

**Humboldt Bay Municipal Water  
District 828 7<sup>th</sup> Street, Eureka**  
**Agenda for Regular Meeting of the Board of Directors**  
 January 9, 2025  
 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>10.1 Engineering</b>  | <b>Engineering</b>                    | <b>11:00 AM</b> |
| <b>8.a New Business</b>  | <b>Matrix Consulting Presentation</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. December 12, 2024, Regular Board Meeting\*-discuss and possibly approve

**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-c)\*- discuss and possibly approve

**7. CORRESPONDENCE**

- a. Email from Dan Edrich\*-discuss

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**8. CONTINUING BUSINESS**

- a. EV Fleet Master Conversion Report-discuss **Time set (1:30 PM)**

**8.1 Water Resource Planning\***– discuss

- a. Letter to State Water Resources Control Board\*-discuss

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

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

**8.3 LAFCo Municipal Service Review\*** discuss

**9. NEW BUSINESS**

- a. Pickett’s Peak Lease\*-discuss and possibly approve
- b. Officer and Committee Assignments\*-discuss and possibly approve
  - i. Appointment of Officers
  - ii. Appointment to committees
- c. Cal Poly Engineering Capstone Project\*-discuss and possibly approve
- d. 2025 Trades Day\*-discuss and possibly approve

**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. Match Commitment Letter\*-discuss and possibly approve
- c. Essex Onsite Sodium Hypochlorite Generation Project-status report
- d. Collector Mainline Redundancy-status report
- e. TRF Generator-status report
- f. Matthews Dam Advance Assistance Seismic Stability Project\*- status report
- g. Status report re: Other engineering work in progress

**10.2 Financial**

- a. December 2024 Financial Statement & Vendor Detail Report\*-discuss and possibly approve
- b. Fieldbrook-Glendale contract revenue and Expense Summary\*-discuss
- c. RGS Final Salary Survey Report\*-discuss and possibly approve

**10.3 Operations**

- a. December Operations Report\*-discuss
- b. Surplus Request\*-discuss and possibly approve

**10.4 Management**

- a. New General Manager Open House-discuss

**11. DIRECTOR REPORTS & DISCUSSION**

- 11.1 General – comments or reports from Directors

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**11.2 ACWA**

Director Report, if any

**11.3 ACWA – JPIA**

Director Report, if any

- a. President’s Special Recognition Award\*-discuss

**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 January 3, 2024.)



**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

**Board of Directors Meeting**

**January 9, 2025**



**Photo at the JPIA Fall Conference**

# MINUTES

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



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

December 12, 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, Rupp, Wheeler, and Woo were present. Director Wheeler was present for a portion of the meeting. General Manager John Friedenbach, Superintendent Dale Davidsen, 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. OATH OF OFFICE**

President Fuller conducted the Oath of Office swearing-in for Directors Lindberg, Wheeler and Woo.

**4. ACCEPT AGENDA**

**ACTION: Motion to accept Agenda**

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

**5. PUBLIC COMMENT**

No public comment was received.

**6. MINUTES**

a. October 31, 2024, Special Board Meeting Minutes

**ACTION: Motion to approve October 31, 2024, Special Board meeting minutes**

**Maker: Director Rupp Second: Director Lindberg Vote: 5-0 to approve**

b. November 14, 2024, Regular Board Meeting Minutes

**ACTION: Motion to approve November 14, 2024, Regular Board meeting minutes with edits**

**Maker: Director Rupp Second: Director Woo Vote: 5-0 to approve**

Item 9.c edit, change the word choose to chose. Item 10.c edit, add Director names to the action makers.

Item 8.2.a edit, strike the first sentence.

c. November 15, 2024, Special Board Meeting Minutes

**ACTION: Motion to approve November 15, 2024, Special Board meeting minutes**

**Maker: Director Lindberg Second: Director Rupp Vote: 5-0 to approve**

d. November 20, 2024, Special Board Meeting Minutes

**ACTION: Motion to approve November 20, 2024, Special Board meeting minutes**

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

**7. CONSENT AGENDA**

**ACTION: Motion to approve Consent Agenda less items 7.a and 7.c**

**Maker: Director Rupp Second: Director Woo Vote: 5-0 to approve**

Director Woo requested to pull item 7.a and Director Lindberg requested to pull item 7.c.

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**ACTION: Motion to approve Consent Agenda items 7.a and 7.c**  
**Maker: Director Rupp Second: Director Woo Vote: 5-0 to approve**

**8. CONTINUING BUSINESS**

- a. Local Hazard Mitigation Plan (LHMP) with Trinity County

**Non Action item**

Historically the District has participated in the LHMP's of both Trinity County and Humboldt County due to assets being located within these jurisdictions. Trinity County's plan is close to being adopted; Humboldt County's plan expires March 2025. The concern is if the District is not a participant within an approved plan, FEMA grant funded projects will not be approved moving forward. Staff have decided to move forward with participating within Trinity County's plan to mitigate this risk and secure the necessary funding for phase 2 of the redundant pipeline project.

- b. Conference with legal counsel-anticipated litigation pursuant to paragraph 2 of subdivision (d) of Section 54956.9 (Arcata Land Company)

Closed session was conducted from 9:30 am to 9:35 am. The Board returned to open session. President Fuller announced there was no reportable action.

- c. Conference with legal Counsel – Existing Litigation: (Van Duzen)

Closed session was conducted from 11:31 am to 12:03 pm. The Board returned to open session. President Fuller announced there was no reportable action.

8.1 Water Resource Planning (WRP)

**Non Action item**

Staff continue to work on the response to the additional information request from Water Board staff regarding our 1707 petitions. A short discussion followed.

- a. Schedule Special Board Meeting for 1707

**Non Action item**

Mr. Friedenbach suggested scheduling a special Board meeting regarding the 1707 petition for change in late January or early February 2025. The Board suggested the second week of February.

8.2 McNamara & Peepe

Director Woo recused herself due to a conflict of interest.

- a. Status update

- i. November monthly summary and quarterly report

**Non Action item**

Staff reported DTSC has not made much progress since October. The day before this meeting US EPA reached out to the District to set up a meeting to discuss their process to complete a site assessment. A short discussion followed.

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b. Site maps & historical sampling results

**Non Action item**

These are included for informational purposes.

**9. NEW BUSINESS**

a. LAFCo Municipal Service Review

**Non Action item**

The Local Agency Formation Commission (LAFCo) conducts Municipal Service Reviews (MSR) every 5 years. The last completed MSR for the District was conducted in 2009. In 2020 an MSR was initiated, LAFCo suspended that MSR. Staff have reached out to LAFCo and await contact from LAFCo to conduct their MSR of the District. The Board asked several clarifying questions.

b. Humboldt Redwood Company (HRC), Lease Extension

**ACTION: Approve Humboldt Redwood Company Lease Extension and direct the general manager to sign the lease amendment.**

**Maker:** Director Rupp **Second:** Director Woo **Vote:** 5-0 to approve

HRC is formally proposing a three-year extension of the existing lease agreement for the Mt. Pierce Communications site which is set to take effect on January 1, 2025. Staff recommends approving the lease extension agreement and the Board authorize and direct the general manager to sign the lease amendment.

c. Resolution 2024-09 Recognizing and Honoring the Outstanding Service of Ken Davis

**ACTION: Approve Resolution 2024-09 Recognizing and Honoring the Outstanding Service of Ken Davis**

**Maker:** Director Rupp **Second:** Director Woo **Vote:** 5-0 to approve by Roll call vote

After 13 years of exceptional tenure with the District, Operations and Maintenance Technician Ken Davis is Retiring on January 30, 2025. Director Rupp read Resolution 2024-09.

**10. REPORTS (from STAFF)**

**10.1 Engineering –**

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

**Non Action item**

Staff continue to make progress on the EIR. Mitigation partners have been identified, and locations have been identified. Staff’s main focus right now is strategizing to minimize cost to the District.

b. Reservoirs Seismic Retrofit Project

**Non Action item**

Cal OES has approved a grant performance period time extension for this project from September 5, 2025 to March 30, 2026.

c. Essex Onsite Sodium Hypochlorite Generation Project

**Non Action item**

After receiving Board approval last month, the construction project was awarded to Sequoia Construction. Staff sent out the notice of award and contract which has been executed and received by staff.



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d. Collector Mainline Redundancy

**Non Action item**

This project's Change in Scope of work for Phase 1 continues to be in FEMA review. Staff believe they will receive authorization to proceed in the next month or two.

e. TRF Generator

**Non Action item**

Pace has communicated to the staff that the next round of designs is expected to be delivered by mid-January. The plan is to get bids out at the end of January/beginning of February 2025. It is anticipated that a recommendation for award will be presented during the March Board meeting.

f. Matthews Dam Advance Assistance Seismic Stability Project

**Non Action item**

Staff continue to work on the Request for Qualifications, and plan to have it out in the near future.

g. Collector 1-3 Rehabilitation Summary

**Non Action item**

Mr. Stevens gave a brief overview of the background for this project. The initiative to rehabilitate the Collectors began in 2012. He noted that Collectors 1 through 3 have been successfully completed, with both pre- and post-testing results indicating their effectiveness and reliability. Collector 4 remains to be rehabilitated. He then gave an in-depth presentation on the collectors and their water production capabilities after their rehabilitations. The Board asked some clarifying questions.

h. Status Report RE: Other Engineering Work

No report was received.

**10.2 Financial**

a. November 2024 Financial Statement & Vendor Detail Report

**ACTION: Motion to approve Financial Statement & Vendor Detail Report in the amount of \$534,678.92**

**Maker:** Director Rupp **Second:** Director Lindberg **Vote:** 5-0 to approve

Ms. Harris presented the November financial statement & vendor detail report. The General Account balance is \$659,000. The various investments balance is \$14 million. The advanced charges are \$5.5 million with a general reserve of \$4 million.

b. Fieldbrook-Glendale contract revenue and Expense Summary

**Non Action item**

This section is presented for transparency.

c. Ruth Hydro Income and Expense Statement

**Non Action item**

Mr. Friedenbach brought this item forward for the Board's review. A lengthy discussion

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followed.

**10.3 Operations**

a. November Operations Report

**Non Action item**

Mr. Davidsen presented the November Operations Report. On November 30th, the lake level reached an impressive height of 17.84 feet above the measurements recorded on October 31st. He included there was 21.82 Inches of rain recorded in November. On November 22<sup>nd</sup> staff recorded the lake had filled in just two days.

**10.4 Management**

a. ACWA/JPIA conference report out

**Non Action item**

Mr. Friedenbach reported on his attendance of the ACWA/JPIA Fall conference. He highlighted a session he attended titled, "Anatomy of a Claim".

b. January Board Elections

**Non Action item**

Staff wanted to bring to the attention of the Board the upcoming Board officer elections, which are scheduled to take place in January in the upcoming odd number year.

**11 DIRECTOR REPORTS & DISCUSSION**

**11.1 a. General – comments or reports from Directors**

**Non Action item**

Director Woo announced there is an invite-only screening of a documentary regarding the Baduwa't on December 19<sup>th</sup>. She noted it will be replayed for the public sometime in January.

**11.2 ACWA**

Director Rupp provided an in-depth report on his attendance of the ACWA/JPIA Fall conference, during which he attended the ACWA Finance and Membership committee meetings. He highlighted his attendance of 2 sessions. One regarding innovation, one called Battle of the Ages. At the Region 1 session meeting he reported on the finance and membership committee results.

**11.3 ACWA – JPIA**

a. ACWA/JPIA Fall conference report out

**Non Action item**

Director Rupp shared his attendance of a Cyber Chronicles session and suggested creating a cyber policy for the District.

b. JPIA Risk Control Grant Program

**Non Action item**

The District submitted a Risk Control Grant Program application for traffic control lights on District vehicles and defibrillator's for District vehicles and Ruth Lake Headquarters.

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**11.4 Organizations on which HBMWD Serves**

a. RCEA:

**Non Action item**

Director Woo reported on the RCEA meeting she attended on November 20<sup>th</sup>. RCEA has been chosen to be the administrator of the Rural Regional Energy Network program.

b. RREDC:

**Non Action item**

Director Lindberg reported on the RREDC meeting he attended on November 25<sup>th</sup>. Highlighting RREDC is working on starting a bi-weekly dock side local fish market they are trying to get started.

**ADJOURNMENT**

The meeting adjourned at 2:08 pm.

Attest:

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Michelle Fuller, President

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Bruce Rupp, Secretary Treasurer

**CONSENT**



**California Special  
Districts Association**  
*Districts Stronger Together*

December 13, 2024

The Honorable Monique Limón  
California State Senate  
1021 O Street, Suite 6510  
Sacramento, CA 95814

**RE: California State Senate Working Group - California Cap and Trade Program**

Dear Senator Limón,

I write on behalf of the California Special Districts Association (CSDA), representing over 1,000 independent special districts throughout the state. CSDA represents all types of special districts, which provide millions of Californians with essential local services such as fire protection, water, resource conservation, healthcare, recreation and parks, and more.

