Area is detailed below. Prior to submittal of an application for development to the County, the applicant and Sublease Holder must first obtain written approval from ~~the~~ HBMWD and RLCSD. The sublease agreement with RLCSD and RLCSD Policy 6000 (Lease Site Standards) explains the process for obtaining approval from ~~the~~ HBMWD and RLCSD for any alterations, additions, and improvements to a Lease Lot. Once approval is received from ~~the~~ HBMWD and RLCSD, the applicant and Sublease Holder may then apply to the Trinity County Building Division and/or Environmental Health Division for respective permits. It is the responsibility of the Sublease Holder to contact ~~the~~ Trinity County Building Division and/or Environmental Health Division for a determination on whether a permit is required for any proposed improvement to a Lease Lot.

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#### 5. APPLICATION SUBMITTAL REQUIREMENTS:

If a building permit is required for proposed improvements to a Lease Lot, the Sublease Holder must submit the following information to the Trinity County Building Division:

- The approval documents for the proposed improvements from ~~the~~ HBMWD and RLCSD.
- A completed building permit application form and application fees.
- A detailed written description of the proposed project, including type of construction, dimensions, and materials, and colors proposed~~materials proposed~~.
- A site plan illustrating where on the project site the proposed improvements will be located.
- Construction plan set.
- Cut sheets providing detailed specifications for any proposed exterior or outdoor lighting fixtures and bulbs for review and approval by the Trinity County Planning Division.
- Timeline for completing the proposed improvements.
- Any other such information as determined by the Trinity County Building Division as being necessary to process the building permit application.



Upon receipt of a complete application, the Building Division will refer the project to other County departments for comment including, but not limited to, the Environmental Health Division, Planning Division, and Department of Transportation. These departments may request additional information about the project and identify other permits that must be obtained from the County. These departments may also recommend referring the project to other regulatory agencies including, but not limited to, the California Department of Fish and Wildlife (“CDFW”), California Department of Forestry and Fire Protection (“CAL FIRE”), and State Water Resources Control Board (“SWRCB”). Once the ~~sublease-Sublease holder-Holder~~ has adequately addressed all applicable comments and received any other required permits or approvals, the Building Division may issue the building permit for the proposed improvements. The ~~sublease-Sublease holder-Holder~~ is responsible for coordinating with the Building Division to schedule required inspections during and at the completion of construction activities (as applicable).

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## 6. PERMITTED USES

The ~~B~~uffer ~~A~~area surrounding Ruth Lake contains approximately 229-230 recreational ~~lease Lease lots-Lots~~. Approximately 195 of the lots are currently leased and/or developed or available for development. The remaining 45 lots are not leased, are vacant, and have not been previously leased or developed. The development on the lots that are currently leased and developed includes recreational-commercial, public facility, and part-time/non-permanent residential uses for recreational purposes. The 9 ~~lease-Lease lots-Lots~~ developed for recreational-commercial purposes include, but are not limited to, a marina, campgrounds, and day use areas. The 2 ~~lease-Lease lots-Lots~~ developed for public facility uses include a solid waste transfer station (“Ruth Transfer Site”) and the ~~Southern Trinity Area Rescue and Southern Trinity Volunteer Fire Department facility~~. The ~~lease-Lease lots-Lots~~ developed for part-time/non-permanent residential purposes include dwellings, recreational vehicles, accessory structures, and associated infrastructure. Notwithstanding, Notwithstanding the represented numbers of Lease Lots above and below, the HBMWD and RLCSO reserve sole discretion on Lease Lot boundaries, availability, number present around the lake, and general characteristic of the Lease Lots. Lease Lots are not equivalent or similar to County designated parcels. Lease Lots do not have physical addresses and are not subject to County jurisdiction for parcel division, parcel additions, or parcel size changes. Lease Lots are used in this Chapter for reference purposes only to distinguish between the types of uses and identify pre-existing and unique sites such as named day-use areas or named campsites.

Below is a list of the principally permitted uses and improvements for the ~~L~~ease ~~L~~ots within the ~~B~~uffer ~~A~~area surrounding Ruth Lake. For the ~~L~~ease ~~L~~ots currently developed with recreational-commercial and public facility uses, a description is provided of the existing principally permitted development and a list is provided of the additional uses and improvements that are principally permitted for these lots. For all the other ~~L~~ease ~~L~~ots, a list is

provided of principally permitted uses and improvements, which primarily allows Part-Time/Non-Permanent residential use for recreational purposes.

For Sublease Holders proposing the use of recreational vehicles (“RVs”), this section provides specific requirements for RV use. For Sublease Holders proposing other uses or improvements not listed as principally permitted, this section explains that these may be allowed with approval from ~~the~~ HBMWD and RLCSD.

Although a use or improvement may be listed in this section as principally permitted on a Lease Lot, the actual development potential of any individual lot may be more limited and site-specific. Factors that could reduce development potential on the Lease Lots include, but are not limited to:

- Sites that have limited vehicular access or can only be accessed by boat.
- Sites that are unable to meet the regulatory requirements (e.g., Environmental Health Division, HBMWD, RLCSD, CDFW, SWRCB, etc.) for onsite wastewater treatment systems and onsite surface water diversions or groundwater wells.
- Sites that are unable to comply with regulatory requirements for fire safety (e.g., CAL FIRE, County of Trinity, etc.), which include but are not limited to, emergency access, water storage, setbacks, and defensible space.
- Sites that have environmental constraints related to issues such as topography, soil suitability, seismic hazards, flooding hazards, riparian corridors and wetlands, habitat for protected plants and wildlife, and cultural and historic resources. Sites with such constraints may be subject to other laws and regulations that limit development potential.

#### **Sheriff's Cove Day Use Area (Lease Lot #1):**

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The Sheriff's Cove Day Use Area is currently developed with a day use/picnic area, parking lot, public dock, and pit toilet. These existing uses and improvements are principally permitted for Lease Lot #1.

In addition to the existing development, the following improvements and uses are principally permitted for the Sheriff's Cove Day Use Area (subject to any other permits/approval that may be required) (Lease Lot #1):

- A. Maintain, upgrade, and add to the public facilities including but not limited to the existing pit toilets, picnic tables, BBQ units, and shade covers.
- B. Maintain rip-rap in the creek channel to ensure that it does not encroach into the parking area.
- C. Maintain and add additional parking areas to provide adequate parking.



- D. Add and maintain one or more courtesy docks for public use.
- E. Additional docks with mooring slips for public access.
- F. Maintain, upgrade, replace and add utility infrastructure (e.g., water, wastewater, electricity, etc.).

G. Add and maintain buildings for purpose related to day use area needs, such as but not limited to bait and tackle shop, business rental shop, RLCSD facility, etc.

**Ruth Lake Marina (Lease Lot #14):**

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The Ruth Lake Marina is currently developed with a two-lane paved boat ramp, a courtesy dock, parking lot, restrooms, picnic tables, beach access for swimming and day use, wet moorage/dry storage, a retail store for basic fishing and boating needs that include, but is not limited to, fishing tackle and bait, ice, sodas, ~~and~~ fishing and patio boat rentals, two host sites, and associated infrastructure. These existing uses and improvements are principally permitted for Lease Lot #14.

In addition to the existing development, the following uses and improvements are principally permitted for the Ruth Lake Marina (subject to any other permits/approval that may be required) (Lease Lot #14):

- A. Log boom constructed and maintained at the Marina to be located into the lake to provide space for adequate boat docking. Maintenance and replacement of the log boom.
- B. Additional comfort stations.
- C. Expansion of the courtesy dock or the addition of one or more courtesy dock(s).
- D. Maintenance of the existing parking lot by resurfacing or other similar means, as well as the expansion of the parking lot or the addition of new parking lot areas.
- E. Maintenance of rip-rap in the creek channel that empties into the Marina Basin to prevent the winter high water from cutting through the channel walls and depositing gravel into the basin itself.
- F. Maintain, through excavation and/or dredging, the north side of the Marina to ensure that the water is deepened in order to prevent late season loss of mooring spaces.
- G. Food service establishment overlooking the lake.
- H. Update and expand the existing Marina store as well as the addition of a land-based land-based store.
- I. Additional parking spaces in the dry storage area.



- J. Permanent housing facility for the Marina Manager.
- K. Maintain, upgrade, replace and add utility infrastructure (e.g., water, wastewater, electricity, etc.).

#### **Ruth Rec Campground (Lease Lot #25):**

The Ruth Rec Campground is currently developed with 8796 camping sites and 2 host sites, a paved boat launch ramp, courtesy dock, coin operated showers, flush toilets, a camp store, a fish cleaning station, and associated infrastructure. These existing uses and improvements are principally permitted for Lease Lot #25.

In addition to the existing development, the following uses and improvements are principally permitted for the Ruth Rec Campground (subject to any other permits/approval that may be required) (Lease Lot #25):

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- A. Maintain, upgrade, replace, and add comfort stations.
- B. Maintain, upgrade, replace campground roads to minimize dust through paving and upgrades.
- C. Add additional or new Adequate-full-service hookups to sites as well as any necessary ADA accessibility upgrades throughout the campground.
- D. Maintain, upgrade, replace and add utility infrastructure (e.g., water, wastewater, electricity, etc.).
- E. Maintain, through excavation and/or dredging, the south side of Ruth Rec Campground swim area to ensure that the water is deepened to prevent late season loss of swim area.
- F. Upgrade and expand the existing Ruth Rec Campground store.
- G. Expansion of the courtesy dock or additional ~~al of one or more~~ courtesy dock(s).
- I. Additional parking spaces in dry storage area.
- K. Maintain and add additional tent campsites as needed.
- L. Upgrade and maintain recreational vehicle campsites as needed.

#### **Old Ruth Day Use Area (Lease Lot #44):**

The Old Ruth Day Use Area is currently developed with a day use/picnic area, group BBQ facilities, public dock, pit toilet, and a paved launch ramp for ~~local~~ boats. These existing uses and improvements are principally permitted for Lease Lot #44.

In addition to the existing development, the following uses and improvements are permitted for the Old Ruth Day Use Area (subject to any other permits/approval that may be required) (Lease Lot #44):

- A. Maintain, upgrade, replace ~~campground-day use~~ roads to minimize dust through by paving and upgrades.
- B. Expansion of the day use area and the maintenance, upgrading, replacement, and addition of picnic tables, BBQ units, fire pits, shade covers, and comfort stations.
- C. Additional recreational features including, but not limited to, a pavilion for group functions.
- D. Maintain, upgrade, replace and add utility infrastructure (e.g., water, wastewater, electricity, etc.).

#### Hobart Creek Campground (Lease Lot #47):

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The Hobart Creek Campground is currently developed with 23 camping sites and 1 host site, coin operated showers, flush toilets, a dump station, and associated infrastructure. These existing uses and improvements are principally permitted for Lease Lot #47.

In addition to the existing development, the following uses and improvements are principally permitted for the Hobart Creek Campground (subject to any other permits/approval that may be required) (Lease Lot #47):

- A. Add additional or new Adequate full-service hookups to sites as well as any necessary ADA accessibility upgrades throughout the campground.
- B. Maintain, upgrade, replace, and add comfort stations.
- C. Maintain, ~~and~~ upgrade, replace encroachment onto County Road 501.
- D. Construct and maintain a pedestrian trail from the campground to the Ruth/Zenia Bridge.
- E. Maintain, upgrade, replace and add utility infrastructure (e.g., water, wastewater, electricity, etc.).
- F. Maintain and add additional tent campsites, as needed.
- G. Upgrade and maintain recreational vehicle campsites, as needed.

H. Expansion of the courtesy dock or additional courtesy docks.**Barlow Group Campground (Lease Lot #62):**

The Barlow Group Campground is currently developed with a host site, group camping area, showers, flush toilets, and a full kitchen. These existing uses and improvements are principally permitted for Lease Lot #62.

In addition to the existing development, the following uses and improvements are principally permitted for the Barlow Group Campground (subject to any other permits/approval that may be required) (Lease Lot #62):

- A. A fenced area for secure boat parking.
- B. Additional recreational improvements including, but not limited to, a baseball field with a backstop and bleachers, horseshoe pits, volleyball court, golf driving range, and trap shoot areas.
- C. Maintain, upgrade, replace, and add comfort stations.
- D. Maintain, upgrade, replace and add utility infrastructure (e.g., water, wastewater, electricity, etc.).
- E. Maintain, upgrade, and add picnic tables, BBQ units, and shade covers.
- F. Maintain and add additional parking area to provide adequate parking.
- G. Upgrade and maintain a horse camp site that includes, but is not limited to, vehicle access, camping facilities, parking, fencing, comfort stations, and water and wastewater systems.

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**Boy Scout Cove Campground (Hetten Cove): Camping sites and host site (Lease Lot #100):**

The Boy Scout Cove Campground (Hetten Cove) is currently developed with 20-18 camping sites, lake access, and pit toilets. These existing uses and improvements are principally permitted for Lease Lot #100.

In addition to the existing development, the following uses and improvements are permitted for the Boy Scout Cove Campground (subject to any other permits/approval that may be required) (Lease Lot #100):

- A. Upgrade and maintain a road system throughout campgrounds with adequate parking.
- B. Upgrade and maintain a water/septic system for current and future development.
- C. Maintain and upgrade additional comfort station(s) ~~as needed~~.



- D. Upgrade and maintain day used day-use areas; including, but not limited to, parking, BBQ grills, shade covers, and tables.
- E. Maintain and add additional tent campsites, ~~as needed~~.
- F. Upgrade and maintain recreational vehicle campsites, ~~as needed~~.
- G. Add and maintain boat ramp(s) and/or courtesy dock(s) for public access, including a boat trailer parking area.
- ~~H. Upgrade and maintain a horse camp site that includes, but is not limited to, vehicle access, camping facilities, parking, fencing, comfort stations, and water and wastewater systems.~~
- I. Seasonal housing facility for the camp host and associated infrastructure and storage areas.
- J. Maintain, upgrade, replace and add utility infrastructure (e.g., water, wastewater, electricity, etc.).

#### Blue Slide Day Use Area (no assigned Lease Lot #):

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The Blue Slide Day Use Area is currently developed as a small day use area with a picnic table and pit toilets. These existing uses and improvements are principally permitted for this Lease Lot (no assigned Lease Lot #).

In addition to the existing development, the following uses and improvements are principally permitted for the Blue Slide Day Use Area (subject to any other permits/approval that may be required) (no assigned Lease Lot #):

- A. Additional recreational features including, but not limited to, a shade cover w/picnic tables underneath.
- B. Maintain, upgrade, and add to the parking area.
- C. Construct and maintain a foot trail starting at Hobart, to expand to Ruth/Zenia Bridge.
- D. Maintain and upgrade encroachment onto County Road 501.
- E. Maintain, upgrade, replace, and add comfort stations.
- F. Maintain, upgrade, replace and add utility infrastructure (e.g., water, wastewater, electricity, etc.).

#### Ruth Transfer Site (Lease Lot #70):

The Ruth Transfer Site is currently developed with a solid waste transfer station, which is currently managed by the County, that includes... These existing uses and improvements are principally permitted for Lease Lot #70.

In addition to the existing development, the following uses and improvements are principally permitted for the Ruth Transfer Site (subject to any other permits/approval that may be required) (Lease Lot #70):

- A. Additional waste management related improvements necessary to increase the capacity of the transfer site.
- B. Maintain, upgrade, replace and add utility infrastructure (e.g., water, wastewater, electricity, etc.).

**Southern Trinity Area Rescue (STAR) and Southern Trinity Volunteer Fire Department (“STVFD”) facility (Lease Lot #77):**

The ~~STAR and STVFD~~ facility is currently developed with infrastructure used for STVFD purposes as well as associated utilities... These existing uses and improvements are principally permitted for Lease Lot #77.

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In addition to the existing development, the following uses and improvements are principally permitted for ~~the STAR and STVFD~~ facility (subject to any other permits/approval that may be required) (Lease Lot #77):

- A. Additional emergency response facility improvements including, but not limited to, buildings, parking areas, storage areas, communications infrastructure and equipment, water storage, and fuel storage.
- B. Maintain, upgrade, replace and add utility infrastructure (e.g., water, wastewater, electricity, etc.).

**All Other Lease Lots:**

Principally permitted uses on all other ~~L~~lease ~~lots-Lots~~ are limited to one dwelling, one bath facility if not provided for in the dwelling (for example, if “primary dwelling” is a recreational vehicle), one storage building, and one water storage or pumping structure. ~~Use of the L~~lots within the ~~buffer-Buffer area-Area~~ for residential purposes is primarily intended to be ~~partPart-timeTime/nonNon-permanent-Permanent~~ and recreational in nature.

Long-~~T~~term/~~permanent-Permanent~~ residential use of a ~~L~~lease ~~L~~ot may be considered on an individual basis and requires the approval of the HBMWD and RLCSD. ~~For the purposes of the~~



SUD Guidelines, ~~Long-Term/Permanent~~ residential use means staying on a ~~Lease Lot~~ while working or commuting to work, conducting business, going to school, or engaging in other non-recreational activities long enough to qualify for certain rights, privileges, etc. ~~Retirement~~ is not considered a recreational pursuit (RLCSD Policy 6010.11).

~~The requirements for the use of recreational vehicles are provided below.~~

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#### Recreation Vehicles:

Recreational vehicles (RVs) are defined as a motorized vehicle or trailer that is designed to provide temporary living quarters for travel, camping, or recreation. ~~RLCSD restricts the use of RVs on Lease Lots in the Buffer Area pursuant to RLCSD Policy 6000.27. Any connection to utilities such as power, water, and sewage disposal must be approved by the Trinity County Building Division, Trinity County Environmental Health Division, and/or any other agency having jurisdiction over such utilities. The RV must remain capable of being moved at all times and shall be currently registered with the State of California Department of Motor Vehicles. No buildings shall be attached to the RV. If the RV is intended to function as the “primary dwelling” on the Lease Lot and remain onsite through the wet season, it must be approved to remain on the Lease Lot through the wet season by the RLCSD, and meet any applicable snow load requirements, which may include the construction of a ramada, carport, etc. to protect the unit.~~

~~The following are the requirements for the use of RVs as a part time/non permanent residential use for recreational purposes on the lease lots in the buffer area:~~

~~A. One (1) RV is allowed per lease lot and requires approval from the HBMWD and RLCSD.~~

~~An RV that is used on a lease lot is subject to the following requirements:~~

- ~~1. The RV must remain capable of being moved at all times and shall be currently registered with the State of California Department of Motor Vehicles. No buildings shall be attached to the RV.~~
- ~~2. All portions of the RV shall remain a minimum of 30 feet from all property lines.~~
- ~~3. Any connection to utilities such as power, water, and sewage disposal must be approved by the Trinity County Building Division, Trinity County Environmental Health Division, and/or any other agency having jurisdiction over such utilities.~~
- ~~4. Sanitation facilities for the RV shall be either fully self contained (allowed when RV use on a lease lot is for less than 30 days) or shall be connected to a fully permitted sewage disposal system serving the property (required when RV use on a lease lot is for more than 30 days). Any RV on a lease lot that will be connected to an onsite wastewater treatment system is considered at least one~~



~~extra bedroom (as determined by the Trinity County Environmental Health Division), and the system must be adequately sized to accept the additional load. The use of a portable toilet does not meet the requirement for providing adequate sewage disposal capacity for an RV.~~

~~5. If the RV is proposed to be used on a lease lot for longer than 30 days, the sublease holder must demonstrate an approved, legal water source.~~

~~6. If the RV is intended to function as the "primary dwelling" on the lease lot and remain onsite through the wet season, it must meet any applicable snow load requirements, which may include the construction of a ramada, carport, etc. to protect the unit.~~

~~7. Generators or other noise generating devices associated with the RV shall not be operated between the hours of 9 p.m. and 7 a.m. on weekdays and 9 p.m. and 9 a.m. on weekends.~~

~~B. With approval of the RLCSD, one (1) additional RV for a guest may be used as a part-time/non permanent residential use for recreational purposes on a lease lot for a period of up to 14 days.~~

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**Other Uses and Improvements:**

Proposed uses or improvements not listed as principally permitted in this section may be allowed with approval from the HBMWD and RLCSD. The sublease agreement with RLCSD and RLCSD Policy 6000 (Lease Site Standards) explains the process for obtaining approval from the HBMWD and RLCSD for any alterations, additions, and improvements to a Lease Lot. As explained in Section 4 (Approval Process for Improvements on Lease Lots), it is the responsibility of the Sublease Holder to contact the Trinity County Building Division or Trinity County Environmental Health Division for a determination on whether a permit is required for any proposed improvement to a Lease Lot.

**7. DEVELOPMENT STANDARDS**

All development within the Ruth Lake SUD district shall comply with the standards and conditions herein, and with the Trinity County Code, and all regulations, standards, and procedures of agencies with jurisdiction by law. Where there is a conflict between Trinity County Code and these SUD Guidelines, these SUD Guidelines shall prevail.

**Setback Requirements:**

For Lease Lots that share a boundary with a County identified parcel (APN boundary), the setbacks for any structure shall follow the requirements listed in the County Ordinance Code under Chapter 17.16 Single Family District or R-1. Those setbacks listed in the County

Ordinance Code do not apply to the sides of the Lease Lot that border other Lease Lots. Setbacks for structures on boundaries between Lease Lots are controlled pursuant to RLCSO policies.

**Placement of Structures:**

~~No structure shall be placed at an elevation less than 2,675 feet (spillway level plus 21 feet). The horizontal setback (from the 2,675 feet level) must be 20 feet.~~

**Lot Line Setbacks:**

~~Front, side, and rear lot line setbacks for structures shall not be less than 30 feet. Lease Lots that are wishing for improvements but unable to meet this requirement must be considered and approved on an individual basis by both the RLCSO and HBMWD Board of Directors.~~

**Height of Structures:**

The maximum building height for all structures is ~~35~~40 feet.

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**Roofing:**

Roofing materials shall be in compliance with California Building Code and California Green Building Standards Code.

**Building Color:**

~~The exterior colors for buildings shall be neutral (e.g., earth tones, wood tone, etc.). Exceptions to this development standard may be allowed with approval from the HBMWD and RLCSO.~~

**Utility Infrastructure:**

**Water**

Lake Water: Water ~~diversion-use for personal purposes~~ from Ruth Lake Reservoir requires approval-permit from ~~the~~ HBMWD and RLCSO. Lake water is defined as any surface water gathered within the flood level of Ruth Lake, determined to be below elevation 2,6754 feet, 20 feet above the current spillway elevation, and between the Matthews Dam and the Ruth-Zenia Bridge.

Well water: Wells must be located at least 100 feet from the high-water mark of the Ruth Lake Reservoir. Well installation requires permission from ~~the~~ HBMWD and RLCSO and a permit is required from ~~the~~ Trinity County Environmental Health Division. A copy of the well drillers report must be forwarded to RLCSO and Trinity County. Additionally, if a well is determined to be hydrologically connected to nearby surface waters, permits or other approvals may be required from regulatory agencies including, but not limited to, the California Department of Fish and Wildlife and the State Water Resource Control Board.



Surface water: ~~Surface water taken from rivers, creeks or springs located above the flood level within the buffer area is not regulated by HBMWD or RLCSO. However, P~~ permits or other approvals, for surface water taken from river, creeks, or springs located above the flood level within the Buffer Area, may be required from regulatory agencies including, but not limited to, the California Department of Fish and Wildlife and the State Water Resource Control Board.

### **Wastewater**

Sewage disposal systems: Onsite wastewater treatment systems (OWTS) or (septic system) installation requires approval from ~~the~~ HBMWD and RLCSO and a permit from the Trinity County Environmental Health Division. No Lease Lot shall be used until an approved sewage disposal system is in place. This prohibition includes tent camping and self-contained RVs (fully self-contained RVs are allowed for stays of less than 30 days without the need for an approved sewage system). Refer to the Recreation Vehicles section for the requirements on self-contained RV usage, and RLCSO Policies 6220 and 6225 for the requirements related to individual wastewater treatment systems and pit toilets.

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### **Electrical and Telecommunication Utilities**

Both electrical and telecommunication connections require a utility easement between the utility provider and HBMWD before installation. HBMWD charges a fee to cover their costs in establishing the easement (contact HBMWD for current fee amount). Additionally, an electrical permit will be required through the Trinity County Building Division to bring power to the property. RLCSO must be contacted prior to contacting the utility company. Refer to RLCSO policy 6300 for the requirements for individual easement and utility installation.

### **Roads**

New roads must be designed to comply with the California Fire Safe Regulations to ensure they provide adequate emergency access (CCR Title 14, Division 1.5, Chapter 7, Subchapter 2, Article 2). Existing roads must be maintained to the standard they were originally built on and may be required to be upgraded as use increases, drainage patterns emerge or change, or for other reasons as determined by ~~the~~ HBMWD, RLCSO, Trinity County, or CAL FIRE. It is noted that upgrades to access roads may be required as a condition of issuance of a building permit by Trinity County. Driveways on Lease Lots are not considered roads for the purposes of this Chapter. Driveways on Lease Lots are regulated by RLCSO policies.

Encroachment permit: An encroachment permit must be obtained from the Trinity County Department of Transportation wherever a private driveway is proposed to intersect with a county road.

Grading permit and Erosion Control: A grading permit must be obtained from the Trinity County Planning Division when applicable to regulations in Trinity County Code Chapter 15.24 (Mass



Grading Ordinance). Please reference RLCSD policies for all erosion control requirements beyond County permit requirements.

~~Shared roads: Shared roads are a shared responsibility of the sublease holders who use it for access. Culverts and side drains must be cleaned throughout the year. RLCSD does not maintain any roads but may require work to be done.~~

~~Road names: Any driveway serving more than one dwelling must have a signpost if it intersects a county road. All road names must be approved by Trinity County.~~

~~Gates: All gates must be approved by RLCSD and HBMWD prior to installation. Chain and cable gates are not acceptable or permissible.~~

~~Locks: All gates if locked must have a lock keyed to the RLCSD master. Master keys are provided to fire, medical, law enforcement agencies, and utility companies that serve the area. If the administrator or any of the above cannot open a gate because of an unapproved or nonfunctioning lock, they have permission to cut the lock, and the sublease holder must replace it at their expense. Providing a copy of an individual lock key to the RLCSD office does not meet this requirement.~~

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#### ~~Landscaping~~

~~Landscaping shall be designed and located so that it will not obstruct sight lines necessary for safe vehicular and pedestrian circulation and will not interfere with utility infrastructure.~~

#### ~~Lighting~~

~~Onsite lighting may include a combination of motion sensor lighting and constant lighting for safety purposes and to accent structural design features and landscaping. All exterior and outdoor lighting shall be fully shielded (bulb not visible), fully cut off (no light above horizontal) and cannot extend over lot lines.~~

#### ~~Fences~~

~~Fences are only allowed for the purpose of guarding against unsafe conditions. Fences shall be designed and located so that they do not obstruct sight lines necessary for safe vehicular and pedestrian circulation. Fence installation is controlled by RLCSD Policy 6000.53 and requires approval from the HBMWD and RLCSD. Additionally, solid fences that do not allow air to pass through over a height of 7 feet will require a Building permit through the Trinity County Building Division.~~

#### ~~Signs~~

~~With the exception of the below requirements, signs proposed on the lease lots must comply with the requirements in Trinity County Code Chapter 15.08 (Sign Ordinance) and may require a~~

Building permit through the Trinity County Building Division. Signs are further controlled by RLCSD Policy 6000.54.

~~Street signs: Each road or driveway serving more than two dwellings must have a street sign if it intersects with a county road. All road names must be approved by Trinity County.~~

~~Address signs: The lease number or an address assigned by Trinity County must be posted on each dwelling. To ensure that the lease number or address is visible to emergency responders, it must also be posted at the driveway entrance that serves that individual dwelling.~~

~~No trespassing signs: No trespassing signs are not allowed to be posted on a lease lot.~~

~~Private lease signs: A sign stating "Private lease" is allowed on a lease lot. However, a sublease holder may not impede access along the water's edge to 100 feet above it.~~

### **Boat or Swimming Docks**

Boat or swimming docks are allowed with approval from HBMWD and RLCSD. Depending on the design of the boat or swimming dock, a building permit may be required from the Trinity County Building Division. Refer to RLCSD policies 6100, 6110, and 6120 for the requirements for boat and swimming docks.

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### **Grading and Erosion Control**

~~Grading activity shall occur in compliance with the requirements of Trinity County Code Chapter 15.24 (Mass Grading). All lease lots, roads, and trails shall be constructed and maintained to minimize erosion into the lake, river, and other water courses. HBMWD, RLCSD, or Trinity County may require modifications to proposed projects and maintenance or repair work to be done as necessary to ensure adequate erosion control.~~

### **DOCUMENTATION AND REFERENCES**

Ruth Lake Community Services District. 2006. *Policy handbook*.

<https://www.ruthlakecsd.org/leaseholders/>

Ruth Lake Community Services District. 2024. *Camping and day use*.

<https://www.ruthlakecsd.org/camping-day-use/>

Ruth Lake Community Services District. 2012. *Lease Lots Map*.

Ruth Lake Community Services District. 2012. *Draft SUD Guidelines*.

**ENGINEERING**





## CHANGE ORDER

PROJECT: Samoa Reservoir  
Seismic Retrofit Project

Change Order No.: 01.

Date: 11/1/24

History:

### **Samoa Foundation:**

October 18<sup>th</sup> 2024 Paso Robles Tank (PRT) presented a net cost reduction change order to change the foundation design on the Samoa 1 MG reservoir. PRT proposed completely replacing the ring wall foundation at a substantial \$80,000 cost saving to the District, compared to the bid item originally designed and bid on by PRT.

The District is interested in pursuing the VE option to pour a brand new monolithic foundation under the 1 Million Gallon IW tank.

The District expects Paso Robles Tank to perform and provide to the District for review and approval, the design and calcs and demonstration that the design meets current seismic code. The District believes this to be a minor design change which does not require a SOW with FEMA. The work on the Samoa tank can proceed as contracted.

### **Samoa Roof Height – Max 50’:**

During discussions surrounding the possible complete tank replacement option, PRT was informed that there is a design height limit for the Samoa Tank of no higher than 50’ total.

The Contract Documents do not stipulate this restriction. Paso Robles Tank included a preliminary design at the time of bid for Samoa tank which would increase the tank shell height to 48’. This will then increase the overall tank height to roughly 54’ at the center vent of the roof.

Because the 50’ requirement was not known at the time of bid, PRT will be granted the additional cost of lowering the overall tank height to less than 50’ tall. PRT will redesign the Samoa tank roof to maintain a maximum height of 50’.

### **Samoa Re-design Time Extension:**

August 1<sup>st</sup> 2024 Paso Robles Tank presented a no cost change to replace the entire tank in lieu of the original retrofit project proposed. Notice to Proceed was issued on August 13<sup>th</sup>. On August 22<sup>nd</sup>, the District suspended work on the Samoa project until a decision could be made on the change request. The District was interested in pursuing the VE option to tear down and rebuild entire new tank. However, because this is a FEMA grant funded project and the proposed construction is a radical change from the original retrofit scope of work included in the grant application, the District was required to submit a revised Scope Of Work (SOW) to FEMA. The challenge with this course of action was that No work could be performed on the Samoa Tank for the changed SOW until approval from FEMA was

**CHANGE ORDER**

received by the District. If any work was performed on the Samoa Tank project in connection with the changed SOW, the entire FEMA grant funding for all tanks could be revoked. Since it could have taken months for FEMA to complete its review of the revised SOW, and the review delays would significantly impact the project's schedule, the change was not in the best interest of the District. On September 17<sup>th</sup> the District directed Paso Robles Tank to proceed with the original retrofit plan. The total work suspension lasted 26 calendar days and 17 working days.

Submittals not related to the change could have still been processed without jeopardizing funding for the project. Those submittals include the Lead Compliance plan and Environmental Submittals. Some of the other submittals could have been related to the change and could not be worked on.

Paso Robles Tank has requested 35 days, since it is the amount of time that has elapsed between the NTP and the notice to resume work.

**Description of the change:**

Samoa Foundation:

PRT will amend the contract documents to include the revised foundation plans and construct the new design with an \$80,000 cost savings to the District.

Samoa Roof Height – Max 50':

PRT will amend the contract documents to include the revised roof design and construct the new design with a \$50,000 cost increase to the District.

Samoa Re-design Time Extension:

The District will extend the Samoa working days by 18 days to address the number of working days lost during the time work was suspended by the District.

NOTE: CONTRACTOR WAIVES ANY CLAIM FOR FURTHER ADJUSTMENTS FOR THE CONTRACT SUM RELATED TO THE ABOVE-DESCRIBED CHANGE IN THE WORK.

<b>Important Dates:</b>					
<b>NTP</b>	<b>August 13, 2024</b>	<b>Calendar days from NTP</b>	<b>Working Days From NTP</b>	<b>Calendar days from Suspension</b>	<b>Working Days From Suspension</b>
<b>Work Suspended</b>	August 22, 2024	9 Days	7 Days	0	0
<b>Work Resumed</b>	September 17, 2024	35 Days	25 Days	26 Days	18 Days



**CHANGE ORDER**

<b>Adjustment of contract completion dates</b>	
Original Contract date	4/23/2025
Prior Adjustments in Calendar	0
Adjustment in Calendar Days for this change Order	26
Revised Contract Completion Date	5/19/2025

<b>Adjustment of contract sum</b>	
Original Contract Sum	\$4,118,700.00
Prior Adjustments	\$0
Contract Sum Prior to this Change	\$4,118,700.00
Adjustment for this Change	-\$30,000
Revised Contract Sum	\$4,088,700.00

RECOMMENDED BY:

*Nathan Stevens*

11/08/2024

Engineer – Nathan Stevens

Date

APPROVED BY:

Owner – John F Friedenbach, General Manager

Date

ACCEPTED BY:

Contractor – Shane P, Wombles, President – Paso Robles Tank

Date



**CHANGE ORDER**

**From:** Desiree Brumley  
**To:** John Friedenbach; "Nathan Stevens"; Shane Womble  
**Cc:** talvik@albat.co; justin@albat.co; Nathaniel Steen; "Dale Davidsen"  
**Subject:** 41475 Samoa Foundation VEC  
**Date:** Friday, October 18, 2024 10:34:50 AM  
**Attachments:** image002.png  
image004.png  
image005.png  
image006.png  
image007.png  
image008.png

Team,

We are working on the VEC to replace the Samoa foundation in the same manner as what we are doing for Korplex.

As noted in the RFI regarding the tank height of Samoa, we did not bid the work to keep the height at a max of 50'.

Shortening the tank from what we bid increases the roof plate thickness and thereby the costs.

If we go with a new foundation, it would be a credit to the District of \$80,000.00; however, changing the tank design down to 50' max will cost an additional \$50,000.00....leading to a \$30,000.00 final credit to the District to replace the foundation.

If that is acceptable to the District, we will proceed on that path. If it turns out that we DON'T have to keep the tank to a max 50' height, then the full \$80,000.00 credit would go to the District.

As with Korplex, the existing piping would be encased within the new foundation.

Once the Tank Height RFI is answered, and the District confirms they would like a new foundation on Samoa, I can get the VEC for the right amount sent over.

Thank you!

**Desiree Brumley**  
 Project Manager

**PASO ROBLES TANK, INC.**

825 26<sup>th</sup> St, Paso Robles, CA 93446  
 Office: 805-227-1641 / Fax: 805-238-9654  
 Mobile: 805-423-9398  
 E-mail: [dbrumley@pasoroblestank.com](mailto:dbrumley@pasoroblestank.com)  
 Website: [www.pasoroblestank.com](http://www.pasoroblestank.com)



**CHANGE ORDER**



RFC NO. 001

9.30.2024

**TO: Albat**  
Attention: Tatevik Janvelyan

**SUBJECT: Tank Design – Water Operating Levels** Contract No. GHD Inc: 12627733

**REQUEST FOR CHANGE**

**SUBJECT:**

- |  |   |
|--|---|
| <input type="checkbox"/> Direction not given in contract documents | <input type="checkbox"/> Conflict in contract requirements          |
| <input type="checkbox"/> Interpretation of contract requirements   | <input checked="" type="checkbox"/> Change in sequence or procedure |

REF. DRAWINGS:

REF. SPECS:

**REQUEST:**

Paso Robles Tank hereby requests a Contract Time Extension in relation to the discussion of constructing an entire new tank on the Samoa Project, in lieu of the original rehabilitation scope of work. NTP was issued August 13, 2024.

On August 22, 2024, The District officially Suspended work on this contract until a decision could be made regarding whether to pursue building a new tank (email attached). On September 17, 2024 PRT was directed to proceed with the original Samoa Tank Scope of Work based on the Board Meeting decision the previous week (email attached).

35 calendar days elapsed between the official NTP date and the date we were formally notified to continue with the original scope of work and the project was no longer suspended.

The current contract completion date is April 25, 2025. Paso Robles Tank is requesting 35 calendar days be added to the contract time, making the final completion date May 28, 2025.

SUBMITTED BY: \_\_\_\_\_

RESPONSE: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ANSWERED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

**Paso Robles Tank, Inc.**  
825 26<sup>th</sup> Street  
Paso Robles, CA 93446  
(805) 227-1641 / FAX No. (805) 238-9654



## CHANGE ORDER

**Desiree Brumley**

**From:** John Friedenbach <friedenbach@hbmwd.com>  
**Sent:** Thursday, August 22, 2024 3:05 PM  
**To:** Desiree Brumley; 'Nathan Stevens'; Shane Wombles  
**Cc:** 'Tatevik Janvelyan'; 'Justin Palmaymesa'; 'Nathaniel Steen'; 'Dale Davidsen'  
**Subject:** RE: 41475 / 41476 Samoa Korblex

**Importance:** High

Hi Desiree and Shane,

In regards to the two VE options by Paso Robles Tank, the District provides the following response:

1. **Samoa Tank:** The District is interested in pursuing the VE option to tear down and rebuild entire new tank. However, because this is a FEMA grant funded project and the proposed construction is a radical change from the original retrofit scope of work included in the grant application, the District is required to submit a revised Scope Of Work (SOW) to FEMA. The challenge with this course of action is that no work can be performed on the Samoa Tank for the changed SOW until approval from FEMA is received by the District. If any work is performed on the Samoa Tank project in connection with the changed SOW, the entire FEMA grant funding for all tanks could be revoked. It can take months for FEMA to complete its review of the revised SOW. This issue will be discussed with the District's board of directors at our September 12<sup>th</sup> board meeting. Bottom line is this component of the contract with Paso Robles Tank will be on hold until the District receives approval from FEMA.  
The District will issue a change order to suspend activity on this project including the contract performance period for this tank.
2. **Korblex Tanks:** The District is interested in pursuing the VE option to pour a brand new monolithic foundation under the 1 Million Gallon DW tank. One item of clarification needed from Paso Robles Tank is your plan for bridging across the large pipes in and out of the tank with the support posts. The District expects Paso Robles Tank to perform and provide to the District for review and approval the design and calcs and demonstration that the design meets current seismic code. The District believes this to be a minor design change which does not require a SOW with FEMA. The work on the Korblex tanks can proceed as contracted.  
The District will issue a change order to authorize this change to the contract.

A joint virtual meeting with all parties needs to be scheduled to discuss the above items and process for each.

Regards,

John Friedenbach  
 General Manager  
 707-443-5018 office  
 707-362-7509 cell







## CHANGE ORDER

### Desiree Brumley

**From:** John Friedenbach <friedenbach@hbmwd.com>  
**Sent:** Tuesday, September 17, 2024 9:40 AM  
**To:** Desiree Brumley; 'Nathan Stevens'; Shane Wombles  
**Cc:** 'Tatevik Janvelyan'; 'Justin Palmaymesa'; 'Nathaniel Steen'; 'Dale Davidsen'  
**Subject:** RE: 41475 / 41476 Samoa Korblex

Hi Desiree,

Given that FEMA can take up to one year to review our Change in Scope of Work for the new tank option that Paso Robles has proposed, and although that is the preferred option by the District, the board and staff do not want to take the risk that if we go down that path, because of the grant performance period end date of September 2025, the District could find itself without any grant funding for improvements to the Samoa tank. We would rather have a retrofitted tank than be stuck with the existing tank with no improvements.

Due to a technicality on our agenda at the Sept 12<sup>th</sup> meeting, the board could not take formal action, but verbally communicated their desire to staff. We have a Special Board meeting this Thursday, Sept 19<sup>th</sup> where they will take formal action to revert back to the retrofit as originally scoped and bid.

Please proceed with the submittals for the Samoa retrofit project.

Thank you,

John Friedenbach  
 HBMWD General Manager  
 707-443-5018 office  
 707-362-7509 cell

**From:** Desiree Brumley <dbrumley@pasorablestank.com>  
**Sent:** Monday, September 16, 2024 12:00 PM  
**To:** John Friedenbach <friedenbach@hbmwd.com>; 'Nathan Stevens' <Nathan.Stevens@ghd.com>; Shane Wombles <swombles@pasorablestank.com>  
**Cc:** 'Tatevik Janvelyan' <tatevik@albat.co>; 'Justin Palmaymesa' <justin@albat.co>; 'Nathaniel Steen' <nsteen@ghirardellassoc.com>; 'Dale Davidsen' <supt@hbmwd.com>  
**Subject:** RE: 41475 / 41476 Samoa Korblex

Hi John,

I wanted to follow up on the District Board Meeting held September 12<sup>th</sup>. In speaking with Tatevik, it sounds like the Board is voting to stick with the original retrofit scope of work due to the lengthy process of changing that with the FEMA funding.

Please confirm and we will get started on the retrofit submittals right away.

Thank you!

Desiree Brumley

**CHANGE ORDER**

PROJECT: Korblex Reservoir  
Seismic Retrofit Project

Change Order No.: 01.

Date: 11/1/24

Page No.: 1 of 5

**History:**

October 18<sup>th</sup> 2024 Paso Robles Tank (PRT) presented a net cost reduction change order to change the foundation design on the Korblex 1 MG reservoir. PRT proposed completely replacing the ring wall foundation at a substantial \$75,000 cost saving to the District, compared to the bid item originally designed and bid on by PRT.

The District is interested in pursuing the VE option to pour a brand new monolithic foundation under the 1 Million Gallon DW tank.

The District expects Paso Robles Tank to perform and provide to the District for review and approval, the design and calcs and demonstration that the design meets current seismic code. The District believes this to be a minor design change which does not require a SOW with FEMA. The work on the Korblex tanks can proceed as contracted.

**Description of the change:**

The PRT will amend the contract documents to include the revised foundation plans and construct the new design with a \$75,000 cost savings to the District.



**CHANGE ORDER**

<b>Adjustment of contract completion dates</b>	
Original Contract date	5/20/2025
Prior Adjustments in Calendar	0
Adjustment in Calendar Days for this change Order	0
Revised Contract Completion Date	5/20/2025

<b>Adjustment of contract sum</b>	
Original Contract Sum	\$6,748,950.00
Prior Adjustments	\$0
Contract Sum Prior to this Change	\$6,748,950.00
Adjustment for this Change	-\$75,000
Revised Contract Sum	\$6,673,950.00

NOTE: CONTRACTOR WAIVES ANY CLAIM FOR FURTHER ADJUSTMENTS FOR THE CONTRACT SUM RELATED TO THE ABOVE-DESCRIBED CHANGE IN THE WORK.

RECOMMENDED BY:

*Nathan Stevens*

Engineer – Nathan Stevens

11/08/2024

Date

APPROVED BY:

Owner – John F Friedenbach, General Manager

Date

ACCEPTED BY:

Contractor – Shane P, Wombles, President – Paso Robles Tank

Date





**CHANGE ORDER**

Page No.: 3 of 5



RFC NO. 001

10.18.2024

TO: Albat  
Attention: Tatevik Janvelyan

SUBJECT: Tank Design – Foundation Design Change Contract No. GHD Inc: 12627733

**REQUEST FOR CHANGE**

**SUBJECT:**

- Direction not given in contract documents
- Conflict in contract requirements
- Interpretation of contract requirements
- Change in sequence or procedure

REF. DRAWINGS: Bid Dwgs REF. SPECS: Bid Specs

**REQUEST:**

Paso Robles Tank is hereby requesting a change to the foundation design on the Korblex 1MG Tank. We can completely replace the ring wall foundation at a substantial cost savings to the Owner, as noted in the attached email correspondence.

To install a new foundation ring wall per the approved design calcs (Submittal 003), PRT can provide a Value Engineering Credit on the Contract of \$75,000.00 back to the HBM/WD.

Please confirm this is acceptable and issue a CCO for the VEC.

**SUBMITTED BY:**

**RESPONSE:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ANSWERED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

Paso Robles Tank, Inc.  
825 26<sup>th</sup> Street  
Paso Robles, CA 93446  
(805) 227-1641 / FAX No. (805) 238-9654

**CHANGE ORDER**

Page No.: 4 of 5

**Desiree Brumley**

**From:** John Friedenbach <friedenbach@hbmwd.com>  
**Sent:** Thursday, August 22, 2024 3:05 PM  
**To:** Desiree Brumley; 'Nathan Stevens'; Shane Wombles  
**Cc:** 'Tatevik Janvelyan'; 'Justin Palmaymesa'; 'Nathaniel Steen'; 'Dale Davidsen'  
**Subject:** RE: 41475 / 41476 Samoa Korblex

**Importance:** High

Hi Desiree and Shane,

In regards to the two VE options by Paso Robles Tank, the District provides the following response:

1. **Samoa Tank:** The District is interested in pursuing the VE option to tear down and rebuild entire new tank. However, because this is a FEMA grant funded project and the proposed construction is a radical change from the original retrofit scope of work included in the grant application, the District is required to submit a revised Scope Of Work (SOW) to FEMA. The challenge with this course of action is that No work can be performed on the Samoa Tank for the changed SOW until approval from FEMA is received by the District. If any work is performed on the Samoa Tank project in connection with the changed SOW, the entire FEMA grant funding for All tanks could be revoked. It can take months for FEMA to complete its review of the revised SOW. This issue will be discussed with the District's board of directors at our September 12<sup>th</sup> board meeting. Bottom line is this component of the contract with Paso Robles Tank will be on hold until the District receives approval from FEMA.  
**The District will issue a change order to suspend activity on this project including the contract performance period for this tank.**
2. **Korblex Tanks:** The District is interested in pursuing the VE option to pour a brand new monolithic foundation under the 1 Million Gallon DW tank. One item of clarification needed from Paso Robles Tank is your plan for bridging across the large pipes in and out of the tank with the support posts. The District expects Paso Robles Tank to perform and provide to the District for review and approval the design and calcs and demonstration that the design meets current seismic code. The District believes this to be a minor design change which does not require a SOW with FEMA. The work on the Korblex tanks can proceed as contracted.  
**The District will issue a change order to authorize this change to the contract.**

A joint virtual meeting with all parties needs to be scheduled to discuss the above items and process for each.

Regards,

John Friedenbach  
 General Manager  
 707-443-5018 office  
 707-362-7509 cell



**CHANGE ORDER**

Page No.: 5 of 5

**From:** Desiree Brumley <dbrumley@pasoblestank.com>  
**Sent:** Wednesday, August 21, 2024 1:21 PM  
**To:** Nathan Stevens <Nathan.Stevens@ghd.com>; friedenbach@hbmwd.com  
**Cc:** Tatevik Janvelyan <tatevik@albat.co>; Justin Palmaymesa <justin@albat.co>; Nathaniel Steen <nsteen@ghirardellassoc.com>  
**Subject:** 41475 / 41476 Samoa Korblex  
**Importance:** High

Good afternoon Team,

Following up on the two VE options we provided to see where they land.  
 Since the NTP was issued on AUG 13, I'd like to get going on these projects and finalize schedules.

1. Samoa – Tear Down and Rebuild entire new tank (utilizing existing foundation) + \$50k because we have to increase steel plate size to shorten overall height to below 50FT.
2. Korblex – Brand new monolithic foundation poured under tank in lieu of the retrofitting piles/anchorage originally planned for - \$76k back to the District

Overall, these options provide a longer-lasting product to HBMWD with an overall \$25k savings back to the District between the two changes.

Please advise a status update so we can start work on our end with subcontracts, material procurement, engineering and schedules.

We should be able to maintain the current contract end dates if we can get started in one direction or the other by early next week.

Thank you!

**Desiree Brumley**  
 Project Manager



PASO ROBLES TANK, INC.



825 26<sup>th</sup> St, Paso Robles, CA 93446  
 Office: 805-227-1641 / Fax: 805-238-9854  
 Mobile: 805-423-9398  
 E-mail: [dbrumley@pasoblestank.com](mailto:dbrumley@pasoblestank.com)  
 Website: [www.pasoblestank.com](http://www.pasoblestank.com)



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To: Board of Directors

Date: November 14, 2024

From: John Friedenbach

RE: **On Site Hypochlorite Generation Installation and Integration**

**Discussion**

The District received four bids for the On Site Hypochlorite Generation Installation and Integration construction project on Tuesday, November 5, 2024.

Item No.	Description	Units	Sequoia Construction Specialties	Mercer-Fraser	Wahlund Construction	GR Sundberg, Inc.
1	Mobilization/Demobilization	LS	\$20,000	\$55,000	\$52,150	\$70,000
2	Erosion and Sediment Control	LS	\$2,000	\$15,000	\$4,350	\$3,000
3	Demolitions, Removal, and Disposal of Existing Equipment	LS	\$13,262	\$50,000	\$30,500	\$35,000
4	Installation of Onsite Sodium Hypochlorite Generator, Ancillary Equipment, and other Site Modifications	LS	\$175,558	\$175,000	\$124,700	\$270,000
5	Concrete	LS	\$140,812	\$178,000	\$164,850	\$200,000
6	Electrical and Controls System	LS	\$143,179	\$125,000	\$119,300	\$120,000
<b>Total Base Bid</b>			<b>\$494,811</b>	<b>\$598,000</b>	<b>\$495,850</b>	<b>\$698,000</b>

Based on the results, Sequoia Construction Specialties is the apparent low bidder. I have reviewed the responsiveness of their bid and it appears to be complete. I have also checked the State and Federal contract databases and their contractor's license is in good standing and they have not been debarred from performing construction work nor do they have any current complaints or claims detailed against them on the State Contractor's Licensing database. Their Department of Industrial Relations (DIR) registration is current and valid. The District has worked with them on several projects in the past and we have found their work to be professional and responsible.

**Recommendation**

Staff recommends that the Board award the On Site Hypochlorite Generation Installation and Integration construction contract to Sequoia Construction Specialties in the amount of \$494,811 and direct staff to prepare and sign the appropriate contract documents.

GAVIN NEWSOM  
GOVERNORNANCY WARD  
DIRECTOR

November 1, 2024

Chris Harris  
Business Manager  
Humboldt Bay Municipal Water District  
828 7<sup>th</sup> Street  
Eureka, CA 95501

Subject: **Notification of Subapplication Approval**  
Hazard Mitigation Grant Program  
FEMA-**4569**-DR-CA, Project #**PA0538**, FIPS #**023-91000**  
Supplement #**45**

Dear Ms. Harris:

The California Governor's Office of Emergency Services (Cal OES) received notification that the Federal Emergency Management Agency (FEMA) has approved your organization's subaward application in the amount of **\$1,532,962.50**. A copy of the FEMA award package is enclosed for your records. In order to receive payment as a grant subrecipient, your organization must have the following on file with the Recovery Financial Processing Unit:

- A valid, current (approved within the last 3 years) Governing Body Resolution
- A Project Assurances for Federal Assistance agreement
- A Supplemental Grant Subaward Information sheet
- A current Federal Funding Accountability and Transparency Act (FFATA) Financial Disclosure form. This form must be submitted each fiscal year.
- An active registration with the federal System for Award Management (SAM) website. The registration must remain active for the duration of this grant subaward.

For your convenience, this subapplication approval package includes the required post-obligation documents as well as guides to completing and renewing a SAM registration. Please complete the documents and mail copies to the address listed at the end of this letter, keeping the originals with your records. Alternatively, you may scan and email the completed documents to the Recovery Financial Processing Unit at [HMGrantsPayments@CalOES.ca.gov](mailto:HMGrantsPayments@CalOES.ca.gov). Electronic copies of the post-obligation documents can also be requested at the same address.

3650 SCHRIEVER AVENUE • MATHER, CA 95655  
RECOVERY FINANCIAL PROCESSING UNIT  
(916) 845-8110

Ms. Chris Harris  
Page 2

Payments will be made on a reimbursement basis using the enclosed Hazard Mitigation Reimbursement Request Form. A ten percent (10%) retention will be withheld from all reimbursement payments and will be released as part of the subaward closeout process.

Reimbursements can be made only for items listed on the approved subaward application. Expenditures for any other work should be separately maintained and are the sole responsibility of the subrecipient. Any funds received in excess of current needs or approved amounts, or those found owed as a result of a final inspection or audit, must be refunded to the State within 30 days of receipt of an invoice from Cal OES.

When mailing documents to the Recovery Financial Processing Unit, please use the following address:

California Governor's Office of Emergency Services  
Attention: Recovery Financial Processing Unit  
3650 Schriever Avenue  
Mather, CA 95655

For further assistance regarding post-obligation documents or the reimbursement request process, please contact the Recovery Financial Processing Unit at (916) 845-8110 or at HMGrantsPayments@caloes.ca.gov. For program-related questions, please contact the Hazard Mitigation Grants Program Unit at (916) 328-7450.

Recovery Financial Processing Unit

Enclosures

c: Subrecipient's Project File

\*The Recovery Financial Processing Unit has universal resolution 2023-01, passed on 01/12/23, on file. A copy of the resolution is included in this package for your review. With the written permission of an Authorized Agent, the resolution can be applied to this project.





GAVIN NEWSOM  
GOVERNOR**Cal OES**  
GOVERNOR'S OFFICE  
OF EMERGENCY SERVICESNANCY WARD  
DIRECTOR

November 1, 2024

Chris Harris  
Business Manager  
Humboldt Bay Municipal Water District  
828 7<sup>th</sup> Street  
Eureka, CA 95501Subject: **Notification of Approval for Subrecipient Management Cost Funding**  
Hazard Mitigation Grant Program  
FEMA-**4569**-DR-CA, Project #**PA0538**, FIPS #**023-91000**,  
Supplement #**45**

Dear Ms. Harris:

The California Governor's Office of Emergency Services (Cal OES) received notification that the Federal Emergency Management Agency (FEMA) has approved **\$34,065.83** in funding for subrecipient management costs (SRMC). SRMC are costs incurred while administering a Hazard Mitigation grant subaward. A copy of FEMA's letter is enclosed for your records.

Payments are made on a reimbursement basis using the specialized Subrecipient Management Cost Reimbursement Request Form. Subrecipients are reminded to document their SRMC separately from direct project expenditures. To qualify for SRMC reimbursement, subrecipients must first incur and seek reimbursement for direct project expenditures via the specialized Project Expenditures Reimbursement Request Form. Reimbursement for SRMC is capped at five percent of a project's cumulative direct project expenditures. Please note that your organization must maintain an active registration in the SAM.gov (System for Award Management) database for the duration of this grant subaward.

Please read the enclosed supplement. In accordance with Title 44 Code of Federal Regulations, Part 206.440, if you disagree with FEMA's obligated amount or scope of work listed in the supplement, you can appeal. All appeals must be in writing and received by Cal OES within 60 days from the receipt of this letter. If you have any questions or need assistance, please contact the Recovery Financial Processing Unit at (916) 845-8110 or at [HMGrantsPayments@caloes.ca.gov](mailto:HMGrantsPayments@caloes.ca.gov).

Recovery Financial Processing Unit  
Enclosures  
c: Subrecipient's Project File3650 SCHRIEVER AVENUE • MATHER, CA 95655  
RECOVERY FINANCIAL PROCESSING UNIT  
(916) 845-8110



Received  
 October 10, 2024  
 Financial Processing Unit

U.S. Department of Homeland Security  
 FEMA Region 9  
 1111 Broadway, Suite 1200  
 Oakland, CA 94607



**FEMA**

October 6, 2024

Robyn Fennig  
 Assistant Director Hazard Mitigation  
 Governor's Authorized Representative  
 California Offices of Emergency Services  
 3650 Schriever Avenue  
 Mather, CA 95655

Reference: Application Approval, HMGP DR-4569-538-008  
 Humboldt Bay Municipal Water District  
 Humboldt Bay Municipal Water District Matthews Dam Advance Assistance  
 FIPS Code: 023-04A9F, Supplement 45  
**023-91000 (MG)**

Dear Robyn Fennig:

We approve and issue Hazard Mitigation Grant Program (HMGP) funds for the Humboldt Bay Municipal Water District, HMGP DR-4569-538-008, Humboldt Bay Municipal Water District Matthews Dam Advance Assistance.

The total project cost is \$2,043,950.00. As shown in the enclosed Obligation Report - Supplement 45, we are obligating \$1,532,962.50 for the 75 percent Federal share; the 25 percent non-Federal share is \$510,987.50. We are obligating \$34,065.83 for the 100% Federal share Subrecipient Management Costs. These funds are available in SmartLink for immediate and eligible disbursements. The following is a summary of the approved funding:

<b>Funding Type:</b>	<b>Federal Share:</b>	<b>Non-Federal Share:</b>	<b>Total Project Cost:</b>
Supplement 45	\$1,532,962.50	\$510,987.50	\$2,043,950.00
Management Costs	\$34,065.83	\$0.00	\$34,065.83

This HMGP project approval and obligation of funds are subject to the following conditions:

- 1. Scope of Work (SOW)** – The Humboldt Bay Municipal Water District will perform a series of seismic stability analyses and develop designs for corresponding retrofits on the R.W. Matthews Dam to reduce the risk of dam and spillway failure. The seismic stability analyses will include geotechnical borings and a Light Detection and Ranging (LiDAR) survey to analyze the composition of the dam and materials underlying the dam and spillway. The borings will be no larger than 6 inches in diameter and will take place on the spillway slab and will progress to the downstream shell of the dam. The results of the borings and surveys will be used to develop plans for retrofitting the dam.

Robyn Fennig  
October 6, 2024  
Page 2 of 3

2. **Project Completion Date** – The work schedule included with the project application indicates that the project will take 36 months to complete; however, we can only approve a project up to the approved disaster period of performance (POP). Therefore, the project completion date is August 28, 2026. Please inform the sub-recipient that work completed after the disaster period of performance (POP) is not eligible for federal funding, and that federal funds may be de-obligated for work completed outside the POP when there is no approved time extension.
3. **Project Closeout** – Within 120 days of the award period of performance’s expiration, all project funds must be liquidated and final closeout documentation for the project must be submitted to FEMA. Please note the project must comply with Code of Federal Regulations Title 2, Part 200 reporting requirements at the time of closeout.
4. **Record of Environmental Consideration (REC)** – This project has been determined to be Categorically Excluded from the need to prepare either an Environmental Impact Statement or Environmental Assessment in accordance with FEMA Instruction 108-1- 1 and FEMA Directive 108-1-1 as authorized by DHS Instruction Manual 023-01-001-01, Revision 1. Categorical Exclusion A7 (minimally invasive data collection and surveys) has been applied. Particular attention should be given to the project conditions before and during project implementation. Failure to comply with these conditions may jeopardize federal assistance including funding. Please reference the enclosed REC for further information.
5. **Standard Conditions** – This project approval is subject to the enclosed *Standard Mitigation Grant Program (HMGP) Conditions*, amended August 2018. Please note that federal funds may be de-obligated for work that does not comply with these conditions.

If you have any questions please contact Jocelyn Madison-Kelly, Hazard Mitigation Assistance Specialist, by email at [jocelyn.madisonkelly@fema.dhs.gov](mailto:jocelyn.madisonkelly@fema.dhs.gov), or phone (202) 717-0135.

Sincerely,

**KATHRYN J LIPIECKI**

Digitally signed by KATHRYN J

LIPIECKI

Date: 2024.10.06 18:50:41 -07'00'

Kathryn Lipiecki  
Director, Mitigation Division  
FEMA Region 9

Enclosures (3):

Obligation Report - Supplement 45  
Record of Environmental Consideration (REC)  
Standard Mitigation Grant (HMGP) Conditions

cc: Melissa Boudrye: Resilience Branch Chief, California Governor’s Office of Emergency

Robyn Fennig  
October 6, 2024  
Page 3 of 3

**Services**

**Concepcion Chavez: Technical Assistance Division Chief, California Governor's Office of Emergency Services**

**Ron Miller: Hazard Mitigation Assistance Branch Chief, California Governor's Office of Emergency Services**

**Joe Purvis: HM Grants Division Chief, California Governor's Office of Emergency Services**

**Ryan Massello: HM Quality Assurance Division Chief, California Governor's Office of Emergency Services**

**Robert McCord, Chief, Hazard Mitigation Assistance Branch, FEMA Region 9**





# Technical Memorandum

July 02, 2024

<b>To</b>	John Friedenbach, HBMWD	<b>Contact No.</b>	707 267 2235
<b>Copy to</b>	Dale Davidsen, HBMWD; Nathan Stevens, GHD	<b>Email</b>	nick.black@ghd.com
<b>From</b>	Nick Black	<b>Project No.</b>	12617293
<b>Subject</b>	Collectors 1-3 Rehab Summary		

## 1. Background and Introduction

HBMWD has five collector wells (1/1A, 2, 3, 4 and 5) located along the Mad River near Arcata. The collector wells are 13-foot-diameter concrete caissons that extend approximately 54 to 95 feet beneath the river (varies for each collector) with laterals near the bottom and pump motors on the top of the caissons. The original collector laterals are perforated carbon steel that were projected out radially from the collectors. Construction of Collector Well Nos. 1, 2, 3<sup>1</sup> and 4 began in 1961, and performance testing was conducted in 1962. Collector Well No. 1A is located about 185 feet southeast of Collector Well No. 1. It was constructed in 1965, and performance testing was conducted in January 1966. Collector Well No. 5 was also constructed in 1965 but is not currently in service.

Prior to the systematic rehabilitation of the District's collectors that is currently in progress, the collectors were coming to the end of their useful lives with a reduction in production capacity due to sediment build up, lateral collapse and general degradation of materials over time. Winzler and Kelly (W&K) prepared a feasibility study in December 2003 that analyzed the following alternatives in order from least to most expensive: rehabilitating existing collector laterals, installing new laterals on existing collectors, converting the Turbidity Reduction Facility (TRF) to a surface water treatment plant, and constructing new collector wells.

Following completion of the feasibility study and with the information developed as a part of the study, the District undertook a project to clean the laterals in Collector 2. The purpose of cleaning the laterals was to determine the condition of the laterals and determine whether cleaning the laterals would sufficiently increase production and efficiency and promote longevity of the collectors. The cleaning was completed in the summer of 2005 by Collector Wells International (now Layne Christensen), and testing was conducted to quantify the benefits of the cleaning. The cleaning increased the specific capacity of Collector 2 by 13%, which was estimated to decrease operation costs by less than \$1,000 per year. Cleaning also resulted in minimal increase in total production. The results of the 2005 Collector 2 cleaning work are summarized in the *Pump Station 2 Evaluation Final Report* completed by W&K in June 2006 (Appendix E).

Based on these findings, W&K recommended installing new laterals instead of cleaning existing laterals to rehabilitate the District's collectors. To date, Collectors 1, 1A, 2, and 3 have had new laterals installed, with rehabilitation of Collector 4 planned in the future when funding is available. This memorandum is a summary of the rehabilitation work completed on the collectors and the performance results of the work.

<sup>1</sup> It is thought that Collector 3 may have been constructed around the same timeframe that Collector 5 was constructed (1965, after Collectors 1, 2, and 4). Collectors 3 and 5 each have (or previously had) 16-inch pump columns, while the others have 14-inch pump columns. Additionally, Collectors 3 and 5 are laid out differently than the others (both doors are on the opposite ends of the starter deck).

## 2. Rehabilitation Work Completed

As mentioned in Section 1, Collectors 1, 1A, 2 and 3 have had new laterals installed. New lateral installation work began with Collector 3 in 2013, then Collectors 1 and 1A in 2016 and 2017, followed by Collector 2 in 2023. All new laterals are 12-inch continuous wire wrap stainless-steel screens. Collector 4 lateral replacement is planned when funding becomes available to the District.

### 2.1 Drawings

Design Drawings for lateral replacement on all collectors to date can be found in Appendix A. Construction as-builts are attached to Appendices B, C and D.

### 2.2 Collector 1 and 1A

Layne Christensen installed two new laterals in Collector 1 and four new laterals in Collector 1A over a seven-month period from August 2016 to March 2017. A final performance report was completed May 22, 2017 (Appendix B). Additionally, a new concrete floor was poured in the bottom of Collector 1, increasing the floor elevation 8 feet, bringing it to approximately -30 feet NAVD88 (the top of concrete is not level). The new floor blocked the lowest A-tier laterals and partially blocked the B-tier laterals, both of which were no longer in use prior to construction of the project.

The two new laterals totalling 190 LF were installed in Collector 1, including 20 feet of blank pipe and 170 feet of new screen (Table 1). The new C-tier laterals were installed at -23.5 feet NAVD88. A third port was installed and left valved off due to time constraints associated with the HBMWD Long Term Streambed Alteration Agreement and rising water levels in Mad River.

*Table 1 Collector 1 Lateral Summary*

Type	Lateral ID	Blank Length (ft)	Lateral Screen Length (ft)	Total Lateral Length (ft)
Existing	A-Tier	Abandoned	Abandoned	Abandoned
Existing	B-Tier	Abandoned	Abandoned	Abandoned
New	C-1	10	90	100
New	C-2	10	80	90
New	Spare Port	N/A	N/A	N/A
<b>Total Existing</b>		<b>Abandoned</b>	<b>Abandoned</b>	<b>Abandoned</b>
<b>Total New</b>		<b>20</b>	<b>170</b>	<b>190</b>
<b>Total</b>		<b>20</b>	<b>170</b>	<b>190</b>

Four new laterals totalling 580 LF were installed in Collector 1A, including 40 feet of blank pipe and 540 feet on new screen (Table 2). The new C-tier laterals were installed at -14.8 feet NAVD88, above the existing A and B-tier laterals.

Table 2 Collector 1A Lateral Summary

Type	Lateral ID	Blank Length (ft)	Lateral Screen Length (ft)	Total Lateral Length (ft)
Existing	B-1	N/A	62	62
Existing	B-2	N/A	61	61
Existing	B-3	N/A	62	62
Existing	B-4	N/A	61.5	61.5
Existing	B-5	N/A	62	62
Existing	B-6	N/A	62	62
Existing	A-1	N/A	61	61
Existing	A-2	N/A	61	61
Existing	A-3	N/A	61	61
Existing	A-4	N/A	62	62
Existing	A-5	N/A	61.5	61.5
Existing	A-6	N/A	61	61
New	C-1	10	140	150
New	C-2	10	130	140
New	C-3	10	135	145
New	C-4	10	135	145
<b>Total Existing</b>		<b>N/A</b>	<b>738</b>	<b>738</b>
<b>Total New</b>		<b>40</b>	<b>540</b>	<b>580</b>
<b>Total</b>		<b>N/A</b>	<b>1278</b>	<b>1318</b>



## 2.3 Collector 2

Layne Christensen installed four new laterals in Collector 2 over a six-month period from May 8, 2023 to October 25, 2023. During construction, three undocumented pipe penetrations through the caisson wall were found approximately 10 feet above the B-tier laterals. The pipes are constructed of mild steel and were failing. The pipes were cut flush to the inner wall of the caisson and redwood plugs were installed to seal the openings. A new stainless-steel ladder was also installed in the caisson to allow access for operating the lateral valves. The final post-rehabilitation test was completed on November 3, 2023. A final performance report was completed February 2, 2024 (Appendix C).

The four new laterals in Collector 2 totaled 530 LF, including 40 feet of blank pipe and 490 feet of new screen (Table 3). The new laterals were installed above the existing A-tier and B-tier laterals as a new C-tier at -40.0 feet NGVD29.

**Table 3** Collector 2 Lateral Summary

Type	Lateral ID	Blank Length (ft)	Lateral Screen Length (ft)	Total Lateral Length (ft)
Existing	B-1	N/A	62	62
Existing	B-5	N/A	87	87
Existing	B-6	N/A	80	80
Existing	A-2	N/A	99	99
Existing	A-3	N/A	49	49
Existing	A-4	N/A	137	137
Existing	A-5	N/A	49	49
Existing	A-6	N/A	23	23
New	C-1	10	170	180
New	C-2	10	110	120
New	C-3	10	90	100
New	C-4	10	120	130
<b>Total Existing</b>		<b>N/A</b>	<b>586</b>	<b>586</b>
<b>Total New</b>		<b>40</b>	<b>490</b>	<b>530</b>
<b>Total</b>		<b>40</b>	<b>1076</b>	<b>1116</b>

## 2.4 Collector 3

Layne Christensen installed six new laterals in Collector 3 over a six-month period from December 2011 to May 2012. During construction, an access port was cored in the side of the caisson to facilitate the movement of personnel, materials and equipment in and out of the caisson. The final post-rehabilitation test was completed on May 4<sup>th</sup> and 5<sup>th</sup>, 2012. A final performance report was completed August 9, 2012 (Appendix D).

The six new laterals in Collector 2 totalled 690 LF, 60 feet of blank pipe and 630 feet on new screen (Table 4). The new laterals were installed over two tiers with the D-tier at -11.2 feet and the C-tier at -22.2 feet NGVD29.

*Table 4 Collector 3 Lateral Summary*

Type	Lateral ID	Blank Length (ft)	Lateral Screen Length (ft)	Total Lateral Length (ft)
Existing	A-2	N/A	104	104
Existing	A-3	N/A	110	110
Existing	A-4	N/A	84	84
Existing	A-5	N/A	68	68
Existing	B-2	N/A	64	64
New	C-1	10	105	115
New	C-3	10	65	75
New	C-5	10	145	155
New	C-6	10	145	155
New	D-2	10	95	105
New	D-4	10	75	85
<b>Total Existing</b>		<b>N/A</b>	<b>366</b>	<b>430</b>
<b>Total New</b>		<b>60</b>	<b>630</b>	<b>690</b>
<b>Total</b>		<b>60</b>	<b>996</b>	<b>1120</b>

### 3. Performance Testing

Pre- and post-rehabilitation testing was conducted for all collectors that have been rehabilitated to date to quantify the benefits of the rehabilitation work. The testing was completed by Layne Christensen hydrogeologists using the existing HBMWD pumps. The testing consisted of multiple-rate and constant-rate pumping tests. Water temperature, conductivity, pumping rate and drawdown were recorded for each test and used to calculate specific capacity and yield of each well at low river and high river water level conditions.

#### 3.1 Pre-Rehabilitation Performance

Pre-rehabilitation performance testing was completed for Collectors 2 and 3 before the collectors were taken offline for rehabilitation. The multiple rate step test consisted of two to three steps at increasing rates of discharge. The constant-rate test was run for over 24 hours with the pumping rate held constant. The results of the pre-rehabilitation tests are presented in Table 5 below.

Due to the interconnected nature of Collectors 1 and 1A, and the fact that the existing laterals in Collector 1 were not in operation, pre-performance testing was completed with the existing Collector 1 laterals closed, and the existing collector 1A laterals open. The tests were conducted using the Collector 1 pumps.

#### 3.2 Post-Rehabilitation Performance

For Collectors 2 and 3, post-rehabilitation performance testing was conducted utilizing the same procedures as the pre-rehabilitation performance testing.

Similar to the pre-performance testing, Collectors 1 and 1A used a modified testing procedure to better analyze the operation of the 1 and 1A system interconnection. The following tests were completed:

1. a multiple rate step test conducted with all the lateral valves in Collector Well No. 1 closed and the four new and twelve original laterals open in Collector Well No. 1A (Collector 1A Multi-Rate Step Test).
2. a multiple-rate step test conducted with the two new laterals open in Collector Well No. 1 and the four new and twelve original laterals open in Collector Well No. 1A (Collector 1 & 1A Multi-Rate Step Test).
3. a constant-rate test conducted with the two new laterals open in Collector Well No. 1 and the four new and twelve original laterals open in Collector Well No. 1A (Collector 1 & 1A Constant-Rate Step Test).

All post-rehabilitation test results are presented in Table 6 below.

Table 5 Pre-Rehabilitation Testing Results

Collector	Constant Rate Test			Step Test, Low Pump Rate			Step Test, Mid Pump Rate			Step Test, High Pump Rate		
	Drawdown (ft)	Pump Rate (MGD)	Specific Capacity (gpm/ft)	Drawdown (ft)	Pump rate (MGD)	Specific Capacity (gpm/ft)	Drawdown (ft)	Pump rate (MGD)	Specific Capacity (gpm/ft)	Drawdown (ft)	Pump rate (MGD)	Specific Capacity (gpm/ft)
Collector 1	Not Completed			Not Completed			Not Completed			Not Completed		
Collector 1A	14.2	6.1	298	7	3.7	368	12.9	6.1	328	21.2	9.1	296
Collector 2	21.5	6.2	200	20.8	6.3	209	Not Completed			36.4	9.4	179
Collector 3	Not Completed			10.7	4.3	280	18.5	6.4	241	27.7	8.6	217

Table 6 Post-Rehabilitation Testing Results

Collector	Constant Rate Test			Step Test, Low Pump Rate			Step Test, Mid Pump Rate			Step Test, High Pump Rate		
	Drawdown (ft)	Pump Rate (MGD)	Specific Capacity (gpm/ft)	Drawdown (ft)	Pump rate (MGD)	Specific Capacity (gpm/ft)	Drawdown (ft)	Pump rate (MGD)	Specific Capacity (gpm/ft)	Drawdown (ft)	Pump rate (MGD)	Specific Capacity (gpm/ft)
Collector 1 & 1A	6.4	5.9	637	3.1	3.8	847	5.2	5.9	790	9	8.9	699
Collector 1A	Not Completed			4	3.8	658	6.7	5.9	609	11.2	8.9	555
Collector 2	11.6	6.4	383	10.7	6.4	415	Not Completed			19.8	10.2	358
Collector 3	Not Reported, Test Interrupted			7.8	4.4	392	12.9	6.7	362	18.3	8.7	329

Table 7 Percent Increase in Specific Capacity after Rehabilitation

Collector	Constant Rate Test		Step Test, Low Pump Rate		Step Test, Mid Pump Rate		Step Test, High Pump Rate	
	Specific Capacity Increase (%)	Drawdown (ft)	Specific Capacity Increase (%)	Drawdown (ft)	Specific Capacity Increase (%)	Drawdown (ft)	Specific Capacity Increase (%)	
Collector 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Collector 1A	N/A	N/A	79%	79%	86%	86%	88%	
Collector 2	92%	92%	99%	99%	N/A	100%	100%	
Collector 3	N/A	N/A	40%	40%	50%	50%	52%	



### 3.3 Estimated Yield

The long-term yield of a collector well is dependent upon length of pumping, efficiency, available drawdown and aquifer hydraulics. Aquifer hydraulics are related to saturated thickness, hydraulic conductivity and recharge. It is possible to project the yield of a collector well for varying aquifer water levels and water temperatures using the data collected during the performance testing and a series of calculations. Layne Christensen conducted the yield analysis for all three collectors. The calculations present three yield conditions: 1) performance test conditions; 2) high water, high temperature river conditions (favorable pumping conditions with low water viscosity and high aquifer head); and 3) low water, low temperature river conditions (unfavorable pumping conditions with high viscosity and low aquifer head). Table 8 below presents the estimated yield for pre- and post-rehabilitation. For full discussion of calculation methods, see Appendices B, C and D.

**Table 8** Yield Estimates

Yield	Pre-Rehabilitation Yield (MGD)			Post-Rehabilitation Yield (MGD)		
	Test	Low River	High River	Test	Low River	High River
Collector 1 & 1A	N/A	N/A	N/A	19.3	9.8	20.4
Collector 2	11.1	8.1	12	20.3	15.8	21.6
Collector 3	8.3	6.2	9.2	11	8.5	12.5

As presented above, there was a significant increase in yield for all collectors after lateral installation. Yield increases ranged from an estimated 37% at the low river condition for Collector 3, to an estimated 80% increase in yield at the high river condition for Collector 2. Due to the poor condition of the Collector 1 laterals before rehabilitation and the interconnection with Collector 1A, pre-rehabilitation yield for Collectors 1 and 1A was not reported.

## 4. Conclusion

To increase the performance and extend the useful life of the HBMWWD Ranney Well Collectors, it was determined that installing new laterals was the best solution. Collectors 1, 1A, 2 and 3 have had new laterals installed. Specific capacity increased by an average of 84% for Collectors 1/1A, 97% for Collector 2 and 47% for Collector 3 after the new laterals were installed (Table 7). Estimated yield increased for Collectors 2 and 3, with a minimum of 2.3 MGD for Collector 3 at the low river condition and a maximum of 9.6 MGD for Collector 2 at the high river condition (Table 8). Collector 4 lateral replacement is planned when funding becomes available to the District.

Regards

**Nick Black**  
Staff Engineer

Enclosed:

Appendix	Document Title
Appendix A	Construction Drawings (GHD, Winzler & Kelly)
Appendix B	Collectors 1 & 1A Maintenance Report (Layne Christensen)
Appendix C	Collector 2 Maintenance Report (Layne Christensen)
Appendix D	Collector 3 Maintenance Report (Layne Christensen)
Appendix E	Pump Station 2 Evaluation Final Report (Winzler & Kelly)

**FINANCIAL**



<u>BANK ACCOUNT BALANCES AT MONTH-END</u>	October 31, 2024	October 31, 2023
<b>GENERAL ACCOUNTS</b>		
1. US Bank - General Account	897,774.48	2,018,640.58
2. US Bank - Xpress BillPay/Electronic Payments Account	6,808.08	6,787.74
<i>Subtotal</i>	904,582.56	2,025,428.32
<b>INVESTMENT &amp; INTEREST BEARING ACCOUNTS</b>		
3. US Bank - DWR/SRF Money Markey Acct	-	166,610.78
4. US Bank - DWR/SRF Reserve CD Account	-	547,336.94
5. US Bank - PARS Investment Account	976,616.20	827,061.03
<i>Contributions = \$800,000    Disbursements = \$166,619</i>		
6. L. A. I. F Account - MSRA Reserve Account	480,644.32	460,123.29
7. CalTRUST - Restricted Inv. Account (Medium Term)	1,824,281.06	1,716,028.67
8. CalTRUST - General Reserve Account (Short-Term)	4,303,785.05	4,542,559.01
<i>Total CalTRUST Accounts</i>	<i>6,128,066.11</i>	<i>6,258,587.68</i>
9. California CLASS - DWFP Reserve Account	266,800.21	253,866.71
10. California CLASS - ReMat Reserve Account	1,626,247.37	1,373,686.63
11. California CLASS - General Reserve Account	2,653,703.16	-
<i>Total California CLASS Accounts</i>	<i>4,546,750.74</i>	<i>1,627,553.34</i>
12. Humboldt County - SRF Loan Payment Account	604,172.92	8,217.98
13. Humboldt County - 1% Tax Account	1,205,064.64	1,143,438.57
14. Inactive Humboldt County Investment Accounts	145.72	182,587.72
15. Principle Investment Account	-	36,141.12
<i>Subtotal</i>	13,941,460.65	12,885,211.79
<b>OTHER ACCOUNTS</b>		
16. ReMat Deposit - Mellon Bank	27,000.00	27,000.00
17. Cash on Hand	700.00	650.00
<i>Subtotal</i>	27,700.00	27,650.00
<b>TOTAL CASH</b>	<b>14,873,743.21</b>	<b>14,938,290.11</b>

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
STATEMENT OF FUND BALANCES - PAGE 2 OF 2



<u>FUND BALANCES AT MONTH-END</u>	October 31, 2024	October 31, 2023
<b>RESTRICTED FUNDS - ENCUMBERED</b>		
1. Prior-Year Price Factor 2 Rebate	(14,493.32)	(15,738.00)
2. Prior-Year Restricted AP Encumbrances	(704,661.00)	(707,103.00)
3. Advanced Charges - 3x Tank Seismic Retrofit	(1,398,379.18)	(1,519,111.09)
4. Advanced Charges - Cathodic Protection Project	(124,999.96)	(124,999.96)
5. Advanced Charges - Collector 2 Rehabilitation	-	(788,827.59)
6. Advanced Charges - On-Site Generation of Chlorine	(587,209.29)	(654,914.17)
7. Advanced Charges - Redundant Pipeline	(428,616.02)	(387,782.70)
8. Advanced Charges - TRF Emergency Generator	(283,115.95)	(372,389.61)
9. 3AC Collected Funds - TRF Emergency Generator	(312,858.62)	(312,858.62)
10. Advanced Funding - FEMA, Shoreline Debris Removal	-	1,487.72
11. Advanced Funding - August Complex-Ruth Paving	(112,456.22)	(112,456.22)
12. Advanced Charges - Assist. Spillway Seismic Grant	(384,490.32)	(23,333.32)
13. Advanced Funding - Eureka Cyber Security	(19,597.72)	(19,597.72)
14. Advanced Charges - Essex Facility Expansion	(105,400.00)	(105,400.00)
15. Advanced Charges - Ruth Storage Barn	(133,333.32)	(30,000.00)
16. Advanced Charges - Capital Financing/Debt Service	(430,434.47)	(297,368.04)
<i>Subtotal</i>	(5,040,045.39)	(5,470,392.32)
<b>RESTRICTED FUNDS - OTHER</b>		
17. 1% Tax Credit to Muni's	(1,205,064.64)	-
18. DWR Reserve for SRF Payment	-	(166,610.78)
19. DWR Reserve for SRF Loan	-	(547,336.94)
20. Pension Trust Reserves	(976,616.20)	(827,061.03)
21. ReMat Deposit	(27,000.00)	(27,000.00)
22. HB Retail Capital Replacement Reserves	(238,432.49)	(190,892.11)
<i>Subtotal</i>	(2,447,113.33)	(1,758,900.86)
<b>UNRESTRICTED FUNDS</b>		
<b>BOARD RESTRICTED</b>		
23. MSRA Reserves	(480,644.32)	(460,123.29)
24. DWFP Reserves	(266,800.21)	(253,866.71)
25. ReMat Reserves	(1,626,247.37)	(1,373,686.63)
27. Principle Investment Reserves	-	(36,141.12)
28. Northern Mainline Extension Study Prepayment	56.40	56.40
29. Blue Lake Rancheria Extension Study Prepayment	(4,235.37)	(2,916.00)
<i>Subtotal</i>	(2,373,635.50)	(2,123,761.35)
<b>UNRESTRICTED RESERVES</b>		
29. Accumulation for SRF Payment	-	(144,027.61)
30. General Fund Reserves	(5,012,948.99)	(5,446,840.41)
<i>Subtotal</i>	(5,012,948.99)	(5,585,235.58)
<b>TOTAL NET POSITION</b>	<b>(14,873,743.21)</b>	<b>(14,938,290.11)</b>



HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 REVENUE REPORT  
 October 31, 2024



**A. REVENUE RETURNED TO CUSTOMERS VIA PF2**

	MTD RECEIPTS	YTD RECEIPTS	PRIOR YEAR	BUDGET	% OF BUDGET
<b>1. Humboldt Bay Retail Water Revenue</b>	39,091	132,813	125,033	350,000	38%
<b>General Revenue</b>					
Power Sales (Net ReMat)	4,304	20,452	0	125,000	16%
Tax Receipts (1% Taxes)	0	0	317,212	1,000,000	0%
Interest - Muni PF2 Retained	5,633	10,933	7,665		
<b>2. Miscellaneous Revenue*</b>	604	2,723	124,167	50,000	5%
<i>*Detail on following page</i>					
<b>TOTAL PF2 REVENUE CREDITS</b>	<b>49,632</b>	<b>166,921</b>	<b>574,076</b>	<b>1,525,000</b>	<b>11%</b>

**B. DISTRICT REVENUE**

	MTD RECEIPTS	YTD RECEIPTS	PRIOR YEAR	BUDGET	% OF BUDGET
<b>3. Industrial Water Revenue</b>					
Harbor District	0	0	0	0	0
<i>Subtotal Industrial Water Revenue</i>	0	0	0	0	0
<b>4. Municipal Water Revenue</b>					
City of Arcata	138,281	534,932	507,689	1,538,900	35%
City of Blue Lake	18,158	70,472	67,480	202,362	35%
City of Eureka	308,215	1,218,029	1,192,887	3,617,684	34%
Fieldbrook CSD	17,880	67,963	65,681	194,298	35%
Humboldt CSD	97,568	379,607	369,724	1,105,724	34%
Manila CSD	7,989	38,465	30,108	90,372	43%
McKinleyville CSD	111,217	431,993	419,974	1,266,298	34%
<i>Subtotal Municipal Water Revenue</i>	699,307	2,741,460	2,653,543	8,015,638	34%
<b>TOTAL INDUSTRIAL &amp; WHOLESALE REVENUE</b>	<b>699,307</b>	<b>2,741,460</b>	<b>2,653,543</b>	<b>8,015,638</b>	<b>34%</b>
<b>5. Power Sales</b>					
Power Sales (ReMat Revenue)	9,356	40,857	0	300,000	14%
Interest (ReMat Revenue)	0	0	0	0	
<b>TOTAL REMAT REVENUE</b>	<b>9,356</b>	<b>40,857</b>	<b>0</b>	<b>300,000</b>	<b>14%</b>
<b>6. Other Revenue and Grant Reimbursement</b>					
HB Retail Capital Replacement Rev.	4,034	15,515	16,046		
FCSO Contract	21,363	130,772	94,784		
FEMA/CalOES Grant Revenue	74,078	74,078	113,363		
SWRCB In-Stream Flow Grant Revenue	0	0	0		
Quagga Grant Revenue	0	0	0		
Misc. Grant Revenue	0	1,120	332,644		
CalFire Healthy Forest Funding	0	0	0		
Interest Earned	0	0	0		
Net Increase/(Decrease) Investment Accounts	22,335	263,849	65,277		
<b>TOTAL OTHER/GRANT REVENUE</b>	<b>121,809</b>	<b>485,334</b>	<b>622,114</b>		
<b>GRAND TOTAL REVENUE</b>	<b>880,104</b>	<b>3,434,572</b>	<b>3,849,732</b>	<b>9,840,638</b>	<b>35%</b>



**B. MISCELLANEOUS RECEIPTS (RETURNED TO CUSTOMERS VIA PF2)**

	MTD RECEIPTS	YTD RECEIPTS
<u>Miscellaneous Revenue</u>		
Dividend - Principal Life	-	-
Fees - Park Use	-	100
Rebate - CALCard	-	367
Refund - Diesel Fuel Tax	-	38
Refunds - Miscellaneous	227	227
Sale - Scrap Material	177	177
Reimb - Blue Lake SCADA/Internet Monthly Fees	-	-
Reimb. - Copies & Postage	40	98
Reimb. - Gas	-	-
Reimb. - Misc. Employee	-	-
Reimb. - Telephone	-	-
UB - Water Processing Fees	-	60
UB - Hydrant Rental Deposit/Use	-	-
Sale of Scrap Metal/Equipment/Gravel	-	576
<u>Ruth Area</u>		
Lease - Don Bridge	-	-
Rent - Ruth Cabin	160	1,080
Ruth Annual Lessee Water Fees	-	-
<hr/>		
<b>TOTAL MISCELANEOUS REVENUE</b>	<b>604</b>	<b>2,723</b>

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
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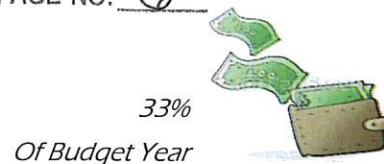


**SALARY AND EMPLOYEE BENEFIT EXPENDITURES (S. E. B.)**

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
<b>Compensation</b>					
1. Wages - Regular	184,978.35	724,671.58	732,101.06	2,662,800	32%
1a. 10/24 Salary Adjustment	(2,116.73)	(2,116.73)			
2. Wages - Sick	10,538.29	31,975.82	24,348.08		
3. Wages - Vacation	11,996.09	85,299.30	87,582.80		
<i>Subtotal</i>	205,396.00	839,829.97	844,031.94	2,662,800	32%
4. Wages - Overtime	1,807.69	4,660.92	3,219.74	17,647	
5. Wages - Holiday (Worked)	-	3,079.68	2,748.24	17,647	
<i>Subtotal</i>	1,807.69	7,740.60	5,967.98	35,294	22%
6. Wages - Part-Time	10,055.01	36,055.37	24,270.62	124,775	29%
7. Wages - Shift Differential	1,032.88	3,939.85	3,811.08	11,765	33%
8. Wages - Standby	7,805.40	34,706.87	33,632.07	96,595	36%
9. Director Compensation	2,400.00	8,240.00	8,880.00	40,300	20%
10. Secretarial Fees	262.50	1,181.25	1,115.63	3,150	38%
11. Payroll Tax Expenses	17,224.81	69,398.51	69,473.22	230,460	30%
11a. 10/24 Salary Adj. Payroll Tax	(157.70)	(157.70)			
<i>Subtotal</i>	38,622.90	153,364.15	141,182.62	507,045	30%
<b>Employee Benefits</b>					
12. Health, Life, & LTD Ins.	43,498.27	178,146.42	175,878.96	645,993	28%
13. Air Medical Insurance	-	79.00	2,291.00	2,370	3%
14. Retiree Medical Insurance	11,329.21	45,400.60	36,449.08	106,496	31%
14a. Retiree Medical Reimb.	(2,193.68)	(12,870.02)	(5,878.01)		
15. Employee Dental Insurance	2,492.47	9,859.61	10,903.51	36,597	27%
16. Employee Vision Insurance	571.72	2,253.46	2,314.99	7,091	32%
17. Employee EAP	76.41	301.12	309.24	1,245	24%
18. Fitness Stipend	-	348.00	-	10,230	3%
19. 457b District Contribution	4,125.00	15,675.00	14,637.50	44,700	35%
20. CalPERS Expenses	29,159.76	456,650.24	322,227.14	638,003	72%
20a. 10/24 Salary Adj. CalPERS	(930.51)	(930.51)			
21. Workers Comp Insurance	16,781.27	43,681.91	58,104.35	121,521	36%
<i>Subtotal</i>	104,909.92	738,594.83	617,237.76	1,614,246	46%
<b>TOTAL S.E.B</b>	<b>350,736.51</b>	<b>1,739,529.55</b>	<b>1,608,420.30</b>	<b>4,819,385</b>	<b>36%</b>



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**SERVICE & SUPPLY EXPENDITURES (S & S)**

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
<b>Operations &amp; Maintenance</b>					
1. Auto Maintenance	4,894.88	17,587.25	16,853.27	44,500	40%
2. Engineering	4,126.82	10,122.61	9,217.69	75,000	13%
3. Lab Expenses	985.00	5,811.00	7,230.00	14,000	42%
4. Maintenance & Repairs					
General	8,999.35	19,275.25	12,554.39	41,600	46%
TRF	614.41	1,750.68	1,540.17	17,000	10%
<i>Subtotal</i>	<i>9,613.76</i>	<i>21,025.93</i>	<i>14,094.56</i>	<i>58,600</i>	<i>36%</i>
5. Materials & Supplies					
General	11,435.23	18,654.13	22,537.60	42,000	44%
TRF	559.02	20,030.30	20,117.13	38,000	53%
<i>Subtotal</i>	<i>11,994.25</i>	<i>38,684.43</i>	<i>42,654.73</i>	<i>80,000</i>	<i>48%</i>
6. Radio Maintenance	578.09	5,804.97	2,312.36	8,500	68%
7. Ruth Lake License	-	1,500.00	1,500.00	1,500	100%
8. Safety Equip./Training					
General	1,074.65	5,972.19	4,155.64	18,700	32%
TRF	-	177.50	153.00	2,000	9%
<i>Subtotal</i>	<i>1,074.65</i>	<i>6,149.69</i>	<i>4,308.64</i>	<i>20,700</i>	<i>30%</i>
9. Tools & Equipment	143.76	1,004.60	945.41	5,000	20%
10. USGS Meter Station	-	-	8,600.00	9,000	0%
<i>Operations Subtotal</i>	<i>33,411.21</i>	<i>107,690.48</i>	<i>107,716.66</i>	<i>316,800</i>	<i>34%</i>

**General & Administration**

11. Accounting Services	4,148.75	20,552.50	19,605.00	35,000	59%
12. Bad Debt Expense	-	-	-	-	0
13. Dues & Subscriptions	22,210.00	23,162.72	22,103.56	35,900	65%
14. IT & Software Maintenance	4,916.85	50,317.05	25,728.49	91,200	55%
15. Insurance	-	88,204.90	130,217.44	139,000	63%
16. Internet	797.23	3,188.36	2,773.19	11,150	29%
17. Legal Services	465.00	3,387.00	6,923.16	35,000	10%
18. Miscellaneous	219.37	880.90	3,207.02	10,000	9%
19. Office Building Maint.	1,436.31	6,451.57	6,827.09	19,000	34%
20. Office Expense	4,870.26	13,726.84	14,733.31	39,600	35%
21. Professional Services	385.00	3,172.50	1,008.75	20,000	16%
22. Property Tax	-	-	-	3,000	0%