Thank you to the Senate working group for inviting CSDA to share its priorities in connection with California's Carbon Cap and Trade Program ("Program"). At this time, CSDA's priorities for the Program and the Greenhouse Gas Reduction Fund ("GGRF") align with the priorities we put forward in connection with the 2024 Climate Resilience Bond. These include the following:

**Parity in Funding for Like Services and Infrastructure**

Special districts build, operate, and maintain the critical infrastructure and natural lands that will be needed to stand strong against rising temperatures and drought, increasingly severe storms, insect outbreak and catastrophic wildfire, sea level rise and ocean acidity, flooding, and erosion. In advancing these critical efforts, special districts provide many of the same essential services as our partners in other types of local government. As just one example, in our November 25 meeting with the working group, vehicles and infrastructure to support compliance with Senate Bill 1383 (Lara, 2016) / Organic Waste diversion were discussed. Just like cities and counties, special districts also provide solid waste disposal services subject to provisions of SB 1383. Nearly all of California's 39 million residents receive at least one essential service from a special district. Parity among local government types in access to funding should reflect this reality for like services, infrastructure, and work.

**California Air Resource Board: Advanced Clean Fleets / Zero Emission Vehicles Local Agency Funding**

CSDA continues to advocate for funding for infrastructure and vehicles to comply with the California Air Resource Board (CARB) Advanced Clean Fleets (ACF) Zero Emission Vehicles (ZEV) mandates. Local government vehicle fleets are required to show that 50 percent of medium-duty and heavy-duty vehicle purchases are zero-emission beginning in 2024 and 100 percent of vehicle purchases are zero-emission by 2027. Small government fleets, defined as those with 10 or fewer vehicles and those in designated counties, may start their ZEV purchases beginning in 2027. Alternately, local government fleet owners may elect to use the ZEV Milestones Option, which allows for a graduated percentage of fleets to be in compliance by certain dates, depending on vehicle type. Local government fleets may

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**California Special  
Districts Association***Districts Stronger Together*

purchase either ZEVs or near-ZEVs, or a combination of ZEVs and near-ZEVs, until 2035. Starting in 2035, only ZEVs will be compliant. These new vehicles, which our communities will depend on for essential services, will be inoperable absent the prior design, construction, and energization of specific infrastructure to service and fuel or re-charge. In most cases, the planning for this critical infrastructure is only just beginning and the costs, while not fully calculated, will easily be billions of dollars.

Our communities are already struggling to afford rising costs and meet the demands of climate adaptation related to flooding, drought, wildfire, and more. Consequently, our local agencies have made difficult decisions to impose necessary taxes, fees, and assessments at a time when our constituents are already overburdened with inflation and when pressure is mounting from the State and other sources to keep rates and charges affordable. Availability of funding for local government infrastructure and vehicles to comply with the ACF or similar mandates will support their successful implementation, and is in alignment with the decarbonization goals of the Program and use of GGRF funds.

**Wildfire Fuel Mitigation Funding**

Although not included in CSDA's 2024 Climate Resilience Bond advocacy, funding for wildfire fuel mitigation work remains a priority for CSDA. Special districts are on the front lines of providing community hardening and resiliency through fuels reduction work. Derisking communities from wildfire aligns with the Program's and GGRF's goals of carbon reduction, while also protecting life, ensuring continued operation of essential services, and bolstering insurance availability and affordability. Special districts have been recipients of grants, funded in part from GGRF monies, which directly support wildfire fuel mitigation efforts. Continued funding for healthy forests and wildfire-safe communities should remain a priority of the Program and GGRF funds.

**Water Funding**

CSDA members are critical to the state's drought resilience, groundwater recharge, water recycling, flood protection, and water use efficiency goals. CSDA welcomes funding opportunities supporting these efforts which align with the goals of the Program and GGRF, including continuing to leverage GGRF funding to address access to safe and affordable drinking water.

We look forward to continuing dialogue around the Program and GGRF funds, and thank you again for the opportunity to participate. Should you have any inquiries, please do not hesitate to contact me at [aarona@csda.net](mailto:aarona@csda.net).

Sincerely,

A handwritten signature in black ink, appearing to read 'Aaron Avery', is written over a light blue horizontal line.

Aaron Avery  
Director of State Legislative Affairs

CC: Members and Staff of the Senate Working Group

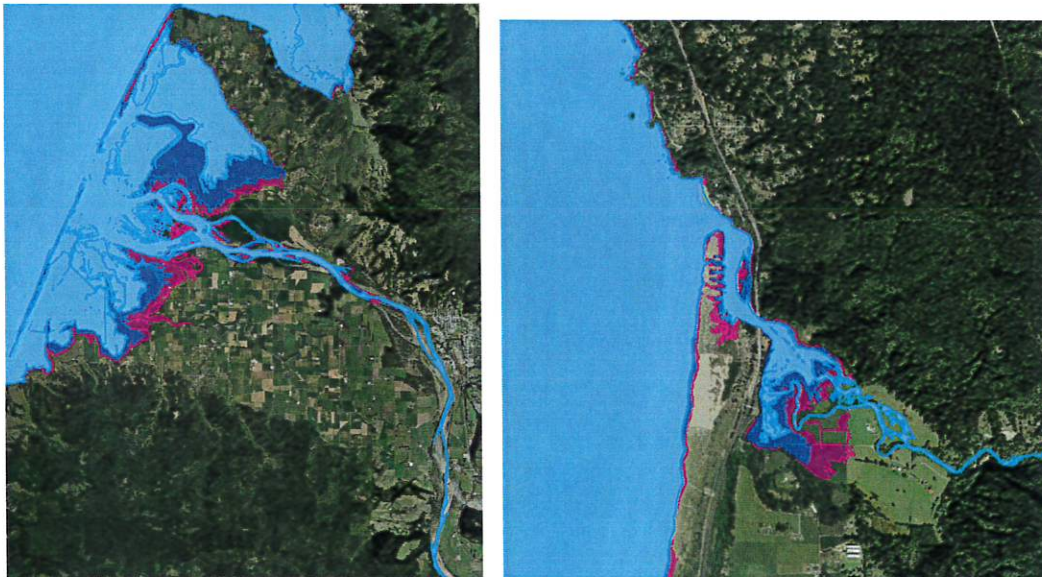


By [Pacific Coastal and Marine Science Center](#) December 12, 2024

The USGS Coastal Storm Modeling System (CoSMoS) flood hazard products are now available for Humboldt County, California.

Across the US, coastal communities face increasing threats from flooding, erosion, and rising groundwater tables due to accelerating sea-level rise and changing storm patterns. CoSMoS is a dynamic modeling approach that allows for detailed projections of coastal flooding due to both future sea level rise and storms. It is integrated with long-term coastal evolution (i.e., beach changes and cliff retreat) over large geographic areas (100s of kilometers).

CoSMoS models all the relevant physics of a coastal storm (e.g., tides, waves, and storm surge), which are then scaled down to local flood projections for use in community-level coastal planning and decision-making. Rather than relying on historical storm records, CoSMoS uses wind and pressure from global climate models to project coastal storm impacts under changing climatic conditions during the 21st century. Projections of multiple storm scenarios are provided under a suite of sea-level rise scenarios. These options allow users to manage and meet their own planning horizons and specify degrees of risk tolerance.



Sources/Usage: Public Domain. [View Media Details](#)

Example CoSMoS flood extent map products for the Humboldt County region, showing a 100-year storm across three sea-level rise scenarios.

Products and web tools have been used for a variety of coastal climate vulnerability and adaptation activities. [Case studies](#) highlight some of the ways in which the tools and data have been used, including:

- Sea level rise vulnerability assessments and coastal adaptation planning
- Municipal plans (e.g., General Plans, Hazard Mitigation Plans, Local Coastal Programs)
- Emergency management
- Infrastructure or capital investment plans

- Natural resource management/restoration plans
- Public engagement and communication

### Access

Products are available as geospatial data downloads via the USGS ScienceBase Catalog, and via two interactive web tools:

- All CoSMoS geospatial data downloads are available [here](#)
- **NEW\*** [Humboldt County downloadable flood products direct link](#)
- Hazard Exposure Reporting and Analytics (HERA) web tool: [www.usgs.gov/apps/hera](http://www.usgs.gov/apps/hera) (Humboldt flood data available by end of December)
- Our Coast Our Future web tool: [www.ourcoastourfuture.org](http://www.ourcoastourfuture.org) (Humboldt County flood data available early Feb 2025)

Coastal erosion (bluff retreat and [shoreline change](#)) and [rising groundwater](#) hazard products are also available for all of California.

### Technical Advancements

CoSMoS in Northern California has been updated to use 2-dimensional (2D) [XBeach](#) models to map projected flood hazards along the complex coastline. While the 2D models are more computationally expensive, the outputs yield more continuous and directly mappable hazards along the many coves, cliffs and beaches of Northern California, without the processing time and potential artifacts from merging 1D model output. Information about the methods are detailed in [O'Neill et al. 2024](#) (open access).

Flood modeling for remaining areas of Northern California are underway, with Del Norte County anticipated in early Spring 2025.

### Training and Technical Assistance

Interested in more information? Contact Maya Hayden ([mkhayden@usgs.gov](mailto:mkhayden@usgs.gov)) for information on upcoming training opportunities and to request technical assistance.



# Times Standard



## Harbor district signs offshore wind agreement with Long Beach

A aerial view of Humboldt Bay shows the location of the future offshore wind marine terminal project. This week, the harbor district and the Port of Long Beach signed an agreement to work together rather than competitively. (Oren Nardi for Humboldt Waterkeeper)

The Humboldt Bay Harbor, Recreation and Conservation District, the Port of Long Beach and the State Lands Commission announced an offshore wind agreement.

The [nine-page agreement](#) puts into ink a commitment to generally work together to develop offshore wind power and the associated port facilities in California. The agreement touts the need for responsible development and the positive attributes of renewable energy and reinvestments at the ports.

The pair of ports are primed to become assembly and staging centers for offshore wind turbines after five lease areas off the coast of Morro Bay and Humboldt Bay were auctioned off in 2022 to private companies — each in federal waters [deeper than any other existing offshore wind project](#) in the world. Huge infrastructure investments are needed before the goals of adding carbon-free energy to the power grid can become a reality, including at ports.

Harbor District Executive Director Chris Mikkelsen said Wednesday the agreement is all about committing to responsible and equitable engagement.

“This is about giving people a voice, the ability for people to want to invest because they can see that it’s a project that the people believe in and that the people want. There’s no better signal to investors than that,” he said.

He said working with Long Beach came about organically, with the ports sharing challenges and successes, and in March they began floating the idea of a more formal deal to let the people know the ports are working on this together. He believes other ports will want to enter the agreement, and invited them to do so.

The video player is currently playing an ad. You can skip the ad in 5 sec with a mouse or keyboard

The deal includes commitments like aligning development and permitting of the ports, community engagement and workforce development. At previous harbor district meetings, the port in Long Beach was sometimes seen closer to a competitor — a purportedly better-funded and more developed port that could compete with Humboldt Bay as a hub for offshore wind turbines.

This agreement, rather, states “no single port site in California can serve all the needs of the floating offshore wind industry,” and the development of staging and integration facilities (like the ones planned in Humboldt Bay and Long Beach) must be prioritized. The harbor district was awarded a massive \$426.7 million grant in January to construct an offshore wind terminal in

Humboldt Bay. Long Beach has proposed a 400-acre staging and integration terminal "Pier Wind," for staging, storage and assembly of wind turbines.

Mikkelsen said the developers, and studies, have found one port can't supply all the materials necessary.

"We're not competing with one another. We're paving the way for this to happen. Let's do it collectively," he said.

Many of the pieces in the agreement are from AB 525, a state law signed in 2021 that laid out a plan for offshore wind energy development off the California coast.

"This agreement is a monumental step forward in California's clean energy journey," Lieutenant Governor and State Lands Commissioner Eleni Kounalakis said in a prepared statement.

The State Lands Commission is the California Environmental Quality Act lead agency for offshore wind energy projects.

"It underscores our commitment to developing offshore wind responsibly, sustainably, and equitably, while uplifting Native American tribes, local communities, and underserved populations," she said.

Multiple tribes in Northern and Central California alike have voiced opposition to offshore wind development.

It's unclear, exactly, where offshore wind in California will end up with the new administration, with President-elect Donald Trump repeatedly voicing his distaste for wind turbines and vowing to stop infrastructure funds granted to wind projects under the Biden administration.

*Sage Alexander can be reached at 707-441-0504.*

*Originally Published: December 18, 2024 at 2:44 PM PST*

# **CORRESPONDENCE**

**From:** [daniel@reninet.com](mailto:daniel@reninet.com) <[daniel@reninet.com](mailto:daniel@reninet.com)>  
**Sent:** Wednesday, December 11, 2024 9:30 AM  
**To:** FRIEDENBACH <[friedenbach@hbmwd.com](mailto:friedenbach@hbmwd.com)>  
**Cc:** [contessa@hbmwd.com](mailto:contessa@hbmwd.com)  
**Subject:** Coastal waterline planting requisites

Dear Mr. Friedenbach  
Board of Directors HBMWD

I was astonished when I saw the vegetation removed from the frontal dunes that protect your industrial water line that runs along our property in Manila. Those grasses were planted especially to provide resilience to your coastal water pipe. Brilliantly, fifty years later they had created a twelve foot frontal dune and the associated wetland to protect our coastal resources and enhance wildlife habitat. When the grasses were removed the frontal dune collapsed, the wetland disappeared along with wildlife and protection for your infrastructure.