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<b>SERVICE &amp; SUPPLY EXPENDITURES (con't)</b>						
	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget	
23. Regulatory Agency Fees	3,067.09	3,067.09	31,983.40	202,900	2%	
24. Ruth Lake Programs	-	-	-	5,000	0%	
25. Safety Apparel	1,228.92	1,568.37	355.56	10,050	16%	
26. Technical Training	-	-	314.23	14,000	0%	
27. Telephone	1,139.08	4,405.04	4,177.19	19,000	23%	
28. Travel & Conference	2,448.62	8,708.30	8,432.45	22,000	40%	
<i>Gen. &amp; Admin. Subtotal</i>	<i>47,332.48</i>	<i>230,793.14</i>	<i>278,389.84</i>	<i>711,800</i>	<i>32%</i>	
<b>TOTAL SERVICE &amp; SUPPLY</b>	<b>80,743.69</b>	<b>338,483.62</b>	<b>386,106.50</b>	<b>1,028,600.25</b>	<b>33%</b>	

**Power**

29. Essex - PG & E	79,671.37	351,793.76	62,632.90		
30. 2Mw Generator Fuel	-	-	-		
<i>Subtotal Essex Pumping</i>	<i>79,671.37</i>	<i>351,793.76</i>	<i>62,632.90</i>	<i>1,017,911</i>	
31. All other PG & E	6,778.43	33,554.31	26,841.08	113,389	
<i>Subtotal All Power</i>	<i>86,449.80</i>	<i>385,348.07</i>	<i>89,473.98</i>	<i>1,131,300</i>	<i>34%</i>

**Total Service and Supplies incl.**

<b>Power</b>	<b>167,193.49</b>	<b>723,831.69</b>	<b>475,580.48</b>	<b>2,159,900</b>	<b>34%</b>
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<b>GRAND TOTAL EXPENSES</b>	<b>517,930.00</b>	<b>2,463,361.24</b>	<b>2,084,000.78</b>	<b>6,979,285.69</b>	<b>35%</b>
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**OTHER EXPENSES**

33. ReMat Consultant Exp.	864.50	6,296.30	-		
34. Capital Replacement Exp.	-	-	-		

**TOTAL EXPENSES WITH OTHER EXPENSES**

	<b>518,794.50</b>	<b>2,469,657.54</b>	<b>2,084,000.78</b>		
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# HUMBOLDT BAY MUNICIPAL WATER DISTRICT PROJECT PROGRESS REPORT

October 31, 2024

33% Of Budget Year



## A. CAPITAL PROJECTS

	MTD	YTD		% OF
GRANT FUNDED PROJECTS	EXPENSES	TOTAL	BUDGET	BUDGET
1 Grant - TRF Generator <i>(Treatment Facility Project, \$1.9M - FEMA, Approved)</i>	17,691	30,713	1,996,016	2%
2 Grant - Collector Mainline Redundancy Pipeline <i>(Treatment/Base Facility Project, \$3.2M - FEMA, Approved)</i>	0	0	3,200,000	0%
3 Grant - 2x Tank Seismic Retro	12,968	33,535	5,619,079	1%
3A Grant - 1x Tank (Industrial) Seismic Retrofit <i>(\$5.7M - FEMA, Approved)</i>	(6,832)	(17,814)		
4 Adv. Assistance Spillway Seismic Grant <i>(\$1.5M - FEMA, Pending Approval)</i>	0	404	1,500,000	0%
<b>TOTAL GRANT FUNDED CAPITAL PROJECTS</b>	<b>23,827</b>	<b>46,838</b>	<b>12,315,095</b>	<b>0%</b>

## NON-GRANT FUNDED CAPITAL PROJECTS

5 Replace Pump 2-2 (Pre-Approved 04/2024)	269,064	270,002	300,000	90%
6 Peninsula Communications Options	0	0	42,000	0%
7 Mainline Valve Replacement Program	0	0	50,000	0%
8 Purchase Collector 4 Transformer	0	0	120,000	0%
9 Purchase Switchboard for Collector 4	0	0	42,000	0%
10 Resize Chemical Feed System	805	22,882	37,250	61%
11 Storage Barn at Headquarters	0	0	220,000	0%
<b>TOTAL NON-GRANT FUNDED CAPITAL PROJECTS</b>	<b>269,869</b>	<b>292,884</b>	<b>811,250</b>	<b>36%</b>

## B. EQUIPMENT AND FIXED ASSET PROJECTS

	MTD	YTD		% OF
	EXPENSES	TOTAL	BUDGET	BUDGET
12 FY25 Replace ESSEX Administrative Computers	0	0	6,500	0%
13 FY25 Replace Control Computers	0	0	5,250	0%
14 Telemetry Radio and Antenna Replacement	0	0	14,000	0%
15 District Lighting Upgrades	0	0	19,000	0%
16 Purchase Temporary Fencing	0	2,262	3,250	70%
17 Construction Tooling	0	0	2,250	0%
18 Plant Water System PLC and VFD Upgrade <i>(Treatment Facility Project)</i>	985	11,301	11,500	98%
19 Replace Turbidimeters <i>(Treatment Facility Project)</i>	0	39,094	41,500	94%
20 Chlorine Analyzer Replacement - Phase 1 of 2 <i>(Treatment Facility Project)</i>	0	0	7,500	0%

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**B. EQUIPMENT AND FIXED ASSET PROJECTS (con't)**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
21 Purchase VFD for N-Poly Pump <i>(Treatment Facility Project)</i>	0	2,014	6,500	31%
22 TRF Filter Gallery Heaters and Air Circulation <i>(Treatment Facility Project)</i>	0	0	9,000	0%
23 Air Actuated Chemical Pump <i>(Treatment Facility Project)</i>	0	0	2,000	0%
24 FY25 Replace EUREKA Administrative Computers	0	0	6,000	0%
25 Main Office Parapet Ladder	0	0	2,750	0%
26 Upgrade Work Boat Motor	0	0	15,750	0%
27 Tesla Battery Project - TRF	233	931	0	0
28 Tesla Battery Project - ESSEX	0	0	0	0
<b>TOTAL EQUIPMENT &amp; FIXED ASSET PROJECTS</b>	<b>1,218</b>	<b>55,603</b>	<b>152,750</b>	<b>36%</b>

**C. MAINTENANCE PROJECTS**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
29 FY25 Pipeline Maintenance	0	875	14,000	6%
30 FY25 Main Line Meter Flow Calibration	0	0	16,000	0%
31 FY25 Technical Support and Software Updates	670	5,535	24,000	23%
32 FY25 Generator Services	86	86	3,600	2%
33 FY25 Hazard & Diseased Tree Removal	0	0	8,000	0%
34 FY25 Cathodic Protection	0	0	1,500	0%
35 FY25 Maintenance Emergency Repairs	0	1,700	50,000	3%
36 FY25 Fleet Paint Repairs	0	0	5,000	0%
37 12kV Electric System General Maintenance	0	0	10,500	0%
38 Voice and SCADA Radio Maintenance	0	0	3,000	0%
39 Safety Certification of Electrical Tools	0	0	2,500	0%
40 Collector Lube Oil System Maintenance	0	0	4,500	0%
41 Collector Pump 1-2 Motor Rebuild	0	2,194	15,750	14%
42 Control Room Office Chair Replacement	0	0	2,000	0%
43 Collector 2 Painting - Exterior	0	0	64,750	0%
44 FY25 Pipeline R-O-W Maintenance	0	0	20,000	0%
45 FY25 TRF Generator Service <i>(Treatment Facility Project)</i>	0	0	500	0%
46 FY25 TRF Limatorque Valve Retrofit Supplies <i>(Treatment Facility Project)</i>	0	0	15,000	0%
47 TRF Valve Network Upgrade (Phase 2) <i>(Treatment Facility Project)</i>	0	0	51,500	0%
48 TRF Control Router Replacement	0	7,725	8,500	91%
49 FY25 Brush Abatement Ruth Hydro	0	0	22,000	0%



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### C. MAINTENANCE PROJECTS (con't)

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
50 FY25 LTO Insurance	0	0	6,000	0%
51 FY25 Spillway Repairs	1,766	3,923	10,000	39%
52 FY25 Howell Bungler Valve Inspection	0	0	1,500	0%
53 FY25 Log Boom Inspection	3,555	3,611	1,500	241%
54 Replace Hydro Plant Hydraulic Pump	0	0	2,500	0%
55 Replace Hydro Plant PLC's	0	0	88,750	0%
56 FY25 Eureka Office Generator Service	0	0	500	0%
<b>TOTAL MAINTENANCE PROJECTS</b>	<b>6,078</b>	<b>25,650</b>	<b>453,350</b>	<b>4</b>

### D. PROFESSIONAL & CONSULTING SERVICES

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
57 FY25 Crane Testing/Certification	0	0	12,000	0%
58 FY25 Chlorine System Maintenance	0	0	20,750	0%
59 FY25 Hydro Plant Annual Electrical and Maintenance	0	0	4,000	0%
60 FY25 Cyber Security Maintenance	0	0	5,250	0%
61 FY23 Hydro Plant Annual Elec. Maint./Testing	7,071	7,071	12,000	59%
62 FY25 Technical Training	0	0	24,500	0%
63 FY25 O & M Training	150	724	20,000	4%
64 FY25 Backflow Tester Certification	0	1,334	3,000	44%
65 EAP Tabletop Exercise	14,285	14,345	15,000	96%
66 Fleet Electrification Analysis and Plan	6,000	6,000	20,000	30%
67 Recruitment Consultant for Next General Manager	0	12,818	25,000	51%
68 FY25 Public Education Funds	0	0	5,000	0%
69 Microsoft 360 Email	0	0	9,550	0%
70 FY25 Mad River Regulatory Compliance Assistance	0	0	50,000	0%
71 FY25 Grant Applications Assistance	0	4,000	20,000	20%
72 Domestic Water for Nordic Aqua Farm	0	0	5,000	0%
73 Water Quality Monitoring Plan Assistance - Phase 2	0	0	20,000	0%
74 Evaluation of Pipes and Valves from Collectors	0	0	3,000	0%
75 Domestic Water System Cathodic Protection Upgrades	0	1,161	80,000	1%
76 Water Model Update & Samoa Peninsula Domestic Capa	0	0	30,000	0%
77 Woodward Governor Replacement - Phase 1 (Planning)	0	0	15,000	0%
78 Professional Consulting Services for C.A. (Dam Insp.)	0	0	20,000	0%
78a Financial Consultant - Services for New Capital Debt	1,000	1,000	0	0%



## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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**D. PROFESSIONAL & CONSULTING SERVICES (CONT)**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
79 FY25 Dam Spillway Wall Monument Survey	0	0	17,500	0%
80 FY25 Matthews Dam Spillway Wingwall and Floor Survey	0	0	6,500	0%
81 FY25 FERC Dam Safety Surveillance and Monitoring R	0	0	5,000	0%
82 FY25 Spillway Repair, Dam Inspection & Reporting	0	56	5,000	1%
83 Log Boom Inspection By GHD	1,896	1,896	5,000	38%
84 FY25 FERC Chief Dam Safety Engineer	0	2,403	12,000	20%
<b>TOTAL PROF/CONSULTING SERVICES</b>	<b>30,402</b>	<b>52,809</b>	<b>470,050</b>	<b>11%</b>

**E. INDUSTRIAL SYSTEM PROJECTS**

85 Refurbish Pump Station 6 (Phase 1)	0	0	3,500,000	0%
86 Two Pumps, Motors, and VFD's for Pump Station 6	0	0	400,000	0%
87 Maintain Water Supply to Industrial Pump Station 6	0	0	13,250	0%
88 Industrial System Assistance	0	0	10,000	0%
89 Crossover Vault Modifications (Needed for Nordic,	0	0	36,000	0%
90 Pump Station 6 Gravel Bar Work and Permitting	0	0	84,000	0%
<b>TOTAL INDUSTRIAL SYSTEM PROJECTS</b>	<b>0</b>	<b>0</b>	<b>4,043,250</b>	<b>0%</b>

**F. CARRY-OVER PROJECTS FROM PRIOR YEAR**

<b>TOTAL CARRYOVER PROJECTS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>
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**G. ADVANCED CHARGES & DEBIT SERVICE FUNDS COLLECTED**

	MTD	YTD	BUDGET	% BUDGET
91 On-Site Generation of Chlorine <i>(\$1.4M - FY24/25 Treatment Facility Project)</i>	7,875	31,500	94,500	33%
92 Prof. Services for New Capital Debt	13,517	54,067	162,200	33%
93 Grant - Collector Mainline Redundancy Pipeline	8,333	33,333	100,000	33%
94 Storage Barn for Ruth Headquarters	10,833	43,333	130,000	33%
<b>TOTAL ADVANCED CHARGES COLLECTED</b>	<b>40,558</b>	<b>162,233</b>	<b>486,700</b>	<b>33%</b>



**H. PROJECTS NOT CHARGED TO MUNICIPAL CUSTOMERS**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
95 On-Site Generation of Chlorine <i>(\$1.4M - FY25, Treatment Facility Project)</i>	4,382	18,649	767,380	2%
96 Humboldt Bay Radio Read Meters <i>(Capital Replacement Funds)</i>	0	9,979	9,500	105%
97 Ruth Paving and Repairs <i>(Non-FEMA August Complex Wildfire Funds Collected)</i>	0	0	112,000	0%
98 North Mainline Extension Study	0	1,020	0	0%
99 BL Rancheria Water	0	0	0	0%
100 CalFire Healthy Forest Grant <i>(CalFire Grant)</i>	133,299	133,583	5,000,000	3%
101 Domestic Water System Cathodic Protection Updates	1,503	4,531	0	0%
102 Grant - 1x Tank (Industrial) Seismic Retrofit	6,832	17,814	0	0%
103 Grant - Quagga	0	33,664	0	0%
<b>TOTAL NOT CHARGED TO CUSTOMERS</b>	<b>146,018</b>	<b>185,576</b>	<b>5,888,880</b>	<b>3%</b>

**PROJECT PROGRESS REPORT SUMMARY OF ALL ACTIVITY**

CUSTOMER CHARGES	MTD	YTD	BUDGET	% BUDGET
TOTAL NON-GRANT FUNDED CAPITAL PROJECTS	269,869	292,884	811,250	36%
<i>Treatment Facility Portion</i>	0	0	0	
TOTAL EQUIPMENT & FIXED ASSET PROJECTS	1,218	55,603	152,750	36%
<i>Treatment Facility Portion</i>	985	52,409	78,000	
TOTAL MAINTENANCE PROJECTS	6,078	25,650	453,350	6%
<i>Treatment Facility Portion</i>	0	0	67,000	
TOTAL PROF/CONSULTING SERVICES	30,402	52,809	470,050	11%
<i>Treatment Facility Portion</i>	0	0	0	
TOTAL INDUSTRIAL SYSTEM PROJECTS	0	0	13,250	0%
TOTAL CARRYOVER PROJECTS	0	0	0	0
<i>Treatment Facility Portion</i>	0	0	0	
TOTAL ADVANCED CHARGES/DEBIT SERVICE	40,558	162,233	486,700	33%
<i>Treatment Facility Portion</i>	\$0	\$0	\$0	
<b>TOTAL CUSTOMER CHARGES</b>	<b>\$348,125</b>	<b>\$589,179</b>	<b>\$2,387,350</b>	<b>25%</b>
NON-CUSTOMER CHARGES (CURRENT FY)	MTD	YTD	BUDGET	% BUDGET
TOTAL GRANT FUNDED CAPITAL PROJECTS	23,827	46,838	12,315,095	0%
TOTAL NON-CUSTOMER CHARGES	146,018	185,576	5,888,880	3%
TOTAL USE OF ENCUMBERED FUNDS	42,122	304,899	1,009,560	30%
<b>TOTAL NON-CUSTOMER CHARGES</b>	<b>\$211,966</b>	<b>\$537,313</b>	<b>\$19,213,535</b>	<b>3%</b>
<b>GRAND TOTAL PROJECT BUDGET ACTIVITY</b>	<b>\$560,093</b>	<b>\$1,126,492</b>	<b>\$21,600,885</b>	<b>5%</b>



HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 ENCUMBERED FUNDS RECONCILIATION REPORT  
 October 31, 2024



	MTD EXPENSES	YTD TOTAL	AMOUNT ENCUMBERED	REMAINING
<b>A. CAPITAL PROJECTS</b>				
1E Mainline Valve Replacement Program	0	74,258	170,000	95,742
2E ADA Improvments - Eureka Office Parking Lot	0	3,654	4,146	492
3E Power and Fiber Optic Link-Collector 2 - Phase 2	0	4,796	8,000	3,204
4E Retaining Wall for Valve Access	0	0	70,000	70,000
<b>B. EQUIPMENT &amp; FIXED ASSET PROJECTS</b>				
5E Ruth Automated Tiltometers	187	22,987	50,000	27,013
6E Hydro Plant Wicket Gate & HBV Signal Upgrade	0	459	143	(316)
<b>C. MAINTENANCE PROJECTS</b>				
7E FY24 Main Line Meter Flow Calibration	0	0	3,500	3,500
8E FY24 Hazard & Diseased Tree Removal	0	13,000	13,000	0
9E Collector 1 Conductor Replacement	0	84,250	89,750	5,500
10E Ruth Hydro Synchronizer Testing	1,223	1,223	23,500	22,278
11E Line Shed Alarm Upgrades	0	3,187	6,500	3,313
<b>D. PROFESSIONAL &amp; CONSULTING SERVICES</b>				
12E Caselle A/R Module	0	0	5,000	5,000
13E EAP Tabletop Planning	2,987	4,596	4,880	284
14E CIP 10-yr Financial Revision and Project Review	0	0	24,000	24,000
15E FY24 Mad River Regulatory Compliance Assistance/In-Stream Flow	2,363	4,332	31,047	26,715
16E Salary Survey	0	391	3,393	3,003
17E Samoa Peninsula ROW EIR (GHD)	34,030	74,537	160,947	86,410
18E Water Quality Moniotoring Plan Update	998	998	20,000	19,002
19E Engineering Study-Replace 15-inch Peninsula Pipe	0	0	25,000	25,000
20E Above Ground 10,000 Gallon Fuel Tank Testing	0	0	5,400	5,400
21E Samoa Peninsula Coastal Development Permit	0	0	18,996	18,996
22E 404 Permit Assistance	0	0	24,196	24,196
23E Lease Lots Surveys	0	0	22,618	22,618
24E GIS Project at Ruth Lake (USFS)	0	0	7,500	7,500
25E Technical Dam/Spillway Support	335	12,232	218,044	205,812

<b>ENCUMBERED FUNDS TOTAL</b>	<b>42,122</b>	<b>304,899</b>	<b>1,009,560</b>	<b>704,661</b>
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Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
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Vendor Name	Date Paid	Description	Amount Paid
<b>101 NETLINK</b>			
101 NETLINK	10/04/2024	<i>Ruth Data Link/Internet</i>	290.00
Total 101 NETLINK:			290.00
<b>Acme Rigging &amp; Supply Company</b>			
Acme Rigging & Supply Company	10/15/2024	<i>Connection hardware for Ruth Log Boom Repairs</i>	1,727.13
Total Acme Rigging & Supply Company:			1,727.13
<b>ACWA Foundation</b>			
ACWA Foundation	10/09/2024	<i>2025 Annual Dues</i>	22,210.00
Total ACWA Foundation:			22,210.00
<b>ACWA/JPIA</b>			
ACWA/JPIA	10/21/2024	<i>COBRA Dental</i>	130.40
ACWA/JPIA	10/21/2024	<i>COBRA Vision</i>	37.12
ACWA/JPIA	10/21/2024	<i>RETIREE MEDICAL</i>	11,161.69
ACWA/JPIA	10/08/2024	<i>Workers Compensation July - September 2024</i>	16,781.27
Total ACWA/JPIA:			28,110.48
<b>AirGas NCN</b>			
AirGas NCN	10/30/2024	<i>PPE Inventory</i>	56.90
Total AirGas NCN:			56.90
<b>Albat</b>			
Albat	10/15/2024	<i>3 X Tank Seismic Retrofit Preconstruction #24-1440</i>	3,470.43
Albat	10/15/2024	<i>3 X Tank Seismic Retrofit Preconstruction #24-1440</i>	2,995.10
Total Albat:			6,465.53
<b>Arcata Used Tire and Wheel</b>			
Arcata Used Tire and Wheel	10/15/2024	<i>Copco Atlas air compressor tire replacement</i>	241.15
Total Arcata Used Tire and Wheel:			241.15
<b>AT &amp; T</b>			
AT & T	10/30/2024	<i>Eureka/Essex Landline</i>	31.57
AT & T	10/30/2024	<i>Arcata/Essex Landline</i>	31.57
AT & T	10/30/2024	<i>Eureka Office/Alarm</i>	62.96
AT & T	10/30/2024	<i>TRF</i>	30.70
AT & T	10/30/2024	<i>Essex office/Modem/Control Alarm System</i>	30.70
Total AT & T:			187.50
<b>ATS Communications</b>			
ATS Communications	10/04/2024	<i>PBX Vertical Wave Support</i>	1,537.82
ATS Communications	10/04/2024	<i>Monthly ProIT support for Essex</i>	1,305.00
Total ATS Communications:			2,842.82
<b>Chris Merz</b>			
Chris Merz	10/04/2024	<i>Per Diem for travel to Ruth</i>	37.50



Humboldt Bay Municipal Water District

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Vendor Name	Date Paid	Description	Amount Paid
Total Chris Merz:			37.50
<b>Citi Cards</b>			
Citi Cards	10/04/2024	Ruth Cabin Supplies	68.24
Citi Cards	10/04/2024	Ruth Cabin Supplies	16.38
Citi Cards	10/30/2024	Board Meeting Supplies	16.79
Total Citi Cards:			101.41
<b>City of Eureka</b>			
City of Eureka	10/15/2024	Eureka office water/sewer	142.50
City of Eureka	10/30/2024	Wharfinger Building Rental - EAP Tabletop Exercise	1,235.00
Total City of Eureka:			1,377.50
<b>Coastal Business Systems Inc.</b>			
Coastal Business Systems Inc.	10/04/2024	Eureka office copy and fax machine	858.22
Coastal Business Systems Inc.	10/04/2024	Essex copy/fax machine	306.89
Total Coastal Business Systems Inc.:			1,165.11
<b>Contessa Dickson</b>			
Contessa Dickson	10/07/2024	Per Diem & Hotel for Board Secretary Conference 10/20 - 10/24	1,175.93
Total Contessa Dickson:			1,175.93
<b>County of Humboldt</b>			
County of Humboldt	10/04/2024	CDP for Industrial Tank Retrofit	714.44
Total County of Humboldt:			714.44
<b>Cummins Sales and Service</b>			
Cummins Sales and Service	10/30/2024	2MW generator oil sampling	27.21
Total Cummins Sales and Service:			27.21
<b>David J. Corral</b>			
David J. Corral	10/24/2024	Per Diem for travel to Ruth Lake	37.50
Total David J. Corral:			37.50
<b>Downey Brand Attorneys LLP</b>			
Downey Brand Attorneys LLP	10/04/2024	Legal Fees August 2024 - Instream Flow Investigation	2,363.00
Total Downey Brand Attorneys LLP:			2,363.00
<b>DXP Enterprises, Inc.</b>			
DXP Enterprises, Inc.	10/09/2024	New pump 2.2, motor, shafting, bearing & other components for	267,461.52
DXP Enterprises, Inc.	10/09/2024	New pump 2.2, motor, shafting, bearing & other components for	1,602.24
Total DXP Enterprises, Inc.:			269,063.76
<b>Electrical Reliability Services, Inc</b>			
Electrical Reliability Services, Inc	10/15/2024	Ruth Hydro Synchronizer Testing #25-0054	1,185.00

Humboldt Bay Municipal Water District

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Vendor Name	Date Paid	Description	Amount Paid
Total Electrical Reliability Services, Inc:			1,185.00
<b>Englund Marine Supply</b>			
Englund Marine Supply	10/30/2024	Buoys for Log Boom inspection tools	35.27
Total Englund Marine Supply:			35.27
<b>Eureka Oxygen</b>			
Eureka Oxygen	10/30/2024	Nitrogen for Ruth Hydro accumulators	61.73
Eureka Oxygen	10/30/2024	cylinder rental	141.40
Total Eureka Oxygen:			203.13
<b>Eureka-Humboldt Fire Ext.,Co, Inc</b>			
Eureka-Humboldt Fire Ext.,Co, Inc	10/04/2024	Ruth Fire Extinguisher maintenance	287.76
Total Eureka-Humboldt Fire Ext.,Co, Inc:			287.76
<b>FEDEX</b>			
FEDEX	10/30/2024	Ship GeoKOn Add-on module for repair	172.91
FEDEX	10/30/2024	Ship electrical gloves for testing	16.64
FEDEX	10/30/2024	Ship GeoKOn Add-on module for repair	13.83
Total FEDEX:			203.38
<b>Ferguson Waterworks #1423</b>			
Ferguson Waterworks #1423	10/30/2024	Kernan 1.5 Meter Replacement	826.98
Total Ferguson Waterworks #1423:			826.98
<b>FleetPride</b>			
FleetPride	10/30/2024	Vacuum trailer hydraulic line repair	72.39
Total FleetPride:			72.39
<b>Flo-Line Technology, Inc</b>			
Flo-Line Technology, Inc	10/30/2024	DW sample pump for inventory	997.94
Total Flo-Line Technology, Inc:			997.94
<b>Franchise Tax Board</b>			
Franchise Tax Board	10/04/2024		65.00
Franchise Tax Board	10/21/2024		65.00
Total Franchise Tax Board:			130.00
<b>Frontier Communications</b>			
Frontier Communications	10/30/2024	Ruth HQ	75.57
Frontier Communications	10/30/2024	Ruth Hydro/Ruth Dataline	295.60
Total Frontier Communications:			371.17
<b>Gannett Fleming, Inc</b>			
Gannett Fleming, Inc	10/30/2024	Facilitator for EAP Tabletop and Functional Exercises	8,500.00

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Vendor Name	Date Paid	Description	Amount Paid
Total Gannett Fleming, Inc:			8,500.00
<b>GEI Consultants, Inc</b>			
GEI Consultants, Inc	10/30/2024	EAP Tabletop and Functional Exercises	4,190.94
Total GEI Consultants, Inc:			4,190.94
<b>GHD</b>			
GHD	10/15/2024	General Engineering	1,419.75
GHD	10/15/2024	General Engineering - Ruth	1,073.67
GHD	10/15/2024	General Engineering - TRF Generator Grant	102.75
GHD	10/15/2024	Samoa Peninsula ROW EIR #23-0625	20,855.11
GHD	10/15/2024	Reservoirs Seismic Retrofit Phs 2 #24-0812	266.88
GHD	10/15/2024	Reservoirs Seismic Retrofit Phs 2 #24-0812	2,401.91
GHD	10/15/2024	Cathodic Protection-Soil Corrosivity Condition Assessments #24	1,503.39
GHD	10/30/2024	General Engineering	1,479.27
GHD	10/30/2024	General Engineering - EAP Tabletop Excercise	2,986.63
GHD	10/30/2024	General Engineering - Ruth	154.13
GHD	10/30/2024	General Engineering - OSHG	102.75
GHD	10/30/2024	Reservoirs Seismic Retrofit Phs 2 #24-0812	2,398.54
GHD	10/30/2024	Reservoirs Seismic Retrofit Phs 2 #24-0812	720.76
GHD	10/30/2024	2024 Log Boom Inspection #25-0511	1,896.41
GHD	10/30/2024	Mad River Cross Sections Survey Memo 2024 #25-0510	521.13
GHD	10/30/2024	CDP for Samoa Peninsula ROW Phase 1 #22-0626	230.63
GHD	10/30/2024	Samoa Peninsula ROW EIR #23-0625	12,944.36
Total GHD:			51,058.07
<b>GR Sundberg, Inc</b>			
GR Sundberg, Inc	10/30/2024	Emergency Vac Truck for FB Leak #25-0512	1,400.00
Total GR Sundberg, Inc:			1,400.00
<b>Grainger</b>			
Grainger	10/30/2024	Concrete anchor pins for spillway repairs	309.76
Total Grainger:			309.76
<b>Hazen and Sawyer</b>			
Hazen and Sawyer	10/15/2024	Grant Support Services #24-0128	500.00
Hazen and Sawyer	10/15/2024	Grant Support Services #24-0128	500.00
Total Hazen and Sawyer:			1,000.00
<b>Health Equity Inc</b>			
Health Equity Inc	10/08/2024	HSA Admin Fee Oct 2024 - 19 employees	56.05
Health Equity Inc	10/08/2024	HSA Admin Fee Oct 2024 - 6 employees	17.70
Total Health Equity Inc:			73.75
<b>Hensel Hardware</b>			
Hensel Hardware	10/30/2024	Line shed #4 roof repairs and rodent control	63.92
Hensel Hardware	10/30/2024	Shop Inventory	5.41
Hensel Hardware	10/30/2024	Clamps for air release repairs and maintenance	29.19
Hensel Hardware	10/30/2024	PVC pipe for inventory	17.35
Hensel Hardware	10/30/2024	PVC fittings for Ruth Piezo Well #8 cleanout	13.41

Humboldt Bay Municipal Water District

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Vendor Name	Date Paid	Description	Amount Paid
Total Hensel Hardware:			129.28
<b>Hensell Materials</b>			
Hensell Materials	10/30/2024	Spillway repairs	584.50
Hensell Materials	10/30/2024	Spillway repairs	271.59
Hensell Materials	10/30/2024	Muratic acid for cleaning hypochlorite plumbing	88.27
Total Hensell Materials:			944.36
<b>Henwood Associates, Inc</b>			
Henwood Associates, Inc	10/04/2024	Consultant Services Agreement- Aug 2024	432.25
Total Henwood Associates, Inc:			432.25
<b>Humboldt County Treasurer</b>			
Humboldt County Treasurer	10/30/2024	Capital Financing Project	45,611.43
Total Humboldt County Treasurer:			45,611.43
<b>Humboldt Fasteners</b>			
Humboldt Fasteners	10/30/2024	Spillway Repairs	10.74
Humboldt Fasteners	10/30/2024	Shop supplies	23.97
Total Humboldt Fasteners:			34.71
<b>Humboldt Redwood Company, LLC</b>			
Humboldt Redwood Company, LLC	10/30/2024	Mt Pierce Lease site	320.59
Total Humboldt Redwood Company, LLC:			320.59
<b>Humboldt Waste Management Authority</b>			
Humboldt Waste Management Authority	10/15/2024	dump fee for debris at Hydro plant	50.03
Humboldt Waste Management Authority	10/15/2024	Fee for disposal of tire from parking lot at park	12.00
Humboldt Waste Management Authority	10/15/2024	dump fee	142.38
Total Humboldt Waste Management Authority:			204.41
<b>Hummel Tire &amp; Wheel</b>			
Hummel Tire & Wheel	10/04/2024	Tire for Unit #3	208.27
Total Hummel Tire & Wheel:			208.27
<b>Johnson's Mobile Rentals LLC</b>			
Johnson's Mobile Rentals LLC	10/15/2024	Temporary fence rental for TRF Tesla battery project	232.74
Total Johnson's Mobile Rentals LLC:			232.74
<b>Josiah Hargadon</b>			
Josiah Hargadon	10/24/2024	Per Diem for Certification Testing D2 & T2	275.79
Total Josiah Hargadon:			275.79
<b>JTN Energy, LLC</b>			
JTN Energy, LLC	10/04/2024	Consultant Services Agreement - Aug 2024	432.25



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Vendor Name	Date Paid	Description	Amount Paid
Total JTN Energy, LLC:			432.25
<b>Justin Natividad</b>			
Justin Natividad	10/04/2024	Per Diem for Travel to Ruth	37.50
Total Justin Natividad:			37.50
<b>Keenan Supply</b>			
Keenan Supply	10/30/2024	Kernen meter replacement	251.88
Keenan Supply	10/30/2024	OSHG Project	41.90
Keenan Supply	10/30/2024	Shop supplies	5.05
Total Keenan Supply:			298.83
<b>Keith Daggs</b>			
Keith Daggs	10/04/2024	Per Diem for travel to Ruth	37.50
Total Keith Daggs:			37.50
<b>Kelsie Sobol</b>			
Kelsie Sobol	10/04/2024	Per Diem for travel to Caselle Conference 10/14-10/17/24	1,187.69
Kelsie Sobol	10/22/2024	Petty Cash - Postage Due	.73
Kelsie Sobol	10/22/2024	Petty Cash - Coffee Creamer	6.79
Kelsie Sobol	10/22/2024	Petty Cash - Cabin Supplies	3.39
Kelsie Sobol	10/22/2024	Petty Cash - Eureka Office Landscaping	8.00
Kelsie Sobol	10/22/2024	Petty Cash - Employee Recognition	32.80
Kelsie Sobol	10/22/2024	Petty Cash - Office Supplies	32.76
Kelsie Sobol	10/22/2024	Petty Cash - Maps Scanned to USB	25.00
Kelsie Sobol	10/22/2024	Petty Cash - Donuts for Open Enrollment Staff Meeting	72.00
Kelsie Sobol	10/22/2024	Petty Cash - Coffee Creamer	6.79
Kelsie Sobol	10/22/2024	Petty Cash - Employee Recognition	38.39
Kelsie Sobol	10/22/2024	Petty Cash - Eureka Office Landscaping	8.00
Total Kelsie Sobol:			1,422.34
<b>Kernen Construction</b>			
Kernen Construction	10/30/2024	Base rock for leak repair at 1497 Glendale Drive	126.52
Total Kernen Construction:			126.52
<b>Lui Ahmad</b>			
Lui Ahmad	10/30/2024	Per Diem for travel to Ruth 11/5-11/6/24	37.50
Total Lui Ahmad:			37.50
<b>Matrix Consulting Group</b>			
Matrix Consulting Group	10/30/2024	Fleet Electrification Master Plan	6,000.00
Total Matrix Consulting Group:			6,000.00
<b>Matthews Paints, Inc.</b>			
Matthews Paints, Inc.	10/30/2024	Paint for Samoa Booster Pump Station manifold piping	200.89
Total Matthews Paints, Inc.:			200.89

Humboldt Bay Municipal Water District

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Vendor Name	Date Paid	Description	Amount Paid
<b>McMaster-Carr Supply</b>			
McMaster-Carr Supply	10/15/2024	TRF Plant Water System PLC upgrade	984.79
McMaster-Carr Supply	10/30/2024	Spillway Repairs	244.55
McMaster-Carr Supply	10/30/2024	Wire brush to clean Peizo Well	37.58
McMaster-Carr Supply	10/30/2024	Piezo well clean out materials	145.72
Total McMaster-Carr Supply:			1,412.64
<b>Mercer-Fraser Company</b>			
Mercer-Fraser Company	10/30/2024	Road repair from leak at 1497 Glendale Dr	246.00
Total Mercer-Fraser Company:			246.00
<b>Microbac Laboratories, Inc</b>			
Microbac Laboratories, Inc	10/15/2024	Lab Tests - Humboldt Bay Retail	610.00
Microbac Laboratories, Inc	10/15/2024	Lab Tests - Humboldt Bay Retail	155.00
Microbac Laboratories, Inc	10/15/2024	Lab Tests - FBGCSD	110.00
Microbac Laboratories, Inc	10/15/2024	Lab Tests - Humboldt Bay Retail	110.00
Microbac Laboratories, Inc	10/15/2024	Lab Tests - Humboldt Bay Retail	110.00
Microbac Laboratories, Inc	10/15/2024	Lab Tests - FBGCSD	110.00
Microbac Laboratories, Inc	10/15/2024	Lab Tests - TRF	330.00
Microbac Laboratories, Inc	10/15/2024	Lab Tests - TRF	55.00
Total Microbac Laboratories, Inc:			1,590.00
<b>Mission Linen</b>			
Mission Linen	10/15/2024	maintenance supplies & uniform rentals	80.54
Mission Linen	10/15/2024	maintenance supplies & uniform rentals	81.57
Mission Linen	10/15/2024	maintenance supplies & uniform rentals	66.40
Mission Linen	10/15/2024	maintenance supplies & uniform rentals	80.54
Mission Linen	10/15/2024	maintenance supplies & uniform rentals	89.49
Mission Linen	10/15/2024	maintenance supplies & uniform rentals	105.19
Mission Linen	10/15/2024	maintenance supplies & uniform rentals	22.57
Mission Linen	10/15/2024	maintenance supplies & uniform rentals	34.25
Total Mission Linen:			560.55
<b>Napa Auto Parts</b>			
Napa Auto Parts	10/30/2024	Unit 8 annual service	408.36
Napa Auto Parts	10/30/2024	Oil filter	20.20
Napa Auto Parts	10/30/2024	Unit 8 annual service	42.25-
Napa Auto Parts	10/30/2024	2MW generator service	39.05
Napa Auto Parts	10/30/2024	Unit 4 six-month service	115.52
Napa Auto Parts	10/30/2024	Repair air hammer	3.71
Napa Auto Parts	10/30/2024	Fleet maintenance supplies	82.13
Total Napa Auto Parts:			626.72
<b>North Coast Journal, Inc</b>			
North Coast Journal, Inc	10/30/2024	Legal Notice of Advertisement of Bids	964.00
Total North Coast Journal, Inc:			964.00
<b>Occ. Health Service of Mad River</b>			
Occ. Health Service of Mad River	10/04/2024	Audiogram test for Temp Employee J. Owejan	70.00
Occ. Health Service of Mad River	10/15/2024	DMV physical	236.25

Humboldt Bay Municipal Water District

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Vendor Name	Date Paid	Description	Amount Paid
Total Occ. Health Service of Mad River:			306.25
<b>O'Connor &amp; Company</b>			
O'Connor & Company	10/09/2024	Annual Financial Audit FY22/23	2,437.50
O'Connor & Company	10/09/2024	Annual Financial Audit FY22/23	1,711.25
Total O'Connor & Company:			4,148.75
<b>Optimum</b>			
Optimum	10/07/2024	Essex internet	266.35
Optimum	10/07/2024	Essex Phones	67.30
Optimum	10/07/2024	Eureka Internet	210.95
Optimum	10/07/2024	Fieldbrook-Glendale CSD Internet	333.33
Optimum	10/07/2024	TRF Internet	29.93
Optimum	10/07/2024	TRF Internet - Blue Lake SCADA Monitoring	59.84
Optimum	10/07/2024	TRF Internet - Fieldbrook-Glendale CSD	59.84
Total Optimum:			1,027.54
<b>PACE Engineering, Inc.</b>			
PACE Engineering, Inc.	10/15/2024	TRF Generator Project	17,588.00
Total PACE Engineering, Inc.:			17,588.00
<b>Pacific Gas &amp; Electric Co.</b>			
Pacific Gas & Electric Co.	10/04/2024	Eureka Office	11.67-
Pacific Gas & Electric Co.	10/04/2024	Jackson Ranch Rd Rectifier	34.59-
Pacific Gas & Electric Co.	10/04/2024	HWY 299 Rectifier	4.35-
Pacific Gas & Electric Co.	10/04/2024	West End Road Rectifier	162.14
Pacific Gas & Electric Co.	10/04/2024	TRF	3,689.41
Pacific Gas & Electric Co.	10/04/2024	Ruth Hydro Valve Control	19.45-
Pacific Gas & Electric Co.	10/04/2024	Ruth Hydro	30.53-
Pacific Gas & Electric Co.	10/04/2024	Samoa Booster Pump Station	1,113.04
Pacific Gas & Electric Co.	10/04/2024	Samoa Dial Station	23.34
Pacific Gas & Electric Co.	10/15/2024	Essex Pumping Sept 2024	1,254.93
Pacific Gas & Electric Co.	10/15/2024	Essex Pumping Sept 2024	1,805.59
Pacific Gas & Electric Co.	10/15/2024	Essex Pumping Sept 2024	78,411.79
Pacific Gas & Electric Co.	10/30/2024	Ruth HQ	90.15
Total Pacific Gas & Electric Co.:			86,449.80
<b>Pacific Paper Co./Arcata Stationers</b>			
Pacific Paper Co./Arcata Stationers	10/04/2024	2 office chairs for Operations desk	502.53
Pacific Paper Co./Arcata Stationers	10/15/2024	Eureka office copier paper	205.35
Total Pacific Paper Co./Arcata Stationers:			707.88
<b>Pape Machinery</b>			
Pape Machinery	10/15/2024	Annual service filters	237.31
Pape Machinery	10/15/2024	Hydraulic oil	248.19
Total Pape Machinery:			485.50
<b>Picky, Picky, Picky, Inc</b>			
Picky, Picky, Picky, Inc	10/04/2024	Safety Boots - P. Jorgensen	207.56

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--

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Vendor Name	Date Paid	Description	Amount Paid
Total Picky, Picky, Picky, Inc:			207.56
<b>Pierson Building Center</b>			
Pierson Building Center	10/15/2024	Spillway Repairs	165.03
Pierson Building Center	10/30/2024	Furnance pipe for Ruth HQ roof repairs	31.13
Pierson Building Center	10/30/2024	Materials to clean out PW 8	20.16
Pierson Building Center	10/30/2024	Materials to clean out PW 8	16.65
Total Pierson Building Center:			232.97
<b>Pitney Bowes Global Financial Services</b>			
Pitney Bowes Global Financial Services	10/07/2024	red ink cartridge	99.73
Total Pitney Bowes Global Financial Services:			99.73
<b>Platt Electric Supply</b>			
Platt Electric Supply	10/30/2024	Overload adapter for TRF	42.56
Platt Electric Supply	10/30/2024	Overload relay for TRF	195.08
Platt Electric Supply	10/30/2024	Electrical shop supplies	84.96
Platt Electric Supply	10/30/2024	Insulated screw	42.47
Platt Electric Supply	10/15/2024	Materials to rewire TRF sump pump	164.09
Platt Electric Supply	10/30/2024	Electrical shop supplies	47.59
Platt Electric Supply	10/30/2024	Electrical shop supplies	33.21
Total Platt Electric Supply:			609.96
<b>Points West Surveying Co</b>			
Points West Surveying Co	10/15/2024	Mad River Cross Sections at Essex #25-0238	6,550.00
Total Points West Surveying Co:			6,550.00
<b>PPG Architectural Coatings</b>			
PPG Architectural Coatings	10/15/2024	Paint for TRF storage container	84.06
PPG Architectural Coatings	10/15/2024	Paint for TRF storage container	204.44
Total PPG Architectural Coatings:			288.50
<b>PTC Inc.</b>			
PTC Inc.	10/30/2024	IT and software maintenance subscriptions and support	613.00
PTC Inc.	10/30/2024	IT and software maintenance subscriptions and support	56.70
PTC Inc.	10/30/2024	Sales tax owed	56.70-
Total PTC Inc.:			613.00
<b>Purchase Power</b>			
Purchase Power	10/15/2024	Postage Refill	502.25
Total Purchase Power:			502.25
<b>Recology Arcata</b>			
Recology Arcata	10/15/2024	Essex Garbage/Recycling Service - Sept 2024	812.76
Total Recology Arcata:			812.76
<b>Recology Humboldt County</b>			
Recology Humboldt County	10/15/2024	Eureka office garbage/recycling service - Sept 2024	110.05



Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
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Vendor Name	Date Paid	Description	Amount Paid
Total Recology Humboldt County:			110.05
<b>Ryan Chairez</b>			
Ryan Chairez	10/04/2024	Per Diem for Travel to Ruth	37.50
Total Ryan Chairez:			37.50
<b>Salisbury Online</b>			
Salisbury Online	10/30/2024	Electrical PPE	34.97
Salisbury Online	10/15/2024	Replace expired hard hats in electrical shop	96.02
Total Salisbury Online:			130.99
<b>SWRCB-DWOCP</b>			
SWRCB-DWOCP	10/04/2024	D3 Exam Fee - Z. Bunke	100.00
SWRCB-DWOCP	10/01/2024	D4 Certification Renewal - D. Davidsen	105.00
Total SWRCB-DWOCP:			205.00
<b>TankMart</b>			
TankMart	10/09/2024	Seismic restraint system for 2500 gallon cone bottom tank	687.87
Total TankMart:			687.87
<b>Tehama Tire Service</b>			
Tehama Tire Service	10/30/2024	Flat tire repair on Unit #1	25.00
Total Tehama Tire Service:			25.00
<b>Tetrault Tire Center</b>			
Tetrault Tire Center	10/30/2024	New tires for Unit #2	1,398.18
Total Tetrault Tire Center:			1,398.18
<b>Thatcher Company, Inc</b>			
Thatcher Company, Inc	10/30/2024	Chlorine - 3 CYL	12,739.49
Thatcher Company, Inc	10/30/2024	deposit return - 3 CYL	3,000.00-
Total Thatcher Company, Inc:			9,739.49
<b>The Mill Yard</b>			
The Mill Yard	10/04/2024	Spillway Repairs	49.23
The Mill Yard	10/04/2024	Roofing sealant for cargo storage container at TRF	394.93
The Mill Yard	10/30/2024	Marking paint	17.34
The Mill Yard	10/30/2024	Spray foam insulation for old cathodic building	16.90
The Mill Yard	10/30/2024	Repairs at Grassy Creek hydrant	37.92
The Mill Yard	10/04/2024	Roofing material for cable car shed #2	32.54
Total The Mill Yard:			548.86
<b>The Mitchell Law Firm, LLP</b>			
The Mitchell Law Firm, LLP	10/15/2024	Legal Services- Sept 2024	465.00
Total The Mitchell Law Firm, LLP:			465.00