I've asked in the past for those planting instructions, and was informed by Mr. Friedenbach that I could NOT see those plans due to Homeland Security issues!

That can not be right.

### **Sand Dunes**

Naturally occurring accumulations of sand in ridges or mounds landward of the beach. Human alteration of dunes within V Zones is prohibited unless it can be demonstrated that such alteration will not increase potential flood damage.

Dunes are essential first lines of defense against coastal storms and can do much to reduce losses to inland coastal development. It can be assumed that any removal or other alteration of a dune will render it more susceptible to erosion and increase potential damages to structures behind that dune.

Communities are advised to prohibit all alterations

of dunes unless the applicant can submit engineering analyses demonstrating that flood damages will not be increased before permits are issued. **National Flood Insurance Program Requirements 59.1 - Definition**

- 60.3 (e)(7) - Alter

Mr. Friedenbach, please either show me the requisite planting instructions OR the engineering analysis to show that altering the frontal dunes will not make your water pipe more susceptible to erosion and increase potential damage.

Thank you  
Dan Edrich  
Manila Ca.

# **CONTINUING BUSINESS**

Fleet Electrification Master Plan

HUMBOLDT BAY MUNICIPAL WATER  
DISTRICT, CALIFORNIA

DRAFT

December 18, 2024

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# 1. Executive Summary

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Matrix Consulting Group was engaged to conduct a fleet and electrification study for the Humboldt Bay Municipal Water District (HBMWD). This study was aimed to review the existing fleet and make recommendations regarding electrification and charging.

Key areas of focus include the composition of the fleet to efficiently meet the operational needs of the District, compliance with applicable regulations regarding zero-emissions vehicles, the adoption of cost-effective replacement cycles, and the charging support needed for the electrification of the fleet.

## 1.1 - Study Overview

The study entailed a series of analytical tasks, each of which contributed to developing recommendations. Over the course of three months, the project team completed these tasks.

1. Collected data on the fleet and conducted interviews with staff to develop a deep understanding of the organization and its operations. Based on this, a descriptive profile was created summarizing the existing fleet composition, the fleet facilities, budget, organizational structure, staffing, policies, and technology resources.
2. Interviewed stakeholders, learning about the daily use of fleet assets, their fit for their assigned function, and the intended disposition of the asset. Odometer readings were collected. Based on this, recommendations for the future state composition of the fleet were developed.
3. Reviewed the relevant regulatory requirements regarding zero-emission vehicle (ZEV) adoption and electrification. Based on the timeframes from these regulations and the appropriate replacement lifecycles for each unit, specific timelines for the replacement of each fleet asset were recommended.
4. Created a detailed fleet replacement plan for each individual vehicle and each recommended classification. This plan aligns with the operational needs, cost-efficient replacement lifecycles and regulatory requirements for ZEV adoption.
5. Assessed the current market of EV options for vehicles and charging infrastructure as well as incentive and funding opportunities.
6. Created a supporting Charging Plan to match the phased integration of ZEVs.



7. Assessed the needs to update facilities and equipment and train drivers and technicians. Created an outline Communications Plan to support ZEV transition.

Our recommendations are supported by an implementation plan that prioritizes the actions required and identifies the level of effort of each task.

## 1.2 Key Findings and Recommendations

In order to enact this Fleet Electrification Master Plan, HBMWD will need to follow the recommendations in this document. A summary by functional areas is included in this Executive Summary.

### 1.2.1 Fleet Profile

A snapshot of the fleet, facilities, staff, budget, policies and technology was provided. The District has a fleet of 51 vehicles and equipment. They are maintained by a combination of inhouse resources and outsourcing to third party maintenance providers.

### 1.2.2 Regulatory Requirements and Market Availability

The Advanced Clean Fleets (ACF) regulation requires that fleets with vehicles over 8,500 lbs. GVWR reduce their greenhouse gas emissions by acquiring zero-emission vehicles (ZEVs). In addition, all information on the fleet must be reported through the TRUCRS website to ensure compliance with the regulation. The [Climate Mayors EV Purchasing Cooperative](#)<sup>1</sup> has a list of eligible vehicles that can satisfy the move to ZEVs.

### 1.2.3 Fleet Utilization

17 vehicles were identified for review. One vehicle is recommended to be removed from the fleet for underutilization and one vehicle is recommended to be removed as it has already been replaced.

### 1.2.4 Conversion Candidates

Many units are available in the marketplace to satisfy the needs and expectations of HBMWD. Sources to identify model availability and price were provided for the 15 candidates for electrification. These units were further broken down by types, location and timeline. Where there are no possible ZEV alternatives, alternative strategies were offered for reducing GHG emissions.

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<sup>1</sup> All websites are listed as an Appendix to this report of ease of reference.

### 1.2.5 Replacement Plan

A levelled replacement plan was prepared, showing annual funding requirements. Using this multi-year replacement plan to justify the funding for the replacement fund is recommended.

### 1.2.6 Charging Plan

Following a site visit to confirm site details, the location and number of charging ports per site are described.

### 1.2.7 Facilities, Equipment and Training

Although most of EV maintenance and repairs will be performed under warranty, there are Personal Protective Equipment (PPE) and equipment needs that must be satisfied before EVs can even be inspected in the Shop. Technician training should also take place.

### 1.2.8 Communications Plan

Fleet users and other employees of the HBMWD all need to be educated about the basic characteristics, costs and operation of electric vehicles.

### 1.2.9 Implementation Guidance

A list of recommendations with levels of urgency and cost are listed for an implementation framework.

## 1.3 Summary of Recommendations

The recommendations from each of these areas are summarized in the table below.

**Table of Recommendations**

- 
- |    |   |
|----|---|
| 1. | Adopt the Milestones Option for ZEV compliance.   |
| 2. | Report the option selected and vehicle selection information through TRUCRS.  |
| 3. | Develop a Fleet Policy Manual.  |
| 4. | Review the utilization of all vehicles annually.  |
| 5. | Develop a system to track the number of trips per vehicle per month and capture mileage monthly for future utilization studies. |
| 6. | Include a formal Replacement Policy in the Fleet Policy Manual.   |

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**Table of Recommendations**

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7. Institute a formal Replacement Plan.
8. Create a list of common upfit items for each vehicle (i.e. strobe, hitch, etc.) to standardize vehicle replacements.
9. Review vehicle types before purchasing units for applicability to job function and fleet standardization.
10. Dispose of decommissioned vehicles immediately.
11. Explore the use of a formal Fleet Management Information System (FMIS) for data collection and analysis.
12. Explore the use of telematics for data collection, driver training, and repair diagnostics.
13. Acquire BEV options when replacing SUVs and light-duty trucks.
14. Explore the CARB list for medium-duty vehicles for the appropriate ZEV unit when replacement is scheduled.
15. Make the fleet disposition recommendations recommended in Chapter 6.
16. Review available federal and state grant funding to ascertain if funding is available for EV charging infrastructure.
17. Contact Redwood Coast Energy Authority and PG&E for information on utility incentives for EV charging infrastructure.
18. Immediately create an account and file Fleet Compliance reports with the State of California through the Truck Regulation Upload, Compliance and Reporting System (TRUCRS).
19. Once the TRUCRS account has been created, file with CARB ACF the necessary paperwork for exemptions when replacing Unit 5 (Crane Truck) and Unit 10 (Dump Truck) in 2027 and 2026, respectively.
20. Follow the recommended replacement plan for all other vehicles to satisfy CARB ACF regulations on the purchase of EV units, using the Milestones Option for the replacement guidelines.
21. Standardize lifecycles for all vehicles and replace in a timely manner to keep the fleet in optimal condition.
22. Create a Fleet Replacement Fund.
23. Adopt the Charging Plan recommendations described in Chapter 7.
24. Explore facility upgrades to accommodate EV maintenance.
25. Develop a maintenance plan and checklist specifically for EV units.
26. Allocate funding for technician training.

**Table of Recommendations**

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- 27. Investigate satisfying other considerations for EV adoption such as insurance coverage and vehicle storage.
- 28. Develop a Communication Plan for employees and drivers that includes training on safe charging for EV units.
- 29. Set up a web page highlighting HBMWD's efforts to move to a more sustainable organization.

The study's analysis and recommendations provide a roadmap for the District as it transitions to electric vehicles to meet regulatory requirements.

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## 2. Fleet Overview

This chapter provides a fleet overview that summarizes the current organization and operations of the District's fleet, as well as existing asset inventory, facilities, budget, technology use, and relevant policies. This overview section does not attempt to include every organizational and operational facet related to the fleet. Instead, it provides a summary profile that can be used as a starting point to show how specific recommendations will impact the organization's approach – whether in organizational structure, operational practices, or in the makeup and management of the fleet.

### 2.1 Fleet Overview

The fleet organization coordinates maintenance for 51 vehicles and pieces of equipment. The following table shows the number of units by equipment class as well as the average age of those assets.

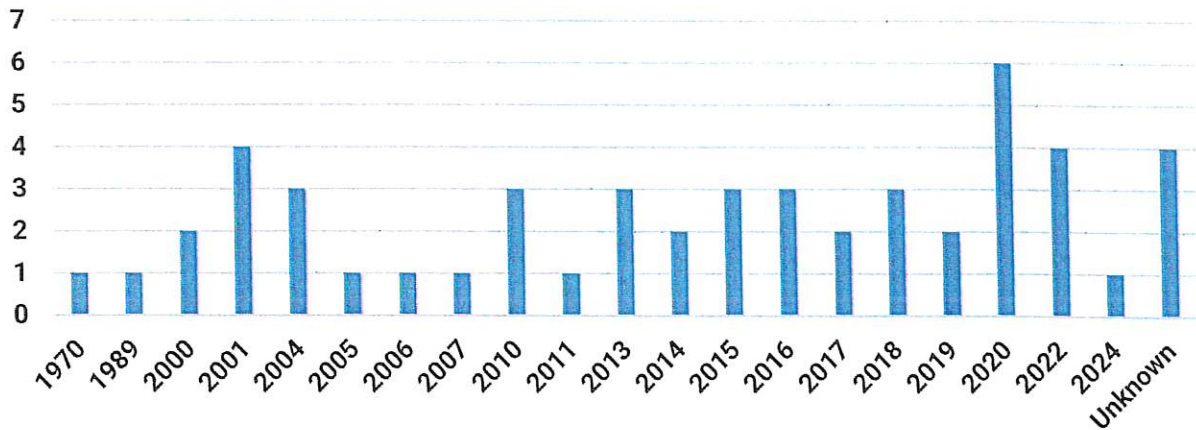
**Fleet Count by Classification**

| <b>Classification</b>  | <b>Total</b> | <b>Avg. Age</b> |
|------------------------|--------------|-----------------|
| Aerial                 | 2            | 10.0            |
| Air Compressor         | 1            | 8.0             |
| Backhoe                | 3            | 14.3            |
| Boat                   | 1            | 2.0             |
| Chipper                | 1            | 10.0            |
| Crane                  | 1            | 11.0            |
| Dump Truck             | 1            | 14.0            |
| Excavator              | 2            | 12.0            |
| Forklift               | 1            | 10.0            |
| Generator              | 7            | 11.7            |
| Generator – Stationary | 3            | 23.0            |
| Pickup – Light Duty    | 8            | 8.5             |
| Pickup – Medium Duty   | 3            | 5.7             |
| Pump                   | 2            | 31.0            |
| SUV                    | 2            | 6.5             |
| Trailer – Boat         | 1            | 2.0             |
| Trailer – Dump         | 1            | 14.0            |
| Trailer – Equipment    | 2            | 7.5             |
| Trailer – Excavation   | 1            | Not Available   |
| Trailer – Flat Bed     | 2            | 26.0            |

| Classification          | Total     | Avg. Age      |
|-------------------------|-----------|---------------|
| Trailer – Generator     | 1         | 24.0          |
| Trailer – Military      | 1         | Not Available |
| Trailer – Miscellaneous | 2         | 4.5           |
| Welder                  | 1         | 7.0           |
| Unit Not In Service     | 1         | Not Available |
| <b>Total</b>            | <b>51</b> | <b>12</b>     |

The next chart shows the HBMWD fleet assets by in-service year. 58.82% of the fleet shows an in-service date within the last 10 years, 72.55% within the last 15 years, and 84.31% within the last 20 years.

Vehicles by Model Year



## 2.2 Fleet Policies

HBMWD does not currently have a Fleet Management Policy Manual or a Driver's Handbook. There are no formal, written fleet policies in place.

## 2.3 Facility

HBMWD currently operates one maintenance shop located at 7270 West End Road in Arcata.

The shop hours are 7:00 am – 3:30 pm. This shop is located in two buildings that have been combined, with two bays in one building and two bays in another. The bays are laid out as follows:

- Storage bay
- Car bay with lift
- Welding bay

- Machinery bay

The shop is staffed with two maintenance workers, two technicians, two electricians, one assistant supervisor, and one supervisor.

## 2.4 Fleet Budget

The fiscal year runs from July 1<sup>st</sup> through June 30<sup>th</sup>. The capital budget is a designated amount each year that changes according to the funding available. Departments submit their list of vehicle needs to the Business Manager. The list is compiled, and the assets are discussed to differentiate between needs and wants. Units are then approved and purchased with the available funding.

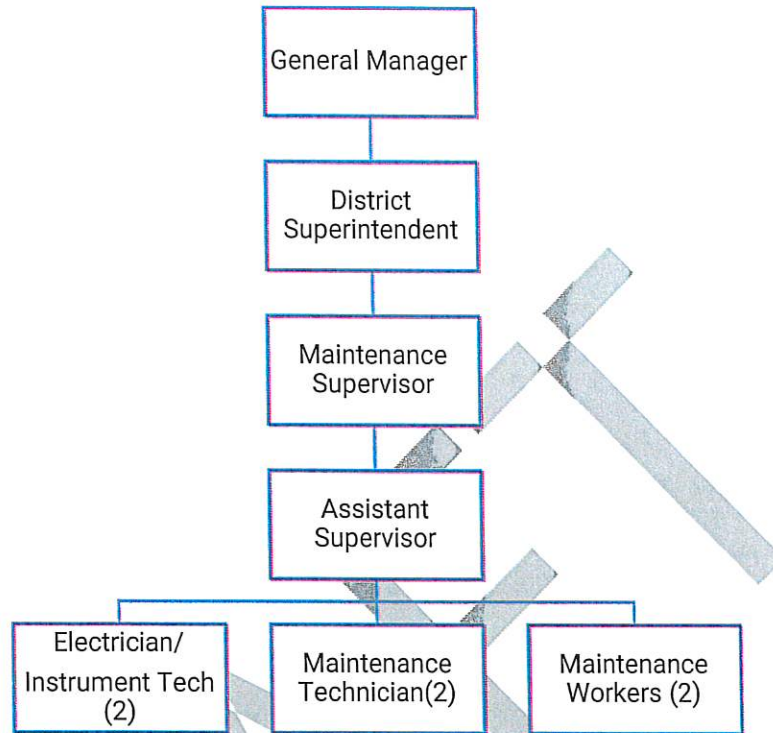
Fleet operating costs (fuel and maintenance) are centralized within the organization. The costs since FY 2021 are outlined below.

**Operating Fleet Budget Actual Expenditures FY22-24**

|                    | FY21<br>Actual | FY22<br>Actual | FY23<br>Actual | FY24<br>Actual | TOTAL     |
|--------------------|----------------|----------------|----------------|----------------|-----------|
| Operating Expenses | \$50,200       | \$54,700       | \$59,900       | \$48,600       | \$213,400 |

## 2.5 Organizational Structure

HBMWD’s fleet is internally managed by a maintenance team under the direct supervision of a District Superintendent. The following organizational chart shows the current structure of the fleet team.



**2.6 Staff Roles and Responsibilities**

The next table summarizes the key roles and responsibilities of each position. These staffing roles and responsibilities are not intended to provide a complete job description level of detail but to summarize the principal duties of each position.

| Position Title          | Key Roles and Responsibilities   |
|-------------------------|--|
| General Manager         | <ul style="list-style-type: none"> <li>• Serves as the Chief Executive Officer of the District.</li> <li>• Provides leadership and management to the organization.</li> <li>• Recommends and plans long-range goals, objectives and organizational structure for future expansion and modernization.</li> <li>• Oversees the District’s safety program and serves as the Dam Safety Coordinator.</li> <li>• Prepares and administers the District’s budget.</li> </ul> |
| District Superintendent | <ul style="list-style-type: none"> <li>• Plans and directs the safety program.</li> <li>• Directs the District’s ongoing construction and maintenance activities.</li> <li>• Prepares the long-term CIP and maintenance plans and annual budgets.</li> <li>• Develops schedules for maintenance work.</li> <li>• Prepares and presents required reports.</li> </ul>  |



| Position Title                   | Key Roles and Responsibilities  |
|----------------------------------|---|
| Maintenance Supervisor           | <ul style="list-style-type: none"> <li>• Directs the work of staff responsible for maintenance functions and projects.</li> <li>• Coordinates the Districts' Safety Program.</li> <li>• Develops methods to assure safety compliance with regulatory agencies.</li> <li>• Provides field supervision on all projects.</li> <li>• Plans and directs in-service training programs.</li> </ul>   |
| Assistant Maintenance Supervisor | <ul style="list-style-type: none"> <li>• Directs the work of staff responsible for maintenance functions and projects.</li> <li>• Coordinates the Districts' Safety Program.</li> <li>• Develops methods to assure safety compliance with regulatory agencies.</li> <li>• Provides field supervision on all projects.</li> <li>• Plans and directs in-service training programs.</li> <li>• Fulfills duties of the Maintenance Supervisor as needed.</li> </ul> |
| Electrician                      | <ul style="list-style-type: none"> <li>• Troubleshoots, repairs, rebuilds, and adjusts electrical and mechanical parts of pumps, motors, and pressure control valves.</li> <li>• Maintains and repairs two-way radio stations, mobile stations, antennas, wireless radio communication systems, and intercom systems.</li> <li>• Collaborates with others on projects.</li> </ul>   |
| Mechanic                         | <ul style="list-style-type: none"> <li>• Operates a full range of field and shop repair equipment and tools.</li> <li>• Maintains and repairs buildings, facilities and equipment.</li> <li>• Repairs and overhauls gas and diesel engines and large pumps, along with fabrication of needed parts and equipment.</li> <li>• Reads and interprets manuals and blueprints.</li> </ul>  |
| Maintenance Worker               | <ul style="list-style-type: none"> <li>• Performs a variety of grounds-keeping and maintenance functions.</li> <li>• Assists with minor maintenance on equipment.</li> <li>• Operates larger equipment and identify issues.</li> </ul>  |

## 2.7 Technology

HBMWD currently does not have a Fleet Management Information System (FMIS) or a Global Positioning System (GPS). HBMWD uses a branded fuel card through Commercial Fueling Network (CFN). This card is a Valley Pacific Cardlock Fueling card and can be used at 13 unattended fueling sites in the Northern California area.

### 3. Regulatory Requirements and EV Market Availability

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This Chapter describes the state and federal regulations regarding zero-emissions vehicles (ZEV) and the availability of these vehicles in the local market.

#### 3.1 Regulatory Requirements

A crucial component of any organization's fleet strategy is compliance with state and federal requirements for zero-emissions vehicles. The California Air Resources Board (CARB) has developed regulations and maintains a robust collection of resources intended to guide the widespread introduction of zero-emission cars, trucks, and equipment. This effort includes a wide variety of programs, resources, and zero-emission vehicle information available at CARB's [Zero-Emission Transportation](#) webpage<sup>2</sup>.

Three regulations are most relevant to fleet electrification because they impose mandatory requirements upon public and private fleet operators, and manufacturers who sell their vehicles in California. The Advanced Clean Cars and Advanced Clean Trucks regulations directly impact vehicle manufacturers who sell their vehicles in California. The Advanced Clean Fleets regulations directly impact fleets.

##### 3.1.1 Advanced Clean Cars

The Advanced Clean Cars (ACC) program combines several regulations into one package. Advanced Clean Cars I was adopted in 2012 and created regulations aimed at scaling down emissions of light-duty passenger cars, pickup trucks and SUVs by requiring an increased number of zero-emission vehicles (ZEVs) to meet air quality and greenhouse gas emissions reduction goals. The Advanced Clean Cars II regulations were adopted in 2022, imposing the next level of low-emission and ZEV standards for model years 2026-2035 that contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality targets. Current regulations require that, by 2035, all new passenger cars, trucks and SUVs sold in California will be zero emission vehicles.

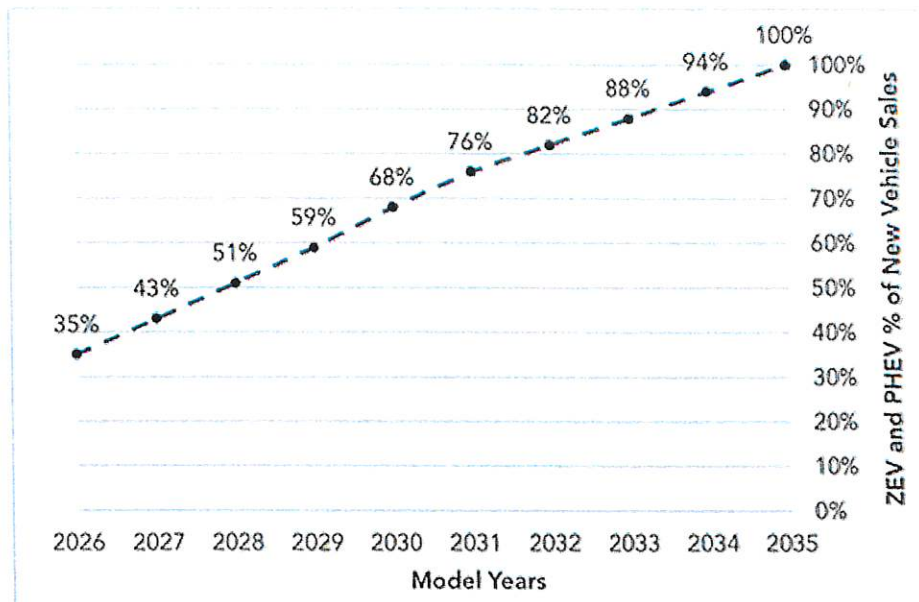
The regulations are two-pronged. First, the Zero-emission Vehicle Regulation supports Governor Newsom's 2020 [Executive Order N-79-20](#) that requires all new passenger vehicles sold in California to be zero emissions by 2035<sup>3</sup>. Second, the Low-emission Vehicle Regulations include increasingly stringent standards for gasoline cars and

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<sup>2</sup> California Air Resources Board (CARB). *Zero-Emission Transportation*, <https://ww2.arb.ca.gov/our-work/topics/zero-emission-transportation>.

<sup>3</sup> State of California Executive Department. Executive Order N-79-20. 9/23/2020, <https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf>.

heavier passenger trucks to continue to reduce smog-forming emissions. The chart below illustrates the increasing percentage of zero-emission vehicle sales requirements that vehicle manufacturers are required to meet, including battery-electric and plug-in hybrid vehicles, by 2035.



Source: California Air Resources Board (CARB) – [arb.ca.gov](http://arb.ca.gov)

### 3.1.2 Advanced Clean Trucks

Starting with the 2024 model year, the Advanced Clean Trucks (ACT) regulation requires manufacturers to sell zero-emission vehicles (ZEVs) as an increasing percentage of total medium- and heavy-duty sales in California. By the end of the 2024 model year, 5% to 9% of sales need to be ZEVs, depending on the truck category. Manufacturers were able to receive early credits for selling 2021 through 2023 model year ZEVs. They also have the flexibility to sell more ZEVs in one category while selling fewer in another, with the caveat that they must still sell a minimum number of ZEV tractors. Manufacturers were also allowed to trade or bank credits from excess ZEV sales and have one extra year to make up any shortfall.

In response to the ACT regulation, the sales of new ZEV medium- and heavy-duty trucks in California in 2023 doubled from the prior year, representing 1 out of every 6 new ACT-regulated vehicles. With more than 18,000 medium- and heavy-duty ZEVs sold in California in 2023, the state exceeded its ACT goal two years ahead of schedule and sold

five times the number of ZEVs required by the regulation, according to a report released by CARB<sup>4</sup>.

### 3.1.3 Advanced Clean Fleets (ACF)

Approved on April 28, 2023, the ACF regulation applies to vehicles with a gross vehicle weight rating (GVWR) greater than 8,500 lbs. and sets “stringent emission standards for mobile sources that are needed to protect the public health and welfare of Californians by improving air quality and by mitigating the harms posed by greenhouse gases”<sup>5</sup>. The ACF regulation complements the Advanced Clean Trucks regulation and is aimed at advancing the introduction of zero-emission technologies into California’s truck and bus fleets, requiring fleets that are well suited for electrification to reduce emissions through requirements to both phase-in the use of ZEVs for targeted fleets and requirements that manufacturers only manufacture ZEV trucks starting in the 2036 model year. Achieving these and other milestones will contribute to meeting the goals in Governor Newsom’s 2020 [Executive Order N-79-20](#)<sup>6</sup>.