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
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Vendor Name	Date Paid	Description	Amount Paid
<b>The Watershed Research &amp; Training Center</b>			
The Watershed Research & Training Center	10/09/2024	Planning Partner C-USFS Salaries & Wages	30,040.83
The Watershed Research & Training Center	10/09/2024	Planning Partner C-USFS Travel	8,795.09
The Watershed Research & Training Center	10/09/2024	Planning Partner C-USFS Supplies	81,413.53
Total The Watershed Research & Training Center:			120,249.45
<b>Thrifty Supply</b>			
Thrifty Supply	10/30/2024	Blade for PVC pipe cutter	101.29
Thrifty Supply	10/30/2024	Ruth HQ roof repair	449.96
Thrifty Supply	10/30/2024	Switch for sample sump	94.83
Total Thrifty Supply:			646.08
<b>Trinity County General Services</b>			
Trinity County General Services	10/30/2024	Pickett Peak site lease	257.50
Total Trinity County General Services:			257.50
<b>Trinity County Solid Waste</b>			
Trinity County Solid Waste	10/04/2024	Ruth HQ dump fees	30.75
Trinity County Solid Waste	10/04/2024	Ruth Hydro dump fees	30.75
Trinity County Solid Waste	10/15/2024	Ruth HQ dump fees	15.75
Trinity County Solid Waste	10/15/2024	Ruth Hydro dump fees	15.75
Total Trinity County Solid Waste:			93.00
<b>Tsementa Nursery</b>			
Tsementa Nursery	10/09/2024	Materials & Supplies-Healthy Forest Grant	13,050.00
Tsementa Nursery	10/09/2024	Sales Tax Owed	946.13
Tsementa Nursery	10/09/2024	Add Sales Tax on Materials & Supplies	946.13
Total Tsementa Nursery:			13,050.00
<b>U.S. Bank Corporate Payment System</b>			
U.S. Bank Corporate Payment System	10/09/2024	Drinks for spillway repairs	28.72
U.S. Bank Corporate Payment System	10/09/2024	Drinks for spillway repairs	20.20
U.S. Bank Corporate Payment System	10/09/2024	Hitch pins for receivers	23.84
U.S. Bank Corporate Payment System	10/09/2024	Light bar for Unit 6	195.29
U.S. Bank Corporate Payment System	10/09/2024	Drinks for spillway repairs	37.68
U.S. Bank Corporate Payment System	10/09/2024	DEF for Unit 2	15.28
U.S. Bank Corporate Payment System	10/09/2024	Fuel for work boat	69.90
U.S. Bank Corporate Payment System	10/09/2024	Concrete diamond blades for spillway work	44.46
U.S. Bank Corporate Payment System	10/09/2024	Fence post for Ruth HQ main gate	30.37
U.S. Bank Corporate Payment System	10/09/2024	Essex Office Supplies	217.51
U.S. Bank Corporate Payment System	10/09/2024	Essex Office Supplies	42.92
U.S. Bank Corporate Payment System	10/09/2024	Essex Office Supplies	71.41
U.S. Bank Corporate Payment System	10/09/2024	Spendwise Monthly Subscription	90.00
U.S. Bank Corporate Payment System	10/09/2024	Toner	160.48
U.S. Bank Corporate Payment System	10/09/2024	Eureka Office Supplies	63.07
U.S. Bank Corporate Payment System	10/09/2024	Hat order for district employees	1,021.36
U.S. Bank Corporate Payment System	10/09/2024	Eureka Office Supplies	142.94
U.S. Bank Corporate Payment System	10/09/2024	Ruth Cabin Supplies	28.72
U.S. Bank Corporate Payment System	10/09/2024	Eureka Office Supplies	5.72
U.S. Bank Corporate Payment System	10/09/2024	Eureka Office Supplies	27.99
U.S. Bank Corporate Payment System	10/09/2024	Eureka Office Supplies	24.02
U.S. Bank Corporate Payment System	10/09/2024	QR Code for EAP tabletop survey	99.00

Humboldt Bay Municipal Water District

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Vendor Name	Date Paid	Description	Amount Paid
U.S. Bank Corporate Payment System	10/09/2024	Level sensors in OSHG tanks	4,237.81
U.S. Bank Corporate Payment System	10/09/2024	Name badges for EAP tabletop event	40.43
U.S. Bank Corporate Payment System	10/09/2024	Drinks for EAP Tabletop event	21.98
U.S. Bank Corporate Payment System	10/09/2024	Security envelopes	30.58
U.S. Bank Corporate Payment System	10/09/2024	Food and drinks for EAP Tabletop event	197.44
U.S. Bank Corporate Payment System	10/09/2024	Ruth Office supplies	143.72
U.S. Bank Corporate Payment System	10/09/2024	Repair parts for JD110	135.12
U.S. Bank Corporate Payment System	10/09/2024	Fuel for Ruth	91.49
U.S. Bank Corporate Payment System	10/09/2024	2024 Emergency Response Handbooks for hazmat response	83.08
U.S. Bank Corporate Payment System	10/09/2024	60W Gigabit PoE+ Injector	31.24
U.S. Bank Corporate Payment System	10/09/2024	Essex Office Supplies	13.25
U.S. Bank Corporate Payment System	10/09/2024	Router to connect cameras at Dam to internet	335.28
U.S. Bank Corporate Payment System	10/09/2024	Danger Keep Off signs for log boom	84.48
U.S. Bank Corporate Payment System	10/09/2024	Mooring chain for Ruth Log Boom anchor connections	1,444.00
U.S. Bank Corporate Payment System	10/09/2024	Webinars for Dale's D4 Certification	150.00
U.S. Bank Corporate Payment System	10/09/2024	Tools for log boom repairs	264.36
U.S. Bank Corporate Payment System	10/09/2024	State Water Resource Control Board 401 Permit Certification Ap	3,067.09
U.S. Bank Corporate Payment System	10/09/2024	2024 ACWA Region 1 Event Registration for Director Rupp	85.00
Total U.S. Bank Corporate Payment System:			12,917.23
<b>USA Blue Book</b>			
USA Blue Book	10/04/2024	TRF Coag feed pump fittings	117.59
Total USA Blue Book:			117.59
<b>VALEO Networks</b>			
VALEO Networks	10/04/2024	Eureka office monthly computer maintenance	2,042.79
Total VALEO Networks:			2,042.79
<b>Valley Pacific Petroleum Serv. Inc</b>			
Valley Pacific Petroleum Serv. Inc	10/04/2024	Cardlock-Pumping & Control	529.69
Valley Pacific Petroleum Serv. Inc	10/04/2024	Cardlock-Water Quality	529.69
Valley Pacific Petroleum Serv. Inc	10/04/2024	Cardlock-Maintenance	529.69
Valley Pacific Petroleum Serv. Inc	10/04/2024	Cardlock-HB Retail	137.72
Valley Pacific Petroleum Serv. Inc	10/04/2024	Cardlock-FBGCS D	391.96
Total Valley Pacific Petroleum Serv. Inc:			2,118.75
<b>Verizon Wireless</b>			
Verizon Wireless	10/15/2024	General Manager	40.23
Verizon Wireless	10/15/2024	Humboldt Bay Retail	13.41
Verizon Wireless	10/15/2024	Fieldbrook Glendale CSD	38.16
Verizon Wireless	10/15/2024	Humboldt Bay IPAD	9.88
Verizon Wireless	10/15/2024	Fieldbrook Glendale CSD IPAD	28.13
Verizon Wireless	10/15/2024	Ruth Area	24.34
Verizon Wireless	10/15/2024	Ruth Hydro	24.34
Total Verizon Wireless:			178.49
<b>Watt's Cleaning Services</b>			
Watt's Cleaning Services	10/04/2024	Eureka Office Cleaning 9/11 & 9/25/24	278.00
Total Watt's Cleaning Services:			278.00

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
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Vendor Name	Date Paid	Description	Amount Paid
Grand Totals:			<u>757,354.75</u>

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## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

*SUPPLEMENTAL* - FIELDBROOK-GLENDALE CSD CONTRACT SERVICES  
 MONTHLY BILLING/EXPENSE REPORT  
 October 31, 2024



	Month-to-Date	Year-to-Date	Prior Year	Difference
<b><i>Contract Services Billing</i></b>				
Administrative	1,232.87	4,931.48	3,583.92	1,347.56
Indirect/Overhead	976.81	3,907.24	2,839.59	1,067.65
Maintenance/Operations/Supplies	35,813.65	115,147.01	62,519.69	52,627.32
<b>Total FB-GCSD Billing</b>	<b>38,023.33</b>	<b>123,985.73</b>	<b>68,943.20</b>	<b>55,042.53</b>
<b><i>Contract Services Expenses</i></b>				
Employee Wages	17,346.58	55,351.60	30,226.88	25,124.72
Employee Benefits	7,508.52	24,603.04	14,716.70	9,886.34
Operations & Maintenance Expenses	3,501.26	17,154.17	1,664.64	15,489.53
General & Administrative Expenses	469.43	9,003.69	7,816.30	1,187.39
<b>Total FB-GCSD Expenses</b>	<b>28,825.79</b>	<b>106,112.50</b>	<b>54,424.52</b>	<b>51,687.98</b>
<b><i>NET Fieldbrook Contract Services</i></b>	<b>9,197.54</b>	<b>17,873.23</b>	<b>14,518.68</b>	<b>3,354.55</b>

**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: Chris Harris  
Date: November 14, 2024  
Re: Draft Audit for the year ended June.30, 2023 (FY22/23)

**Discussion**

For the audit of fiscal year 2022/23 (FY23), staff worked with Anahi Cisneros and Michael O’Conner from O’Conner & Company, located in Novato, California. Staff was once more very appreciative of the support and assistance received from Mr. O’Conner and his staff for this audit year.

The FY23 audit was successful and there were no audit findings – this is considered a “clean opinion.”

There was one prior year recommendation listed regarding formalizing a capitalization policy for GASB 87 (Leases) and GASB 96 (IT Subscriptions). Staff has worked to create these policies which will be brought for Board approval in the near future.

**Review**

The Audit Committee is scheduled to meet with Mr. O’Conner via Zoom on Wednesday, November 13<sup>th</sup>. Any changes, questions, or suggestions that arise from this meeting will be brought to the full Board during the November 14<sup>th</sup> Board Meeting.

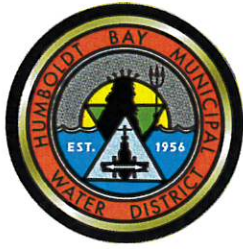
Mr. O’Conner will also be attending the Board Meeting on November 14<sup>th</sup> via Zoom and will address any additional questions and comments.

**Recommendation**

Staff recommends the Board follow the Audit Committee’s recommendation.

**Attachments**

DRAFT – Management Representation Letter  
DRAFT - Board of Directors and Management Report FYE 6/30/2023  
DRAFT – Audit Report FYE 6/30/2023



## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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### BOARD OF DIRECTORS

MICHELLE FULLER, PRESIDENT  
DAVID LINDBERG, VICE PRESIDENT  
J. BRUCE RUPP, SECRETARY-TREASURER  
SHERI WOO, DIRECTOR  
TOM WHEELER, DIRECTOR

### GENERAL MANAGER

JOHN FRIEDENBACH

November 14, 2024

O'Connor and Company  
1701 Novato Blvd., Suite 302  
Novato, CA 94947

We are providing this letter in connection with your audit of the basic financial statements of Humboldt Bay Municipal Water District as of June 30, 2023, and for the year then ended, for the purpose of expressing an opinion as to whether the basic financial statements present fairly, in all material respects, the respective financial position of the business-type activities and the major fund of Humboldt Bay Municipal Water District and the respective changes in financial position in conformity with U.S. generally accepted accounting principles. We confirm that we are responsible for the fair presentation of the previously mentioned basic financial statements in conformity with U.S. generally accepted accounting principles. We are also responsible for adopting sound accounting policies, establishing, and maintaining effective internal control, and preventing and detecting fraud.

We understand that you performed the following non-attest services. Your firm audit team prepared the trial balance for use during the audit and that your preparation of the trial balance was limited to formatting the information in Humboldt Bay Municipal Water District's summary trial balance into a working trial balance. Also, as part of your audit, you prepared the draft basic financial statements and drafted the related notes from the trial balance. We have designated a competent management-level individual, Chris Harris, to oversee your non-attest services and have made all management decisions and performed all management functions. We have reviewed, approved, and accepted responsibility for those basic financial statements, audit adjustments, depreciation calculations and related notes and believe they are adequately supported by the books and records of Humboldt Bay Municipal Water District.

Certain representations in this letter are described as being limited to matters that are material. Items are considered material if they involve an omission or misstatement of accounting information that, considering surrounding circumstances, makes it probable that the judgment of a reasonable person relying on the information would be changed or influenced by the omission or misstatement. An omission or misstatement that is monetarily small in amount could be considered material because of qualitative factors.

We confirm, to the best of our knowledge and belief, the following representations made to you during your audit(s):

1. The basic financial statements referred to above are fairly presented in conformity with U.S. generally accepted accounting principles and include all properly classified funds and other financial information of the primary government and all component units required by U.S. generally accepted accounting principles to be included in the financial reporting entity.
2. We have fulfilled our responsibilities, as set out in the terms of the audit engagement letter, including our responsibility for the preparation and fair presentation of the financial statements in accordance with U.S. GAAP and for preparation of the supplementary information in accordance with the applicable criteria.
3. We have made available to you all:

- a. Financial records and related data [and all audit or relevant monitoring reports, if any, received from funding sources].
  - b. Minutes of the meetings of Humboldt Bay Municipal Water District Board of Directors or summaries of actions of recent meetings for which minutes have not yet been prepared.
  - c. Access to all information, of which we are aware, that is relevant to the preparation and fair presentation of the financial statements, such as records (including information obtained from outside of the general and subsidiary ledgers), documentation, and other matters, and all audit or relevant monitoring reports, if any, received from funding sources.
  - d. Additional information that you have requested from us for the purpose of the audit.
  - e. Unrestricted access to persons within Humboldt Bay Municipal Water District from whom you determined it necessary to obtain audit evidence.
4. There have been no communications from regulatory agencies concerning noncompliance with, or deficiencies in, financial reporting practices.
  5. There are no material transactions that have not been properly recorded in the accounting records underlying the basic financial statements.
  6. We acknowledge our responsibility for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error. The financial statements are not materially misstated due to fraud, error or noncompliance with laws and regulations.
  7. The effects of uncorrected misstatements are immaterial, both individually and in aggregate, to the financial statements for each opinion unit.
  8. Related party relationships and transactions, including revenues, expenditures/expenses, loans, transfers, leasing arrangements, and guarantees, and amounts receivable from or payable to related parties have been appropriately accounted for and disclosed in accordance with U.S. GAAP.
  9. Adjustments or disclosures have been made for all events, including instances of noncompliance, after the date of the financial statements that would require adjustment to or disclosure in the financial statements or in the schedule of findings and questioned costs.
  10. We acknowledge our responsibility for the design and implementation of programs and controls to prevent and detect fraud.
  11. We have assessed the risk that the financial statements may be materially misstated because of fraud. The results of our risk assessment are that the financial statements are not materially misstated as the result of fraud.
  12. We have no knowledge of any fraud or suspected fraud affecting Humboldt Bay Municipal Water District involving:
    - a. Management,
    - b. Employees who have significant roles in internal control, or
    - c. Others where fraud could have a material effect on the basic financial statements.
  13. We have no knowledge of any allegations of fraud or suspected fraud affecting Humboldt Bay Municipal Water District received in communications from employees, former employees, analysts, regulators, or others.
  14. We have no knowledge of any employees or governing board members working in collusion to circumvent or override internal controls.
  15. Humboldt Bay Municipal Water District's assets are properly insured against the risk of loss and damage from acts of employee dishonesty and fraud.
  16. Bank and investment statements and related reconciliations are reviewed each month by a responsible official and we are not aware of any unauthorized transactions reported in our monthly bank and investment statements.
  17. We are unaware of any unauthorized, erroneous or fraudulent credit or debit card transactions and electronic transfers.
  18. We have taken timely and appropriate steps to remedy identified and suspected fraud or noncompliance with provisions of laws, regulations, contracts, and grant agreements that you have reported to us.
  19. We have identified and disclosed to you all instances of identified and suspected fraud and noncompliance with provisions of laws, regulations, contracts, and grant agreements that we believe have a material effect on the financial statements.



20. We have a process to track the status of audit findings and recommendations (if any).
21. Humboldt Bay Municipal Water District has no plans or intentions that may materially affect the carrying value or classification of assets, liabilities, or fund equity.
22. We have disclosed to you the names of the Humboldt Bay Municipal Water District's related parties and all the related party relationships and transactions, including any side agreements.
23. The following, if any, have been properly recorded or disclosed in the basic financial statements:
  - a. Related party transactions, including revenues, expenditures/expenses, loans, transfers, leasing arrangements, and guarantees, and amounts receivable from or payable to related parties.
  - b. Guarantees, whether written or oral, under which Humboldt Bay Municipal Water District is contingently liable.
  - c. All accounting estimates that could be material to the basic financial statements, including the key factors and significant assumptions underlying those estimates, and we believe the estimates are reasonable in the circumstances.
24. We are responsible for compliance with the laws, regulations, and provisions of contracts and grant agreements applicable to us, including tax or debt limits and debt contracts; and we have identified and disclosed to you all laws, regulations and provisions of contracts and grant agreements that we believe have a direct and material effect on the determination of financial statement amounts, including legal and contractual provisions for reporting specific activities in separate funds.
25. There are no estimates that may be subject to a material change in the near term that have not been properly disclosed in the basic financial statements. We understand that *near term* means the period within one year of the date of the basic financial statements. In addition, we have no knowledge of concentrations existing at the date of the basic financial statements that make Humboldt Bay Municipal Water District vulnerable to the risk of severe impact that have not been properly disclosed in the basic financial statements. We understand that *concentrations* include individual or group concentrations of contributors, grantors, clients, customers, suppliers, lenders, products, services, fund-raising events, sources of labor or materials, licenses or other rights, or operating areas or markets. We further understand that *severe impact* means a significant financially disruptive effect on the normal functioning of Humboldt Bay Municipal Water District. We have identified all accounting estimates that could be material to the basic financial statements, including the key factors and significant assumptions underlying those estimates, and we believe the estimates are reasonable in the circumstances.
26. We have identified the most sensitive estimate(s) affecting the basic financial statements:
  - Accrual and disclosure of compensated absences.
  - Capital asset lives and depreciation expense.
  - Actuarial assumptions for retiree pension and retiree health plan disclosure.
  - Fair value of investments and financial instruments.
27. There were no significant changes from prior years in methods or assumptions, outcomes, or degrees of uncertainty.
28. The methods, significant assumptions, and data used in making accounting estimates and their related disclosures are appropriate to achieve recognition, measurement, or disclosure that is reasonable in accordance with U.S. GAAP.
29. We have identified to you any previous audits, attestation engagements, and other studies related to the audit objectives and whether related recommendations have been implemented.
30. Humboldt Bay Municipal Water District has no plans or intentions that may materially affect the carrying value or classification of assets, deferred outflows of resources, liabilities, deferred inflows of resources, and fund balance or net position.
31. We have identified and disclosed to you all instances that have occurred or are likely to have occurred, of abuse that could be quantitatively or qualitatively material to the financial statements or other financial data significant to the audit objectives.
32. There are no:
  - a. Violations or possible violations of budget ordinances, laws, and regulations (including those pertaining to adopting, approving, and amending budgets), provisions of contracts and grant agreements, tax or debt limits, and any related debt covenants whose effects should be considered for disclosure in the basic financial statements or as a basis for recording a loss contingency, or for reporting on noncompliance.

- b. Unasserted claims or assessments that our lawyer has advised us are probable of assertion and must be disclosed in accordance with Financial Accounting Standards Board (FASB) Statement No. 5, *Accounting for Contingencies*.
  - c. Other liabilities or gain or loss contingencies that are required to be accrued or disclosed by FASB Statement No. 5.
  - d. Reservations or designation of fund equity that was not properly authorized and approved.
  - e. We have no knowledge of any instances of noncompliance or suspected noncompliance with provisions of laws, regulations, contracts, or grant agreements, or waste or abuse whose effects should be considered when preparing financial statements.
33. There have been no communications from regulatory agencies concerning noncompliance with, or deficiencies in, financial reporting practices.
  34. Humboldt Bay Municipal Water District has satisfactory title to all owned assets, and there are no liens or encumbrances on such assets nor has any asset been pledged as collateral.
  35. Humboldt Bay Municipal Water District has complied with all aspects of contractual agreements that would have a material effect on the basic financial statements in the event of noncompliance.
  36. The basic financial statements include all component units as well as joint ventures with an equity interest, and properly disclose all other joint ventures and other related organizations.
  37. The basic financial statements properly classify all funds and activities in accordance with GAAP.
  38. We have appropriately identified, recorded, and disclosed all leases in accordance with GASBS No. 87.
  39. We have appropriately disclosed or recognized conduit debt obligations and/or certain arrangements associated with conduit debt obligations in accordance with GASBS No. 91.
  40. We have appropriately identified, recorded, and disclosed subscription-based information technology arrangements in accordance with GASBS No. 96.
  41. The financial statements properly classify all funds and activities in accordance with GASBS No. 34, as amended.
  42. All funds that meet the quantitative criteria in Governmental Accounting Standards Board (GASB) Statement Nos. 34 and 37 for presentation as major are identified and presented as such and all other funds that are presented as major are particularly important to financial statement users.
  43. Components of net position (net investment in capital assets; restricted; and unrestricted) and classifications of fund balance (non-spendable, restricted, committed, assigned, and unassigned) are properly classified and, if applicable, approved.
  44. Investments, derivative instrument transactions, and land and other real estate held by endowments are properly valued.
  45. Provisions for uncollectible receivables have been properly identified and recorded. All loans made by Humboldt Bay Municipal Water District or another entity acting on behalf of Humboldt Bay Municipal Water District are properly identified, recorded and reported in Humboldt Bay Municipal Water District's basic financial statements.
  46. Expenses have been appropriately classified in or allocated to functions and programs in the statement of activities, and allocations have been made on a reasonable basis.
  47. Revenues are appropriately classified in the statement of activities within program revenues, general revenues, contributions to term or permanent endowments, or contributions to permanent fund principal.
  48. Interfund, internal, and intra-entity activity and balances have been appropriately classified and reported.
  49. Special and extraordinary items are appropriately classified and reported (if any).
  50. Deposits and investment securities and derivative instrument transactions are properly classified as risk and are properly disclosed.
  51. Capital assets, including infrastructure assets, are properly capitalized, reported, and, if applicable, depreciated, or amortized.
  52. We have appropriately disclosed Humboldt Bay Municipal Water District's policy regarding whether to first apply restricted or unrestricted resources when an expense is incurred for purposes for which both restricted and unrestricted net position is available and have determined that net position is properly recognized under the policy.

53. We are following our established accounting policy regarding which resources (that is, restricted, committed, assigned, or unassigned) are spent first for expenditures for which more than one resource classification is available. That policy determines the fund balance classifications for financial reporting purposes.
54. We acknowledge our responsibility for the required supplementary information (RSI). The RSI is measured and presented within prescribed guidelines and the methods of measurement and presentation have not changed from those used in the prior period. We have disclosed to you any significant assumptions and interpretations underlying the measurement and presentation of the RSI.
55. With respect to the supplemental information:
- a. We acknowledge our responsibility for presenting the supplemental information in accordance with accounting principles generally accepted in the United States of America, and we believe the supplemental information, including its form and content, is fairly presented in accordance with accounting principles generally accepted in the United States of America. The methods of measurement and presentation of the supplemental information listed in the table of contents in Humboldt Bay Municipal Water District's financial statements have not changed from those used in the prior period, and we have disclosed to you any significant assumptions or interpretations underlying the measurement and presentation of the supplemental information.
  - b. If the supplemental information is not presented with the audited financial statements, we will make the audited financial statements readily available to the intended users of the supplementary information no later than the date we issue the supplementary information and the auditor's report thereon.
56. All copies of original documents submitted to you have not been improperly altered or changed.
57. We have prepared the Management's Discussion and Analysis, and it is fairly presented as required by the Governmental Accounting Standards Board.
58. We are not aware of any off-balance sheet or general ledger accounts and transactions.
59. We are not aware of any errors in the pension plan census data for all plans.
60. We are not aware of any potential risks or financial reporting errors related to our information systems and related controls over data and related access. We are properly insured against the risk of cyber-attack and data loss.
61. All material transactions have been recorded in the accounting records and are reflected in the financial statements and the schedule of expenditures of federal awards (if applicable).
62. We have identified to you any investigations or legal proceedings that have been initiated with respect to the period under audit.
63. The effects of all known actual or possible litigation, claims, and assessments have been accounted for and disclosed in accordance with U.S. GAAP.
64. We have disclosed to you all known actual or possible litigation, claims, and assessments whose effects should be considered when preparing the financial statements.
65. We did consult with an attorney regarding litigation during the fiscal year ending June 30, 2023 regarding litigation with Steve Morris Logging and Construction regarding logging on District property. At the date of this letter the outcome of this litigation cannot be determined. We did not consult with an attorney regarding any other potential litigation during the fiscal year ending June 30, 2023 and through the date of this letter.
66. We have provided our views on reported findings, conclusions, and recommendations, as well as our planned corrective actions, for the report (if any).
67. We have reviewed the Board of Directors & Management Report (Report to Governance) and agree with the information reported.
68. We are not aware of any indicators, information, or data that the Humboldt Bay Municipal Water District will not be able to pay their bills in a timely manner.

To the best of our knowledge and belief, no events, including instances of noncompliance, have occurred after the balance sheet date and through the date of this letter that would require adjustment to or disclosure in the basic financial statements.

Signed: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

DRAFT



**DRAFT**

**10/9/2024**

To be used only for management discussion purposes; engagement is incomplete; this draft is subject to final review and possible revision. \*\*Report/Letter date is TENTATIVE-TBD\*\*

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
BOARD OF DIRECTORS & MANAGEMENT REPORT**

**For the Year Ended  
JUNE 30, 2023**

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Board of Directors  
Humboldt Bay Municipal Water District  
Eureka, California

In planning and performing our audit of the financial statements of the business-type activities of Humboldt Bay Municipal Water District as of and for the year ended June 30, 2023, in accordance with auditing standards generally accepted in the United States of America, we considered Humboldt Bay Municipal Water District's system of internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Humboldt Bay Municipal Water District's internal control. Accordingly, we do not express an opinion on the effectiveness of Humboldt Bay Municipal Water District's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis.

Our consideration of internal control was for the limited purpose described in the first paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses. Given these limitations during our audit, we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses and significant deficiencies may exist that have not been identified.

During our audit, we noted certain matters involving internal controls and other operational matters that are presented for your consideration in this report. We will review the status of these comments during our next audit engagement. Our comments and recommendations, all of which have been discussed with appropriate members of management, are not intended to be all-inclusive, but rather represent those matters that we considered worthy of your consideration. Our comments and recommendations are submitted as constructive suggestions to assist you in strengthening controls and procedures; they are not intended to reflect on the honesty or integrity of any employee. We will be pleased to discuss these comments in further detail at your convenience, to perform any additional study of these matters, or to assist Humboldt Bay Municipal Water District in implementing the recommendations.

This report is intended solely for the information and use of the management and Board of Directors of Humboldt Bay Municipal Water District and is not intended to be, and should not be, used by anyone other than these specified parties.

We thank Humboldt Bay Municipal Water District's staff for its cooperation during our audit.

O'Connor & Company

Novato, California

To the Board of Directors  
Humboldt Bay Municipal Water District  
Eureka, California

We have audited the financial statements of Humboldt Bay Municipal Water District for the year ended June 30, 2023. Professional standards require that we provide you with the following information related to our audit.

Our Responsibility under U.S. Generally Accepted Auditing Standards

As stated in our engagement letter dated June 3, 2024, our responsibility, as described by professional standards, is to plan and perform our audit to obtain reasonable, but not absolute, assurance that the financial statements are free of material misstatement and are fairly presented in accordance with U.S. generally accepted accounting principles. Because an audit is designed to provide reasonable, but not absolute assurance and because we did not perform a detailed examination of all transactions, there is a risk that material misstatements may exist and not be detected by us.

As part of our audit, we considered the internal control of Humboldt Bay Municipal Water District. Such considerations were solely for the purpose of determining our audit procedures and not to provide any assurance concerning such internal control.

**Qualitative Aspects of Accounting Practices**

Management is responsible for the selection and use of appropriate accounting policies. In accordance with the terms of our engagement letter, we will advise management about the appropriateness of accounting policies and their application. The significant accounting policies used by Humboldt Bay Municipal Water District are described in Note 1 to the financial statements. No new accounting policies were adopted, and the application of existing policies was not changed during the year.

The following pronouncements became effective, but did not have a material effect on the financial statements:

GASB 96 – IT Subscription Arrangements  
GASB 91 – Conduit Debt Obligations  
GASB 94 – Public-Private and Public-Public and Availability Payment Arrangements  
GASB 93 – Omnibus 2022, paragraphs 11-25

**Unusual Transactions, Controversial or Emerging Areas**

We noted no transactions entered by Humboldt Bay Municipal Water District during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. We evaluated the key factors and assumptions used to develop the accounting estimates in determining that they are reasonable in relation to the financial statements taken as a whole. The most sensitive estimates affecting the financial statements were:

- Accrual and disclosure of compensated absences.
- Capital asset lives and depreciation expense.
- Pension plan and post employment health benefits actuarial valuations.
- Fair value of investments and financial instruments.

**Disclosures**

The financial statement disclosures are neutral, consistent, and clear.



To the Board of Directors  
Humboldt Bay Municipal Water District – Page 2

**Difficulties Encountered in Performing the Audit**

We encountered no significant difficulties in dealing with management in performing and completing our audit.

**Corrected and Uncorrected Misstatements**

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. Management has corrected all such misstatements. In addition, 3 of the misstatements detected because of audit procedures and corrected by management were material, either individually or in the aggregate, to each opinion unit's financial statements taken as a whole

**Disagreements with Management**

For purposes of this letter, professional standards define a disagreement with management as a financial accounting, reporting, or auditing matter, whether resolved to our satisfaction, that could be significant to the financial statements or the auditors' report. We are pleased to report that no such disagreements arose during our audit.

**Management Representations**

We have requested certain representations from management that are included in the management representation letter dated [DATE].

**Management Consultations with Other Independent Accountants**

In some cases, management may decide to consult with other accountants about auditing and accounting matters, like obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to Humboldt Bay Municipal Water District's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

**Other Audit Findings or Issues**

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as Humboldt Bay Municipal Water District's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

**Other Matters**

We applied certain limited procedures to the Management's Discussion and Analysis, Schedule of the Proportionate Share of Net Pension Liability (Asset), the Schedule of Contributions, Schedule of Change in the Net OPEB Liability and Related Ratios, and the Schedule of Humboldt Bay Municipal Water District's Contributions – OPEB, which is required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

This report is intended solely for the information and use of management and Board of Directors of Humboldt Bay Municipal Water District and is not intended to be, and should not be, used by anyone other than these specified parties.

Humboldt Bay Municipal Water District  
BOARD OF DIRECTORS & MANAGEMENT REPORT  
For the Year Ended June 30, 2023

**Current Year Observations**

There are no current year observations.

**Prior Years Observations**

1) Lease and IT Subscription Arrangements Capitalization Policy

Observation:

Humboldt Bay Municipal Water District implemented Financial Accounting Standards Board GASB 87, *Leases*, which became effective for the year ended June 30, 2022. This new standard requires leases to be capitalized as intangible assets. In compliance with the new accounting statement Humboldt Bay Municipal Water District should consider formalizing a capitalization policy for leases like their capitalization policy for capital assets. In addition, the District implemented GASB 96, IT subscription arrangements, which became effective for the year ended June, 30, 2023.

Recommendation:

We recommended Humboldt Bay Municipal Water District consider formalizing a capitalization policy for leases liabilities and the right to use assets and IT subscription arrangements.

Status:

Management is in the process of formalizing a policy.

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**DRAFT**

**10/18/2024**

To be used only for management discussion purposes; engagement is incomplete; this draft is subject to final review and possible revision. \*\*Report/Letter date is TENTATIVE-TBD\*\*

**HUMBOLDT BAY MUNICIPAL  
WATER DISTRICT**

**EUREKA, CALIFORNIA**

**ANNUAL FINANCIAL REPORT**

**JUNE 30, 2023**

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## INDEPENDENT AUDITORS' REPORT

To the Board of Directors  
Humboldt Bay Municipal Water District  
Eureka, California

### Report on the Audit of the Financial Statements

#### Opinions

We have audited the accompanying financial statements of the business-type activities of Humboldt Bay Municipal Water District as of and for the year ended June 30, 2023 and the related notes to the financial statements, which collectively comprise Humboldt Bay Municipal Water District's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities of Humboldt Bay Municipal Water District as of June 30, 2023 and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

#### Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Humboldt Bay Municipal Water District, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

#### Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about Humboldt Bay Municipal Water District's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

#### Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

To the Board of Directors  
Humboldt Bay Municipal Water District – Page 2

In performing an audit in accordance with generally accepted auditing standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Humboldt Bay Municipal Water District's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about Humboldt Bay Municipal Water District's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

#### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis (pages 3-10) and the required supplemental information (pages 32-34) listed in the table of contents be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### Report on Summarized Comparative Information

We have previously audited Humboldt Bay Municipal Water District's June 30, 2022 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated June 21, 2024. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2022, is consistent, in all material respects, with the audited financial statements from which it has been derived.

O'Connor & Company

Novato, California



Humboldt Bay Municipal Water District  
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)  
For the Year Ended June 30, 2023

The purpose of this section of the financial statements is to present management's discussion and analysis of the Humboldt Bay Municipal Water District's (District) financial performance during the fiscal year that ended on June 30, 2023. We recommend that readers review this in conjunction with the remainder of the financial statements.

### **INTRODUCTION AND BACKGROUND**

We would first like to provide a brief overview of the District and the customers served which will provide a context for the financial statements and the discussion which follows.

#### **The Regional Water System:**

The District was formed in 1956 pursuant to the Municipal Water District Act of the California Water Code. The District completed construction of the regional water system in 1961, and service commenced to the Cities of Eureka and Arcata and two pulp mills on the Samoa Peninsula. Since the initial construction, several additions and improvements to the regional system have been made, and additional wholesale customers have joined the regional system. Since inception, this regional water system has efficiently and reliably served the municipal and industrial water needs of customers in the Humboldt Bay region.

The regional water system includes the following components: R.W. Matthews Dam (which forms Ruth Lake) and the Gosselin Power House, in Trinity County; and the following facilities in Humboldt County: 1) diversion works on the Mad River northeast of Arcata capable of supplying 75 million gallons per day, 2) treatment facilities, including the Lloyd L. and Barbara Hecathorn Turbidity Reduction Facility, 3) over 35 miles of pipeline infrastructure around the Humboldt Bay area to deliver water to the wholesale customers, and 4) extensive communication and control systems to operate and control the regional system including the John R. Winzler Operations and Control Center.

#### **Customers Served and Associated Wholesale Water Contracts:**

The District supplies domestic water to seven municipal agencies on a wholesale basis. The municipalities served by the District are the Cities of: Arcata, Blue Lake and Eureka, and the Community Services Districts of: Fieldbrook/Glendale, Humboldt, Manila and McKinleyville. Via the wholesale relationship, the District serves water to an estimated residential population of 94,000 (approximately 65% of the entire County), and to numerous businesses, industries and educational institutions.

The District provides retail water service to about 200 customers who reside outside the service territory of other water purveyors, but are located in close proximity to District facilities. Approximately 100 of these customers are located on the Samoa Peninsula. These residents have formed the Peninsula Community Services District to perform water, sewer, fire protection, parks, and recreation services. Once operational, the District retail customers located within Peninsula Community Services District's jurisdictional boundaries will cease being retail customers of the District. The financial impact on the District has not been analyzed. Currently there is no definitive date to transfer these District retail customers to the Peninsula CSD.

The District also has facilities to supply untreated water to customers on the Samoa Peninsula. The District was serving one wholesale industrial customer (pulp mill) until it ceased operations on October 15, 2008. Recently there is renewed interest in the industrial raw water that the District is able to supply to the Samoa Peninsula. There are several other entities involving aqua culture that are currently considering siting on the Samoa Peninsula due in part to the availability of the raw water from the District.

Ultimately, this increased economic and water dependent activity on the Samoa Peninsula is expected to revitalize the District's industrial water system albeit at a much lower consumption rate than experienced by the former pulp mills.

The District has long-term contracts in place with each of its seven wholesale municipal customers. These 20-year contracts were amended in early 2017 and have an effective date of July 1, 2017. These contracts will be in place until June 30, 2037, with an opportunity to extend them for another ten years.

Humboldt Bay Municipal Water District  
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)  
 For the Year Ended June 30, 2023

These contracts define the terms and conditions by which the District provides water service to its customers. The contracts specify that all operating, maintenance and capital costs associated with the regional water system are paid for by the wholesale customers. The contracts also specify the way these costs are allocated among the wholesale customers. Furthermore, they specify that most revenues received by the District, other than those associated with wholesale water sales, are credited back to the wholesale customers, and thus offset the costs that the wholesale customers otherwise pay. For fiscal year 22-23 examples of such revenues which are credited back to the wholesale customers include the District's share of 1% property taxes, a portion of power sales from the hydro-electric facility, interest income, revenues associated with retail water service, and other miscellaneous revenues.

A summary of the current cost allocation provisions of the wholesale contract is as follows:

Type of Cost	Municipal Customers' Cost Share	Industrial Customer(s) Cost Share
Debt Service for Turbidity Reduction Facility	100%	0%
Operation, Maintenance and Capital Expenditures associated with drinking water treatment facilities (i.e., facilities associated with providing safe drinking water in accordance with federal and state requirements).	100%	0%
Operation, Maintenance and Capital Expenditures associated with all other aspects of the regional water supply, pumping and distribution system (other than power for pumping water).  *Change in % due to pulp mill closure.	55% increased to 100% effective April 1, 2009*	45% decreased to 0% effective April 1, 2009*
Power Costs for Pumping Water	In proportion to actual power use.	n/a

Additionally, the wholesale contracts provide that "Additions to Reserves" may be charged to the wholesale customers should the District need to replenish its General Reserve level. During fiscal year 2022-23, the charges for additions to reserves to the wholesale customers was \$350,000.

### **OVERVIEW OF THE FINANCIAL STATEMENTS**

This discussion and analysis is intended to serve as an introduction to the District's basic financial statements. The District's basic financial statements are comprised of several components: a) the Statements of Net Position, b) the Statements of Revenues, Expenses, and Changes in Net Position, and c) the Statements of Cash Flows. These financial statements present the District's financial position on an enterprise fund basis. An enterprise fund accounts for goods or services which are provided to outside parties – in the District's case, this is wholesale and retail water service.



Humboldt Bay Municipal Water District  
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)  
For the Year Ended June 30, 2023

### **BASIC FINANCIAL STATEMENTS**

The financial statements are designed to provide readers with a broad overview of the District's finances, in a manner like a private-sector business. These statements offer short- and long-term financial information about District activities.

The Statement of Net Position includes all of the District's assets and liabilities and provides information about the nature and amounts of investments in resources (assets) and the obligations to District creditors (liabilities). It also provides the basis for evaluating the capital structure of the District and assessing the liquidity and financial flexibility of the District.

All the current year's revenues and expenses are accounted for in the Statement of Revenues, Expenses, and Changes in Net Position. This statement measures the results of the District's operations over the past year and can be used to determine the District's general financial well-being and whether the District has recovered its costs through its water charges.

The final financial statement is the Statement of Cash Flows. The primary purpose of this statement is to provide information about the District's cash receipts and cash payments during the reporting period. The statement reports cash receipts, cash payments, and the changes in cash resulting from operations and investments. It also provides answers to such questions as where cash came from, what was cash used for, and what was the change in cash balance during the reporting period.

There may be minor rounding differences between the following tables and the financial statements.

### **FINANCIAL HIGHLIGHTS**

- The District's net position was \$36,334,694 as of June 30, 2023, an increase of \$2,008,331 compared to June 30, 2022.
- Revenues were \$9,747,716, a decrease of \$1,038,071 from FY 2021-22.
- Expenses were \$7,739,385, an increase of \$52,981 from FY 2021-22.

### **SINGLE AUDIT ACT REPORT**

The District was not subject to the Single Audit Act for FY2022-23. This is a separate audit that focuses specifically on Federal funding sources when an agency expends/receives funds more than \$750,000 over the course of a fiscal year. The Single Audit focuses specifically on auditing the funds spent/received from the Federal Government – for Humboldt Bay Municipal Water District, this includes funds allocated by FEMA for Hazard Mitigation Grants.

### **DISCUSSION AND ANALYSIS**

Our analysis of the District begins with the Statements of Net Position on page 12 of the financial statements. The Statements of Net Position present information on all of the District's assets and liabilities, with the difference between the two reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the District is improving or deteriorating. A summary of the District's Condensed Statements of Net Position is presented in Table 1 below.

Humboldt Bay Municipal Water District  
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)  
 For the Year Ended June 30, 2023

<b>ASSETS</b>	<b>FY 2022-2023</b>	<b>FY 2021-2022</b>	<b>Change</b>	
			<b>\$</b>	<b>%</b>
Current Assets	\$ 9,211,596	\$ 9,221,837	\$ (10,241)	-0.11%
Restricted Cash & Investments	6,224,802	5,876,079	348,723	5.93%
Land, Property & Equipment (net Accum. Depr.)	27,972,022	27,800,720	171,302	0.62%
<b>Total Assets</b>	<b>43,408,420</b>	<b>42,898,636</b>	<b>509,784</b>	<b>1.19%</b>
<b>Deferred Outflows of Resources</b>	<b>2,127,303</b>	<b>973,874</b>	<b>1,153,429</b>	<b>118.44%</b>
<b>LIABILITIES</b>				
Current Liabilities	1,154,236	1,807,102	(652,866)	-36.13%
Post-Retirement Health Benefits Obligation	2,271,571	2,593,559	(321,988)	-12.41%
Net Pension Liability	4,126,146	1,808,936	2,317,210	128.10%
Long-term Debt	-	273,668	(273,668)	-100%
<b>Total Liabilities</b>	<b>7,551,953</b>	<b>6,483,265</b>	<b>1,068,688</b>	<b>16.48%</b>
<b>Deferred Inflows of Resources</b>	<b>1,649,076</b>	<b>3,062,882</b>	<b>(1,413,806)</b>	<b>-46.16%</b>
<b>NET POSITION</b>				
Net Investment in Capital Assets	27,698,354	26,979,715	718,639	2.66%
Restricted (for debt service)	820,413	794,985	25,428	3.20%
Restricted (for capital projects)	4,830,848	4,547,232	283,616	6.24%
Restricted funds	1,606,645	908,608	698,037	76.82%
Unrestricted	1,378,434	1,095,823	282,611	25.79%
<b>TOTAL NET POSITION</b>	<b>\$ 36,334,694</b>	<b>\$ 34,326,363</b>	<b>\$2,008,331</b>	<b>5.85%</b>

As can be seen from the table above, the net position as of June 30, 2023 was \$36,334,694, an increase of \$2,008,331 as compared to June 30, 2022.

The largest portion of the District's net position is its investment in capital assets called property and equipment (e.g., land, buildings, equipment, and water system infrastructure), less any related debt used to acquire those assets that is still outstanding. The District uses these capital assets to provide water services to its wholesale and retail customers, and consequently, these assets are not available for future spending. Although the District's investment in its capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to satisfy these liabilities.

The Statements of Revenues, Expenses, and Changes in Net Position (page 13) present information showing how the District's net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will result in cash flows in future fiscal periods (e.g. uncollected taxes or earned but unused vacation leave).



Humboldt Bay Municipal Water District  
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)  
 For the Year Ended June 30, 2023

A summary of the District's Condensed Statements of Revenues, Expenses, and Changes in Net Position is presented in Table 2.

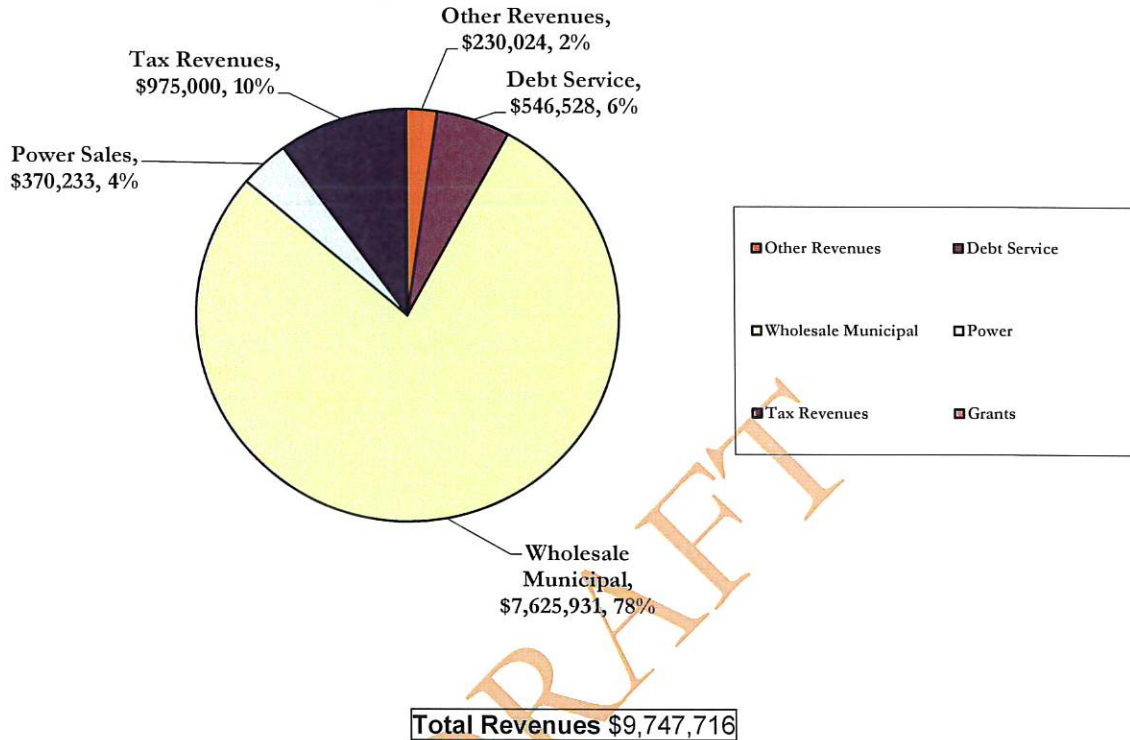
	FY 2022-2023	FY 2021-2022	Change	
			\$	%
<b>REVENUES</b>				
<b>*Operating:</b>				
Water Sales	\$ 7,625,931	\$ 7,967,964	\$ (342,033)	-4.29%
Power Sales	370,233	423,988	(53,755)	-12.68%
SRF Debt Service Receipt	546,528	79,361	467,167	588.66%
Other Operating	-	1,171,201	(1,171,201)	-100.00%
<b>*Non-Operating:</b>				
Taxes	975,000	1,133,337	(158,337)	-13.97%
Interest Income	230,024	9,936	220,088	2215.06%
<b>Total Revenues</b>	<b>9,747,716</b>	<b>10,785,787</b>	<b>(1,038,071)</b>	<b>-9.62%</b>
<b>EXPENSES</b>				
Operating expense	6,611,234	6,604,486	6,748	0.10%
Non-operating expense	30,425	12,888	17,537	136.07%
Depreciation	1,429,352	1,410,651	18,701	1.33%
Less Reimbursements	(331,626)	(341,621)	9,995	-2.93%
<b>Total Expenses</b>	<b>7,739,385</b>	<b>7,686,404</b>	<b>52,981</b>	<b>-0.69%</b>
<b>Change in Net Position</b>	<b>2,008,331</b>	<b>3,099,383</b>	<b>(1,091,052)</b>	<b>-35.20%</b>
Beginning Net Position	34,326,363	31,226,980	3,099,383	9.93%
<b>Ending Net Position</b>	<b>\$ 36,334,694</b>	<b>\$ 34,326,363</b>	<b>\$2,008,331</b>	<b>5.85%</b>

While the Statements of Net Position show the changes in financial position, the Statements of Revenues, Expenses, and Changes in Net Position explain the nature and source of these changes. As shown in Table 2, the change in net position increased by \$2,008,331, compared with the prior year. The changes in revenues and expenses which contributed to this change in net position are reflected in the above line-item detail.

As a supplement to the Statements of Revenues, Expenses, and Changes in Net Position, Chart 1 presents operating, and non-operating revenues earned in FY 2022-23 by category along with the proportionate share of the total revenue each category represents. The total revenues reflected in Chart 1 are \$9,747,716. The municipal customer receipts of \$546,528 for repayment of the District's SRF Loan for the Turbidity Reduction Facility, which is further described in the subsequent Long-Term Debt section and the grant funding receipts of \$0, are associated with repayment of long-term debt and special funding respectively and not current operations. The major fluctuations in revenues and expenses relate to the decreased grant funding and related expenditures. The power revenue decreased this year due to PG&E equipment failure.

Humboldt Bay Municipal Water District  
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)  
 For the Year Ended June 30, 2023

Chart 1 Revenues Received by Category for FY 2022-23



### PROPERTY AND EQUIPMENT

The District has invested approximately \$75,941,426 in a broad range of infrastructure for the regional water system. Table 3 presents a summary of the District's property and equipment. The total increase in the current year property and equipment in the amount of \$171,302 is mostly attributable to the large capital assets currently under construction.

<b>TABLE 3</b>				
<b>PROPERTY AND EQUIPMENT</b>				
	FY 2022-2023	FY 2021-2022	Change	
			\$	%
Buildings (includes land)	\$ 8,662,869	\$4,769,938	\$3,892,931	81.61%
Equip - Auto/Mobile/Office/Radio/Tools	3,346,385	3,137,219	209,166	6.67%
Water System Infrastructure (excludes land)	62,351,580	62,227,187	124,393	0.20%
<b>Total Property and Equipment</b>	<b>74,360,834</b>	<b>70,134,344</b>	<b>4,226,490</b>	<b>6.03%</b>
Less Accumulated Depreciation	(47,969,404)	(46,540,053)	(1,429,351)	3.07%
Add Projects in Progress	1,580,592	4,206,429	(2,625,837)	-62.42%
<b>Total Property &amp; Equipment (net of depr)</b>	<b>\$ 27,972,022</b>	<b>\$27,800,720</b>	<b>\$171,302</b>	<b>0.62%</b>



Humboldt Bay Municipal Water District  
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)  
For the Year Ended June 30, 2023

**LONG-TERM DEBT**

At June 30, 2023 year-end, the District has one long-term note payable outstanding for a total amount of \$273,668. This is the SRF Loan used to finance the Turbidity Reduction Facility. The SRF loan carries no interest (i.e., zero percent), and has a repayment term of 20 years. The initial SRF loan balance at its inception in 2004 was \$10,946,736. The debt service for the SRF Loan is paid in its entirety by the District's wholesale municipal customers in accordance with the wholesale water contracts (via Price Factor 1).

**DESCRIPTION OF CURRENTLY KNOWN FACTS OR CONDITIONS THAT MAY HAVE A SIGNIFICANT EFFECT ON THE FINANCIAL POSITION OR RESULTS OF OPERATIONS**

**Pulp Mill Closure**

On October 15, 2008 (FY2008-09), the District's only industrial customer, Evergreen Pulp, shut down its pulp mill. The pulp mill was sold on February 6, 2009, to Samoa Acquisition Corporation (SAC). The District had an interim agreement with the new owner until April 30, 2009. The District shut off the water supply to the mill on May 1, 2009. This industrial property was acquired by the Humboldt Bay Harbor Recreation and Conservation District for development. The Humboldt Bay Harbor Recreation and Conservation District has worked with the Humboldt County Redevelopment Agency to market the viability of this property over the past years. Nordic Aquafarms is currently in the permitting process for the development of a land-based seafood production facility. This will allow the District to again begin selling raw industrial water to the Samoa Peninsula.

In 2022 the County of Humboldt established an Enhanced Infrastructure Financing District (EIFD) on the Samoa Peninsula which encompasses approximately 2,243 acres located Southwest of the 255 Bridge outside of Eureka, CA. The Samoa Peninsula EIFD (the "EIFD") was created to facilitate infrastructure projects that create jobs, enhance the quality of life for visitors and residents, support existing and emerging industries, and help mitigate the impacts of climate change.

The EIFD facilitates the improvement of public infrastructure by leveraging property tax increment generated within the EIFD area.

Ultimately, this increased economic and water dependent activity on the Samoa Peninsula is expected to help revitalize the District's industrial water system albeit at a much lower consumption rate than experienced by the former pulp mills. Although the quantities will be significantly less than prior pulp-mill usage, the District looks forward to utilizing its industrial water system that has been idle for almost 10-years.

While previous pulp mills had been paying 45% of the District's operation, maintenance, and capital expenditure costs associated with all aspects of the regional water supply except for the drinking water treatment facilities, (for 2008-09, the mill's contribution to the cost of the regional water system would have been approximately \$1.1 million), due to the significantly less raw water that is anticipated to be needed by the new operations, this contribution by new businesses is anticipated to be significantly less.

Under the terms of the District's Ordinance 16 contracts, costs were shifted to the remaining wholesale customers (seven municipal agencies) beginning April 1, 2009. Whereas the municipalities had previously been paying 55% of costs, currently they now pay 100%.

Since the closure of the mill in 2009, the District has been diligent in searching for possible new customers or uses for the water that has been available. While there is current development interest activity on the Peninsula; it is anticipated to take several more years to complete infrastructure upgrades and construction.

**Capital Improvement Program**

The District has implemented a substantial capital improvement program (CIP) given the age of its infrastructure (50 years). Mechanisms to finance CIP projects include pursuing grant funding, issuing new long-term debt, and working with wholesale municipal customers to increase revenues through water rates.



Humboldt Bay Municipal Water District  
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)  
For the Year Ended June 30, 2023

The following infrastructure projects have been completed or are in process:

1. The Ranney Collector #3 Rehabilitation project. For financing purposes this was bundled with the Techite Pipeline Replacement project. Total projected funding needs of \$5,165,000 were met using a combination of Federal Emergency Management Agency (FEMA) grant funding, reserve funds, advance charges collected from the municipal customers, and bank loans.
2. The Emergency Intertie project was a multijurisdictional project led by the District. The project partners were: HBMWD, the City of Arcata, the City of Eureka and the McKinleyville Community Services District. This project installed new water transmission interconnections between the agencies to allow for water supply redundancy in the event of a supply line disruption. A State of California Department of Public Health Proposition 50 grant in the amount of \$3,648,550 was received for this project. The construction was completed during FY2014-15 and the assets created via this construction project were transferred to the respective agencies in accordance with the terms and conditions of the Special Facilities Agreement (May 3, 2013).
3. The next significant infrastructure project was the replacement of the 1MG domestic reservoir roof. This tank has been in service for almost fifty years and was showing signs of stress and corrosion. This project replaced the entire roof and repainted the reservoir to extend its' life another 40-50 years. This project was completed in FY2017-18. Funding for this project was a combination of advance charges collected from the municipal customers and by the District through water rates.
4. The replacement of the District's pipeline that crosses over the Mad River to serve the City of Blue Lake and the Fieldbrook-Glendale Community Services District was the next large CIP project. The completed project total was \$2,025,510. These funds were provided through the award of a State of California Department of Water Resources Proposition 84 grant via the North Coast Integrated Regional Water Management Plan, as well as the receipt of a FEMA Hazard Mitigation grant. This project was completed early FY2018-19.
5. The removal of the Surge Tower for the industrial line was completed in late FY 2018-19. This large tower had lost some of its structural integrity and it was feared that should the tower fall or collapse, due to its proximity to both the industrial and domestic water lines, significant damage and loss of service to municipal customers and their residents would occur. While this project was originally estimated to cost \$960,000, due to a revision of the project upon realization that the tower did not need to be replaced only removed, the final cost for this project was \$256,343 and was mostly (75%) funded by another FEMA Hazard Mitigation grant.
6. The relocation of the District's 12kV Switchgear Project has been a large multi-year CIP project and was completed in 2023. This project was mostly funded by a FEMA Hazard Mitigation Grant, with a final cost estimate of \$3,574,000.
7. The Ranney Collector #2 Rehabilitation Project (similar to the Ranney Collector #3 Rehabilitation) is anticipated to be completed early 2024 and will be funded with Integrated Regional Water Management (IRWM) grant funds and advance charges collected from the municipal customers. The estimated cost is \$2,799,000
8. The 3-Tank Seismic Retrofit Project is a large CIP project for seismic upgrades for all three of the Districts large storage tanks. This project is expected to begin in 2024 with an anticipated cost of \$7,000,000. This project will be funded using a combination of FEMA Hazard Mitigation Grant funds and advanced charges.
9. The Turbidity Reduction Facility (TRF) Emergency Generator Project will install a larger generator and fuel tank to provide full power to the TRF in the event of a power loss. This project is funded using a combination of FEMA Hazard Mitigation Funds and advanced charges. This project is anticipated to be completed in 2025 at a cost of \$2,000,000.
10. The District is currently collecting funds for an On-site Chlorine Generation Project. This project will allow the District to switch from using chlorine gas to treat drinking water to an onsite hypochlorite treatment. Construction for this project is expected to begin in 2025 with an anticipated cost of \$1,400,000. This project will be funded entirely from advance charges collected from the municipal customers.

Humboldt Bay Municipal Water District  
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)  
For the Year Ended June 30, 2023

11. The Collector Mainline Redundancy Pipeline Project will construct a redundant pipeline between the Ranney Collectors and the TRF in case of earthquake or other pipeline failure. Phase 1 of this project began in 2022. Due to new (potential seismic) information gained during the geotechnical investigation in phase 1, a revised scope-of-work has been submitted to FEMA. The District is currently waiting for approval of this SOW from FEMA.

**CONTACTING THE DISTRICT'S FINANCIAL MANAGEMENT**

The financial report is designed to provide our citizens, customers, and creditors with a general overview of the District's finances and to demonstrate the District's accountability for the money it receives. If you have a question about this report or need additional financial information, contact the Business Manager or General Manager at Humboldt Bay Municipal Water District, 828 Seventh Street, Eureka, California, 95501.

DRAFT

BASIC FINANCIAL STATEMENTS

DRAFT



Humboldt Bay Municipal Water District  
STATEMENTS OF NET POSITION  
 June 30, 2023  
 (With Comparative Totals for June 30, 2022)

<u>ASSETS</u>	<u>2023</u>	<u>2022</u>
Current assets:		
Cash and investments	\$ 7,619,603	\$ 6,746,186
Restricted cash and investments:	<u>6,224,802</u>	<u>5,876,079</u>
Total cash and investments	<u>13,844,405</u>	<u>12,622,265</u>
Accounts receivable	683,804	907,353
Grants receivable	780,766	1,458,116
Inventory	61,578	62,466
Prepaid items	<u>65,845</u>	<u>47,716</u>
Total current assets	<u>15,436,398</u>	<u>15,097,916</u>
Capital assets:		
Non-depreciable assets	2,952,564	5,578,401
Depreciable assets (net of depreciation)	<u>25,019,458</u>	<u>22,222,319</u>
Total assets	<u>43,408,420</u>	<u>42,898,636</u>
<u>DEFERRED OUTFLOWS</u>		
Deferred outflows related to pensions	2,077,292	888,450
Deferred outflows related to OPEB	<u>50,011</u>	<u>85,424</u>
Total deferred outflows	<u>2,127,303</u>	<u>973,874</u>
<u>LIABILITIES AND NET POSITION</u>		
Current liabilities:		
Accounts payable	370,508	327,525
Compensated absences	340,450	757,386
Accrued expenses	<u>169,610</u>	<u>174,854</u>
Total current liabilities	<u>880,568</u>	<u>1,259,765</u>
Long-term liabilities:		
Due within one year	273,668	547,337
Due in more than one year	-	273,668
Other post-employment benefits	2,271,571	2,593,559
Net pension liability	<u>4,126,146</u>	<u>1,808,936</u>
Total long-term liabilities	<u>6,671,385</u>	<u>5,223,500</u>
Total liabilities	<u>7,551,953</u>	<u>6,483,265</u>
<u>DEFERRED INFLOWS</u>		
Deferred inflows related to pensions	103,489	1,598,062
Deferred inflows related to OPEB	<u>1,545,587</u>	<u>1,464,820</u>
Total deferred inflows	<u>1,649,076</u>	<u>3,062,882</u>
Net position:		
Invested in capital assets, net of related debt	27,698,354	26,979,715
Restricted for debt service	820,413	794,985
Restricted for capital projects	4,830,848	4,547,232
Restricted funds	1,606,645	908,608
Unrestricted	<u>1,378,434</u>	<u>1,095,823</u>
Total net position	<u>\$ 36,334,694</u>	<u>\$ 34,326,363</u>

The accompanying notes are an integral part of these financial statements.

Humboldt Bay Municipal Water District  
STATEMENTS OF REVENUES, EXPENSES AND  
CHANGES IN NET POSITION

For the Year Ended June 30, 2023  
(With Comparative Totals for the Year Ended June 30, 2022)

	<u>2023</u>	<u>2022</u>
Operating revenues:		
Municipal customer water sales	\$ 7,253,439	\$ 7,608,421
Retail customer water sales	372,492	359,543
Debt service receipts	<u>546,528</u>	<u>79,361</u>
Total water sales	8,172,459	8,047,325
Power sales	370,233	423,988
Other operating revenues	<u>-</u>	<u>1,171,201</u>
Total operating revenues	<u>8,542,692</u>	<u>9,642,514</u>
Operating expenses:		
Salaries and benefits	3,335,113	3,857,421
Employee retirement contributions	270,171	553,549
Power and pumping	931,100	783,204
Engineering	191,473	83,066
Materials and supplies	376,810	126,287
Repairs and maintenance	398,331	236,894
Auto and travel expenses	77,879	57,435
Insurance	120,389	122,866
Legal and accounting fees	63,098	69,256
Professional assistance	473,382	304,798
Tax and license	208,265	225,733
Training	33,951	36,073
Other operating expenses	131,272	147,904
Depreciation	<u>1,429,352</u>	<u>1,410,651</u>
Total operating expenses before reimbursements	<u>8,040,586</u>	<u>8,015,137</u>
Reimbursements for services and costs	<u>(331,626)</u>	<u>(341,621)</u>
Total operating expenses	<u>7,708,960</u>	<u>7,673,516</u>
Operating income (loss)	<u>833,732</u>	<u>1,968,998</u>
Non-operating revenues (expenses):		
Tax revenues	975,000	1,133,337
Interest revenues	230,024	9,936
Interest expense	<u>(30,425)</u>	<u>(12,888)</u>
Total non-operating revenues (expenses)	<u>1,174,599</u>	<u>1,130,385</u>
Income (loss) before contributions	<u>2,008,331</u>	<u>3,099,383</u>
Change in net position	2,008,331	3,099,383
Net position, beginning of period	<u>34,326,363</u>	<u>31,226,980</u>
Net position, end of period	<u>\$ 36,334,694</u>	<u>\$ 34,326,363</u>

The accompanying notes are an integral part of these financial statements.

Humboldt Bay Municipal Water District  
STATEMENTS OF CASH FLOWS  
 For the Year Ended June 30, 2023  
 (With Comparative Totals for the Year Ended June 30, 2022)

	<u>2023</u>	<u>2022</u>
Cash flows from operating activities:		
Receipts from customers	\$ 9,097,867	\$ 9,127,344
Payments to suppliers	(2,980,208)	(2,307,114)
Payments to employees	(4,599,477)	(4,246,277)
Net cash provided (used) by operating activities	<u>1,518,182</u>	<u>2,573,953</u>
Cash flows from non-capital financing activities:		
Taxes and assessments	975,000	1,133,337
Net cash provided (used) by non-capital financing activities	<u>975,000</u>	<u>1,133,337</u>
Cash flows from capital and related financing activities:		
Acquisition and construction of capital assets	(1,600,653)	(3,017,844)
Receipts of capital grants	677,350	1,415,370
Interest expense	(30,425)	(12,888)
Payment on current portion of bonds	(547,337)	(627,463)
Net cash provided (used) by capital and related financing activities	<u>(1,501,065)</u>	<u>(2,242,825)</u>
Cash flows from investing activities:		
Interest earned	230,024	9,936
Net cash provided by investing activities	<u>230,024</u>	<u>9,936</u>
Net increase (decrease) in cash and cash equivalents	1,222,141	1,474,401
Cash and cash equivalents - beginning of period	<u>12,622,265</u>	<u>11,147,864</u>
Cash and cash equivalents - end of period	<u>\$ 13,844,405</u>	<u>\$ 12,622,265</u>
Reconciliation of operating income (loss) to net cash provided (used in) operating activities:		
Operating income (loss)	\$ 833,732	\$ 1,968,998
Adjustments to reconcile operating income (loss) to net cash provided by operating activities:		
Depreciation	1,429,352	1,410,651
Changes in certain assets and liabilities:		
Accounts receivable	223,549	(856,791)
Inventory	888	(2,926)
Prepaid items	(18,129)	(1,113)
Accounts payable	42,983	(109,559)
Accrued expenses	(5,244)	21,230
Compensated absences	(416,936)	349,416
Deferred outflows	(1,153,429)	63,504
Deferred inflows	(1,413,806)	1,749,545
Net pension liability	2,317,210	(1,601,216)
Other post-employment benefits	(321,988)	(417,786)
Net cash provided (used) by operating activities	<u>\$ 1,518,182</u>	<u>\$ 2,573,953</u>

The accompanying notes are an integral part of these financial statements.



Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
For the Year Ended June 30, 2023

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements of Humboldt Bay Municipal Water District (the District) have been prepared in conformity with generally accepted accounting principles (GAAP) as applied to government units. The Governmental Accounting Standards Board (GASB) is the accepted standard setting body for establishing governmental accounting and financial reporting principles.

This summary of significant accounting policies of the District is presented to assist in understanding the financial statements. The financial statements and notes are representations of management, who is responsible for their integrity and objectivity. These accounting policies have been consistently applied in the preparation of financial statements.

A. Reporting Entity

The District has no oversight responsibility over any other governmental unit and is not included in any other governmental "reporting entity" as defined in GASB pronouncements. The Board of Directors are elected by the public and have the decision-making authority to levy taxes, the power to designate management, the ability to significantly influence operations, and the primary accountability for fiscal matters.

B. Nature of Activities

The District is a state-authorized special purpose government established to provide water services to the Humboldt Bay region. It was formed in 1956 under the provisions of the Municipal Water District Act of 1911. The District provides retail water service to residential customers, and it contracts with seven municipal agencies for the purchase of treated domestic water for resale.

C. Basis of Presentation

The financial statements required by GASB Statement No. 34, *Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments*, as amended by GASB Statement No. 63, include a statement of net position, a statement of revenues, expenses, and changes in net position, and a statement of cash flows.

The District utilizes an enterprise fund, which is a proprietary fund type. Proprietary funds are used to account for activities like those found in the private sector, where the determination of net income is necessary or useful to sound financial administration. Enterprise funds account for goods or services that are provided to outside parties. In accordance with the business-type activities reporting model, the District prepares its statement of cash flows using the direct method.

D. Measurement Focus/Basis of Accounting

Measurement focus refers to what is being measured. The basis of accounting refers to the timing of the recognition of revenues and expenditures in the accounts and their reporting in the financial statements.

Proprietary fund types are accounted for on an economic resources' measurement focus using the accrual basis of accounting in which revenues are recognized when earned and expenses are recognized when the related liabilities are incurred.

The proprietary fund distinguishes operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations.



Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
For the Year Ended June 30, 2023

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

D. Measurement Focus/Basis of Accounting (concluded)

The principal operating revenues of the District are charges to customers for sales and services. Operating expenses for proprietary funds include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses. When both restricted and unrestricted resources are available for use, it is District practice to first use specifically designated restricted resources before unrestricted resources.

E. Allowance for Doubtful Accounts

The District evaluates the collectability of water sales and grants receivable in order to determine the allowance for doubtful accounts. As of June 30, 2023, the District determined that the various receivables are fully collectible and recorded \$0 for the allowance for doubtful accounts. Based on historical experience, the District does not expect amounts to become uncollectible, however if they are, they will be charged to operations as a bad debt expense. The impact of any bad debt expense recorded in the future is expected to be immaterial to the financial statements.

F. Cash and Cash Equivalents

The District's cash and cash equivalents are considered to be cash on hand, demand deposits, and short-term investments with original maturities of three months or less from the date of acquisition.

G. Fair Value Hierarchy

GASB Statement No. 72, *Fair Value Measurements and Application*, establishes a fair value hierarchy consisting of three broad levels: Level 1 inputs consist of quoted prices (unadjusted) for identical assets and liabilities in active markets that a government can access at the measurement date, Level 2 inputs consist of inputs other than quoted prices that are observable for an asset or liability, either directly or indirectly, that can include quoted prices for similar assets or liabilities in active or inactive markets, or market-corroborated inputs, and Level 3 inputs have the lowest priority and consist of unobservable inputs for an asset or liability. The valuation method used for rental properties is the Leased Fee Market method, which is dependent on the income generated from the rental properties.

The District's holdings in the Humboldt County Treasurer's Investment Pool, LAIF, PARS and cash in banks were not subject to the fair value hierarchy.

The District's investment policy has been to invest idle cash in demand deposits, time deposits and the Humboldt County Treasurer's Investment Pool, Cal Trust, and LAIF. Investments are reported at fair value. The County Pool is operated in accordance with applicable state laws and regulations, and the reported value of the District's investment in the County Pool is the same as the fair value of the pool shares.

State statutes authorize the District to invest in obligations of the U.S. Treasury, Federal Agency obligations, commercial paper, the LAIF and other instruments. The Loan and Installment Agreement underlying the issuance of Loans and Installment Purchase Agreements authorize permitted investments consistent with the State of California Government Code but broader in scope than the District's usual investment practices.

The District accounts for cash equivalents in its various investment accounts at fair value. Fair value is the amount at which a financial instrument could be exchanged in a current transaction between willing parties.

Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
 For the Year Ended June 30, 2023

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

H. Capital Assets

Capital assets are defined as assets with an initial cost of \$5,000 and projects costing \$5,000 or more. All capital assets are valued at historical cost or estimated historical cost if actual historical cost is not available. Assets that individually may be below threshold amounts are capitalized if collectively they are above the threshold amount.

Additions to and replacements of capital assets are recorded at original cost, which includes material, labor, overhead, and an allowance for the cost of funds used during construction, when significant. The costs of betterments or repairs that extend the life of a capital asset are added to capital accounts.

Depreciation of all exhaustible capital assets is charged as an expense against operations, with accumulated depreciation reflected in the statement of net position. Depreciation has been provided over the estimated useful lives using the straight-line method. The estimated useful lives are as follows:

Dam, pipeline, buildings, water collection system, South Bay extension, Fieldbrook extension, Blue Lake extension, Lindley extension, Essex diversion, hydro plant penstock and piping	40 Years
Pump station and related facilities	10 - 40 Years
Hydro plant turbine and generators	20 Years
Tools and shop equipment, office equipment, pipeline connections, and hydro switchgear and controls	10 Years
Radio communication system and computers	5 Years
Vehicles	5 - 10 Years
Supplemental construction - except valves	40 Years
Supplemental construction - valves	20 Years

I. Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenditures/expenses during the reporting period. Actual results could differ from those estimates.

J. Investments

The District's adopted investment policy seeks to promote the safety of principal, provide adequate liquidity for operational needs, earn market rates of return on investments consistent with liquidity needs and investment quality, and conform to legal requirements.

The District follows the authority governing investments for municipal governments set forth in the California Government Code, Sections 53601 through 53686. The Code authorizes the District to invest in obligations of the U.S. Treasury in the form of notes, bonds, bills or instruments for which the faith and credit of the United States are pledged for payment. The District may also invest in registered treasury notes, or bonds of the State of California and commercial paper of "prime" quality as defined by California Government Code Section 53635 and as rated by Standard and Poor's Corporation or Moody's Commercial Paper Record.

The District's investment policy states that the District will structure its portfolio to meet cash requirements for ongoing operations thereby avoiding the need to sell securities prior to their maturity. The policy does not place formal limits on investment maturities.



Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
For the Year Ended June 30, 2023

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

K. Deferred Outflows and Inflows of Resources

Pursuant to GASB Statement 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position*, and GASB Statement 65, *Items Previously Reported as Assets and Liabilities*, the District recognizes deferred outflows and inflows of resources.

In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. A deferred outflow of resources is defined as a consumption of net position by the government that is applicable to a future reporting period.

In addition to liabilities, the statement of net position will sometimes report a separate section for deferred inflows of resources. A deferred inflow of resources is defined as an acquisition of net position by the District that is applicable to a future reporting period.

L. Net Position

Net position represents the difference between assets and deferred outflows of resources less liabilities and deferred inflows of resources. The District reports three categories of net position, as follows:

Net Investment in Capital Assets - consists of net capital assets reduced by outstanding balances of any related debt obligations and deferred inflows of resources attributable to the acquisition, construction, or improvement of those assets and increased by balances of deferred outflows of resources related to those assets.

Restricted Net Position - net position is considered restricted if its use is constrained to a particular purpose. Restrictions are imposed by creditors, grantors, laws, or regulations. The District has restricted net position for debt service, advance charges related to capital projects per contracts, and for revenue credits to the seven municipal customers per Ordinance 16.

Unrestricted Net Position - consists of all other net position that does not meet the definition of "net investment in capital assets" or "restricted net position" and is available for general use by the District.

Net Position Flow Assumption

Sometimes the government will fund outlays for a particular purpose from both restricted (e.g., restricted bond or grant proceeds) and unrestricted resources. To calculate the amounts to report as restricted - net position and unrestricted - net position in the government-wide financial statements, a flow assumption must be made about the order in which the resources are applied. It is the government's policy to consider restricted - net position to have been depleted before unrestricted - net position is applied.

M. Property Taxes

The lien date for secured property taxes is March 1 of each year. Taxes are levied as of July 1 on all secured real property and are due and payable November 1 and February 1 of the following fiscal year. Humboldt County is responsible for assessing, collecting, and distributing property taxes in accordance with enabling legislation.

Since the passage of California Proposition 13, beginning with fiscal year 1978-79, taxes are based either on a 1% rate applied to the 1975-76 assessed value of the property, or on 1% of the sales price of the property on sales transactions and construction which occur after the 1975-76 assessment. Assessed values on properties (exclusive of increases related to sales transactions and improvements) can rise at a maximum of 2% per year.

Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
 For the Year Ended June 30, 2023

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (concluded)

M. Property Taxes (concluded)

The amount collected by the County is distributed in accordance with State law to the various public agencies. Therefore, the District does not levy a specific tax rate but receives a share of the property tax revenue based on State formula. The District's tax rate is \$1.00/\$100 of assessed value, the maximum allowable under Proposition 13.

During fiscal year 1993-94, an alternate method of property tax allocation (the "Teeter Plan") was adopted by the County. Under this plan, the county auditor/controller distributes 100 percent of current secured taxes billed to taxing entities during the current year, whether collected or not. The District recognizes property tax revenues (including tax increment revenues) to the extent of each year's tax allocation received or to be received within 60 days after the end of each fiscal year.

N. Restricted Assets

Assets that are restricted as to withdrawal or use for other than current operations, for the liquidation of long-term debts or for expenditure in the acquisition or construction of capital assets are separately reported as restricted assets and not as current assets.

O. Pension

For purposes of measuring the net pension liability, deferred outflows and inflows of resources related to pensions and pension expense, information about the fiduciary net position of the District's California Public Employees' Retirement System (CalPERS) Plan (the "Plan") and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by CalPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when currently due and payable in accordance with the benefit terms. Investments are reported at fair value. CalPERS' audited financial statements are publically available reports that can be obtained.

P. Prior Year Information

Selected information regarding the prior year has been included in the accompanying financial statements. This information has been included for comparison purposes only and does not represent a complete presentation in accordance with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the District's prior year financial statements from which this selected financial data was derived.

NOTE 2 - CASH, CASH EQUIVALENTS AND INVESTMENT

Cash, cash equivalents, and investment at June 30, 2023, consist of the following:

	<u>2023</u>	<u>2022</u>
Cash:		
Demand accounts	\$ 1,784,812	\$ 4,005,316
State Treasurer's Pool (LAIF)	-	1,688
CalTrust	5,834,689	2,727,359
County investment pool	<u>102</u>	<u>11,823</u>
Total	<u>\$ 7,619,603</u>	<u>\$ 6,746,186</u>



Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
 For the Year Ended June 30, 2023

NOTE 2 - CASH, CASH EQUIVALENTS AND INVESTMENT (continued)

	<u>2023</u>	<u>2022</u>
Restricted cash:		
U.S. Bank demand accounts	\$ 754,447	\$ 749,574
Public Agency Retirement Services	928,275	906,479
State Treasurer's Pool (LAIF)	452,459	443,054
CalTrust	2,937,925	2,640,605
County investment pool	<u>1,151,696</u>	<u>1,136,367</u>
Total	<u>\$ 6,224,802</u>	<u>\$ 5,876,079</u>

The U.S. Bank commercial checking account balances are carried at cost. One of the U.S. Bank money market accounts is restricted for servicing the Safe Drinking Water State Revolving Fund (SRF) loan (see Note 7). The District transfers funds quarterly from a fund in the Humboldt County Treasurer's Investment Pool to the restricted U.S. Bank money market account. U.S. Bank, acting as a fiscal agent, administers the semiannual loan payments for a total annual payment of \$547,337.

Restricted cash and cash equivalents include restrictions imposed by creditors, grantors, laws, regulations, and designations imposed by the Board of Directors. Restricted cash and cash equivalents in the Humboldt County Treasurer's Investment Pool are as follows:

	<u>2023</u>	<u>2022</u>
Restricted for debt service	\$ 820,413	\$ 794,985
Restricted for municipalities	<u>331,283</u>	<u>341,382</u>
Total restricted cash in County Pool	<u>\$ 1,151,696</u>	<u>\$ 1,136,367</u>

Custodial Credit Risk - Deposits

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for deposits and investments is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party.

The California Government Code requires California banks and savings and loan associations to secure an entity's deposits by pledging government securities with a value of 110% of an entity's deposits. California law also allows financial institutions to secure entity deposits by pledging first trust deed mortgage notes having a value of 150% of an entity's total deposits. The entity's Treasurer may waive the collateral requirement for deposits which are fully insured up to \$250,000 by the FDIC. The collateral for deposits in federal and state-chartered banks is held in safekeeping by an authorized agent of depository recognized by the State of California Department of Banking. The collateral for deposits with savings and loan associations is generally held in safekeeping by the Federal Home Loan Bank in San Francisco, California as an agent of depository. These securities are physically held in an undivided pool for all California public agency depositors.

All monies in the Humboldt County Treasurer's Pool are not evidenced by specific securities; and therefore, are not subject to custodial credit risk. The average number of days to maturity for investments in the County Pool is 644 days.

Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
 For the Year Ended June 30, 2023

NOTE 2 - CASH, CASH EQUIVALENTS AND INVESTMENT (concluded)

The following is a summary of the fair value hierarchy of the fair value of investments of the District as of June 30, 2023:

<u>Investment Type</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Exempt</u>	<u>Uncategorized</u>	<u>Total</u>
Demand Accounts	\$ -	\$ -	\$ 2,539,259	\$ -	\$ 2,539,259
State Treasurer's Pool (LAIF)	-	-	452,459	-	452,459
CalTrust	-	8,772,614	-	-	8,772,614
Public Agency Retirement Svcs	-	-	928,275	-	928,275
County investment pool	-	-	1,151,798	-	1,151,798
Total Investments	<u>\$ -</u>	<u>\$8,772,614</u>	<u>\$5,071,791</u>	<u>\$ -</u>	<u>\$ 13,844,405</u>

NOTE 3 - ACCOUNTS RECEIVABLE

Accounts receivable from customers at June 30, 2023, consist of the following:

Property tax	\$ 682,788
Retiree health insurance	1,016
Total accounts receivable	<u>\$ 683,804</u>

NOTE 4 - LAND

Land at June 30, 2023, consists of land and land rights of the Humboldt Bay Municipal Water District, including lands located in both Humboldt and Trinity Counties. There were no changes in land during the year ended June 30, 2023.

NOTE 5 - PROPERTY AND EQUIPMENT

Changes in property and equipment during the year ended June 30, 2023, are as follows:

	<u>Balance at 07/01/22</u>	<u>Additions</u>	<u>Deletions</u>	<u>Balance at 6/30/23</u>
<u>Governmental Activities</u>				
Capital assets, not being depreciated:				
Land	\$ 1,371,972	\$ -	\$ -	\$ 1,371,972
Construction in progress	<u>4,206,429</u>	<u>865,616</u>	<u>3,491,453</u>	<u>1,580,592</u>
Total capital assets, not being depr.	<u>5,578,401</u>	<u>865,616</u>	<u>3,491,453</u>	<u>\$ 2,952,564</u>
Capital assets, being depreciated:				
Buildings and improvements	3,397,966	3,931,003	38,072	\$7,290,897
Equipment	3,137,219	209,166	-	3,346,385
Water System Infrastructure	45,978,324	38,396	-	46,016,720
Ruth Lake Infrastructure	10,893,965	85,997	-	10,979,962
District No. U-1	<u>5,354,898</u>	<u>-</u>	<u>-</u>	<u>5,354,898</u>
Total capital assets, being depreciated	<u>68,762,372</u>	<u>4,264,562</u>	<u>38,072</u>	<u>72,988,862</u>
Total accumulated depreciation	<u>(46,540,053)</u>	<u>(1,429,351)</u>	<u>-</u>	<u>(47,969,404)</u>
Total capital assets being depr. - net	<u>22,222,319</u>	<u>2,835,211</u>	<u>38,072</u>	<u>25,019,458</u>
Capital assets - net	<u>\$27,800,720</u>	<u>\$ 3,700,827</u>	<u>\$ 3,529,525</u>	<u>\$27,972,022</u>

Total depreciation expense charged to operations for the year ended June 30, 2023, was \$1,429,352. All capital assets are depreciable except land and projects in progress.



Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
 For the Year Ended June 30, 2023

NOTE 6 - COMPENSATED ABSENCES

Compensated absences consist of estimates of future obligations relating to accumulated unpaid vacation and sick leave compensation. There are predetermined limits to the amount of vacation and sick leave hours that can be accumulated by an employee. The District will pay the employee at the end of each calendar year for any excess vacation time accumulated that year.

Upon retirement, an employee will receive compensation for unused accumulated vacation. The employee also has the option under the District's California Public Employees' Retirement System (CalPERS) contract to convert 100% of the unused sick leave accrual to CalPERS service credit, or to receive a 35% cash payment and convert the remainder to CalPERS service credit. However, if an employee with less than ten years of employment terminates or retires, the unused accumulated sick leave is not eligible for compensation or CalPERS service credit conversion. Compensated absences payable as of June 30, 2023 was \$340,450.

NOTE 7 - LONG-TERM NOTES PAYABLE

The following is a summary of changes in long-term debt as of June 30, 2023:

	Balance at 07/01/22	Increase	Decrease	Balance at 6/30/23	Current
California Safe Drinking Water State Revolving Fund (SRF) Note	\$ 821,005	\$ -	\$ 547,337	\$ 273,668	\$ 273,668
Compensated absences	757,386	-	416,936	340,450	-
Net pension liability	1,808,936	2,317,210	-	4,126,146	-
Other post-employment benefits	2,593,559	-	321,988	2,271,571	-
Total	<u>\$ 5,980,886</u>	<u>\$ 2,317,210</u>	<u>\$ 1,286,261</u>	<u>\$ 7,011,835</u>	<u>\$ 273,668</u>

California Safe Drinking Water State Revolving Fund (SRF) Note

The District has a loan with the California Department of Water Resources (acting on behalf of the California Department of Health Services) under the provisions of the California SRF Law of 1997. The proceeds of the SRF loan were used to finance the construction of the Turbidity Reduction Facility. The loan, which matures in January of 2024, carries no interest, and has a repayment term of 20 years. The District pays \$547,337 annually in two semiannual payments. A U.S. Bank money market account is restricted for servicing the loan. The debt service for the loan is paid in its entirety by the District's municipal customers. Future debt service on the loan is:

Year Ending June 30	Principal	Interest	Total
2024	\$ 273,668	\$ -	\$ 273,668
Total	<u>\$ 273,668</u>	<u>\$ -</u>	<u>\$ 273,668</u>

Net position restricted for debt service for the year ended June 30, 2023 was \$820,413.

NOTE 8 - WHOLESALE WATER CONTRACTS

The District is primarily a wholesale water provider. The District's Ordinance 16 as amended in June 2006 and June 2016 establishes rates, charges, and conditions of service for water sales to the municipal water customers. The costs of constructing, operating, maintaining, repairing, and replacing the water treatment facilities and maintaining reasonable reserves are allocated among the municipal customers.

The District has long-term contracts with its seven municipal wholesale customers governing wholesale rates, charges and conditions of service. These seven contracts were recently amended including a new twenty-year term with a ten-year renewal option.

Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
For the Year Ended June 30, 2023

NOTE 8 - WHOLESALE WATER CONTRACTS (concluded)

The new contracts were effective July 1, 2017, and include the following seven municipal wholesale customers:

- City of Arcata
- City of Blue Lake
- City of Eureka
- Fieldbrook-Glendale Community Services District
- Humboldt Community Services District
- McKinleyville Community Services District
- Manila Community Services District

The District lost its last large industrial customer in February 2009. Beginning April 1, 2009, all costs for the regional water system associated with operation, maintenance, and capital expenditure were shifted to the seven municipal customers. Whereas the municipalities had previously been paying 55% of costs, they currently pay 100%.

The rate structure is based on "Price Factor" formulas which proportionally allocates the operating, maintenance and capital costs of the District to each of the wholesale customers. Municipal customers are billed monthly for water usage based on their share of such operating, maintenance, and capital costs.

Most revenues received by the District, other than those associated with wholesale water sales, are credited back to the wholesale municipal customers. These revenues include property tax revenues, a portion of power sales, interest income, retail water service revenues and other miscellaneous revenues. The revenue credit is applied ratably monthly during the year. The seven wholesale municipal customers are initially billed based on the District's approved budget, with the costs spread out evenly across the fiscal year. At year-end, the budgeted costs are reconciled with actual costs.

Any underpayments or overpayments are divided into monthly installments and applied to the municipalities' billing during the following year. As of June 30, 2023, the municipal customers overpaid \$23,577 for operating, maintenance, and capital costs. Overpayments in the amount of \$23,577 were credited to the municipalities' 2023/2024 billings. At June 30, 2023, total net position restricted for credits to the municipalities was \$23,577.

The municipal water customers may be charged in advance to fund future capital projects. For the year ended June 30, 2023, the municipal customers had balances in advance charges of \$5,296,400 for improvement projects.

Additions to the District's general reserves may be charged to the wholesale customers should the District need to replenish its general reserve level. For the year ended June 30, 2023, the District charged the wholesale customers \$350,000.

During the fiscal year ended June 30, 2016, the contracts with the municipal customers were amended. District's Ordinance 16 included a provision that limits capital expenditures. Based on the District's development and implementation of its Capital Improvement Plan (CIP), this limit was no longer practical. To address this and to reduce the need for large fluctuations in costs to the municipalities, the limit on capital expenditures was replaced with a quinquennial update for the Capital Improvement Plan beginning in 2017. This process includes providing a copy to the individual municipalities no later than February 28 for their use in their own budget planning, analysis, and updates of water rates. An additional change with the amended contracts includes revising the schedule for the quinquennial revision of the Peak Rate Allocation to commence again on July 1, 2017 (to address revenue changes in 2016 in the Manila Community Services District).



Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
 For the Year Ended June 30, 2023

NOTE 9 - DEFERRED COMPENSATION PLAN

The District offers its employees a deferred compensation plan created in accordance with the Internal Revenue Code Section 457. The plan, available to all District employees, permits them to defer a portion of their salary until future years. All amounts of compensation deferred under the plan, all property and rights purchased with those amounts, and all income attributable to those amounts, property or rights, are (until paid or made available to the employee or other beneficiary) placed in trust for the benefit of the participants or their beneficiaries and are not the assets of the District.

Effective January 1, 2013, the District contributes \$50 per month for each employee who is not currently participating in the deferred compensation program. For fiscal year 2022-23, the District will provide a contribution match of up to \$100 per month for employees who are participating in the deferred compensation program. The District has a fiduciary responsibility to the participating employees in the administration of the plan, but is not liable for losses arising from depreciation or other declines in the value of the plan assets.

NOTE 10 - PENSION PLANA. General Information about the Pension PlanPlan Description

All qualified permanent and probationary employees are eligible to participate in the Public Agency Cost Sharing Multiple-Employer Plan (Plan) administered by the California Public Employees' Retirement System (CalPERS). The Plan consists of individual rate plans (benefit tiers) within a safety risk pool (police and fire) and a miscellaneous risk pool (all others).

Plan assets may be used to pay benefits for any employer rate plan of the safety and miscellaneous pools. Accordingly, rate plans within the safety or miscellaneous pools are not separate plans under GASB Statement No. 68. Individual employers may sponsor more than one rate plan in the miscellaneous or safety risk pools. The District sponsors two miscellaneous rate plans. Benefit provisions under the Plan are established by State statute and District resolution. CalPERS issues publicly available reports that include a full description of the pension plan regarding benefit provisions, assumptions, and membership information that can be found on the CalPERS website.

Benefits Provided

CalPERS provides service retirement and disability benefits, annual cost of living adjustments and death benefits to plan members, who must be public employees and beneficiaries. Benefits are based on years of credited service, equal to one year of full-time employment. Members with five years of total service are eligible to retire at age 50 with statutorily reduced benefits. All members are eligible for non-duty disability benefits after 10 years of service. The death benefit is one of the following: the Basic Death Benefit, the 1957 Survivor Benefit, or the Optional Settlement 2W Death Benefit. The cost-of-living adjustments for the Plan are applied as specified by the Public Employees' Retirement Law.

The rate plan provisions and benefits in effect at June 30, 2023, are summarized as follows:

	Miscellaneous 1 <sup>st</sup> Tier	Miscellaneous PEPRA
	Prior to January 1, 2013	On or after January 1, 2013
Hire date		
Benefit formula	2% @ 55	2% @ 62
Benefit vesting schedule	5 years service	5 years service
Benefit payments	monthly for life	monthly for life
Retirement age	50 – 63	52 - 67
Monthly benefits, as a % of annual salary	1.426% to 2.418%	1.0% to 2.5%
Required employee contribution rates	7.000%	6.750%
Required employer contribution rates	10.320%	7.470%

Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
 For the Year Ended June 30, 2023

NOTE 10 - PENSION PLAN (continued)

A. General Information about the Pension Plan (concluded)

Beginning in fiscal year 2016, CalPERS collects employer contributions for the Plan as a percentage of payroll for the normal cost portion as noted in the rates above and as a dollar amount for contributions toward the unfunded liability and side fund, if applicable. The dollar amounts are billed on a monthly basis. The District's required contribution for the unfunded liability was \$291,132 for the fiscal year ended June 30, 2023.

Contributions

Section 20814(c) of the California Public Employees' Retirement Law (PERL) requires that the employer rates for all public employers are determined on an annual basis by the actuary and shall be effective on the July 1 following notice of a change in the rate. The total plan contributions are determined through CalPERS' annual actuarial valuation process. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The District is required to contribute the difference between the actuarially determined rate and the contribution rate of employees.

Employer contribution rates may change if plan contracts are amended. Payments made by the employer to satisfy contribution requirements that are identified by the pension plan terms as plan member contribution requirements are classified as plan member contributions.

The District's contributions to the plan recognized as a part of pension expense for the year ended June 30, 2023 were \$574,390.

B. Pension Liabilities, Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions

As of June 30, 2023, the District reported a net pension liability for its proportionate share of the net pension liability of the Plan of \$4,126,146.

The District's net pension liability for the Plan is measured as the proportionate share of the net pension liability. The net pension liability of the Plan is measured as of June 30, 2021, and the total pension liability for the Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2020 rolled forward to June 30, 2021, using standard update procedures. The District's proportion of the net pension liability was based on a projection of the District's long-term share of contributions to the pension plans relative to the projected contributions of all participating employers, actuarially determined. The District's proportionate share of the net pension liability for the Plan as of June 30, 2021 and 2022 was as follows:

Proportion - June 30, 2021	0.0953%
Proportion - June 30, 2022	0.0882%
Change – Increase (Decrease)	-0.0071%

For the year ended June 30, 2023, the District recognized pension expense of \$281,426. At June 30, 2023, the District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:



Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
 For the Year Ended June 30, 2023

NOTE 10 - PENSION PLAN (continued)B. Pension Liabilities, Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions (concluded)

	Deferred Outflows of Resources	Deferred Inflows of Resources
Pension contributions subsequent to the measurement date	\$ 647,631	\$ -
Changes in assumptions	422,810	-
Differences between actual and expected experience	82,861	55,497
Net differences between projected and actual earnings on plan investments	755,800	-
Change in employer's proportion	168,190	-
Differences between the employer's actual contributions and the employer's proportionate share of contributions	-	47,992
Total	\$ 2,077,292	\$ 103,489

\$647,631 reported as deferred outflows of resources related to contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2024. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as pension expense as follows:

<u>Year Ended June 30</u>	
2024	\$ 372,606
2025	317,741
2026	173,553
2027	462,272
2028	-
Thereafter	-

C. Actuarial Assumptions

The total pension liabilities in the June 30, 2021 actuarial valuations were determined using the following actuarial assumptions:

Valuation Date	June 30, 2021
Measurement Date	June 30, 2022
Actuarial Cost Method	Entry-Age Normal Cost Method
Actuarial Assumptions:	
Discount Rate	6.90%
Inflation	2.30%
Payroll Growth	2.80%
Projected Salary Increase	Varies by Entry Age and Service
Investment Rate of Return	6.90% <sup>(1)</sup>
Mortality	Derived from CalPERS Membership Data for all Funds <sup>(2)</sup>

<sup>(1)</sup> Net of pension plan investment expenses, including inflation.