There are two approaches that government fleets can use to comply with ACF regulations. Option 1 is the Model Year Option which dictates that fleets must ensure, beginning January 1, 2024, that 50% of their annual vehicle purchases are ZEVs, and beginning January 1, 2027, that 100% of vehicle purchases are ZEVs. Near-zero-emissions vehicles, as defined in the regulation, with a vehicle model year of 2035 or earlier, count the same as ZEVs for this requirement. New internal combustion engine (ICE) vehicles, 2024 or newer, must have an engine certified to applicable California emissions standards and emissions-related requirements, and any used ICE vehicle added to the fleet must have a 2010–2023 model year engine. The required ZEV percentages by model year under this option are shown in the table below.

| Required ZEV Purchases by Year (Model Year Option) | 2024 | 2025 | 2026 | 2027 | 2028+ |
|--|------|------|------|------|-------|
| Percent of Vehicles                                | 50%  | 50%  | 50%  | 100% | 100%  |

Option 2 is the ZEV Milestones Option, which allows government organizations the flexibility of phasing in ZEVs based on the suitability of different vehicles in their fleets. Under this option, vehicles are categorized according to three “milestone groups”. Each

<sup>4</sup> California Air Resources Board (CARB). *Advanced Clean Trucks Credit Summary Through the 2023 Model Year*, <https://ww2.arb.ca.gov/resources/fact-sheets/ACT-Credits-Summary%202023>.

<sup>5</sup> California Air Resources Board (CARB). *Advanced Clean Fleets*, <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets/about>.

<sup>6</sup> State of California Executive Department. Executive Order N-79-20. 9/23/2020, <https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf>.

milestone group carries with it an increasing percentage of annual vehicles purchases that must be ZEVs. The percentages by milestone group are shown in the table below.

| <b>Required ZEV Composition (Milestones Option)</b>   | <b>10%</b> | <b>25%</b> | <b>50%</b> | <b>75%</b> | <b>100%</b> |
|---|------------|------------|------------|------------|-------------|
| <b>Milestone Group 1:</b> Box trucks, vans, buses with two axles, yard tractors, light-duty package delivery vehicles | 2025       | 2028       | 2031       | 2033       | 2035        |
| <b>Milestone Group 2:</b> Work trucks, day cab tractors, pickup trucks, buses with three axles                        | 2027       | 2030       | 2033       | 2036       | 2039        |
| <b>Milestone Group 3:</b> Sleeper cab tractors and specialty vehicles   | 2030       | 2033       | 2036       | 2039       | 2042        |

**Based on the fleet composition and vehicle utilization analysis, the Milestone Option is recommended.** When opting into either option, the fleet owner must report this intention through the TRUCRS website. After electing to use this option, fleet owners are no longer subject to, and may not switch back to, the other option.

#### 3.1.4 Reporting

Organizations with annual gross revenues greater than \$50 million, fleet owners with 50 or more medium- and heavy-duty vehicles, and any California government or federal agency with one or more vehicles over 8,500 pounds must report their existing fleet operations to ensure fleets are purchasing and placing zero-emission trucks in the correct service locations. HBMWD is not exempt from these mandates.

Regardless of the option selected, AGF requires fleets to report their vehicle information through the Truck Regulation Upload, Compliance and Reporting System (TRUCRS). TRUCRS reporting information, guidance and a link to the submission portal is available at CARB's [TRUCRS Reporting Information](#) webpage<sup>7</sup>.

CARB is being challenged on their mandates. The latest lawsuit is from the National Truck and Equipment Association (NTEA) and the Specialty Equipment Market Association (SEMA). This lawsuit alleges that the CARB ACF mandates exceed California's authority in requiring manufacturers to only produce ZEV units from 2036 and beyond. In addition, the Environmental Protection Agency (EPA) has not approved these mandates, so the requirements should not be instituted until approval is given. The timeline for resolution of these lawsuits is unknown.

<sup>7</sup> California Air Resources Board (CARB). *TRUCRS Reporting Information*, <https://ww2.arb.ca.gov/our-work/programs/truck-bus-regulation/trucrs-reporting-information>.

## 3.2 Market Scan

### 3.2.1 Introduction

The two major obstacles for the proliferation of electric vehicles that have always been associated with battery technology are energy density and cost. Advancements in battery technology are rapidly erasing these two issues. Industry experts have been striving to get battery energy density higher to increase the range of the EV. As the battery packs grew in density and sophistication, however, they became more expensive. The industry had always targeted the cost of \$400-\$250 per kWh as the number that needed to be reached for EV's to be cost effective. Changes in battery chemistry, design and construction now have the cost down in the \$135kWh range.

### 3.2.2 Light Duty Fleet Options

Most fleet operations begin electrification with their light duty fleet (passenger cars, SUV's and pick-ups) because there are more fully mature product offerings in this space. Essentially, every vehicle OEM provides a platform of HEV, PHEV and BEV units. Additionally, a few of these vehicles have some type of incentive program that helps reduce the acquisition cost of the vehicle. The marketplace and the current federal government administration are currently giving preference to plug-in electric vehicles.

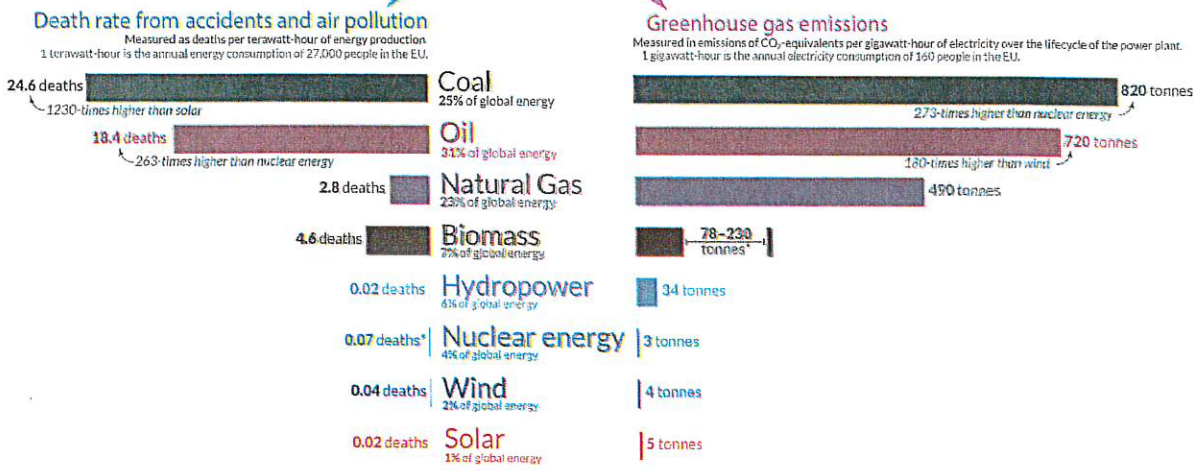
### 3.2.3 Heavy Duty Fleet Options

While there are technology solutions for heavy duty vehicle, most are in the early stages of development and cost prohibitive without funding assistance. Most of the major truck manufacturers either currently have a battery electric vehicle on the market or will release one in the next 1-3 years. California is leading the effort to make major inroads in converting trucks/equipment used for shipping, drayage, mass transit and marine applications. Each of those industries requires a unique strategy and technology solution. There are few or no heavy-duty vehicles in classifications needed for government fleets and utilities. Funding opportunities for most of those applications are addressed below.

### 3.2.4 Clean Energy

There are often debates over the well-to-well emissions associated with producing and using alternative fuels. The safest and lowest-emitting sources of energy are shown in the following chart.

# Our World in Data What are the safest and cleanest sources of energy?



\*Life-cycle emissions from biomass vary significantly depending on fuel (e.g. crop residues vs. forestry) and the treatment of biogenic sources.  
 \*The death rate for nuclear energy includes deaths from the Fukushima and Chernobyl disasters as well as the deaths from occupational accidents (largely mining and milling).  
 Energy shares refer to 2019 and are shown in primary energy substitution equivalents to correct for inefficiencies of fossil fuel combustion. Traditional biomass is taken into account.  
 Data sources: Death rates from Markandya & Wilkinson (2007) in *The Lancet*, and Sovacool et al. (2016) in *Journal of Cleaner Production*;  
 Greenhouse gas emission factors from IPCC AR5 (2014) and Pehl et al. (2017) in *Nature*; Energy shares from BP (2019) and Smil (2017).  
 OurWorldinData.org - Research and data to make progress against the world's largest problems. Licensed under CC-BY by the authors Hannah Ritchie and Max Roser.

These safety and emissions implications are leading many organizations to adopt electric vehicles where the electricity comes from one of the cleaner sources – solar, wind, nuclear or hydro. Driving electric vehicles yields greater environmental benefits when the grid used to power those vehicles is itself powered by safe and low-emissions sources.

### 3.2.5 Local Market

Determining what is available locally at any given time is difficult. A reliable source of information is the Climate Mayors EV Purchasing Cooperative. They have many EV and charging cooperative contracts available to government fleets. The Cooperative was created in 2017 by the District of Los Angeles and 30 other U.S. cities. The Collaborative leverages the buying power of participants to reduce the costs of EVs and charging infrastructure. The Collaborative also provides training, best practices, educational resources, and analysis, creating a one-stop shop to support EV transitions for public fleets. To take advantage of these offerings, visit the Sourcewell website at [www.sourcewell-mn.gov/become-member](http://www.sourcewell-mn.gov/become-member) and click "Apply Online". Becoming a member is free to governmental agencies.

The current availability of light duty, medium to heavy duty and bus options as well as a variety of charging solutions can be found under 'offerings' on the web page. See [Offerings | Drive EV Fleets](#). Current offerings include Ford Escape, E-Transit, Mach E and Lightning, Volkswagen ID.4, Kia Niro and Pacifica for light duty applications. Also

included are Class 6 and 8 offerings from a variety of manufacturers including Peterbilt and Lion.

Another resource for locating available vehicles in California is from the California Air Resources Board. They have a list of all vehicles available in California that are zero-emission vehicles (ZEV) certified for sale, and which meet the requirements of the Advanced Clean Fleets (CAF) regulation. This list can be accessed at [CARB ACF List of Certified Medium and Heavy Duty ZEVs](#).

### 3.2.6 Funding

There are numerous incentive programs offered by federal, state and local governments as well as by electric service providers and EV charging equipment companies. In addition, savings can be found by bulk purchases off existing contracts. Information on incentives and funding programs most directly relevant are described in detail below. A comprehensive database of vehicle and infrastructure funding programs is maintained by CALSTART and is available at <https://fundingfindertool.org/>.

**Medium- and Heavy-Duty Vehicle and Infrastructure Grant Program.** The California Air Resources Board (CARB) provides funding for eligible medium- and heavy-duty on-road alternative fuel vehicles or engine repowers and replacements, as well as for associated electric vehicle supply equipment (EVSE) and hydrogen fueling infrastructure. Funding is also available for Level 2 EVSE located at public, workplace, or multi-unit dwellings. Both government and non-government entities that own and operate diesel fleets and equipment are eligible for funding. This grant program is funded by California's portion of the Volkswagen Environmental Mitigation Trust.

**ZERO Emissions Medium and Heavy-Duty Vehicle Program.** The California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program (Program) will provide funding for development, demonstration, pre-commercial pilot, and early commercial implementation projects for zero and near-zero emission trucks, buses, and off-road vehicles and equipment. Eligible projects include, but are not limited to, the following:

- Technology development, demonstration, pre-commercial pilots, and early commercial implementation projects for zero and near-zero emission truck technology.
- Zero and near-zero emission bus technology development, demonstration, pre-commercial pilots, and early commercial deployments, including pilots of multiple vehicles at one site or region.



- Purchase incentives for commercially available zero and near-zero emission truck, bus, and off-road vehicle and equipment technologies and fueling infrastructure.
- Projects that support greater commercial motor vehicle and equipment freight efficiency and greenhouse gas emissions reductions, including autonomous vehicles, grid integration technology, and charge management solutions.

Remanufactured and retrofitted vehicles meeting warranty and emissions requirements may also qualify for funding. At least 20% of allocated funds must go towards early commercial deployment of eligible vehicles and equipment. The California Air Resources Board and the State Energy Resources Conservation and Development Commission will develop and administer the Program.

**Emissions Reductions Grants.** The Carl Moyer Memorial Air Quality Standards Attainment Program (Program) provides incentives to cover the incremental cost of purchasing engines and equipment that are cleaner than required by law. Eligible projects include heavy-duty fleet modernization, light-duty vehicle replacements and retrofits, idle reduction technology, off-road vehicle and equipment purchases, and alternative fuel and electric vehicle infrastructure projects. The Program provides funds for significant near-term reductions in nitrogen oxide emissions, reactive organic gases, and particulate matter emissions. Funding was available until January 1, 2024. It is not determined at this time if funding will continue for 2025 and beyond. The California Air Resources Board, in consultation with local air districts, must convene working groups to evaluate the Program's policies and goals.

**Low Emission Truck and Bus Purchase Vouchers.** Through the Hybrid and Zero Emission Truck and Bus Voucher Incentive Project (HVIP) and Low Oxide of Nitrogen (NOx) Engine Incentives, the California Air Resources Board provides vouchers to eligible fleets to reduce the incremental cost of qualified electric, hybrid, or natural gas trucks and buses at the time of purchase. Vouchers are available on a first-come, first-served basis. Only fleets that operate vehicles in California are eligible. Voucher amounts vary depending on whether the vehicles are in a disadvantaged community. For more information, including a list of qualified vehicles and other requirements, see the HVIP website.