<sup>(2)</sup> The mortality table was developed based on CalPERS specific data. The table includes 15 years of mortality improvements using Society of Actuaries Scale 80% of scale MP 2020.

Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
 For the Year Ended June 30, 2023

NOTE 10 - PENSION PLAN (continued)D. Discount Rate

The discount rate used to measure the total pension liability was 6.90%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current member contribution rates and that contributions from employers will be made at statutorily required rates, actuarially determined. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class.

In determining the long-term expected rate of return, CalPERS took into account both short-term and long-term market return expectations as well as the expected PERF cash flows. Using historical returns on all the funds' asset classes, expected compound (geometric) returns were calculated over the short-term (first 10 years) and the long-term (11+ years) using a building-block approach. Using the expected nominal returns for both short-term and long-term, the present value of benefits was calculated for each fund. The expected rate of return was set by calculating the single equivalent expected return that arrived at the same present value of benefits for cash flows as the one calculated using both short-term and long-term returns. The expected rate of return was then set equivalent to the single equivalent rate calculated above and adjusted to account for assumed administrative expenses.

The expected real rates of return by asset class are as follows:

<u>Asset Class</u> <sup>(a)</sup>	<u>New Strategic Allocation</u>	<u>Real Return</u> <sup>(a, b)</sup>
Global Equity - Cap-weighted	30.0%	4.54%
Global Equity - Non-Cap-weighted	12.0%	3.84%
Private Equity	13.0%	7.28%
Treasury	5.0%	0.27%
Mortgage-backed Securities	5.0%	0.50%
Investment Grade Corporates	10.0%	1.56%
High Yield	5.0%	2.27%
Emerging Market Debt	5.0%	2.48%
Private Debt	5.0%	3.57%
Real Assets	15.0%	3.21%
Leverage	-5.0%	-0.59%
Total	<u>100.00%</u>	

<sup>(a)</sup> An expected inflation of 2.30% used for this period

<sup>(b)</sup> Figures are based on the 2021 Asset Liability Management study.

Sensitivity of the Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the District's proportionate share of the net pension liability for the Plan, calculated using the discount rate for the Plan, as well as what the District's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the current rate:

Discount Rate -1%	Current Discount Rate	Discount Rate +1%
5.90%	6.90%	7.90%
<u>\$ 6,336,696</u>	<u>\$ 4,126,146</u>	<u>\$ 2,307,412</u>



Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
 For the Year Ended June 30, 2023

NOTE 10 - PENSION PLAN (concluded)E. Pension Plan Fiduciary Net Position

Detailed information about the Plan's fiduciary net position is available in the separately issued CalPERS financial reports.

F. Payable to the Pension Plan

The District did not have an outstanding amount of contributions to the pension plan required for the year ended June 30, 2023.

G. Pension Rate Stabilization Program

Establishment of a Section 115 Irrevocable Trust (Pension Trust) for the purpose of assisting with stabilizing the unfunded CalPERS pension liability was approved by the Board of Directors in January 2018. This trust was founded in May 2018 with an initial deposit of \$600,000. The Pension Trust, managed by Public Agency Retirement Services (PARS), is considered a "Pension Rate Stabilization Program," and is designed to prefund rising pension costs and address the District's net pension liability. The Pension Trust should help mitigate long-term pension investment volatility, while providing the District with increased local control of assets and investment flexibility to create a more actuarially sound pension plan. The District intends to make annual contributions to the trust.

NOTE 11 - OTHER POST-EMPLOYMENT BENEFITSA. Plan Description

The District provides a defined benefit healthcare plan (the "Retiree Health Plan"). The District shoulders a certain percentage of eligible retirees' actual costs subject to a maximum of \$640 per month. The duration of retiree benefits provided by the District depends on the date an employee was hired by the District. For all full-time regular employees hired by the District prior to July 8, 2004, the District will pay the medical costs premium during the life of a retiree subject to a maximum of \$640 per month. For all full-time regular employees hired by the District after July 8, 2004, the District will pay 100% of the medical cost premium during retirement, subject to a maximum of \$640 per month, for a maximum of 10 years or until the retiree reaches age 65, whichever comes first.

All health plan participants are on a group plan rate. In addition to the District's actual costs, the District is required to recognize an implicit subsidy since the District allows its retirees to participate in the plan. The difference between the group plan rate that the retiree must pay and the actual or estimated individually rated premium for the retiree is the implicit rate subsidy (because the retiree continues to participate in the group plan, an implicit rate subsidy exists on the part of the employer).

B. Funding Policy

The District's Board of Directors will not be funding the plan in the current year but will follow a pay-as-you-go approach. The Board will review the funding requirements and policy annually.

Membership of the District as of the valuation date consisted of the following:

Active plan members	30
Inactive employees or beneficiaries currently receiving benefit payments	<u>12</u>
Total	<u><u>42</u></u>

Contribution

As of June 30, 2023, the District has accumulated \$-0- in an irrevocable trust toward this liability.

Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
 For the Year Ended June 30, 2023

NOTE 11 - OTHER POST-EMPLOYMENT BENEFITS (continued)C. Net OPEB Liability

The District's net OPEB liability was measured as of June 30, 2023, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation dated June 30, 2022.

D. Actuarial Assumptions

The total OPEB liability in the June 30, 2023 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified.

Discount rate	4.13%
Inflation	2.50%
Aggregate salary increases (individual salary increases based on CalPERS)	3.0%
Retirement age	50 to 75
Mortality rate	Based on Muni 20 Year Rate Index
Healthcare cost trend rate	10% in 2024, decreasing to 3.9% by 2076.

E. Discount Rate

The cash flows of the OPEB plan were projected to future years, assuming that the District will contribute an amount so that the assets always exceed expected benefits to retirees. Under that projection, the plan assets are projected to be adequate to pay all benefits to retirees in all future years, so the discount rate has been set equal to the long-term expected rate of return on investments, 4.13%.

The long-term expected rate of return on OPEB investments was determined using Muni 20 Year Rate Index expected long-term mean rate of return.

F. Change in the Net OPEB Liability

	Total OPEB Liability June 30, 2022	Total OPEB Liability June 30, 2023
Service cost	\$ 113,476	\$ 83,532
Interest	66,768	107,488
Benefit payments, including refunds of employee contributions	(124,097)	(98,046)
Differences between expected and actual experience	-	(393,112)
Change in assumptions	(473,933)	(21,850)
Net change in total OPEB liability	(417,786)	(321,988)
Total OPEB liability – beginning of year	3,011,345	2,593,559
Total OPEB liability – end of year	<u>\$ 2,593,559</u>	<u>\$ 2,271,571</u>

G. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The net OPEB Liability of the District, as well as what the District's net OPEB Liability would be if it were calculated using a discount rate that is one percentage point lower (3.13%) or one percentage point higher (5.13%) follows:

Plan's Net OPEB Liability/(Asset)		
Discount Rate - 1% (3.13%)	Current Discount Rate (4.13%)	Discount Rate + 1% (5.13%)
\$ 2,509,746	\$ 2,271,571	\$ 1,979,995



Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
 For the Year Ended June 30, 2023

NOTE 11 - OTHER POST-EMPLOYMENT BENEFITS (concluded)G. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate (concluded)

The following presents the Net OPEB Liability (NOL) as well as what the NOL would be if it were calculated using healthcare cost trend rates that are 1-percentage-point higher or lower than the current healthcare cost trend rates, as of June 30, 2023.

Plan's Net OPEB Liability/(Asset)		
1% Decrease	Healthcare Cost Trend Rates	1% Increase
\$ 1,948,661	\$ 2,271,571	\$ 2,449,500

H. OPEB Expense and Deferred Inflows of Resources Related to OPEB

For the fiscal year ended June 30, 2023, the District recognized OPEB income of \$107,762. On June 30, 2023, the District reported deferred inflows of resources from OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
OPEB contributions subsequent to measurement date	\$ -	\$ -
Differences between actual and expected experience	-	517,584
Changes in assumptions	50,011	1,028,003
Net differences between projected and actual earnings on OPEB plan investments	-	-
Change in employer's proportion and differences between the employer's contributions and the employer's proportionate share of contributions	-	-
Total	\$ 50,011	\$ 1,545,587

\$0 reported as deferred outflows of resources related to contributions after measurement date will be recognized as a reduction of the net OPEB liability in the year ended June 30, 2024.

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

<u>Fiscal Year Ended</u>	
6/30/24	\$ (305,552)
6/30/25	(318,512)
6/30/26	(328,510)
6/30/27	(334,195)
6/30/28	(130,110)
Thereafter	(78,697)

Additional information relating to the District's Retiree Health Plan and required OPEB disclosures can be obtained from the District's publicly available Comprehensive Annual Financial Report that may be obtained by contacting the Business Manager or General Manager at Humboldt Bay Municipal Water District, 828 Seventh Street, Eureka, California 95501-1114.

Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
For the Year Ended June 30, 2023

NOTE 12 - RISK MANAGEMENT

The District is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The risk of loss is variable as to the deductible amount per occurrence. Liability losses up to \$1 million and property losses up to \$50,000, are covered through a pooled self-insurance program, administered by the Association of California Water Agencies - Joint Powers Insurance Authority (ACWA-JPIA). Through participation in ACWA-JPIA, the District is covered by commercial liability insurance for losses of more than \$1 million, up to an insured maximum of \$60 million. Separately, the District insures for property damage more than the pooled limit of \$1 million, with commercial insurance for losses up to \$100 million.

The ACWA-JPIA began operations on October 1, 1979, and has continued without interruption since that time. The District is one of approximately two hundred and eighty-eight districts participating in the pool. The responsibilities of the ACWA-JPIA and the District are as follows:

Responsibilities of the ACWA-JPIA:

- a. Provide insurance coverage as necessary.
- b. Assist members in obtaining insurance coverage for risks not included within the coverage of the ACWA-JPIA.
- c. Assist each member's designated risk manager with the implementation of the risk management function.
- d. Provide loss prevention and safety consulting services to members as required.
- e. Provide claims adjusting and subrogation services for claims covered by the ACWA-JPIA's joint protection programs.
- f. Provide loss analysis and control to identify high exposure operations and to evaluate proper levels of self-retention and deductibles.
- g. Review members' contracts to determine sufficiency of indemnity and insurance provisions when requested.
- h. Conduct risk management audits to review the participation of each member in the programs.
- i. The ACWA-JPIA shall have such other responsibilities as deemed necessary by the Board of Directors and Executive Committee (of the ACWA-JPIA).

Responsibilities of the District:

- a. The governing board of each member district shall appoint a representative and at least one alternate representative to the Board of Directors.
- b. Each member shall appoint an employee of the member to be responsible for the risk management function within that member and serve as a liaison between the member and the ACWA-JPIA as to risk management.
- c. Each member shall maintain an active safety officer and/or committee and shall consider all recommendations of the ACWA-JPIA concerning unsafe practices.
- d. Each member shall maintain its own set of records, including a loss log, in all categories of risk covered by the joint protection program to ensure accuracy of the ACWA-JPIA's loss reporting system.
- e. Each member shall pay its deposit premium and premium adjustments within thirty days of the invoice date.
- f. Each member shall provide the ACWA-JPIA with such other information or assistance as may be necessary for the ACWA-JPIA to carry out the joint protection programs.
- g. Each member shall cooperate with and assist the ACWA-JPIA, and any insurer of the ACWA-JPIA, in all matters and covered claims and will comply with all bylaws, rules and regulations adopted by the Board of Directors and Executive Committee of the ACWA-JPIA.

There have been no significant reductions in insurance coverage from the prior year. The amounts of settlements have not exceeded the insurance coverage in each of the past three fiscal years.



Humboldt Bay Municipal Water District  
NOTES TO BASIC FINANCIAL STATEMENTS  
For the Year Ended June 30, 2023

NOTE 13 - CONTINGENCIES

The District receives, on a cost-reimbursement basis, federal and state funds to carry out a variety of projects and studies. As a recipient of federal and state funds, the District is responsible for maintaining an internal control structure that ensures compliance with all laws and regulations related to these programs. All federal and state program expenditures are subject to financial and compliance audits by the awarding agency. Such audits could result in claims against the District for disallowed costs or noncompliance with contract provisions. No provision has been made for any liabilities which may arise from noncompliance or questioned costs since the amounts, if any, cannot be determined at this time. The District is still in litigation with Van Duzen Investments, LLC and Steve Morris Logging and Construction regarding logging on District property. The outcome of this litigation cannot be determined at this time.

NOTE 14- SUBSEQUENT EVENTS

In preparing these financial statements, the District has evaluated events and transactions for potential recognition or disclosure through the date the financial statements were issued.

DRAFT

REQUIRED SUPPLEMENTARY INFORMATION

DRAFT

Humboldt Bay Municipal Water District  
SCHEDULE OF THE PROPORTIONATE SHARE OF THE  
NET PENSION LIABILITY (ASSET) MISCELLANEOUS  
 June 30, 2023  
 Last 9 years\*

Measurement Date, June 30	2022	2021	2020	2019	2018	2017	2016	2015	2014
Proportion of the net pension liability	0.0882%	0.09530%	0.08080%	0.07880%	0.07720%	0.07640%	0.07490%	0.07300%	0.07880%
Proportion share of the net pension liability	\$ 4,126,146	\$ 1,808,936	\$ 3,410,152	\$ 3,155,817	\$ 2,907,930	\$ 3,011,029	\$ 2,602,142	\$ 2,002,310	\$ 1,969,634
Covered - employee payroll	\$ 2,332,340	\$ 2,239,553	\$ 2,156,138	\$ 2,049,579	\$ 1,963,789	\$ 1,901,128	\$ 1,730,351	\$ 1,746,146	\$ 1,692,541
Proportionate share of the net pension liability as a percentage of covered-employee payroll	176.91%	80.77%	158.16%	153.97%	148.08%	158.38%	150.38%	114.67%	116.37%
Plan fiduciary net position as a percentage of the total pension liability	74.56%	88.26%	76.74%	77.37%	77.39%	75.66%	76.58%	80.90%	80.51%

NOTES TO SCHEDULEChanges in Benefit Terms:

None

Changes in Assumptions:

Effective with the June 30, 2021 valuation date (2022 measurement date), the accounting discount rate was reduced from 7.15% to 6.90%. In determining the long-term expected rate of return, CalPERS took into account long-term market return expectations as well as the expected pension fund cash flows. Projected returns for all asset classes are estimated, combined with risk estimates, and are used to project compound (geometric) returns over the long term. The discount rate used to discount liabilities was informed by the long-term projected portfolio return. In addition, demographic assumptions and the inflation rate assumption were changed in accordance with the 2021 CalPERS Experience Study and Review of Actuarial Assumptions.

\* Schedule is intended to show information for ten years. Additional years will be displayed as they become available.

Humboldt Bay Municipal Water District  
SCHEDULE OF CONTRIBUTIONS - MISCELLANEOUS  
 June 30, 2023  
 Last 10 years\*

Fiscal Year Ending June 30	Miscellaneous Plan									
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Contractually required contribution (actuarially determined)	\$ 647,631	\$ 574,390	\$ 526,893	\$ 475,220	\$ 477,614	\$ 434,427	\$ 408,926	\$ 386,697	\$ 253,791	\$ 229,022
Contributions in relation to the actuarially determined contributions	(647,631)	(574,390)	(526,893)	(475,220)	(477,614)	(434,427)	(408,926)	(386,697)	(253,791)	(229,022)
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Covered - employee payroll	\$2,610,161	\$2,332,340	\$2,239,553	\$2,156,138	\$2,049,579	\$1,963,789	\$1,901,128	\$1,730,351	\$1,746,146	\$1,692,541
Contributions as a percentage of covered-employee payroll	24.81%	24.63%	23.53%	22.04%	23.30%	22.12%	21.51%	22.35%	14.53%	13.53%

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Humboldt Bay Municipal Water District  
SCHEDULE OF CHANGE IN THE NET OPEB LIABILITY  
AND RELATED RATIOS  
For the Year Ended June 30, 2022

<b>Total OPEB Liability</b>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
Service cost	\$ 83,532	\$ 113,476	\$ 149,761	\$ 141,025	\$ 132,814	\$ 122,984
Interest	107,488	66,768	118,022	118,649	119,775	122,441
Benefit payments, included refunds of employee contributions	(98,046)	(124,097)	(128,964)	(172,574)	(177,041)	(155,236)
Differences between expected and actual experience	(393,112)	-	(310,304)	-	-	-
Change in assumptions	(21,850)	(473,933)	(1,168,795)	66,621	64,777	100,904
<b>Net change in total OPEB liability</b>	<b>(321,988)</b>	<b>(417,786)</b>	<b>(1,340,280)</b>	<b>153,721</b>	<b>140,325</b>	<b>191,093</b>
<b>Total OPEB liability - beginning of year</b>	<b><u>2,593,559</u></b>	<b><u>3,011,345</u></b>	<b><u>4,351,625</u></b>	<b><u>4,197,904</u></b>	<b><u>4,057,579</u></b>	<b><u>3,866,486</u></b>
<b>Total OPEB liability - end of year</b>	<b><u>\$2,271,571</u></b>	<b><u>\$2,593,559</u></b>	<b><u>\$3,011,345</u></b>	<b><u>\$4,351,625</u></b>	<b><u>\$4,197,904</u></b>	<b><u>\$4,057,579</u></b>
<b>Plan Fiduciary Net Position</b>						
Net investment income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contributions						
Employer	-	-	-	-	-	-
Benefit payments, included refunds of employee contributions	-	-	-	-	-	-
Implicit rate subsidy fulfilled	-	-	-	-	-	-
Administrative expense	-	-	-	-	-	-
<b>Net change in plan fiduciary net position</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Plan fiduciary net position - beginning of year</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Plan fiduciary net position - end of year</b>	<b><u>\$ -</u></b>	<b><u>\$ -</u></b>	<b><u>\$ -</u></b>	<b><u>\$ -</u></b>	<b><u>\$ -</u></b>	<b><u>\$ -</u></b>
<b>District's net OPEB liability - end of year</b>	<b><u>\$2,271,571</u></b>	<b><u>\$2,593,559</u></b>	<b><u>\$3,011,345</u></b>	<b><u>\$4,351,625</u></b>	<b><u>\$4,197,904</u></b>	<b><u>\$4,057,579</u></b>
<b>Covered-employee payroll</b>	<b>\$2,894,534</b>	<b>\$2,568,480</b>	<b>\$2,464,853</b>	<b>\$2,183,531</b>	<b>\$2,080,167</b>	<b>\$2,073,759</b>
<b>Net OPEB liability as a percentage of covered-employee payroll</b>	<b>78.48%</b>	<b>100.98%</b>	<b>122.17%</b>	<b>199.29%</b>	<b>201.81%</b>	<b>195.66%</b>

The schedules present information to illustrate changes in the District's changes in the net OPEB liability over a ten year period when the information is available.

**Humboldt Bay Municipal Water District**

To: Board of Directors

From: Chris Harris

Date: November 14, 2024

Re: **GASB 87** - Capitalization of Leases and **GASB 96** - Subscription-Based Information Technology Agreements

**Background****GASB 87**

In June 2017, the Government Accounting Standards Board (GASB) issued Statement No. 87, “Leases”, applying to leases of tangible capital assets—including buildings, land, and equipment.

Prior to GASB 87, leased equipment could be considered either “operating” leases or “capital” leases. This option has been eliminated with GASB 87. Now, lessees will recognize an intangible right-to-use asset and a lease liability. Lessors will recognize a lease receivable and a deferred inflow of resources. GASB 87 increases the transparency of governmental financial statements by requiring recognition of leased assets and liabilities for all leases, including those that previously were classified as operating leases and recognized as income by lessors and expenditures by lessees.

**GASB 96**

In May 2020, GASB issued Statement No. 96, “Subscription-Based Information Technology Arrangement” (SBITAs), establishing uniform accounting and financial reporting requirements for software subscriptions.

GASB 96 applies to government agencies who are currently using subscription-based information technology software to perform their operations. SBITA’s provide a cost-effective solution for agencies without the upfront costs associated with traditional software licenses. Rather than purchasing the software outright, agencies can subscribe to the software services from vendors for a specified period, paying for the service on a recurring basis. GASB 96 applies to all contracts meeting the definition of a SBITA, unless specifically excluded. Exclusions from GASB 96 include arrangements that provide a perpetual license and contracts that provide IT services.

**Discussion**

Although issued in 2017, GASB 87’s implementation date was for the FY22 year, while GASB 96 (issued in May 2020) was to be implemented for the FY23 year.

For the FY22 Audit, the auditor recommended the District consider formalizing both a capitalization policy for leases as well as a policy for Subscription-Based IT Arrangements (similar to the District's capitalization policy for fixed assets). Based on timing of the audits, this recommendation is listed in the FY23 Audit as a "Prior Year Observation." Although the District does not currently have any leases or SBITA's that will be impacted by this policy, as recommended by the auditor, staff has created the *Capitalization Policy for Leases and Subscription-Based IT Arrangements*, attached.

### **Recommendation**

Staff recommends the Board approve the attached *Capitalization Policy for Leases and Subscription-Based IT Arrangements*.

### **Attachments**

Capitalization Policy (GASB 87 and GASB 96)

**Humboldt Bay Municipal Water District**  
**Capitalization Policy – Leases and Subscription-Based IT**  
**Arrangements**  
**(GASB 87 and GASB 96)**

Approved By: Board of Directors

## Purpose

Based on recommendation by the District auditor, this policy establishes accounting treatment of lease agreements (GASB 87) and subscription-based IT arrangements (GASB 96) entered into by Humboldt Bay Municipal Water District (HBMWD).

### **GASB 87 Summary**

GASB 87 establishes a single model for lease accounting based on the principle that leases are financings of the right to use an asset. Contracts for service are not included. Contracts that contain both a lease component (right to use a building) and a service component (maintenance of the building) should be separated and only the lease component should be included. GASB 87 specifically excludes Subscription-Based Information Technology Arrangements (SBITA's).

### **GASB 96 Summary**

GASB 96 establishes uniform accounting and financial reporting requirements for Subscription-Based Information Technology Arrangements (SBITA). GASB 96 applies to IT software under contract that conveys the right to use another party's IT software, alone or in combination with tangible capital assets (with underlying IT assets), as specified in the contract for a period of time.

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## **Lease Capitalization Policy (GASB 87)**

### **General Policy**

The materiality threshold for GASB 87 leases is established at \$100,000. The lease term threshold for GASB 87 are leases with terms greater than 12-months, including options to extend. The lease must meet both the materiality and term thresholds to be considered a GASB 87 lease. Leases that meet both requirements will be capitalized in compliance with GASB 87, with the following exceptions:



1. Leases that transfer ownership and do not contain termination options
2. Supply Contracts
3. SBITA contracts
4. Any other leases specifically excluded by GASB 87

#### **When the District is the Lessee**

- 1) At the onset of the lease, the District will recognize a lease liability and an intangible asset representing the District's right to use the leased asset at the beginning of the lease.
- 2) The District will measure its lease liability as the present value of all payments expected to be made during the lease term.
- 3) Variable payments based on future performance of the District or usage of the underlying asset will be expensed as incurred, and not included in the measurement of the lease liability.
- 4) The lease asset will be measured at the amount of the initial measurement of the lease liability, plus any payments made to the lessor at or before the commencement of the lease term.
- 5) The District will assess each lease liability annually for changes in the terms of the lease, interest rate, impairment of the underlying leased asset, or other factors that may impact the expected lease payments. Lease amendments and other modifications could necessitate remeasuring the lease liability.
- 6) The District will report amortization expense for the lease asset over the shorter of the term of the lease or the useful life of the underlying asset. This amortization expense will be reported with depreciation expense for capital assets.
- 7) The District will calculate the amortization of the discount on each lease liability in subsequent financial reporting periods, and report that amount as interest expense.
- 8) The District will ensure that the District auditor includes the appropriate footnote disclosures in the District audited financial statements.

#### **When the District is the Lessor**

- 1) The District will recognize a lease receivable at the present value of lease payments anticipated to be received during the lease term, reduced by any provision for estimated uncollectible amounts.
- 2) The District will recognize a deferred inflow of resources at the initial value of the lease receivable, plus the amount of any payments received at or before the commencement of the lease term that relate to future periods (i.e. the final month's rent).
- 3) The District will continue to report the asset underlying the lease in its financial statements and will continue to calculate depreciation and impairment as needed.

- 4) The District will assess each lease receivable annually for changes in the terms of the lease, interest rate, impairment of the underlying leased asset, or other factors that may impact the expected lease payments. Lease amendments and other modifications could necessitate remeasuring the lease receivable.
- 5) The District will report lease revenue, systematically over the term of the lease, corresponding with the reduction of the deferred inflow.
- 6) The District will calculate the amortization of the discount on each lease receivable in subsequent financial reporting periods, and report that amount as interest revenue.
- 7) The future lease payments to be received should be discounted using any interest rate the District charges the lessee.
- 8) The District will ensure that the District auditor includes the appropriate footnote disclosures in the District audited financial statements.

When entering into a lease agreement, District staff will consult with the District Auditor.

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## **IT Subscription Policy (GASB 96)**

### **General Policy**

The materiality threshold for GASB 96 SBITA's is established at \$100,000. The term threshold for GASB 96 SBITA's are subscriptions with terms greater than 12-months, including options to extend. The SBITA must meet both the materiality and term thresholds to be considered a GASB 96 SBITA. Leases that meet both requirements will be capitalized in compliance with GASB 96, with the following exceptions:

1. SBITAs that provide ownership or indefinite use of the vendor's IT assets (perpetual licensing agreements).
2. SBITAs that convey control of the right to use another party's combination of IT software and tangible capital assets that meets the definition of a lease in GASB 87.
3. SBITAs that are not considered subscription-based, such as contracts that solely provide IT support services.

**District - SBITA Lessee**

Under GASB 96, the District will recognize a subscription asset and a corresponding subscription liability.

**Subscription Liability**

- 1) The subscription liability is initially measured as the present value of subscription payments expected to be made during the subscription term. The subscription term should be reassessed if the District elects to exercise an option to extend, or alternatively, elects to not exercise an option to extend.
- 2) Subscription payments are discounted at the implicit rate when known; if unknown, a reasonable incremental borrowing rate will be used. The discount on the subscription liability is amortized over subsequent accounting periods.
- 3) The amortization is calculated using the effective interest method, which results in a constant periodic interest rate applied to the outstanding balance of the subscription liability.
- 4) The effective interest rate is calculated at the inception of the subscription liability and is based on the discount rate used to measure the liability, adjusted for any changes in the liability's expected cash flows.
- 5) Any subscription payments made will be allocated first to the accrued interest liability and then to the subscription liability.
- 6) The District will ensure that the District auditor includes the appropriate footnote disclosures in the District audited financial statements.

**Subscription Asset**

- 1) The subscription asset is recognized and measured at the beginning of the subscription term as follows: The initial subscription liability amount + Payments made to the SBITA vendor at the beginning of the subscription term + Capitalizable implementation costs - Incentives received from the SBITA vendor at or before commencement of the subscription term = Subscription Asset amount.
- 2) The subscription asset will be amortized using the straight-line method over the shorter of the subscription term or the useful life of the underlying IT assets and is reported as amortization/depreciation expense.
- 3) The periodic amortization amount is calculated as the initial measurement of the subscription asset, less any residual value, divided by the shorter of the subscription term or the useful life of the underlying IT assets.
- 4) The District will evaluate its SBITA assets at least annually for indications of impairment (the decline in value of an asset below its fair value). Under GASB 96, the impairment of a SBITA asset occurs when its carrying amount exceeds its recoverable amount.
- 5) The District will ensure that the District auditor includes the appropriate footnote disclosures in the District audited financial statements.

# **OPERATIONS**



Memo to: HBMWD Board of Directors  
From: Dale Davidsen, Superintendent  
Date: November 1, 2024  
Subject: Essex/Ruth October 2024 Operational Report

### **Upper Mad River, Ruth Lake, and Hydro Plant**

1. There was no flow at Mad River above Ruth Reservoir (Zenias Bridge) in October.
2. The conditions at Ruth Lake for October were as follows:  
The lake level on October 31<sup>st</sup> was 2637.50 feet which is:
  - 3.38 feet lower than September 30<sup>th</sup>, 2024;
  - 6.62 feet lower than October 31<sup>st</sup>, 2023;
  - 3.76 feet lower than the ten-year average;
  - 16.50 feet below the spillway.
3. Ruth Headquarters recorded 0.80 inches rainfall in October.
4. Ruth Hydro produced 156000 KWh in October. There were 2 maintenance shut downs for 2 hours.
5. The lake discharge averaged 45 cfs with a high of 48 cfs on October 12<sup>th</sup>.

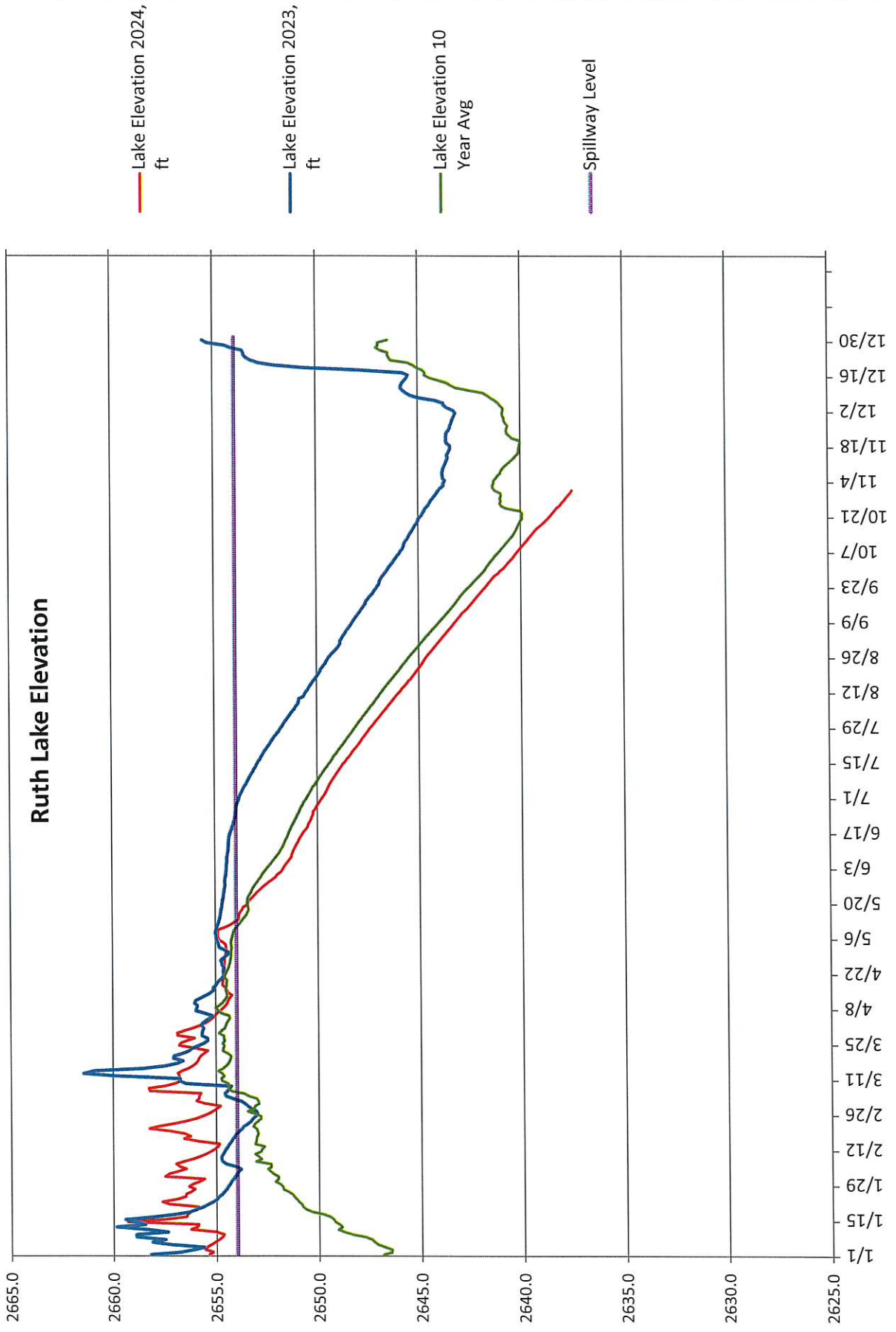
### **Lower Mad River, Winzler Control, and TRF**

6. The river at Winzler Control Center, for October, had an average flow of 58 cfs. The river flow was at a high of 92 cfs on October 29<sup>th</sup>.
7. The domestic water conditions were as follows:
  - a. The domestic water turbidity average was 0.07 NTU, which meets Public Health Secondary Standards;
  - b. As of October 31<sup>st</sup>, we pumped 238.852 MG at an average of 7.705 MGD;
  - c. The maximum metered daily municipal use was 8.780 MG on October 3<sup>rd</sup>.
8. The TRF is online from October 4<sup>th</sup>.
  - a. Average monthly source water turbidity was 1.81 NTU;
  - b. Average monthly filtered water turbidity was 0.18 NTU;
  - c. Number of monthly filter backwashes was 29.

9. October 1<sup>st</sup> – A crew went to Ruth to do the following:
  - a. Install a new inverter in the slide gate room.
  - b. Install a new switch for the camera system.
  - c. Diagnose cause of HBV drifting.
10. October 2<sup>nd</sup> – Took delivery of the new conical bottom coagulant tank, loaded out the wrong tank that was shipped out last week.
11. October 3<sup>rd</sup> – Challenging leak in Fieldbrook. Leak was alongside a 10” fire service line, under a 4” gas line and Fiber optic conduit.
12. October 4<sup>th</sup>
  - a. Finished clean up and road pavement patch from leak.
  - b. Install new bury and re-set hydrant near Grassy Creek in Fieldbrook. This hydrant was hit by a car a few weeks ago.
13. October 8<sup>th</sup>
  - a. Maintenance went to Ruth to replace 25’ ft of cable on the ends of the secondary logboom anchors with heavy chain.
  - b. Cody Cruz, GHD structural engineer, also did the routine 5 yr. inspection of the logboom.
  - c. Points West doing annual surveys at Ruth.
14. October 14<sup>th</sup>
  - a. Reviewed 90% plans for the TRF generator.
  - b. 90-day truck inspections.
15. October 15<sup>th</sup>
  - a. Maintenance went to Ruth to start repairs to cold joint on Ogee face.
  - b. OSHG project bid walk through.
  - c. Worked with Laurel Tree Charter School on fire service needs.
16. October 16<sup>th</sup>
  - a. Painting contractor on-site prepping Col 2 for paint.
  - b. Electrical staff went to Ruth to work on Wickett gate controls.
17. October 17<sup>th</sup> – Maintenance went to Ruth to finish Ogee cold joint repairs.
18. October 22<sup>nd</sup> – SB 198 safety meeting.

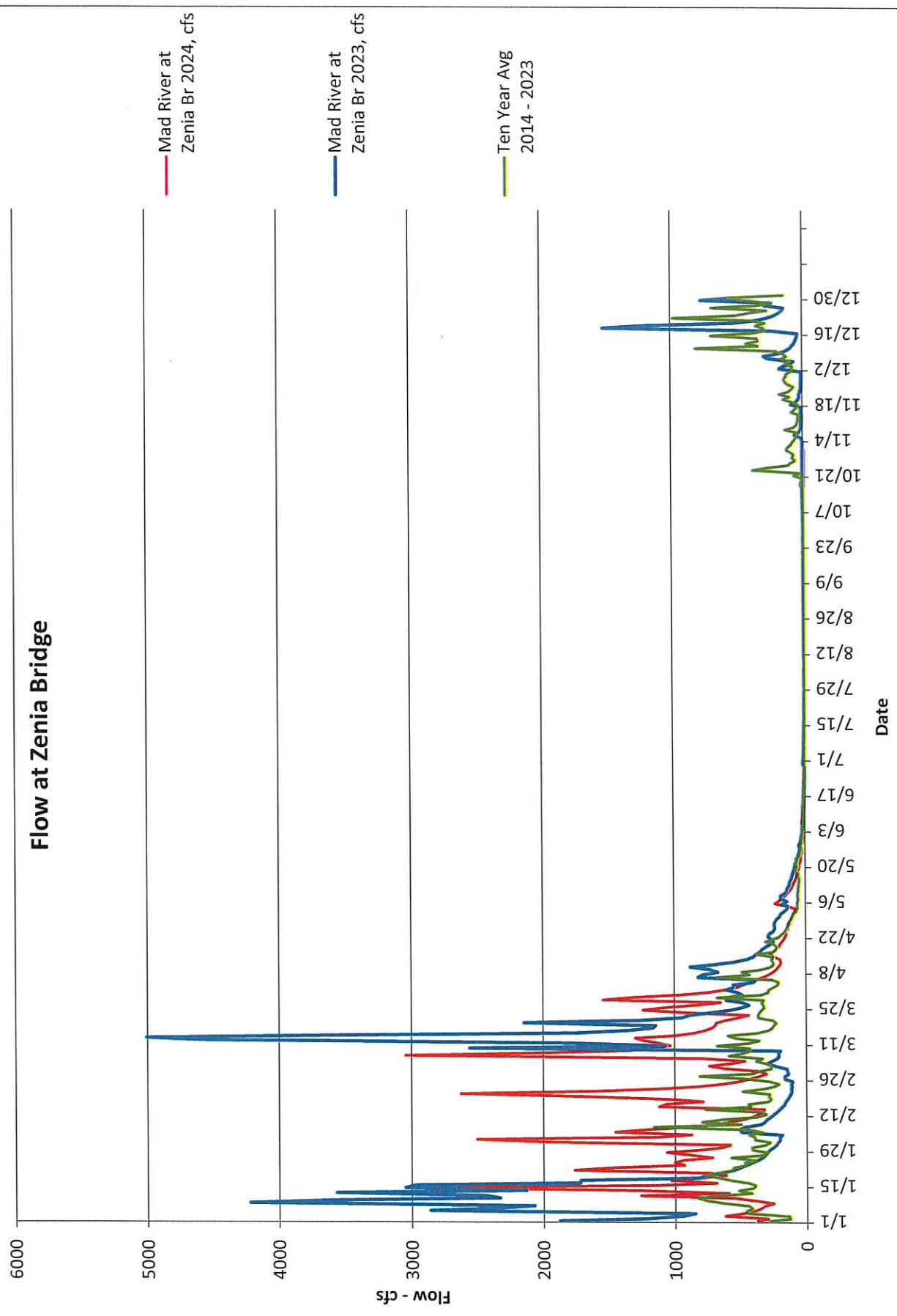
19. October 23<sup>rd</sup>
  - a. Matt and I went to Ruth to clean out Piezo Well 8.
  - b. Unit 2 tripped offline due to a “loss of field” alarm. This is a very uncommon alarm. Larry started unit 1.
  
20. October 24<sup>th</sup>
  - a. Electrical staff went to Ruth to trouble shoot why unit 2 had loss of field. No problem was found. Larry started unit 2, it synchronized no problem.
  - b. Safety meetings
    - i. Bloodborne pathogens.
    - ii. Rigging safety.
  
21. October 25<sup>th</sup> – Staff interviews of GM candidates.
  
22. October 28<sup>th</sup>
  - a. Dave went to Ruth to meet with Electrical Reliability to calibrate synchronizer. This was a budget project and help with camera connectivity.
  - b. Lui also went to Ruth to work on camera connectivity.
  
23. October 29<sup>th</sup> – Maintenance went to Ruth to meet with Camera vendor and help install camera on tower.
  
24. Current and Ongoing Projects
  - a. FEMA ICS-100 training – 95% completed.
  - b. Work on mounting brackets and networking for Ruth dam camera system – Installation complete. Training left to be done.
  - c. Collector 2 and Collector 2-meter, Communications project – In Progress.
  - d. Tesla battery bank projects – In progress
  - e. OSHG – Bid opening Nov 5<sup>th</sup>.
  - f. Routine annual equipment maintenance and services.

### Ruth Lake Elevation

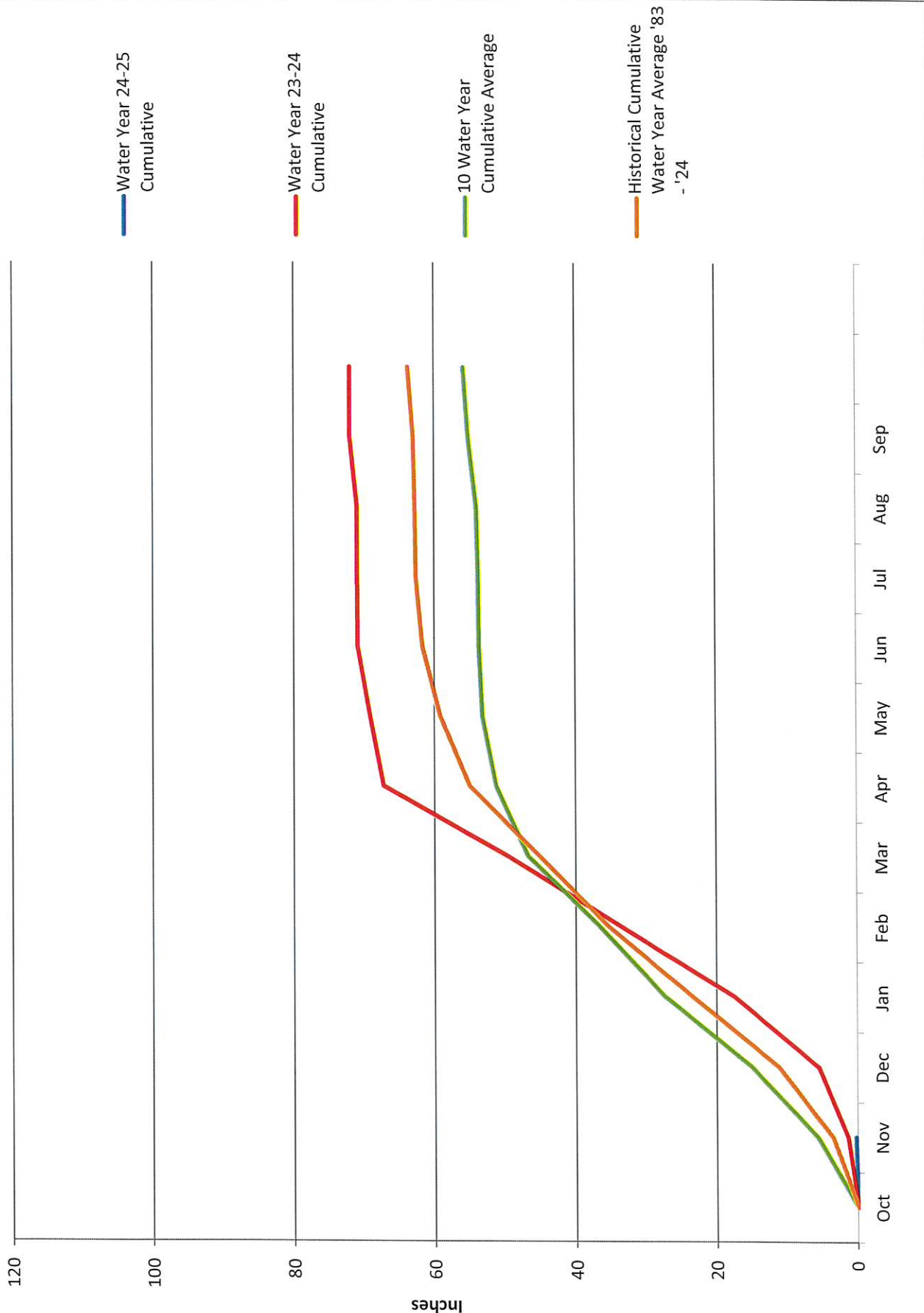


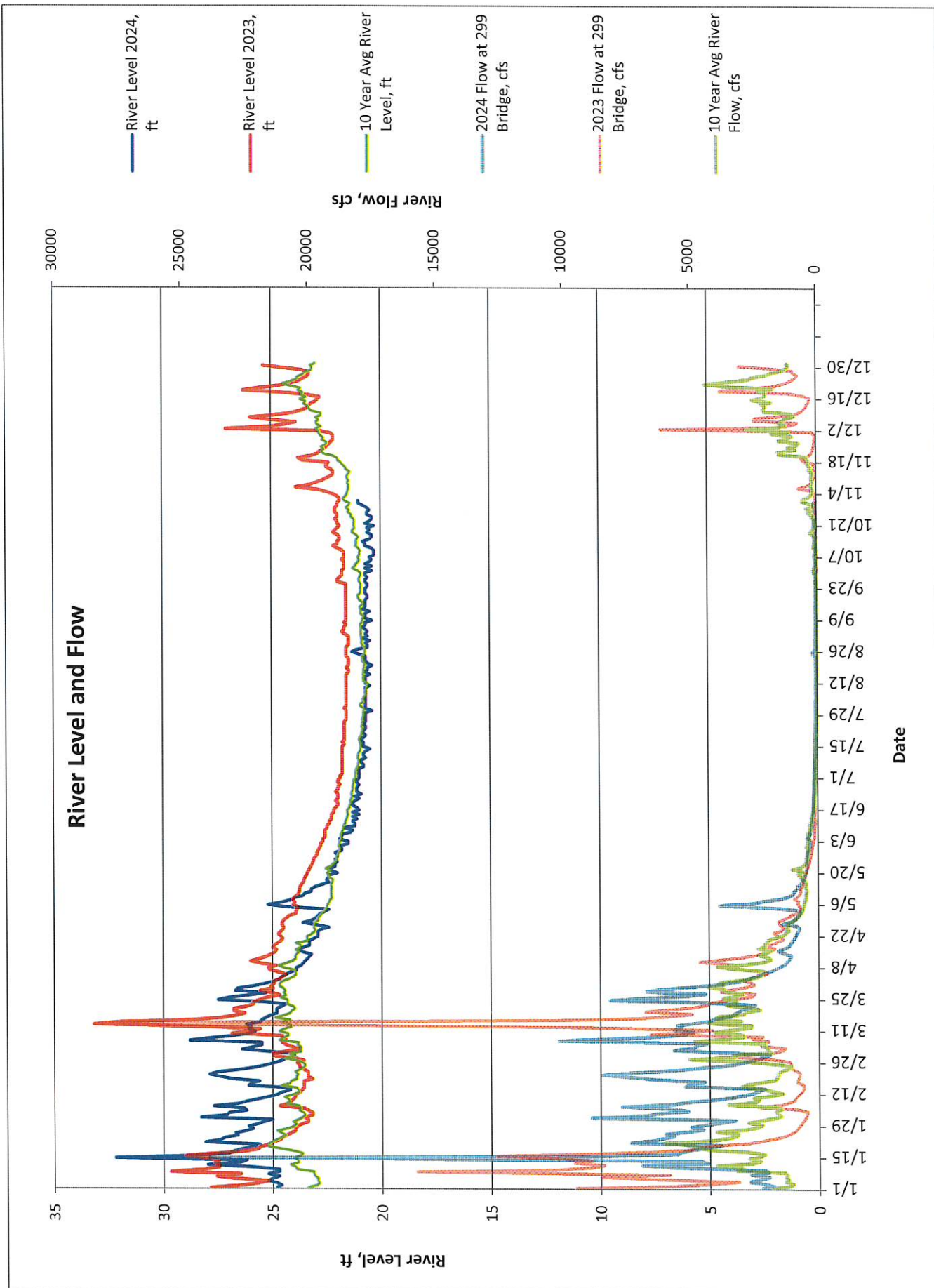


### Flow at Zenia Bridge

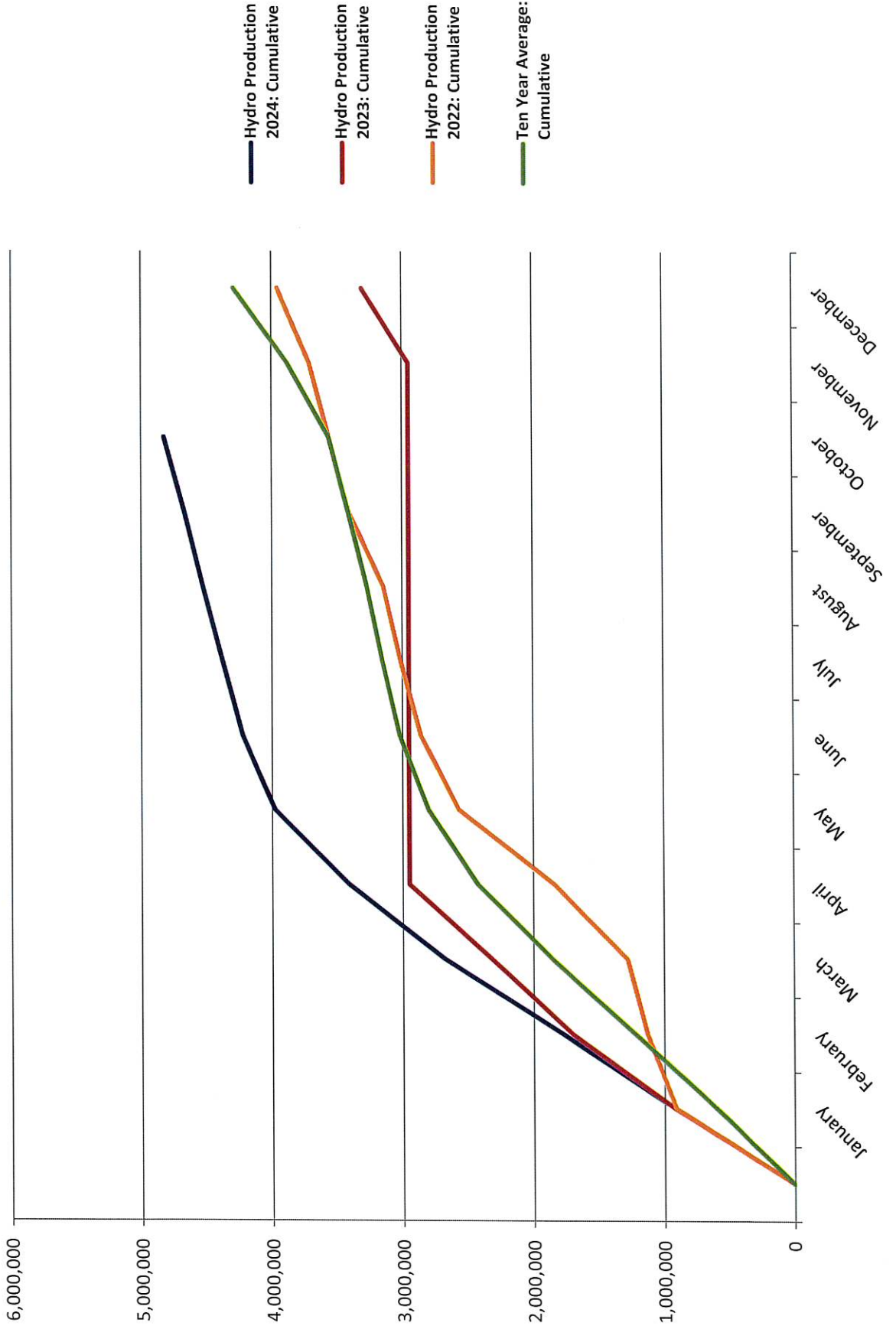


### Ruth Rainfall - Water Year 2023-2024





### Ruth Hydro Production: Cumulative kWh





# MANAGEMENT

**John Friedenbach**

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**From:** buffington@pointswestsurveying.com  
**Sent:** Wednesday, October 16, 2024 4:20 PM  
**To:** John Friedenbach  
**Cc:** Michael Pulley  
**Subject:** RE: HBMWD Easement Survey - Arcata  
**Attachments:** HBMWD EASEMENT EXHIBIT 36x24.pdf

Hi John,

Please find the attached exhibit showing the location of the HBMWD easement in relation to waterline stakes in the field. I am leaving the office now but will be in most of the day tomorrow if you want to discuss. I understand how Hogan Land Services ended up with the easement mapped in the wrong place. It appears that they did their survey on grid bearings and then did not rotate the easement from ground to grid bearings. Let me know if you have any questions about this.

Thank you,

Jesse Buffington, PLS  
Points West Surveying Company  
5201 Carlson Park Drive Suite 3  
Arcata CA 95521  
707.840.9510

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**From:** Michael Pulley <pulley@pointswestsurveying.com>  
**Sent:** Thursday, October 3, 2024 6:12 PM  
**To:** John Friedenbach <friedenbach@hbmwd.com>  
**Cc:** David Crivelli <crivelli@pointswestsurveying.com>; buffington@pointswestsurveying.com  
**Subject:** Re: HBMWD Easement Survey - Arcata

John--

I agree with you that the solution is the survey your easement.

I need to let you know that we had a contractual relationship with Renewable America on this project for staking the driveway entrance to the site from Foster Avenue. When they reached out to us to survey the fences and solar arrays, it was an emergency staking job in their view and they declined our emergency survey Scope and Cost. So we were involved with a minor aspect of this project for this developer. That said, since we were not hired for the stakeout of the fence and solar arrays that has taken place, I feel like we can do this work for this district.

As you know, we will be up at Ruth on Monday and Tuesday next week but we could certainly start the fieldwork to locate your easement when we return. We would be making some ties to monuments called out in the easement description prior to staking the easement. Did Renewable America give you any indication of the availability of their surveyor? I believe they are using Hogan Land Services out of Santa Rosa. That was who prepared their pre-construction ALTA survey.

I will be in the office tomorrow if you want to discuss this further over the phone.

Thanks,  
Michael

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**From:** John Friedenbach <[friedenbach@hbmwd.com](mailto:friedenbach@hbmwd.com)>  
**Sent:** Thursday, October 3, 2024 5:14 PM  
**To:** David Crivelli <[crivelli@pointswestsurveying.com](mailto:crivelli@pointswestsurveying.com)>; Michael Pulley <[pulley@pointswestsurveying.com](mailto:pulley@pointswestsurveying.com)>  
**Subject:** HBMWD Easement Survey - Arcata

Hi David & Michael,

We are having an issue with a solar field construction project adjacent to our pipelines in the Arcata bottoms. Attached is the agreement we have with the company doing the project. Our pipeline easement was incorporated into the agreement. The last page of the agreement is a picture of the project and pipeline easement location. Apparently, the surveyor for the construction company used that diagram's polygons to create the fence lines on the ground for the project. One of their fence lines encroaches into our easement.

The solution that I see is for you to survey in our easement. Unless you have a better id  
What is your availability to survey our easement location?  
Time is of the essence on this as they are having millions of dollars of solar panels delivered to the site and they need them secured by the fencing.  
The construction company would like their surveyor to be onsite when you do your survey.  
Please let me know so I can inform them of when you are available.

Thank you!

John Friedenbach  
General Manager  
707-443-5018 office  
707-362-7509 cell

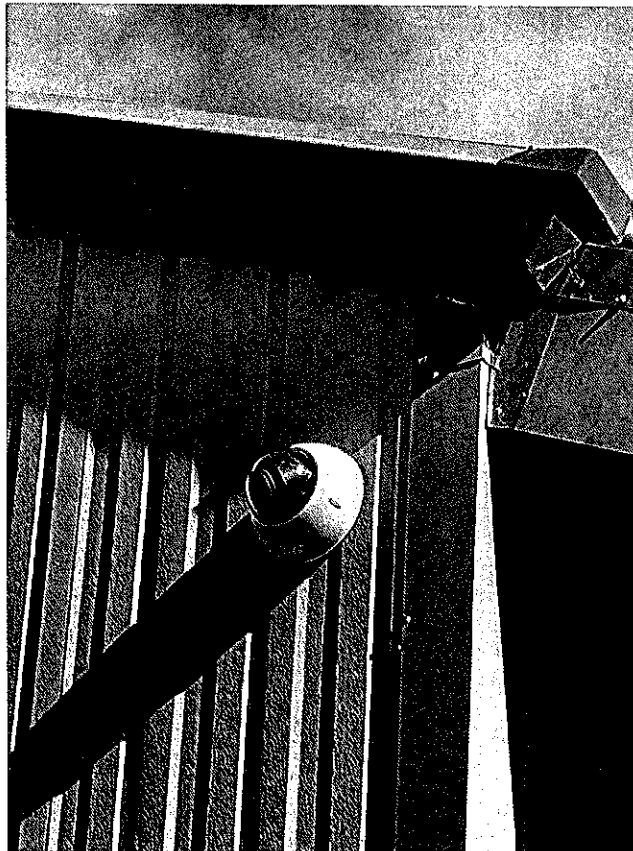
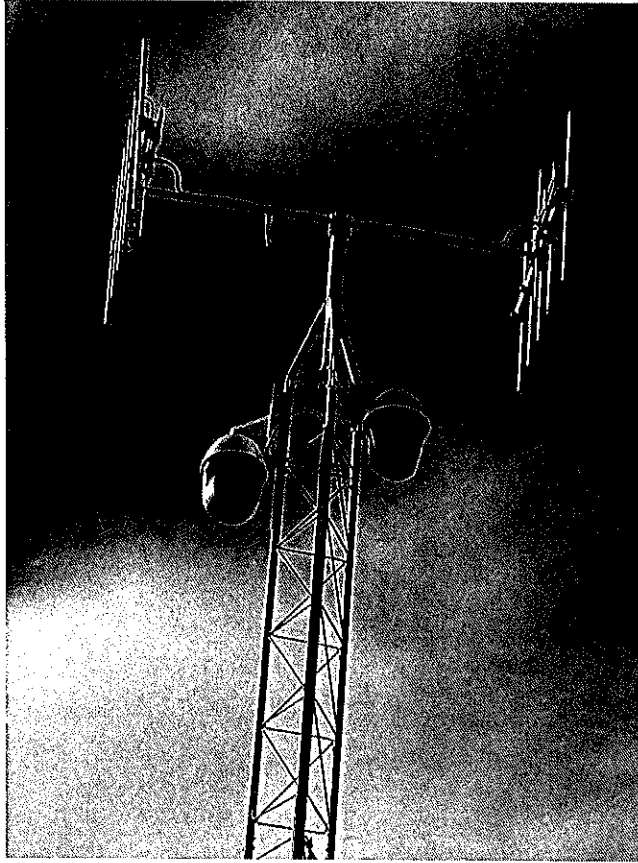












**ACWA**



# MEMORANDUM

Via U.S. Mail and Electronic Mail

**TO:** ACWA Member Agency Board Presidents and General Managers  
**CC:** ACWA Board of Directors  
**FROM:** Dave Eggerton, ACWA Executive Director  
**DATE:** October 8, 2024  
**SUBJECT:** Notice of Membership Meeting — December 4

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A Membership Meeting will be held at ACWA's 2024 Fall Conference & Expo to conduct a vote by the membership on proposed Amended and Restated Bylaws of the Association of California Water Agencies. The in-person meeting will be held on **Wednesday, December 4 at 1:30 p.m.** at the Main Stage in the Springs Ballroom F & G at the JW Marriott Desert Springs Resort & Spa, Palm Desert.

Each member agency is entitled to one vote that will be cast by its authorized voting representative. Member agencies must designate their voting representative and alternate by submitting the attached Voting Representative Form by **Monday, November 25.**

## Important Next Steps

1. **Designate your voting representative:** Fill out the attached Voting Representative Form by Monday, November 25.
2. **Review the proposed Amended and Restated Bylaws:** These are available online at [www.acwa.com](http://www.acwa.com).
3. **Have your designated voter pick up their keypad:** During ACWA's Fall Conference & Expo, have your designated voter go to the ACWA Membership Meeting Check-in Desk on **Wednesday, December 4, between 9 a.m. and noon** to sign in and pick up their voting keypad. If your voting representative does not get a keypad by noon, they will not be able to vote. ACWA staff will also be available at the desk to answer questions.
4. **Have your designated voter attend the Membership Meeting:** Make sure your designated voter takes their keypad to the Membership Meeting on December 4 at 1:30 p.m. The voting representative must be present to vote.

More information on the proposed Amended & Restated Bylaws, voting process and next steps is available at [www.acwa.com](http://www.acwa.com). If you have any questions regarding the proposed Amended and Restated Bylaws or the voting process, please contact Senior Clerk of the Board Donna Pangborn at 916-669-2425 or [donna@acwa.com](mailto:donna@acwa.com).





## 2024 ACWA MEMBERSHIP MEETING AUTHORIZED VOTING REPRESENTATIVE FORM

There will be a Membership Meeting at ACWA's 2024 Fall Conference & Expo.

**Date & Time:** December 4, 2024, 1:30 p.m.

**Location:** JW Marriott Desert Springs Resort & Spa, Palm Desert  
Main Stage in the Springs Ballroom F & G

The purpose of the meeting is to conduct a vote by the membership on proposed Amended and Restated Bylaws of the Association of California Water Agencies as recommended by the Board of Directors at its meeting on September 20, 2024.

As set forth in Board Policy 2.8.1.5, each authorized voting representative has the responsibility to do the following in order to vote:

- Pick up handheld keypad or other designated voting mechanism prior to the start time of the membership meeting as specified in the meeting notice.
- Be physically present and inside the meeting room at the start of the membership meeting as specified on the meeting agenda.

### Pick up Voting Keypad and Ask Questions

ACWA staff will be at the **Membership Meeting Check-In Desk** on **Wednesday, December 4, from 9:00 a.m. to noon.** to answer questions about the membership meeting and voting process. Voters must sign in during this time to pick up their voting keypads. *Note: If you do not have your keypad by noon., you will not be able to vote, consistent with established Board Policy 2.8.1.5.*

**The person designated below will attend the Membership Meeting on December 4 as our voting representative. An alternate has also been identified as a backup voter in the event one is needed.**

Member Agency's Name		Agency's Phone No.
Authorized Voting Representative's Name	Authorized Voting Representative's Email	Authorized Voting Representative's Phone No.
Alternate Authorized Voting Representative's Name	Alternate Authorized Voting Representative's Email	Alternate Authorized Voting Representative's Phone No.

Member acknowledges that this information has been communicated to their authorized voting representative.

Print Name of Member Agency's Authorized Signatory

Date

Authorized Signatory Signature

### SUBMIT YOUR FORM

**To:** Donna Pangborn, Senior Clerk of the Board  
**Email:** [donna@acwa.com](mailto:donna@acwa.com)  
**Fax:** 916-669-2425

**SUBMISSION DEADLINE  
NOVEMBER 25, 2024**



# Proposed Amendments to the Bylaws of the Association of California Water Agencies

**Amendment 1: ARTICLE 3, Officers**

Current Bylaw	Proposed Bylaw	Rationale
<p><b>Section 3.01. (c) Vice President.</b> The vice president shall, in the absence of the president, assume all of the duties of that office and, if a vacancy occurs, succeed thereto for the unexpired term. The vice president shall sit as a member of the Executive Committee of the ACWA Joint Powers Authority and shall perform such other duties as assigned by the president.</p>	<p>Section 3.01. (c) Vice President. The vice president shall, in the absence of the president, assume all of the duties of that office and, if a vacancy occurs, succeed thereto for the unexpired term. The vice president shall sit as a member of the Executive Committee of the ACWA Joint Powers Insurance Authority and shall perform such other duties as assigned by the president. <u>The vice president shall be a non-voting, ex officio member of each committee, but shall not be an ex officio member of the Election Committee or the region boards.</u></p> <p><u>The vice president may be expelled from office with or without cause, upon the satisfaction of the following two events: (1) a two-thirds vote of the Board of Directors; and (2) a subsequent simple majority vote of the members of the Association during a meeting of the membership.</u></p>	<p>Amendment to add these provisions to the Vice President position, similar to Section 3.01(b) to provide procedural consistency to the two Board Officer positions.</p>

Note: Green text throughout this document reflects edits recommended by the Legal Affairs Committee (LAC) Workgroup in response to its review and analysis of the proposed amendments to the Bylaws, consistent with Section 9.09 of ACWA's Bylaws. The ACWA Board included the LAC Workgroup's recommended edits as part of its recommendation to the members.



# Proposed Amendments to the Bylaws of the Association of California Water Agencies

## Amendment 2: ARTICLE 4, Board of Directors

Current Bylaw	Proposed Bylaw	Rationale
<p><b>Section 4.07. Quorum.</b> At any meeting of the Board of Directors, the attendance of 50 percent of the voting members of the Board of Directors, or their permitted alternates as specified in these bylaws, shall constitute a quorum for the transaction of any business. The Board may hold a closed session for discussion of personnel matters; <del>or</del> enforcement of violations of the code of conduct; <del>pending or anticipated litigation or other legal matters, including, but not limited to, considering whether to file or join in an amicus brief, real property negotiations and discussions;</del> and other confidential matters as determined by the Board to the extent permitted by applicable law. (See Board Policy 2.1.8.3.)</p>	<p><b>Section 4.07. Quorum.</b> At any meeting of the Board of Directors, the attendance of 50 percent of the voting members of the Board of Directors, or their permitted alternates as specified in these bylaws, shall constitute a quorum for the transaction of any business. The Board may hold a closed session for discussion of personnel matters; <del>or</del> enforcement of violations of the code of conduct; <del>pending or anticipated litigation or other legal matters, including, but not limited to, considering whether to file or join in an amicus brief, real property negotiations and discussions;</del> and other confidential matters as determined by the Board to the extent permitted by applicable law. (See Board Policy 2.1.8.3.)</p>	<p>Amendment to clarify the scope of issues that can be addressed by the Board in closed session.</p>





# Proposed Amendments to the Bylaws of the Association of California Water Agencies

## Amendment 3, ARTICLE 3, Board of Directors

Current Bylaw	Proposed Bylaw	Rationale
<p><b>Section 4.12. Code of Conduct of Board Members.</b>  <b>(a) Code of Conduct Purpose and Adoption.</b> The Board of Directors shall establish, and update as appropriate, a code of conduct for its Directors that recognizes the Association’s commitment of integrity, respect, and fair representation to its members and the public they serve and the public they serve and establishes minimum ethical standards for the performance of the duties of office. The code shall be consistent with the procedural processes contained in this section. The code shall be distributed to all new Directors and shall be distributed annually to all members of the Association.</p>	<p><b>Section 4.12. Code of Conduct of Board Members.</b>  <b>(a) Code of Conduct Purpose and Adoption.</b> The Board of Directors shall establish, and update as appropriate, a code of conduct for its Directors that recognizes the Association’s commitment of integrity, respect, and fair representation to its members and the public they serve and establishes minimum ethical standards for the performance of the duties of office. <del>The code shall be consistent with the procedural processes contained in this section.</del> <u>(See Code of Conduct Policy, Board Policy Manual, Policy No. GO-2.1A). The code shall be consistent with the procedural processes contained in the Code of Conduct Policy (See sections 2.1.3A and 2.1.4A of Policy No. GO-2.1A of the Board Policy Manual.)</u> The code shall be distributed to all new Directors and shall be distributed annually to all members of the Association.</p>	<p>Amendment to reflect consistency with recently adopted Board Policy GO-2.1A Code of Code and to delete reference to the Legal Affairs Committee Chair in Section 4.12(b). Amendment reflects deletion to this text to be less prescriptive due to the details in Board Policy GO-2.1A.</p>





# Proposed Amendments to the Bylaws of the Association of California Water Agencies

Amendment 3 (cont'd), ARTICLE 3, Board of Directors

Current Bylaw	Proposed Bylaw	Rationale
<p><b>Section 4.12. Code of Conduct of Board Members.</b></p> <p>(b) <b>Violations and Enforcement Process.</b> A violation of the code of conduct may result in removal, public censure, or private reprimand of a Director, or such other action as contained in the code of conduct. However, removal and public censure shall be reserved only for serious violations. A Director may not be removed or publicly censured absent an affirmative vote of two-thirds of the voting members of the Board of Directors. A Director may be privately reprimanded for a violation of the code of conduct upon the majority vote of the quorum. Complaints of violation of the code of conduct may be filed with the president, or the vice-president if the allegations are made against the president. The president may refer a complaint of violation to the executive director/secretary for investigation. The executive director/secretary may retain a special investigator or special counsel to conduct or assist the investigation. A Director accused of a violation shall be provided a</p>	<p><b>Section 4.12. Code of Conduct of Board Members.</b></p> <p>(b) <del>Violation and Enforcement Process.</del> A violation of the code of conduct may result in removal, public censure, or private reprimand of a Director, or such other action as contained in the code of conduct. However, removal and public censure shall be reserved only for serious violations. A Director may not be removed or publicly censured absent an affirmative vote of two-thirds of the voting members of the Board of Directors. A Director may be privately reprimanded for a violation of the code of conduct upon the majority vote of the quorum. Complaints of violation of the code of conduct may be filed with the president, or the vice-president if the allegations are made against the president. The president may refer a complaint of violation to the executive director/secretary for investigation. The executive director/secretary may retain a special investigator or special counsel to conduct or assist the investigation. A Director accused of a violation shall be provided a</p>	<p>Amendment to reflect consistency with recently adopted Board Policy GO-2.1A Code of Code and to delete reference to the Legal Affairs Committee Chair in Section 4.12(b). Amendment reflects deletion to this text to be less prescriptive due to the details in Board Policy GO-2.1A.</p>



# Proposed Amendments to the Bylaws of the Association of California Water Agencies

## Amendment 4, Article 6, Executive Committee

Current Bylaw	Proposed Bylaw	Rationale
<p><b>Section 6.02 Powers. Personnel.</b></p> <p>(a) Subject to the budget adopted by the Board of Directors, the Executive Committee shall perform the following personnel actions: (1) recommend compensation for the executive director/secretary to the Board of Directors for approval; (2) perform annual reviews of the executive director/secretary and submit that review to the Board of Directors; (3) review and approve the classification and compensation plan and publicly posted salary schedule for Association employees submitted by the executive director/secretary, which shall be reviewable by the Board of Directors, in closed session, upon request of the Board of Directors;</p> <p>...</p>	<p><b>Section 6.02 Powers. Personnel.</b></p> <p>(a) Subject to the budget adopted by the Board of Directors, the Executive Committee shall perform the following personnel actions: (1) recommend compensation for the executive director/secretary to the Board of Directors for approval; (2) perform annual reviews of the executive director/secretary and submit that review to the Board of Directors; (3) review <del>and approve</del> the classification and compensation plan and publicly posted salary schedule for Association employees submitted by the executive director/secretary, which shall be <del>reviewable</del> <u>approved by the Board of Directors</u>, <del>in closed session, upon request of the Board of</del> <u>Directors</u>;</p> <p>...</p>	<p>Amendment to clarify that the ACWA Board is the approving authority for the public salary schedule, as required by CalPERS. The Executive Committee will review and make a recommendation to the Board.</p>





# Proposed Amendments to the Bylaws of the Association of California Water Agencies

## Amendment 5, ARTICLE 8, Special Council, Committees, and Task Forces

Current Bylaw	Proposed Bylaw	Rationale
<p><b>Section 8.01 Council of Past Presidents.</b> There shall be a Council of Past Presidents composed of all past presidents of the Association who serve on the council until each is no longer able to or wishes to serve. The council shall provide a mechanism for past presidents to continue to make valuable contributions to the Association. With approval of the Board of Directors, the president and/or executive director/secretary may assign specific responsibilities to the council from time to time. Members of the Council of Past Presidents are invited to attend and participate in the Association's Board meetings.</p>	<p><b>Section 8.01 Council of Past Presidents.</b> There shall be a Council of Past Presidents composed of all past presidents of the Association who serve on the council until each is no longer able to or wishes to serve. The council shall provide a mechanism for past presidents to continue to make valuable contributions to the Association. With approval of the Board of Directors, the president and/or executive director/secretary may assign specific responsibilities to the council from time to time. Members of the Council of Past Presidents are invited to attend and participate in the Association's Board and Executive Committee meetings, <u>including attending closed sessions. With the exception of the immediate past president, members of the Council of Past Presidents are non-voting.</u></p>	<p>Amendment to clarify that Past Presidents are non-voting representatives on ACWA's Board and Executive Committee with the ability to participate in the full range of activities, including closed session.</p>



# Proposed Amendments to the Bylaws of the Association of California Water Agencies

## Amendment 6, ARTICLE 8, Special Council, Committees, and Task Forces

Current Bylaw	Proposed Bylaw	Rationale
<p><b>Section 8.02 Election Committee.</b></p> <p><b>(b) Qualification.</b> In order to serve on the Election Committee, an individual must be an officer, employee, or member of the governing body of the Association, or other representative duly designated by a member agency of the Association to represent that member at the time of the appointment. Where an individual ceases to meet these criteria during the election cycle, the individual may not continue to serve. When the disqualified member represented a Region Board, the affected Region Board shall select a replacement representative. When the disqualified member represented the President, the President shall select an alternate representative.</p>	<p><b>Section 8.02 Election Committee.</b></p> <p><b>Qualification.</b> In order to serve on the Election Committee, an individual must be an officer, employee, or member of the governing body of a member agency of the Association, or other representative duly designated by a member agency of the Association to represent that member at the time of the appointment. <u>Past presidents, who are Honorary Life Members of the Association, may also serve on the Election Committee without meeting stated qualifications unless otherwise disqualified.</u> Where an individual ceases to meet these criteria during the election cycle, the individual may not continue to serve. When the disqualified member represented a Region Board, the affected Region Board shall select a replacement representative. When the disqualified member represented the President, the President shall select an alternate representative.</p>	<p>Amendment to allow unaffiliated Past Presidents to serve on the Election Committee without meeting the stated criteria since they are Honorary Life Members of the Association.</p>





# Proposed Amendments to the Bylaws of the Association of California Water Agencies

## Amendment 7, ARTICLE 9, Meetings of Members

Current Bylaw	Proposed Bylaw	Rationale
<p><b>Section 9.06 Voting.</b> Each member of the Association in good standing at the time of the annual or special meeting shall be entitled to one vote that shall be cast by its authorized representative. Each member must designate its authorized representative prior to the annual or special meeting. It is the member's responsibility to designate or update its authorized representative as needed. The Association may confirm with any member the identity of that member's authorized representative for the purpose of casting ballots in any election of president and vice president.</p> <p>All questions, except amendments or revisions of these bylaws, shall be determined by a majority of the members present and voting. A roll call may be requested by any authorized representative.</p>	<p><b>Section 9.06 Voting.</b> Each member of the Association in good standing at the time of the annual or special meeting shall be entitled to one vote that shall be cast by its authorized representative. Each member must designate its authorized representative prior to the annual or special meeting. It is the member's responsibility to designate or update its authorized representative as needed. The Association may confirm with any member the identity of that member's authorized representative for the purpose of casting ballots in any election of president and vice president, <u>amendments to these Bylaws, or other Association business that requires a vote.</u> All questions, except amendments or revisions of these bylaws, shall be determined by a majority of the members present and voting. A roll call may be requested by any authorized representative.</p>	<p>Amendment to expand this language to cover additional actions where an authorized representative will need to be confirmed for the purposes of casting a ballot (see newly added Section 9.15).</p>



# Proposed Amendments to the Bylaws of the Association of California Water Agencies

## Amendment 8, ARTICLE 9, Meetings of Members

Current Bylaw	Proposed Bylaw	Rationale
<p><b>Section 9.08 Quorums.</b> The presence of the authorized representative of 50 members of the Association at any meeting of the members shall constitute a quorum for transacting business. Written ballots timely received from the authorized representative of 50 members shall constitute a quorum for elections of president and vice president.</p>	<p><b>Section 9.08 Quorums.</b> The presence of the authorized representatives of <u>at least</u> 50 members of the Association at any meeting of the members shall constitute a quorum for transacting business. <del>Written ballots timely received from the authorized representative of 50 members shall constitute a quorum for elections of president and vice president.</del> <u>Actions taken by written ballot shall require the timely receipt of the written ballot from the authorized representatives of at least 50 members to constitute a quorum.</u></p>	<p>Amendment to clarify the written ballot quorum language to cover other actions besides the elections of president and vice president (see newly added Section 9.15)</p>



# Proposed Amendments to the Bylaws of the Association of California Water Agencies

## Amendment 9, ARTICLE 9, Meetings of Members

Current Bylaw	Proposed Bylaw	Rationale
<p><b>Section 9.11. Election of President and Vice President.</b> Each member of the Association in good standing at the time a vote is cast is entitled to one vote for election of the president and vice president that shall be cast by its authorized representative by written ballot. The ballot and any related material may be sent by first class, registered, or certified mail or electronic transmission by the Corporation that meets the requirements of Corporations Code section 20, and responses may be returned to the Corporation by mail or electronic transmission. On any written ballot for the election of president or vice president, an authorized representative acting on behalf of the member may write in a qualified candidate for election. On any written ballot for the election of president or vice president, an authorized representative acting on behalf of the member may write in a qualified candidate for election.</p>	<p><b>Section 9.11. Election of President and Vice President.</b> Each member of the Association in good standing at the time a vote is cast is entitled to one vote for election of the president and vice president that shall be cast by its authorized representative by written ballot. The ballot and any related material may be sent by first class, registered, or certified mail or electronic transmission by the Corporation that meets the requirements of Corporations Code section 20, and responses may be returned to the Corporation by mail or electronic transmission. On any written ballot for the election of president or vice president, an authorized representative acting on behalf of the member may write in a qualified candidate for election. <u>Nominating resolutions for write-in candidates must be received by the deadline for the return of ballots.</u></p>	<p>Amendment to clarify that write-in candidates for president or vice presidents must submit a nominating resolution by the election deadline since they did not go through the Election Committee review process.</p>





# Proposed Amendments to the Bylaws of the Association of California Water Agencies

## Amendment 10, ARTICLE 9, Meeting of Members

Current Bylaw	Proposed Bylaw	Rationale
	<p><b>Newly Added Section.</b>  <u>Section 9.15. Action by Written Ballot.</u> To the extent permitted by applicable law and subject to all applicable requirements, any action that may be taken at a regular or special member meeting of the members may be approved by written ballot if a ballot is sent to each member entitled to vote on the matter. Ballots may be sent and returned by electronic transmission as permitted in the Corporations Code. Ballot format, solicitation and voting thresholds shall meet the requirements of the Corporations Code and be consistent with applicable provisions of these Bylaws.</p>	<p>Amendment to allow the flexibility to take action by written ballot beyond the currently approved process of electing the president and vice president by written ballot.</p>





# Proposed Amendments to the Bylaws of the Association of California Water Agencies

## Amendment 11, Article 11, Definitions

Current Bylaw	Proposed Bylaw	Rationale
<p><b>Section 11.04. Definitions.</b> As used in these bylaws, the term “notice provided by electronic means” shall refer to notice given by fax or e-mail.</p>	<p><b>Section 11.04. Definitions.</b> As used in the Bylaws, the terms “<u>electronic transmission</u>” and “notice provided by electronic means” shall refer to notice and <u>other communications</u> given by fax or email.</p> <p><b>Newly Added Section.</b>  <b><u>Section 11.05. Conflicts Between Bylaws and Other Association Policies.</u></b> To the extent permitted by applicable law, these Bylaws shall govern in the event there is a <u>conflict between these Bylaws and another Association policy, rule, or procedure.</u></p>	<p>Amendment to add “electronic transmission,” to clarify the meaning of this term in Section 9.15 and to harmonize this term with currently accepted means of providing notice.</p> <p>Amendment to clarify that ACWA’s Bylaws govern in the event there is a conflict with another Association policy, rule, or procedure.</p>

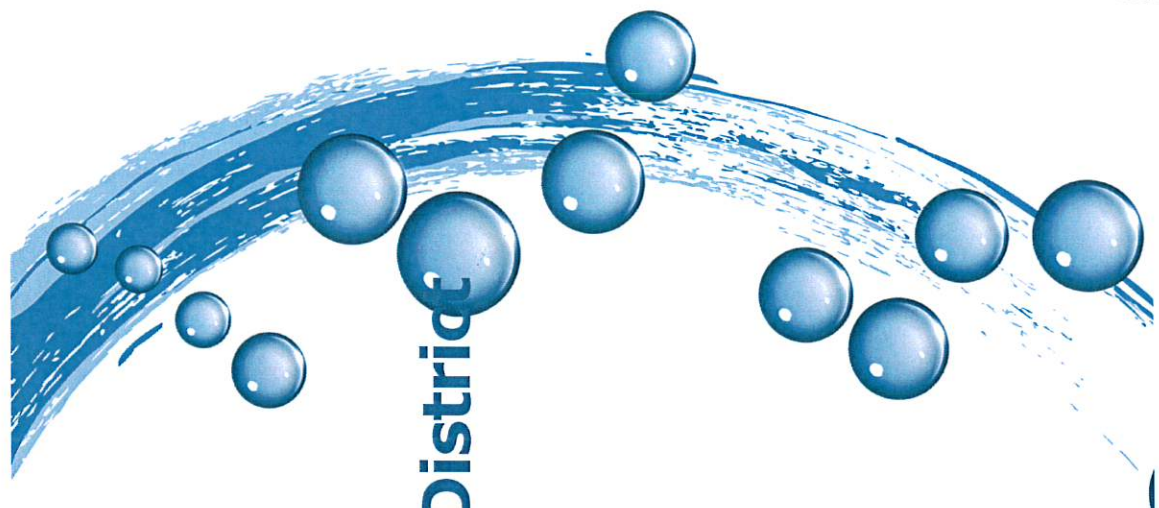


# Proposed Amendments to the Bylaws of the Association of California Water Agencies

## Amendment 12, VARIOUS, References to ACWA

Current Bylaw	Proposed Bylaw	Rationale
<p>Cleanup amendments:</p>	<p>Change the reference to ACWA to Association in the following Bylaws:            Section 5.02 Officers (a)            Section 7.01 Qualification.            Section 7.05 Agriculture Committee</p> <p>Section 5.02 Officers (a): Delete reference to ACWA before Board of Directors.</p>	<p>Amendment to change references to ACWA to Association to provide consistency throughout the document.</p>

**ACWA/JPIA**



## **ACWA JPIA Update**

# **Humboldt Bay Municipal Water District**

**Adrienne Beatty, Chief Executive Officer  
Jennifer Jobe, Director of Pooled Programs**

*“A Partnership of Public Water Agencies”*



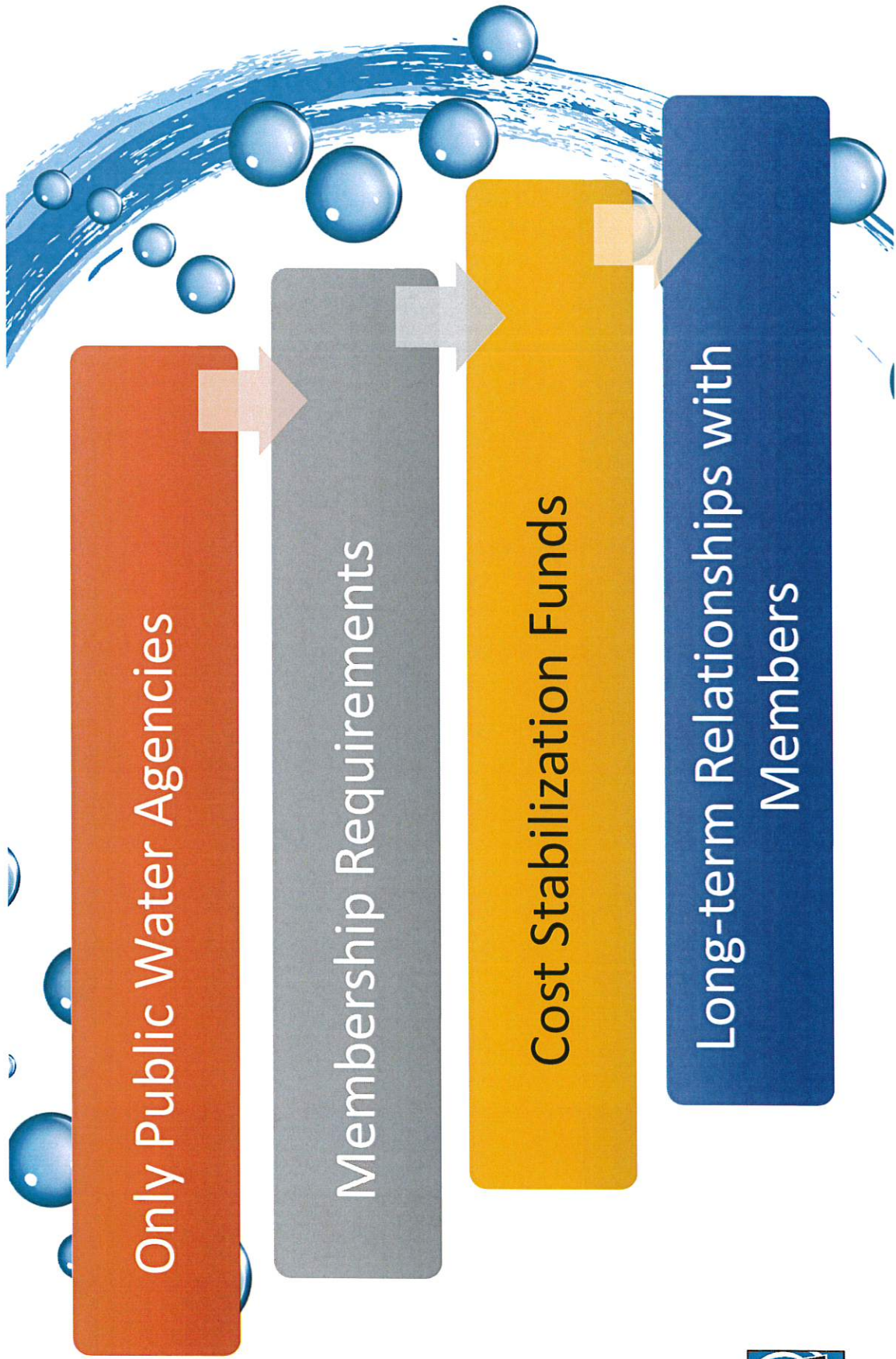


# What is the JPIA?

**A Partnership  
of the JPIA  
and 401  
California  
Water Agencies**









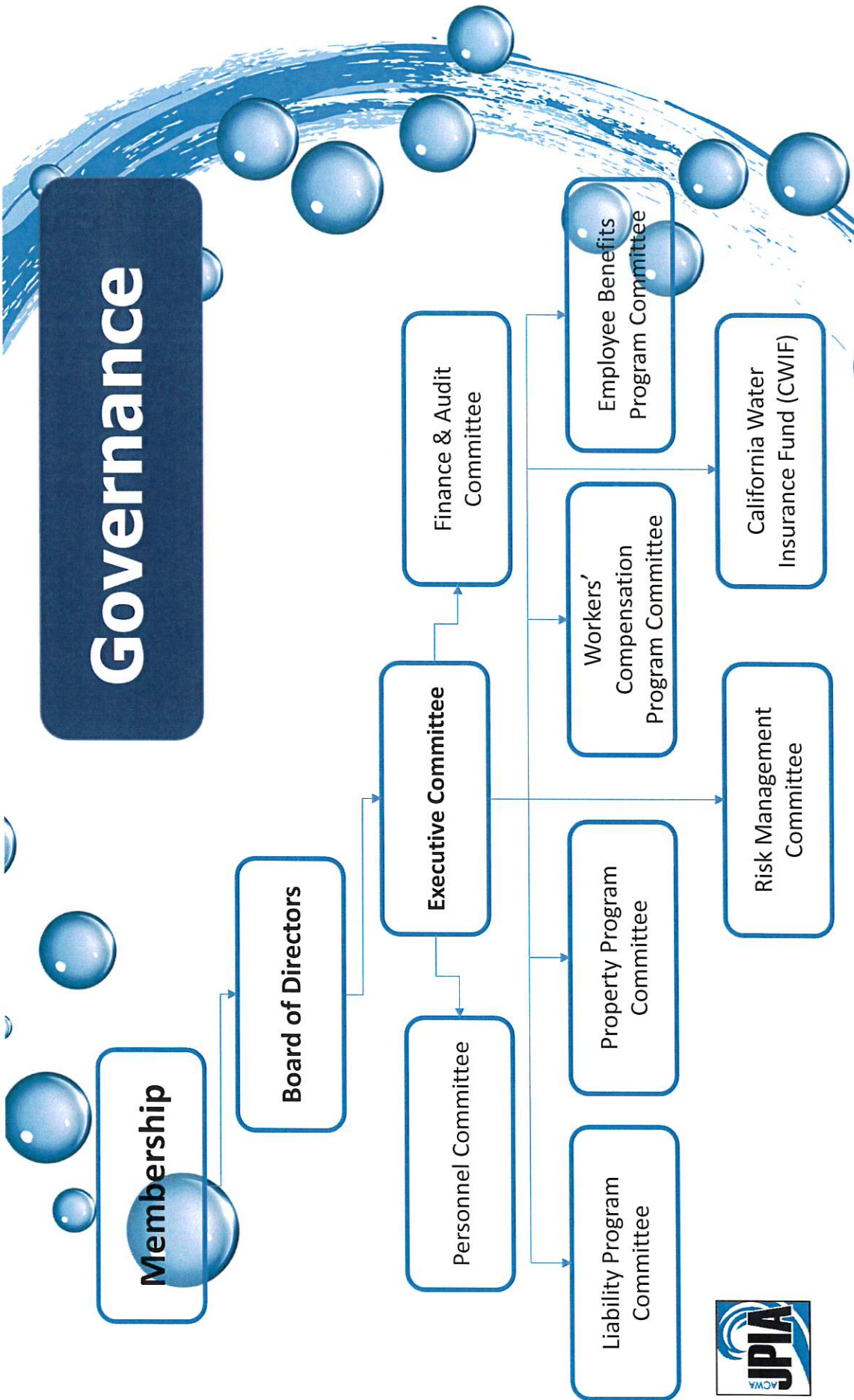


# Retrospective Contribution Adjustments



Over \$75 million refunded to JPIA Members since inception of the Pool





# Governance

Membership

Board of Directors

Executive Committee

Finance & Audit Committee

Personnel Committee

Liability Program Committee

Property Program Committee

Workers' Compensation Program Committee

Employee Benefits Program Committee

Risk Management Committee

California Water Insurance Fund (CWIF)