**Utility Incentives.** Redwood Coast Energy Authority recently had an EV program for residential customers in the HBMWD area. The program has ended, but RCEA does have a contact form that can be filled out for more information on project management support for public agencies. This can be accessed at [RCEA Solutions Interest](#).

PG&E also has an incentive-backed program to install electric vehicle chargers. The program currently is full, but HBMWD can sign up for email notification of the latest programs, incentives and rebates at [EV Interest](#).

#### Recommendations:

The following recommendations pertaining to fleet regulation should be adopted by the District:

1. **Adopt the Milestones Option for ZEV compliance.**
2. **Report the option selected and vehicle selection information through TRUCRS.**

DRAFT

## 4. Fleet Utilization

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This chapter provides the results of the fleet utilization review.

### 4.1 Best Practices for Fleet Composition Management

The following table provides a list of best industry practices for managing fleet composition, utilization levels, right sizing, and effective asset disposition. Together, these practices result in a data-informed, cost-effective fleet where vehicles are strategically selected to meet departments' operational and mobility needs as efficiently as possible. The principles of utilization thresholds, minimizing total cost of ownership, and ongoing cost allocation for replacement planning are central to this fleet approach.

Each of the topics is addressed in the summary best practices table which follows. The best practice in each area is stated in column one and assessed in the middle column. The right column describes the practice at HBMWD. A ✓ indicates that HBMWD complies with best practice and a ~ indicates partial compliance with room for improvement. An X in the column means that the practice is not met. Any criteria that do not receive a ✓ are discussed further in the applicable chapters of the Final Report where recommendations to bring current practices in line with best practices will be made.

| Best Practice  | Meets | Comment  |
|--|-------|--|
| 1. Asset utilization policies and guidelines are clearly defined to ensure that vehicles and equipment are allocated properly based on job requirements.                     | X     | The District has no formal fleet policies.   |
| 2. Utilization thresholds are in place and the fleet is reviewed annually against these benchmarks.  | X     | Utilization thresholds are not used to determine if assets are appropriately utilized.           |
| 3. Processes are in place to capture utilization data from available sources and to validate and analyze the data.   | X     | Utilization data is not difficult to obtain (could be done from fuel records) so is not tracked. |
| 4. Motor Pool vehicles are available for occasional transportation needs. Motor Pools reduce the number of assigned vehicles in the fleet and reduce mileage reimbursements. | X     | There is no motor pool. Based on the size of the fleet, a motor pool is not recommended.         |

| Best Practice  | Meets | Comment  |
|--|-------|--|
| 5. A replacement policy is in place and asset replacement cycle guidelines reasonably follow industry norms.   | ~     | There is a replacement plan in the CIP, but there is no formal stand-alone document outlining the replacement plan. Annual replacement depends on the funds available. |
| 6. A multiple-year fleet equipment replacement plan has been developed to identify future peak year funding requirements so that this can be dealt with in a planned manner.   | X     | There is no formal replacement plan in place. Annual replacement depends on the funds available.   |
| 7. The focus is on matching vehicle design to meet specific customer job requirements and customers are given ample input into the specification process.  | ✓     | Users have input in ensuring vehicles and equipment are fit for their jobs.  |
| 8. Non-technical requirements such as parts lists, repair manuals, diagnostic tools, and training are included in vehicle specifications.  | ✓     | Where applicable, manuals and training are requested.  |
| 9. Vehicles are remarketed at the optimum point in their lifecycle to minimize the Total Costs of Ownership (TCO).   | X     | Lifecycles have not been calculated.   |
| 10. Equipment standardization is ensured where possible in order to minimize the number of tools needed and maximize the efficiency of mechanics and driver training.  | X     | Standardization is not a purchase criteria.  |
| 11. Vehicle decommissioning practices ensure that vehicles are disposed of in the most efficient and cost-effective manner possible. Vehicles determined to no longer be needed are physically removed from service so as to control fleet size. | X     | Vehicles are not always disposed of immediately.   |
| 12. A fleet system is in place that uses modern technology and provides up to date functionality for asset management, maintenance management, performance measurement, and cost reporting.  | X     | There is no fleet system.  |

| Best Practice  | Meets | Comment  |
|--|-------|--|
| 13. A telematics system is in place to improve routing and scheduling of services, identify driver training issues, and provide timely fleet data. | X     | There are no telematics in use.  |
| 14. Information produced by systems are routinely used to make management decisions and reports are provided to customer departments.              | X     | There is little data available upon which to make fleet management decision. |

This Chapter describes the methodology and results of the utilization review.

#### 4.2 Utilization Review Methodology

Utilization reviews call for organizations to have a mobility mindset. When a transportation requirement is identified, the default should not necessarily be purchasing an additional resource. Management and users should first ask whether that requirement can be met more efficiently by other means such as leasing, renting, public transportation, employee reimbursement, or vehicle pool/sharing. Vehicle ownership should be undertaken when the business case is framed by the organization's needs and the cost justifies it. When ownership is the best option, care should be taken in matching the asset to the requirement in a way that promotes efficiency and sustainability.

This utilization review was conducted in these steps:

**Step 1 - Data Analysis.** An analysis of the fleet inventory and utilization data identified all vehicles with utilization below the average for vehicles in that class, as well as any vehicles aged beyond the recommended lifecycle for their class. This target list became the basis for further discussion. The following table represents the 17 vehicles, by classification, that were initially identified as potentially being underutilized or being beyond lifecycle. Some vehicles may appear in both columns.

| Classification      | Number of Units in Class | Below Average Utilization | Age Beyond Lifecycle |
|---------------------|--------------------------|---------------------------|----------------------|
| Aerial Truck        | 2                        |                           | 1                    |
| Crane Truck         | 1                        |                           |                      |
| Dump Truck          | 1                        |                           |                      |
| Truck – Light Duty  | 8                        |                           | 3                    |
| Truck – Medium Duty | 3                        |                           |                      |
| SUV                 | 2                        | 1                         |                      |
| <b>Total</b>        | <b>17</b>                | <b>1</b>                  | <b>4</b>             |

**Step 2 - Interviews.** Staff were interviewed about the daily use of each asset with excessive age or low utilization and were asked to recommend a disposition for the asset. Interview questions included the frequency of use, emergency needs, unique specifications or configurations, and the appropriate mobility option for each department/division's work.

**Step 3 – Assign Disposition.** After the analysis and interviews with vehicle users, one of the following recommendations for each asset was offered:

| <b>Recommendation</b>   | <b>Explanation</b>   |
|-------------------------|--|
| Retain                  | Keep current unit in service and replace according to industry standard lifecycles.                      |
| Replace                 | Replace the asset immediately with a like asset.   |
| Right-Type (Now)        | Replace the asset with an asset more suited to the job function immediately (as it is beyond lifecycle). |
| Right-Type (Next Cycle) | Replace the asset with an asset more suited to the job function at the next replacement cycle.           |
| Right-Fuel (Now)        | Replace the asset with an asset that uses sustainable fuel, immediately (as it is beyond lifecycle).     |
| Right-Fuel (Next Cycle) | Replace the asset at the next replacement cycle with an asset that uses sustainable fuel.                |
| Eliminate               | Dispose of the vehicle through an appropriate remarketing method.  |
| Other                   | Take other actions such as pool, share, department transfer or inventory adjustment.                     |

#### 4.3 Vehicle Dispositions

The analysis and interviews resulted in the following disposition recommendations:

|                    | <b>Count</b> |
|--------------------|--------------|
| <b>Total Fleet</b> | <b>17</b>    |
| Retain             | 12           |
| Replace            | 3            |

|                      | Count     |
|----------------------|-----------|
| Eliminate            | 2         |
| <b>EV Candidates</b> | <b>15</b> |

Units that were recommended for actions other than retention are listed below along with an explanation of the recommended action.

| Unit #       | Description              | Recommendation | Comments   |
|--------------|--------------------------|----------------|--|
| Unit 1       | 2019 Jeep Grand Cherokee | Eliminate      | Unit has shown less usage over 4 years, going from 12,851 miles per year in 2020 to 4,963 miles per year in 2023. Unit 13 can be used instead. |
| Unit 4 (old) | 2006 Ford F-550 Aerial   | Eliminate      | Unit is surplus and a new unit has already been acquired.  |
| Unit 12      | 2010 Ford F-150          | Replace        | Vehicle age is beyond lifecycle. Vehicle is used for electrical shop. Replace vehicle with a half-ton pickup truck.                            |
| Unit 14      | 2011 Ford F-150          | Replace        | Vehicle age is beyond lifecycle. Vehicle used for Fire Disaster projects. Replace vehicle with a half-ton pickup truck.                        |
| Unit 16      | 2013 Ford F-250          | Replace        | Vehicle age is beyond lifecycle. Vehicle used for vegetation clearing projects. Replace vehicle with a ¾ ton pickup truck.                     |

HBMWD has historically reassigned older vehicles that were replaced elsewhere in the fleet. Because of the remoteness of the Ruth Lake area, it is essential to assign reliable vehicles.

#### 4.4 Other Utilization Issues

Several issues related to vehicle utilization and right-typing were raised in interviews.

- Annual odometer readings are captured but do not provide information on the number of trips or maximum range traveled by vehicle. This makes it more challenging to identify candidates for electrification.
- Currently, vehicles specifications are created as each vehicle is procured. A list of common specifications for add-ons would be helpful in saving time and ensuring vehicle standardization.

#### 4.5 Summary Table of Recommendations

The following table summarizes the recommendations in the utilization report. It also shows the number of assets which appear to be candidates for electrification.

| Vehicle Type        | Eliminate | Replace  | Retain    | Total     | EV Candidates |
|---------------------|-----------|----------|-----------|-----------|---------------|
| Aerial Truck        | 1         |          | 1         | 2         | 1             |
| Crane Truck         |           |          | 1         | 1         | 1             |
| Dump Truck          |           |          | 1         | 1         | 1             |
| SUV                 | 1         |          | 1         | 2         | 1             |
| Truck – Light Duty  |           | 3        | 5         | 8         | 8             |
| Truck – Medium Duty |           |          | 3         | 3         | 3             |
| <b>TOTAL</b>        | <b>2</b>  | <b>3</b> | <b>12</b> | <b>17</b> | <b>15</b>     |

The following notes are pertinent to the recommendations for EV transition candidates:

**Vehicle Locations.** All the District's assets are housed in the Eureka or Arcata area except for one unit assigned to Ruth Lake. This makes EV conversion more straightforward because charging infrastructure could be made available at these sites.

**EV Market Dynamics.** HBMWD must consider EV availability when replacing vehicles. When a specific class is not available, a different class may have to be substituted (e.g. a full-size pickup for an SUV) if they meet the functional needs and the price differential is justified.

#### 4.6 Financial Analysis

The following table summarizes the financial impact of the recommendations in terms of change to the fleet's replacement value. This savings is a one-time capital cost savings and does not include future operating cost savings in fuel or maintenance (if warranted).

| Unit Number  | Description              | Recommendation   | Impact            |
|--------------|--------------------------|------------------|-------------------|
| Unit 1       | 2019 Jeep Grand Cherokee | Eliminate        | -\$47,000         |
| Unit 4 (old) | 2006 Ford F-550 Aerial   | Eliminate        | -\$158,931        |
| Unit 12      | 2010 Ford F-150          | Right-Fuel (Now) | \$0               |
| Unit 14      | 2011 Ford F-150          | Replace          | \$0               |
| Unit 16      | 2013 Ford F-250          | Right-Fuel (Now) | \$0               |
| <b>TOTAL</b> |                          |                  | <b>-\$205,931</b> |

As the table shows, the cumulative impact of fleet composition changes equates to a decrease in fleet replacement value of approximately \$205,931. This estimate does not



include the other, non-capital costs and savings associated with fleet assets, and it does not include the cost of electrification recommendations.

### Recommendations:

The following recommendations pertaining to utilization should be adopted by the District:

3. **Develop a Fleet Policy Manual.**
4. **Review the utilization of all vehicles annually.**
5. **Develop a system to track the number of trips per vehicle per month and capture mileage monthly for future utilization studies.**
6. **Include a formal Replacement Policy in the Fleet Policy Manual.**
7. **Institute a formal Replacement Plan.**
8. **Create a list of common upfit items for each vehicle (i.e. strobe, hitch, etc.) to standardize vehicle replacements.**
9. **Review vehicle types before purchasing units for applicability to job function and fleet standardization.**
10. **Dispose of decommissioned vehicles immediately.**
11. **Explore the use of a formal Fleet Management Information System (FMIS) for data collection and analysis.**
12. **Explore the use of telematics for data collection, driver training, and repair diagnostics.**

## 5. Conversion Candidates

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The utilization study resulted in the following recommendations and identified a possible 15 assets for electric conversion based on the usage patterns, dwelling and range travelled.

| <u>Vehicle Type</u> | <u>EV Candidates</u> |
|---------------------|----------------------|
| Aerial Truck        | 1                    |
| Crane Truck         | 1                    |
| Dump Truck          | 1                    |
| SUV                 | 1                    |
| Truck – Light Duty  | 8                    |
| Truck – Medium Duty | 3                    |
| <b>TOTAL</b>        | <b>15</b>            |

Each vehicle class was assessed for EV market availability to identify if conversion candidates are currently available.