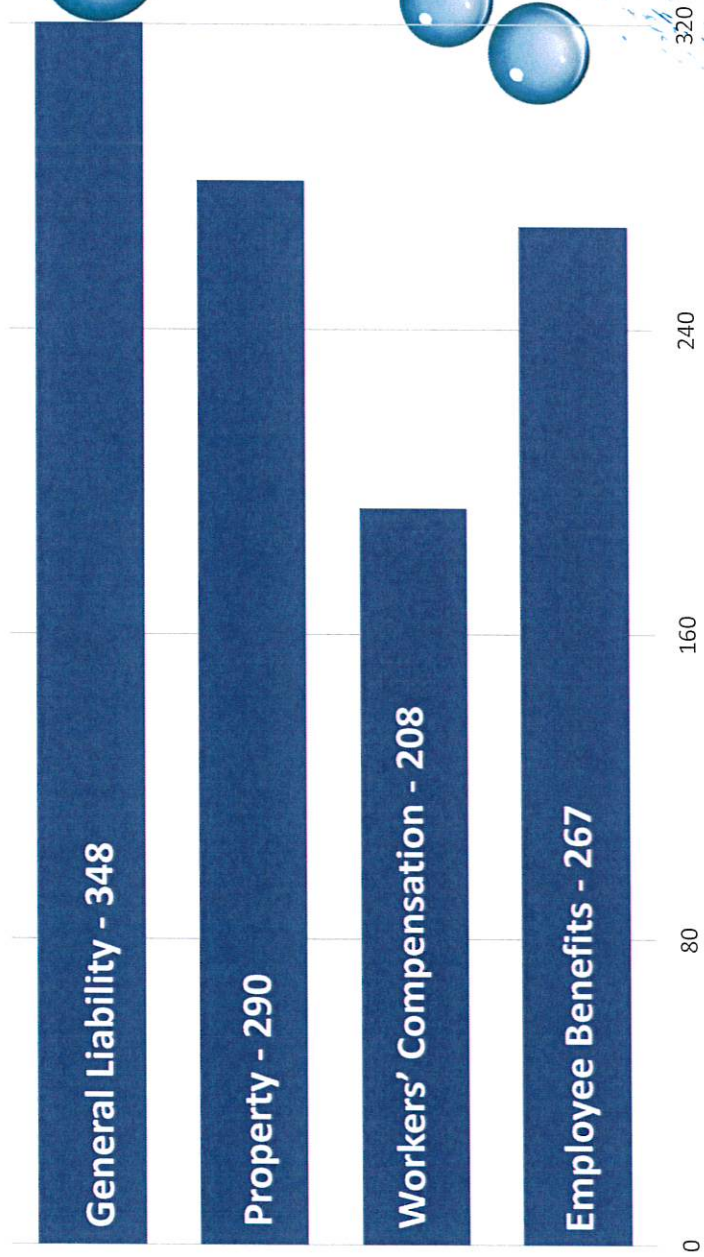






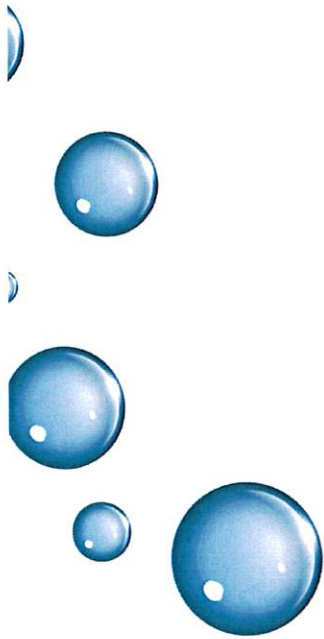
# Membership Snapshot

As of August 1, 2024





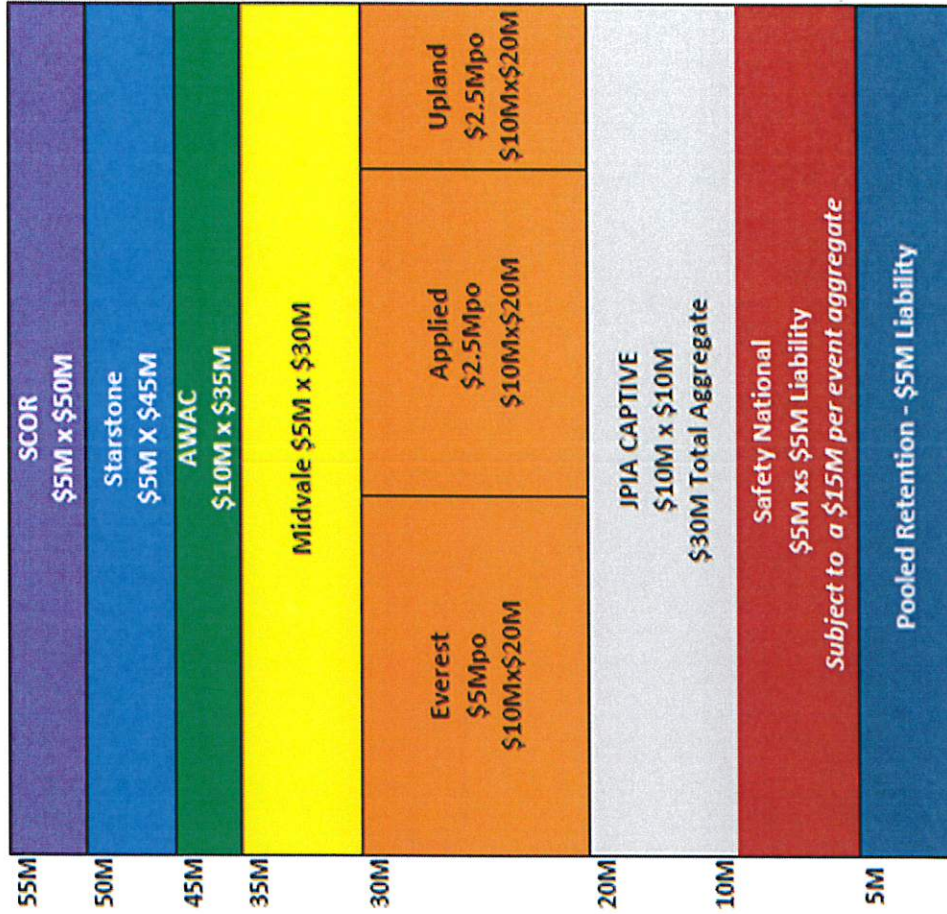
# Liability Program





# Liability Program

- 348 members
- \$5M pool retention
- \$10M x \$10M CWIF
- \$55M total limits



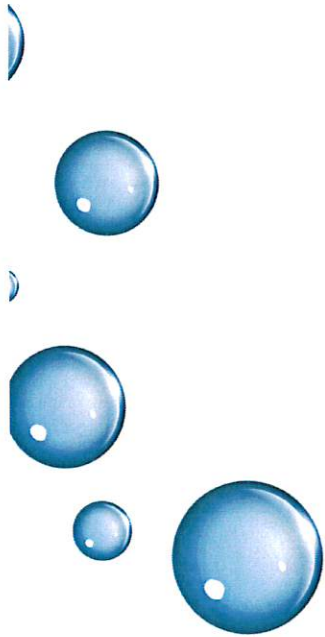


# Historical Rates



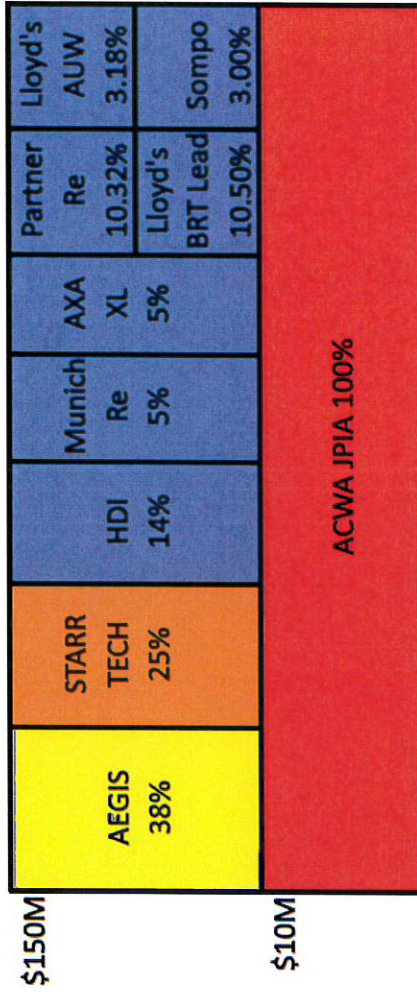


# Property Program

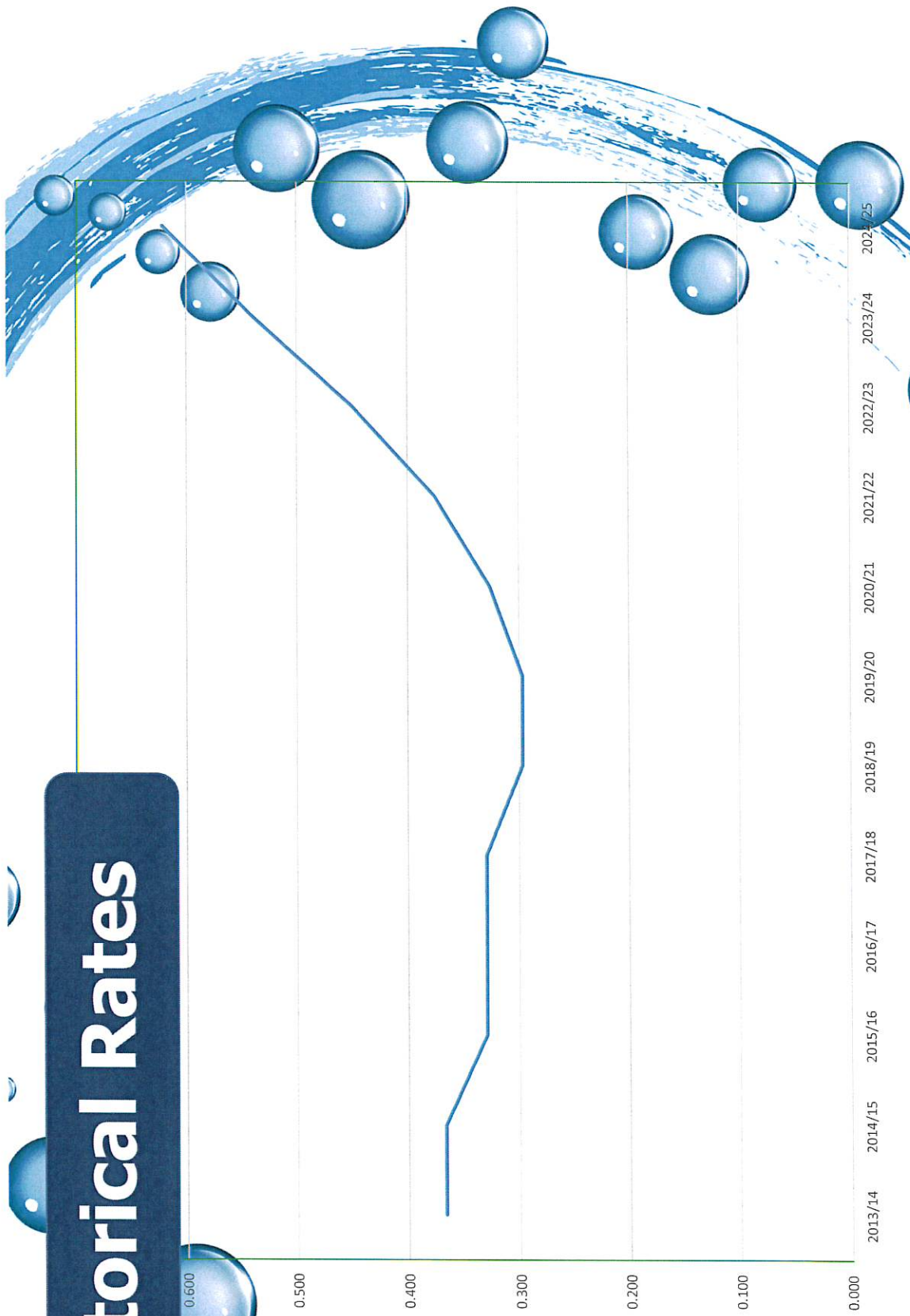


# Property Program

- 290 Members
- \$13B in TIV
- \$10 million retention
- \$500 million limit
  - High-value assets
- \$150 million limit
  - All other assets







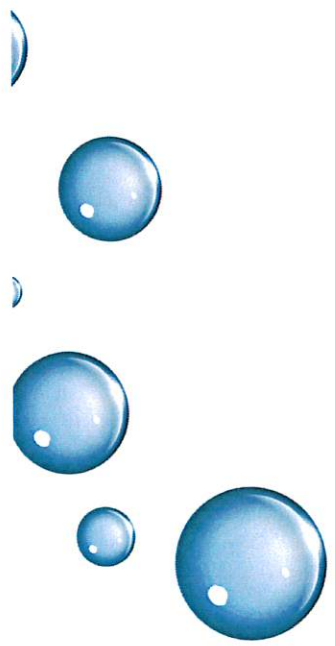
# Historical Rates







# Workers' Compensation Program

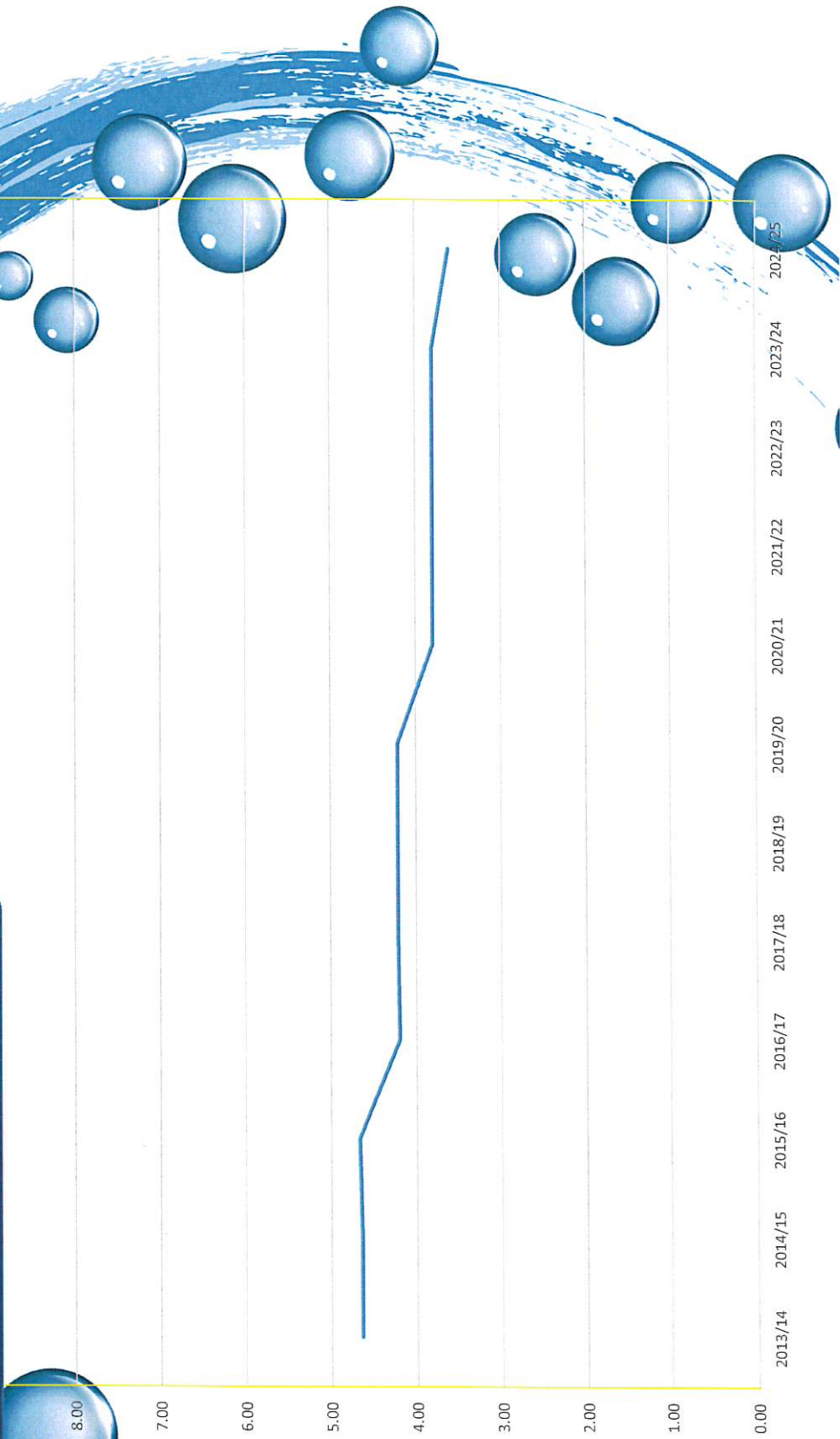


# Workers' Compensation Program

- 208 members
- Over 7,500 employees covered
- \$2 million pool retention
- Full statutory limits

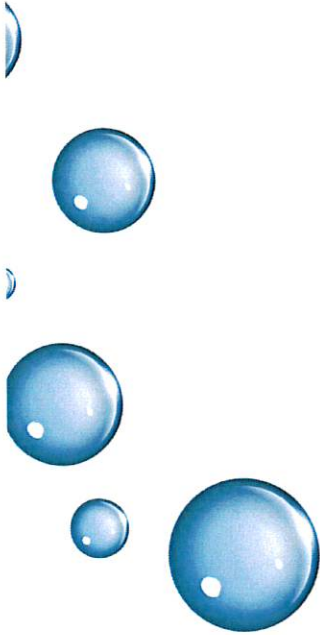


# Historical Rates





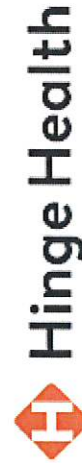
# Employee Benefits Program



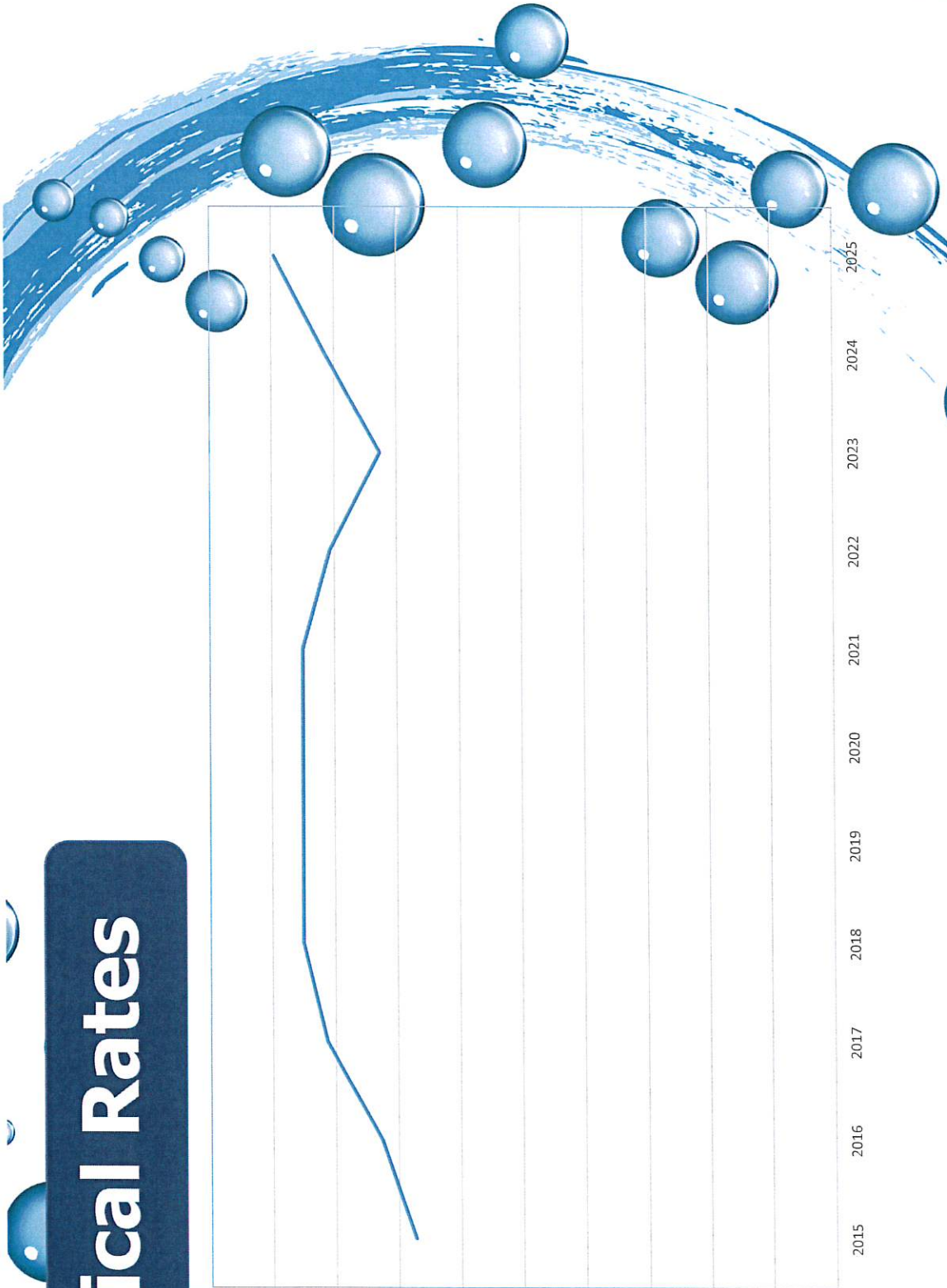


# Employee Benefits Program

- 267 Members
- 2025 Rates:
  - self-funded PPO +10%
  - dental/vision - flat
  - insured programs – flat to +7.83%
- 2025 Program focus:
  - Monitor PBM
  - Market point solutions
  - Carrum incentive
  - Dental plan enhancements

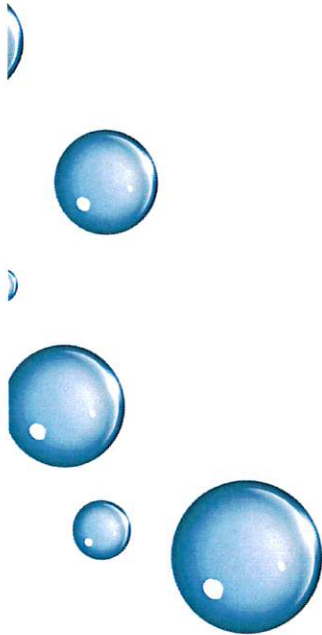


# Historical Rates





# Cyber Insurance

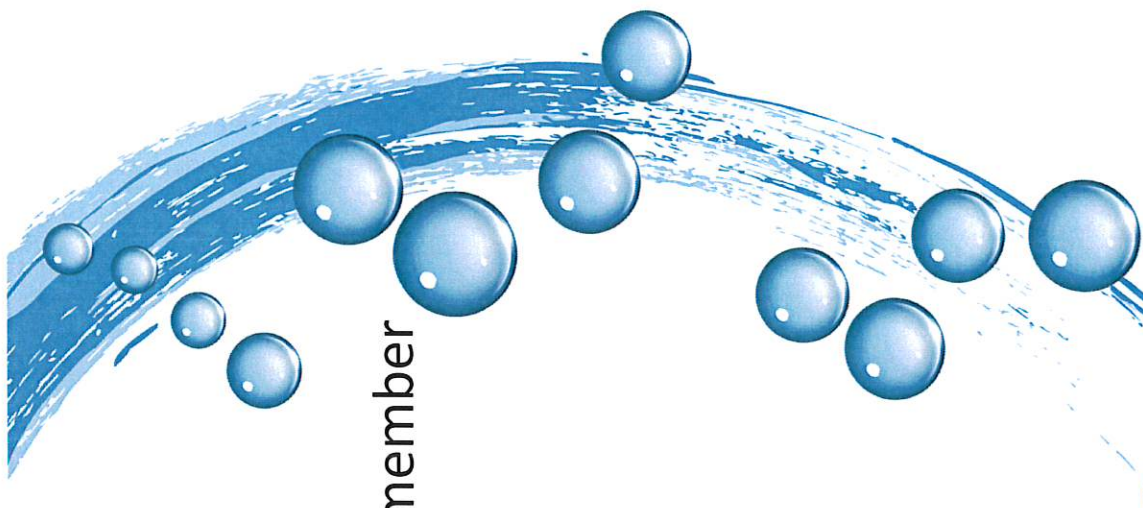
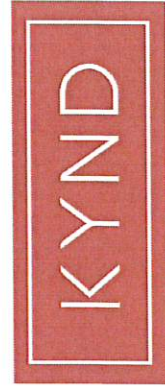




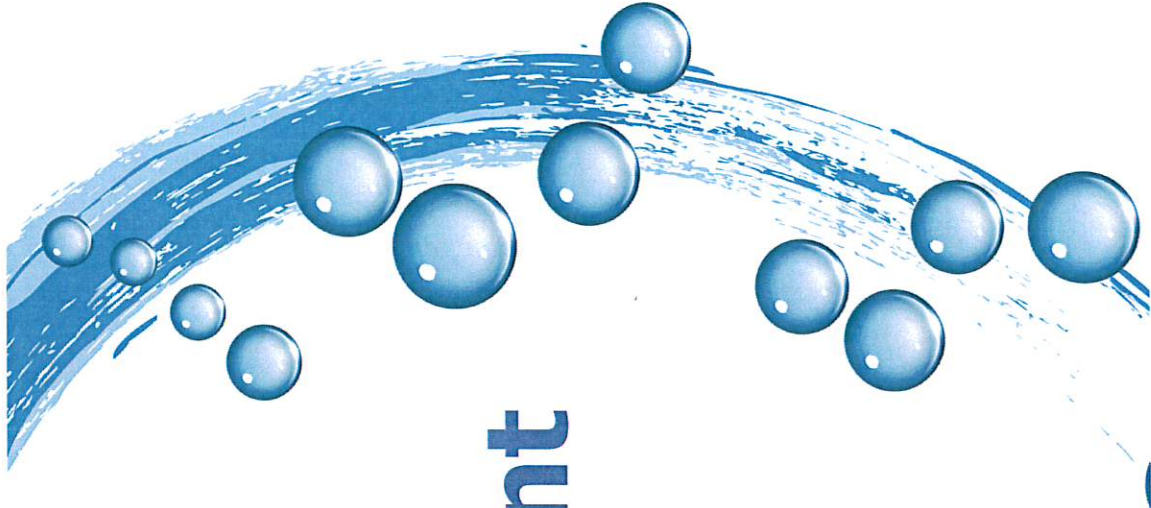
# Cyber Insurance

- 275 group-purchasers
- \$50-\$100K member deductible
- \$5 million total policy aggregate limit/\$3 million per member

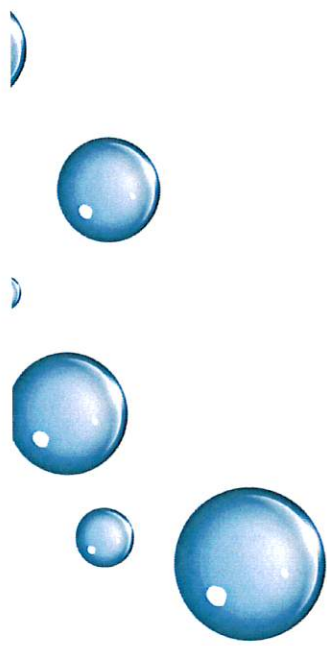
Year	Program Cost	% Change
• 2020-2021	\$127,000	+38%
• 2021-2022	\$929,000	+641%
• 2022-2023	\$1,100,000	+29%
• 2023-2024	\$1,100,000	0%
• 2024-2025	\$1,100,000	0%



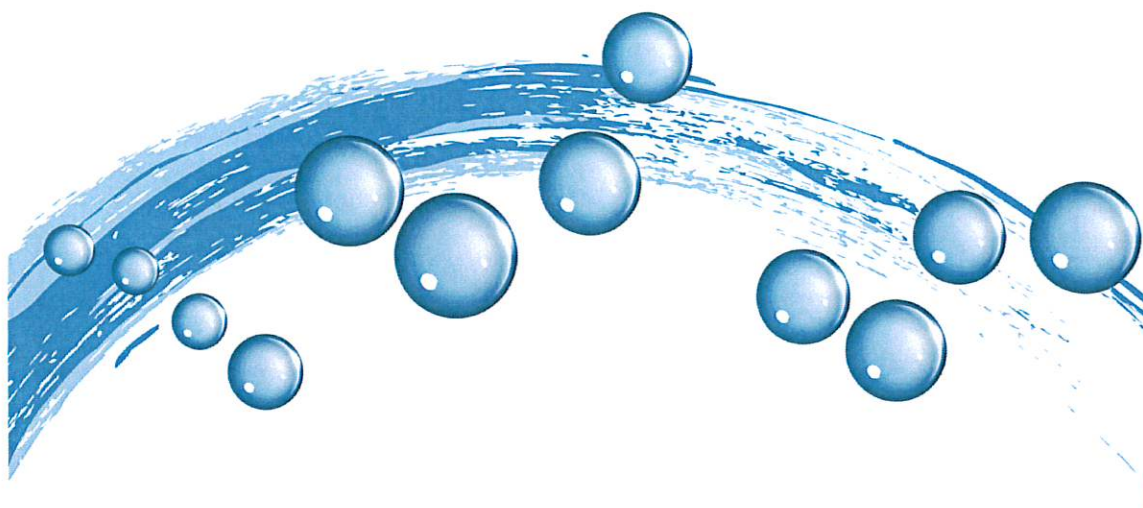




# Risk Management







# Risk Management

- Annual onsite Risk Assessment Surveys
- Multiple onsite training days
- Customized virtual trainings
- Annual focus areas

## Commitment to Excellence (C2E) Program

Loss Categories:

- Wildfire Prevention
- Vehicle Operations
- Construction
- Infrastructure
- Employment Practices
- Ergonomics/Falls





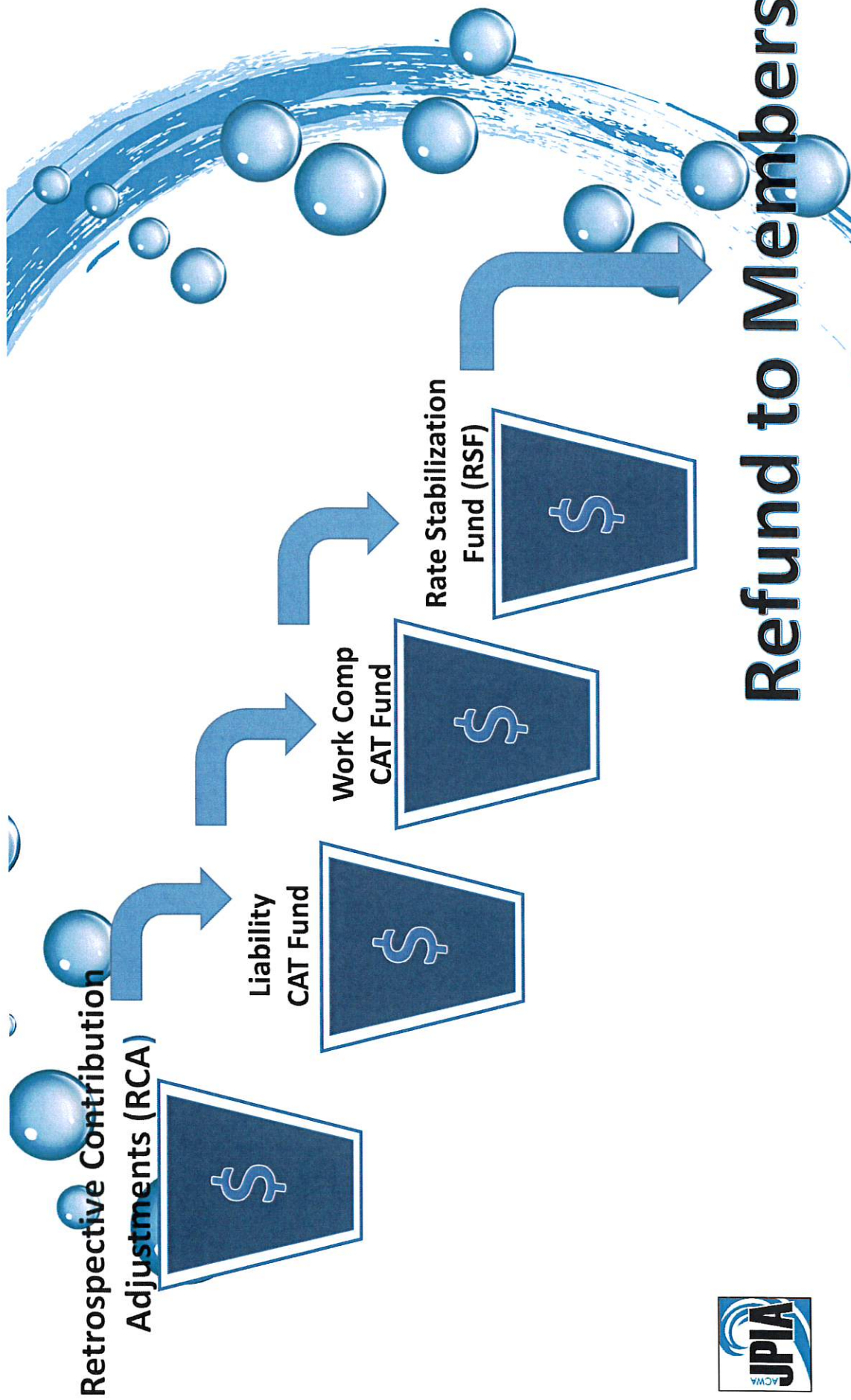


# Retrospective Contribution Adjustment Process

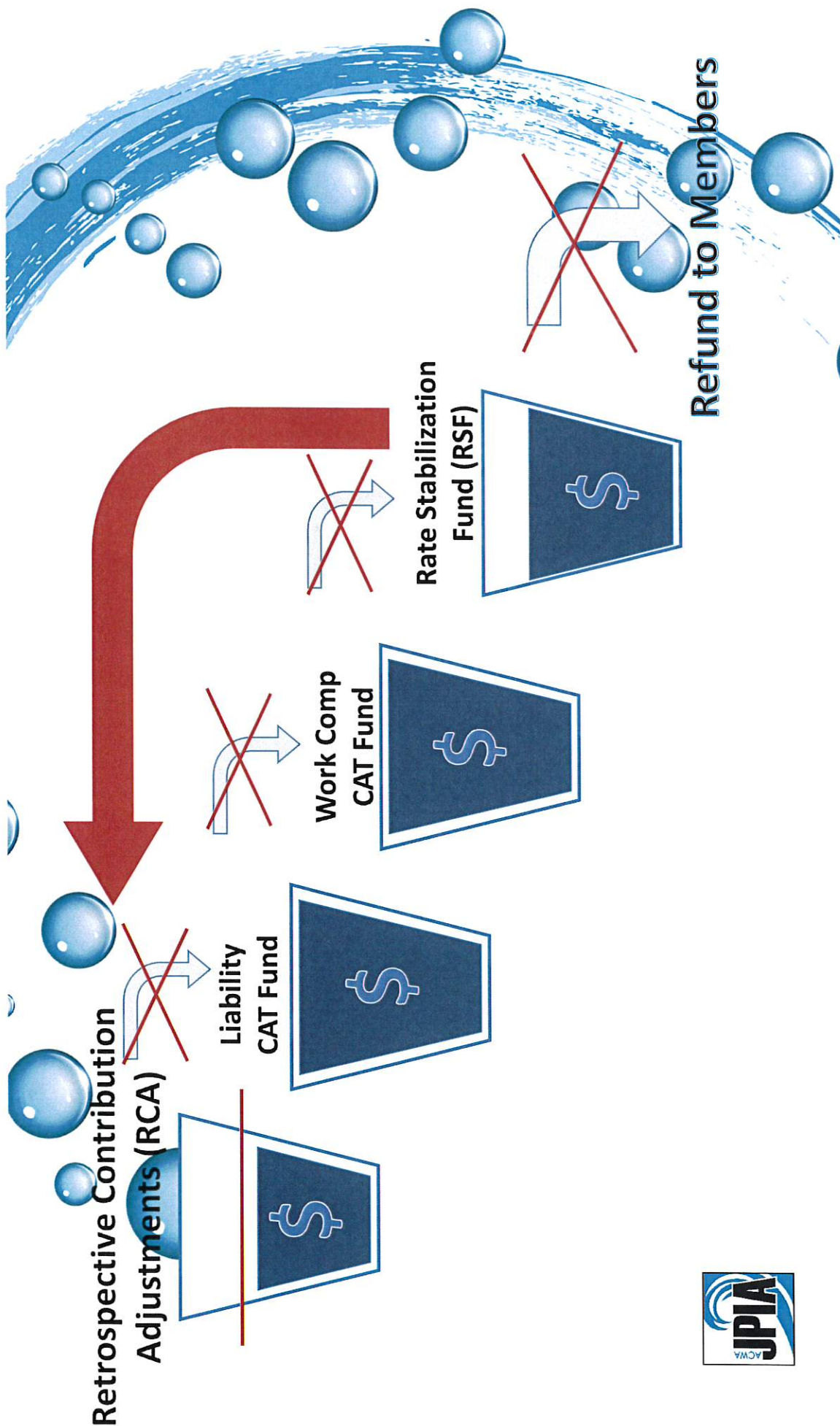












# Humboldt Bay Municipal Water District

## Training

*In-Person Classes: 28 staff attendees*

*District Hosted Classes: 5*

*Vector Solutions: 36 courses completed*

*PDP Program: 0 enrolled*

*Leadership Essentials: 3 graduates*

## Risk Management

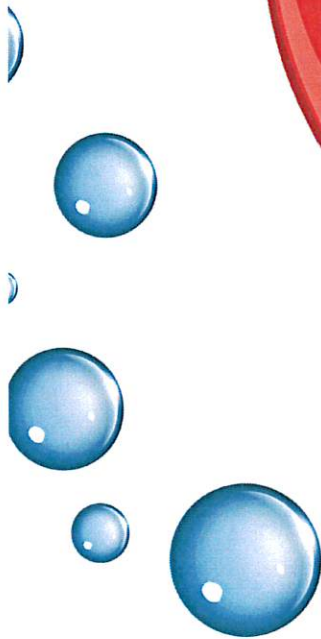
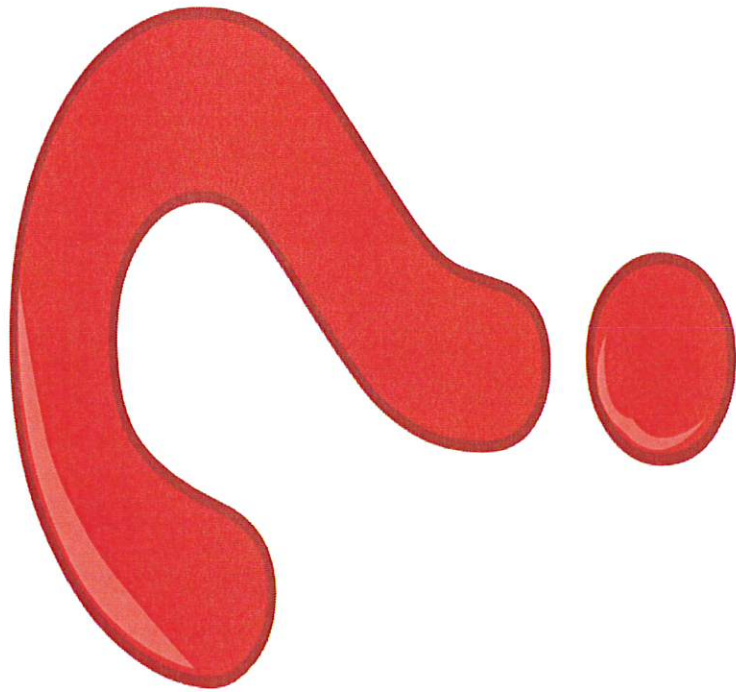
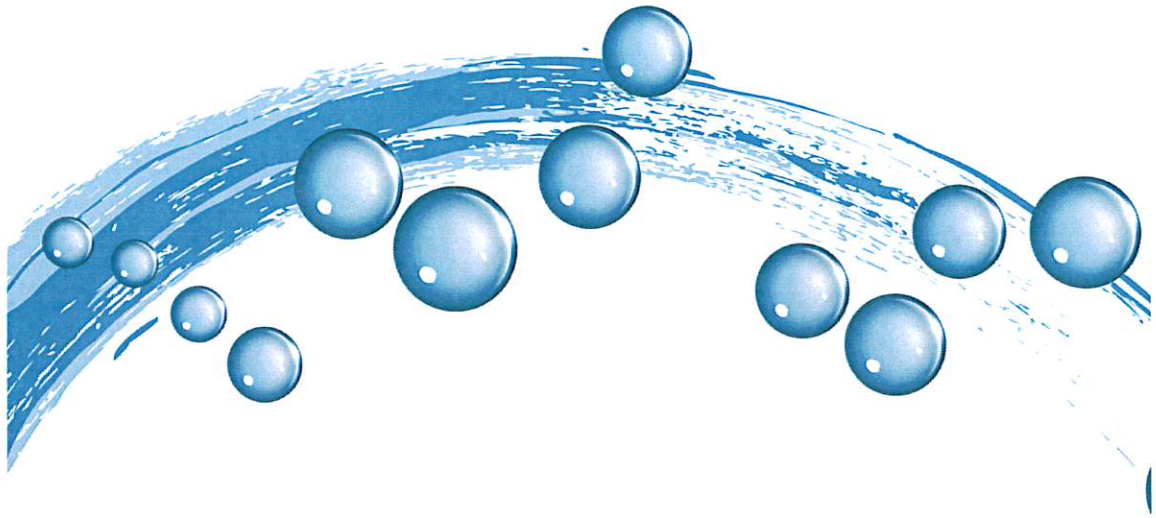
*Safety Awards Spring 2024 & Spring*

*2022*

*Last RAS*

*July 23, 2024*





**RCEA/RREDC**



## **BOARD OF DIRECTORS REGULAR MEETING AGENDA**

Wharfinger Building, Bay Room (downstairs)  
1 Marina Way, Eureka, CA 95501

October 24, 2024  
Thursday, 3:30 p.m.

Any member of the public needing special accommodation to participate in this meeting or access the meeting materials should email [LTaketa@redwoodenergy.org](mailto:LTaketa@redwoodenergy.org) or call (707) 269-1700 at least 3 business days before the meeting. Assistive listening devices are available.

Pursuant to Government Code section 54957.5, all writings or documents relating to any item on this agenda which have been provided to a majority of the Board, including those received less than 72 hours prior to the Committee's meeting, will be made available to the public at [www.RedwoodEnergy.org](http://www.RedwoodEnergy.org).

NOTE: Speakers wishing to distribute materials to the Board at the meeting, please provide 13 copies to the Board Clerk.

### **THIS IS A HYBRID IN-PERSON AND VIRTUAL MEETING.**

The RCEA Board of Directors holds in-person hybrid meetings. When attending, please socially distance as much as possible and be courteous to those who choose to wear a mask.

**To participate in the meeting online**, go to <https://us02web.zoom.us/j/81972368051>. **To participate by phone**, call (669) 900-6833 or (253) 215-8782. Enter webinar ID: 819 7236 8051.

**To make a comment during the public comment periods**, raise your hand in the online Zoom webinar, or press star (\*) 9 on your phone to raise your hand. You will continue to hear the meeting while you wait. When it is your turn to speak, a staff member will prompt you to unmute your phone or computer. You will have 3 minutes to speak.

**You may submit written public comment** by email to [PublicComment@redwoodenergy.org](mailto:PublicComment@redwoodenergy.org). Please identify the agenda item number in the subject line. Comments will be included in the meeting record but not read aloud during the meeting.

While downloading the Zoom application may provide a better meeting experience, Zoom does not need to be installed on your computer to participate. After clicking the webinar link above, click "start from your browser."

## **OPEN SESSION** Call to Order

### **1. ROLL CALL - REMOTE DIRECTOR PARTICIPATION**

- 1.1. Approve teleconference participation request for this meeting by Director pursuant to Brown Act revisions of AB 2449 due to an emergency circumstance to be briefly described.

### **2. REPORTS FROM MEMBER ENTITIES**

### **3. ORAL AND WRITTEN COMMUNICATIONS**

This time is provided for people to address the Board or submit written communications on matters not on the agenda. At the conclusion of all oral communications, the Board may respond to statements. Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

### **4. CONSENT CALENDAR**

All matters on the Consent Calendar are considered to be routine by the Board and are enacted in one motion. There is no separate discussion of any of these items. If discussion is required, that item is removed from the Consent Calendar and considered separately. At the end of the reading of the Consent Calendar, Board members or members of the public can request that an item be removed for separate discussion.

- 4.1 Approve Minutes of September 26, 2024, Board Meeting.
- 4.2 Approve Disbursements Report.
- 4.3 Accept Financial Reports.
- 4.4 Accept Quarterly Regulatory and Legislative Policy Engagement Report.
- 4.5 Appoint Elizabeth Burks as RCEA Executive Director, and Approve the Agreement for Employment of Executive Director.
- 4.6 Authorize the Executive Director to Execute the 2024-2027 PG&E Funding Agreement for \$32,178,044 Upon Final Review and Approval by RCEA General Counsel; and, Upon Full Execution, Authorize the Executive Director to Issue Solicitations for Consultant and Subcontractor Services to Implement the Northern California RuralREN in Regions Covered by PG&E funding.
- 4.7 Approve Resolution 2024-14 Approving the Form of and Authorizing the Execution of the Hatchery Road Solar A Feed-In Tariff Power Purchase Agreement with RPCA Solar 5, LLC.

### **5. REMOVED FROM CONSENT CALENDAR ITEMS**

Items removed from the Consent Calendar will be heard under this section.

### **COMMUNITY CHOICE ENERGY (CCE) BUSINESS (Confirm CCE Quorum)**

Items under this section of the agenda relate to CCE-specific business matters that fall under RCEA's CCE voting provisions, with only CCE-participating jurisdictions voting on these matters with weighted voting as established in the RCEA joint powers agreement.



## 6. OLD CCE BUSINESS

### 6.1. Energy Risk Management Quarterly Report

Accept Energy Risk Management Quarterly Report.

### 6.2. Motion to Reconsider: Statewide Allocation of Carbon-Free Attributes from Diablo Canyon Nuclear Power Plant

Consider whether to make a motion to reconsider the Diablo Canyon Power Plant nuclear allocation due to clarification of the CCE voting process required to pass a motion on CCE business.

(If motion passes, the Board may discuss the matter again:)

Direct staff on whether to accept the nuclear allocation, making a short-term exception to the RCEA Energy Risk Management Policy's prohibition on nuclear power procurement, as allowed for in the Energy Risk Management Policy.

Provide guidance on strategic use of the nuclear allocation as a tool for cost savings or greenhouse reductions, should the Board elect to accept the allocation.

## 7. NEW CCE BUSINESS – None.

## END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS

## 8. OLD BUSINESS – None.

## 9. NEW BUSINESS

### 9.1 Summary of RCEA-related Climate Action Plan implementation measures (Information only)

## 10. STAFF REPORTS

### 10.1 Interim Executive Director's Report

## 11. FUTURE AGENDA ITEMS

Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

## 12. ADJOURNMENT

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**NEXT REGULAR MEETING** (*Different day due to holiday.*)

Wednesday, November 20, 2024, 3:30 p.m.

Wharfinger Building downstairs Bay Room, 1 Marina Way, Eureka, CA 95501

Online and phone participation will also be possible via Zoom.



Redwood Region Economic Development Commission  
 325 2nd Street, Suite 203, Eureka, California 95501  
 Phone 707.445.9651 Fax 707.445.9652 www.rredc.com

**REDWOOD REGION ECONOMIC DEVELOPMENT COMMISSION**  
**Regular Meeting of the Board of Directors**

In person: Eureka City Hall, Conference Room 207, 531 K Street, Eureka CA  
 or via Zoom:

<https://us02web.zoom.us/j/83677709497?pwd=anZwsgAnvvDUNa8OmVVPWJaNJ3A84d.1>

Meeting ID: 836 7770 9497 Passcode: 380737

**October 28, 2024 at 6:30 pm PT**

**AGENDA**

- I. **Call to Order**
- II. **Approval of Agenda**
  - A. Approval of Agenda for October 28, 2024
- III. **Public Input for non-agenda items**
- IV. **Consent Calendar**
  - A. Approval of Minutes of the Board of Directors Meeting: August 26, 2024
  - B. Acceptance of Agency-wide Financial Reports: 1<sup>st</sup> Quarter FY 24-25
- V. **Program – Humboldt Builders Exchange – Pat Hooven, President; Tim Hooven; Lynette Mullen**
- VI. **New Business**
  - A. Update on Headwaters Fund programs and grants – Ryan Heitz, Economic Development Coordinator, County of Humboldt Office of Economic Development  
<https://www.gohumco.com/157/Headwaters-Fund>
- VII. **Old Business**
- VIII. **Reports – No Action Required**
  - A. Executive Director's Report
  - B. Loan Portfolio Report
- IX. **Member Reports**
- X. **Agenda/Program Requests for future Board of Directors Meetings**
- XI. **Adjourn**

*The Redwood Region Economic Development Commission will, on request, make agendas available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in implementation thereof. Individuals who need this agenda in an alternative format or who need a disability-related modification or accommodation in order to participate in the meeting should contact the Board Secretary at (707) 445-9651. Notification 48 hours prior to the meeting will enable the Commission to make reasonable arrangements for accommodation.*