**Aerial Truck:** HBMWD has recently received a 2022 Ford F-550 aerial truck. Aerial trucks are utility trucks with a hydraulic pole (boom) that has a man-carrying bucket on the end. These trucks typically have outriggers and a power take-off (PTO) that transfers power from a truck's engine to a hydraulic pump, thereby raising or lowering the boom. At the present time, CARB is developing a streamlined ZEV Purchase Exemption list which will define the types of vehicles for which a ZEV or NZEV (near zero-emission vehicle) are unavailable based on configuration and not on chassis. Aerial (or bucket) trucks are tentatively planned to be on this list. As HBMWD's asset has a tentative replacement date of 2038, this vehicle, while being a candidate for conversion, does not have to be considered for replacement at this time.

**Crane Truck:** HBMWD has a 2013 Ford F-750 crane truck that has a recommended replacement cycle of 15 years (2028). Crane trucks are also on CARB's list as potential exemptions. HBMWD should file an exemption request with CARB in 2027 to replace the unit with an available internal combustion engine (ICE) vehicle.

**Dump Truck:** As with the aerial truck and the crane truck, CARB is listing dump trucks as tentatively being on the exemption list. HBMWD has a 2010 Kenworth T-800 dump truck with a tentative replacement date of 2026, so should file an exemption request as soon as possible to replace this with another ICE vehicle.

**SUV:** There are many electric vehicle options on the market today that can satisfy the Advanced Clean Cars program in California. Some of the most popular ones are the

Hyundai Ioniq 5, Volkswagen ID.4, Honda Prologue Elite AWD and the Chevrolet Blazer EV RS. All these options are highly rated by Consumer Reports, Edmunds, and Car and Driver. For a more extensive listing, Car and Driver has a list at [Car and Driver Best Electric SUVs](#). All SUV replacements going forward should be a battery electric vehicle (BEV) option.

**Truck – Light Duty:** The classification of light duty truck includes vehicles up to GVWR of 6,000 pounds (Class 1) and a Class 2 that is broken into 2 parts. Class 2a trucks are units that have a GVWR of 6,001 to 8,500 pounds, while Class 2b trucks have a GVWR of 8,501 to 10,000 pounds.

HBMWD has five Class 1 light-duty trucks. There are several options on the market in California that can meet the needs of HBMWD. They include the Ford F-150 Lightning, the Rivian R1T, the Chevrolet Silverado EV, and the Ram 1500 REV. All Class 1 replacements going forward should be a BEV option.

When reviewing the options for the Class 2a and 2b trucks, the list of vehicles that HBMWD has did not include the vehicle identification number (VIN) for the vehicles that would fall into these classes. After requesting the VINs from HBMWD and checking the VINs of these vehicles, it was determined that there are several Class 2b options on the market that could accomplish project objectives. They include the Chevrolet Silverado EV, GMC Sierra EV HD, and Rivian R1T.

**Truck – Medium Duty:** HBMWD has three medium duty vehicles in their fleet, from the Ford F-350 to F-550 size. The [CARB Certified MD and HD List](#) has the ability to sort by manufacturer and vehicle class. As HBMWD did not have the VIN of the three vehicles listed in their inventory, it could not be determined which of the vehicles listed could satisfy the work requirements of the three vehicles.

#### Recommendations:

The following recommendations pertaining to conversions should be adopted by the District:

13. **Acquire BEV options when replacing SUVs and light-duty trucks.**
14. **Explore the CARB list for medium-duty vehicles for the appropriate ZEV unit when replacement is scheduled.**

## 6. Replacement Plan

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### 6.1 Introduction

This section uses the results of the utilization and electrification studies to create a 10-year replacement plan for the organization.

The replacement plan is shaped by three key factors: the fleet composition, cost-effective replacement lifecycles, and compliance with state and regional requirements for zero-emission vehicle adoption.

#### 6.1.1 Fleet Composition

This analysis began by reviewing available data on the fleet and speaking to users. The goal of the exercise is to align the fleet composition with the use cases presented by HBMWD's users. The result is a fleet which meets the operational needs of HBMWD effectively, reliably, and cost-efficiently.

#### 6.1.2 Fleet Replacement

Vehicles and equipment should be replaced at the point that will minimize the Total Cost of Ownership (TCO) to HBMWD. This is usually just before the maintenance costs associated with an older vehicle start to spike. By establishing a standard set of replacement cycles as the basis for replacement decisions and replacement funding, HBMWD can prevent the recurrence of an aged fleet, which is costly and inefficient.

A set of replacement cycles can be used for each classification of motorized vehicles and equipment in the fleet. These are shown below.

| <b>Classification</b> | <b>Lifecycle in Years</b> |
|-----------------------|---------------------------|
| SUV Small / Crossover | 10                        |
| Truck LD 1/2 Ton      | 10                        |
| Truck MD 1 Ton        | 12                        |
| Truck MD Class 4/5    | 15                        |
| Truck HD Dump         | 15                        |
| Crane Truck           | 15                        |
| Aerial Truck          | 15                        |

These standard replacement lifecycles have been used to project estimated replacement timing for vehicles to minimize the total cost of ownership.

## 6.2 Policy Requirements and Standards

As previously discussed, the California Air Resources Board (CARB) has developed regulations and maintains a robust collection of resources intended to guide the widespread introduction of zero-emission cars, trucks, and equipment. This effort includes a wide variety of programs, resources, and zero-emission vehicle information available at CARB’s [Zero-Emission Transportation](#) webpage<sup>8</sup>.

There are two approaches that government fleets can use to comply with ACF regulations:

**Option 1.** The Model Year Option dictates that fleets meet the following mandates:

- 50% of their annual vehicle purchases are ZEVs as of January 1<sup>st</sup>, 2024.
- 100% of vehicle purchases are ZEVs as of January 1<sup>st</sup>, 2027.
- Near-zero-emissions vehicles, as defined in the regulation, with a vehicle model year of 2035 or earlier, count the same as ZEVs for this requirement.
- New ICE vehicles, 2024 or newer, must have an engine certified to California emissions standards and emissions-related requirements, and any used ICE vehicle added to the fleet must have a 2010–2023 model year engine.

The required ZEV percentages by model year under this option are shown in the table below.

| Required ZEV Purchases by Year (Model Year Option) | 2024 | 2025 | 2026 | 2027 | 2028+ |
|--|------|------|------|------|-------|
| Percent of Vehicles                                | 50%  | 50%  | 50%  | 100% | 100%  |

**Option 2** is the ACF Milestones Option, which allows governments the flexibility of phasing in ZEVs based on the suitability of different vehicles in their fleets. Under this option, vehicles are categorized according to three milestone groups. Each milestone group has an increasing percentage of annual vehicles purchases that must be ZEVs. The percentages by milestone group are shown in the table below. It should be noted that 14 of the ACF-regulated vehicles in the HBMWD fleet fit into Milestone Group 2.

<sup>8</sup> California Air Resources Board (CARB). *Zero-Emission Transportation*, <https://ww2.arb.ca.gov/our-work/topics/zero-emission-transportation>.

| Required ZEV Composition (Milestones Option)  | 10%  | 25%  | 50%  | 75%  | 100% |
|---|------|------|------|------|------|
| <b>Milestone Group 1:</b> Box trucks, vans, buses with two axles, yard tractors, light-duty package delivery vehicles | 2025 | 2028 | 2031 | 2033 | 2035 |
| <b>Milestone Group 2:</b> Work trucks, day cab tractors, pickup trucks, buses with three axles                        | 2027 | 2030 | 2033 | 2036 | 2039 |
| <b>Milestone Group 3:</b> Sleeper cab tractors and specialty vehicles   | 2030 | 2033 | 2036 | 2039 | 2042 |

**Based on the fleet composition and vehicle utilization analysis, Option 2 - ACF Milestone Option is recommended.** When opting into the ZEV Milestones Option, the fleet owner must report this intention. After electing to use this option, fleet owners are no longer subject to and may not switch back to Option 1.

### 6.3 Reporting

Regardless of the option selected, ACF requires fleets to report their vehicle information through the Truck Regulation Upload, Compliance and Reporting System (TRUCRS). TRUCRS reporting information, guidance and a link to the submission portal is available at CARB's [TRUCRS Reporting Information](#) webpage<sup>9</sup>.

As of the date of this report, the TRUCRS reporting portal **did not** list HBMWD as having filed the necessary reports. It is recommended that HBMWD immediately register and start the reporting process at [TRUCRS Reporting](#).

According to CARB, Humboldt County is a low-population county. For low-population counties, CARB has set separate guidelines. This guideline outlines that government fleets in these areas can delay their ZEV purchases until January 1, 2027. However, they can only do so if they have followed the other regulation requirements, including reporting requirements, starting January 1, 2024. As HBMWD has not followed these other regulation requirements, they cannot put off their ZEV purchases until 2027. Matrix suggests that HBMWD contact CARB at [helpline@arb.ca.gov](mailto:helpline@arb.ca.gov) to confirm their status and to ascertain if they can qualify for the 2027 replacement option once they have a TRUCRS account and are reporting as required.

### 6.4 Replacement Plan

The following section includes the vehicle disposition recommendations from the utilization report with specific notes added on electrification. Key findings from the analysis include:

<sup>9</sup> California Air Resources Board (CARB). *TRUCRS Reporting Information*, <https://ww2.arb.ca.gov/our-work/programs/truck-bus-regulation/trucrs-reporting-information>.

- With the small number of vehicles in the HBMWD fleet, replacement timeframes can be adjusted to meet HBMWD's needs within the allocated budget.
- The CARB mandate may have exemptions for replacing the aerial, crane and dump trucks with EVs because of the configuration of these vehicles. The status of these exemptions is not yet known but the replacement schedule can be adjusted as this is clarified.

#### 6.4.1 Recommended Replacement Timeframes

The following table summarizes the recommended type and disposition for each vehicle, as well as its candidacy for EV conversion based on utilization, the EV market, and CARB regulations. A recommendation and timeframe are provided for each unit.

| Unit | Description              | Right-Sizing and Reallocation  | EV Transition Evaluation   | Recommendation and Timeframe   |
|------|--------------------------|--|--|--|
| 1    | 2019 Jeep Grand Cherokee | Eliminate  | None   | None   |
| 2    | 2018 Ram 3500            | Correctly sized and well utilized. 4WD needed as well as the ability to tow. | ACF Milestone Group 2. Compatible EV chassis available.              | Replace with 1 Ton 4WD EV by 2032.                                       |
| 3    | 2020 Ford F-250          | Correctly sized and well utilized. 4WD needed.                               | ACF Milestone Group 2. Compatible EV chassis available.              | Replace with Class 2a or 2b 4WD EV by 2031.                              |
| 4    | 2022 Ford F-550 Aerial   | Correctly sized and well utilized.   | ACF Milestone Group 3. No compatible EV options currently available. | Replace with in kind EV by 2038. Apply for exemption for unit in 2036/7. |
| 4A   | 2006 Ford F550 Aerial    | Eliminate  | None   | None   |
| 5    | 2013 Ford F-750 Crane    | Correctly sized and well utilized.   | ACF Milestone Group 3. No compatible EV options currently available. | Replace with in kind EV by 2030. Apply for exemption for unit in 2028/9. |
| 6    | 2020 Ram 2500            | Correctly sized and well utilized. 4WD needed.                               | ACF Milestone Group 2. Compatible EV chassis available.              | Replace with Class 2a or 2b 4WD EV by 2031.                              |
| 7    | 2018 Ram 1500            | Correctly sized and well utilized. 4WD needed.                               | ACF Milestone Group 2. Compatible EV chassis available.              | Replace with Class 1 4WD EV by 2029.                                     |

| Unit | Description                    | Right-Sizing and Reallocation   | EV Transition Evaluation   | Recommendation and Timeframe   |
|------|--------------------------------|---|--|--|
| 8    | 2015 Ford F-550                | Correctly sized and well utilized. 4WD needed as well as the ability to tow.                              | ACF Milestone Group 2. Compatible EV chassis available.              | Replace with in kind EV by 2029.                                       |
| 9    | 2022 Ford F-350                | Correctly sized and well utilized. 4WD needed as well as the ability to tow and have a dump-able flatbed. | ACF Milestone Group 2. Compatible EV chassis available.              | Replace with in kind EV by 2034.                                       |
| 10   | 2010 Kenworth T-800 Dump Truck | Correctly sized and well utilized. 4WD needed as well as the ability to tow.                              | ACF Milestone Group 3. No compatible EV options currently available. | Replace with in kind EV by 2027. Apply for exemption for unit in 2026. |
| 11   | 2015 Ram 1500                  | Correctly sized and well utilized. 4WD needed.  | ACF Milestone Group 2. Compatible EV chassis available.              | Replace with Class 1 4WD EV by 2026.                                   |
| 12   | 2010 Ford F-150                | Correctly sized and well utilized. 4WD needed.  | ACF Milestone Group 2. Compatible EV chassis available.              | Replace with Class 1 4WD EV by 2025.                                   |
| 13   | 2016 Ford Escape               | Correctly sized and well utilized.  | Advanced Clean Cars Program. Compatible EV unit available.           | Replace with in kind EV in 2028.                                       |
| 14   | 2011 Ford F-150                | Correctly sized and well utilized. 4WD needed.  | ACF Milestone Group 2. Compatible EV chassis available.              | Replace with Class 1 4WD EV by 2026.                                   |
| 15   | 2017 Ram 1500                  | Correctly sized and well utilized. 4WD needed.  | ACF Milestone Group 2. Compatible EV chassis available.              | Replace with Class 1 4WD EV by 2028.                                   |
| 16   | 2013 Ford F-250                | Correctly sized and well utilized. 4WD needed.  | ACF Milestone Group 2. Compatible EV chassis available.              | Replace with Class 2a or 2b 4WD EV by 2035.                            |

The vehicles are generally well-utilized, and their configuration and assignment are matched to their function. Because of the terrain between Eureka and Ruth Lake, the vehicles should be 4WD units.

#### 6.4.2 EV and ICE Replacement

The following table shows the 15-year replacement plan for the fleet, by recommended classification, based on the analysis shown above. EV replacements are shown in light green. ICE replacements are shown in orange. These ICE replacements are conditional



upon receiving a waiver from CARB based on vehicle configuration. There are no recommendations for EV-optional replacements currently.

This plan is designed to bring the fleet into compliance with ACF regulations and adopt EV replacements for the units with the greatest market availability. This plan assumes that vehicles will be replaced at the end of their lifecycle.

| Unit Number | ACF | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 |
|-------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2           | ACF |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |
| 3           | ACF |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |
| 4           | ACF |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |
| 5           | ACF |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |
| 6           | ACF |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |
| 7           | ACF |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |
| 8           | ACF |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |
| 9           | ACF |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |
| 10          | ACF |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 11          | ACF |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 12          | ACF | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 13          | ACF |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |
| 14          | ACF |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 15          | ACF |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |
| 16          | ACF | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

### 6.4.3 Total Cost of Ownership

Vehicles and equipment should be replaced at the point that will minimize the Total Cost of Ownership (TCO). This is usually just before the maintenance costs associated with an older vehicle start to spike. HBMWD should establish replacement lifecycles which can be used as a basis for planning future capital expenditures or as criteria for evaluating when it is time to replace assets.

Matrix has recommended a set of replacement cycles that can be used for each classification of motorized vehicles and equipment in the fleet. The following table shows these recommended total lifecycles for each unit type, as well as an estimate of the total replacement value for the class.

| Classification        | Count | Lifecycle in Years | Estimated Total Replacement Value |
|-----------------------|-------|--------------------|-----------------------------------|
| SUV Small / Crossover | 1     | 10                 | \$61,790                          |

| <b>Classification</b> | <b>Count</b> | <b>Lifecycle<br/>in Years</b> | <b>Estimated Total<br/>Replacement Value</b> |
|-----------------------|--------------|-------------------------------|--|
| Truck LD              | 8            | 10                            | \$377,650                                    |
| Truck MD              | 3            | 12                            | \$616,150                                    |
| Dump Truck            | 1            | 15                            | \$229,000                                    |
| Crane Truck           | 1            | 15                            | \$267,245                                    |
| Aerial Truck          | 1            | 15                            | \$158,931                                    |
| <b>Total</b>          | <b>15</b>    |                               | <b>\$1,594,458</b>                           |

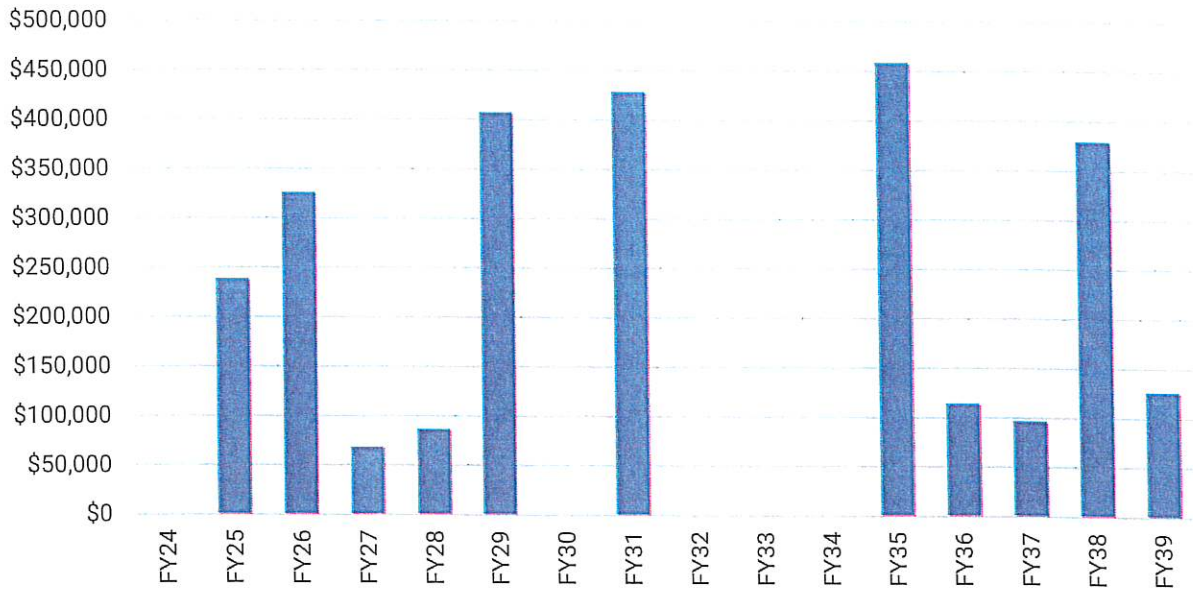
Establishing and using replacement lifecycles will prevent the recurrence of an aged fleet, which is costly and inefficient for HBMWD. Lifecycles should be reviewed regularly, especially in conjunction with fuel and maintenance data. These types of lifecycles can be used to develop a multi-year capital replacement plan, as described in the following subsection.

#### 6.4.4 Initial Replacement Plan

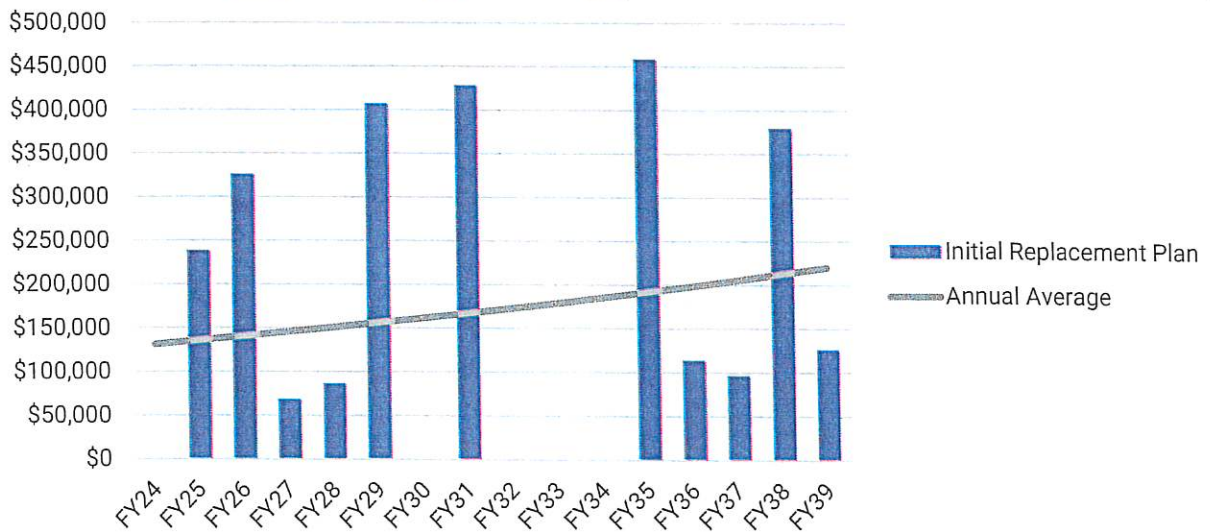
Using the fleet inventory provided by HBMWD, the planned disposal of selected units, and our replacement value estimates, the Matrix forecasting tool provides an estimate of approximately \$131,682 (increasing with inflation) in average annual funding required for replacement of the vehicle fleet. While the actual amount will vary depending on the replacement cost of the individual units due for replacement each year, an average of \$131,682 per year (in 2024 dollars) would be sufficient to keep the fleet current according to recommended lifecycles.

Using the established lifecycles and fleet classifications above, the future replacement funding needs for each vehicle can be determined by calculating the next year it is due for replacement and applying an inflation calculator (in this case, 3.5%). The following chart shows the resulting fleet-wide expenditure amount in each of the next 15 years.

**Fig 2: Fleet Replacement Cost by Year – Initial Plan**



As this chart shows, the funding required to replace all the backlog as well as those due for replacement spikes in FY29, FY31, and FY35. The expenditures of a given year may not be required until vehicles arrive, which may not be for some years due to long delivery times. The targeted replacement year based on the established lifecycles, however, equates to sizeable spikes and valleys in funding need. The following chart shows this level of funding compared to the annualized replacement funding needs of the fleet.



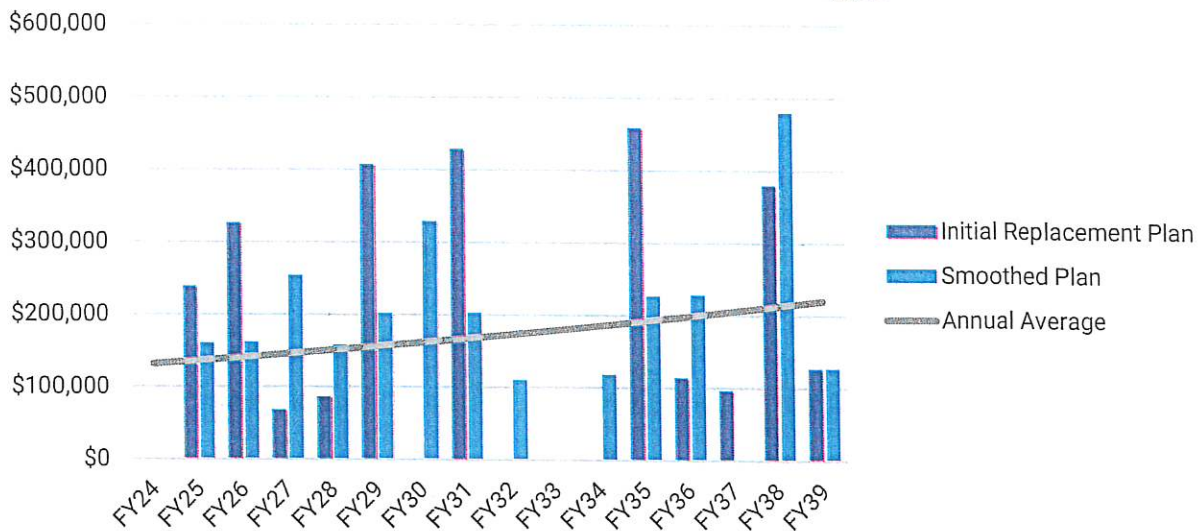
The Matrix Fleet Model was used to level this initial replacement plan. Saving \$131,682 in Year 1 would result in peaks and valleys of spending in future years and is logistically impossible due to the number of transactions that would be required, as well as

manufacturers' production backlogs. Instead, a smoothed approach can be taken to bring fleet replacement on schedule over multiple years.

### 6.4.5 Smoothed Replacement Plan

The following table and chart illustrate a schedule that aligns more closely with HBMWD's smoothed annual replacement funding needs.

**Fig 4: Fleet Replacement Cost by Year – Smoothed Plan**



In dark blue, the first plan developed shows the annual spend to bring the fleet into lifecycle immediately. The light blue shows an approach where some replacement is delayed to smooth annual expenditures to the degree possible and to account for manufacturers' order delays. Both approaches assume that vehicles are bought and replaced with purchases according to recommended replacement cycle thereafter. As is normal for a smaller fleet, there are still some unavoidable peaks when expensive equipment is replaced.

This plan would require annual expenditures as shown in the smoothed column, which has been developed by applying a delayed replacement year to certain vehicles in the fleet to smooth the date of the expenditure. The total cost fluctuates some from year to year, but it largely aligns with the annualized figure of \$131,682 in 2024 dollars.

**Fig 5: Fleet Replacement Cost by Year – Initial vs. Smoothed Plans**

| Year | Initial Replacement Plan | Smoothed Plan |
|------|--------------------------|---------------|
| 2025 | \$0                      | \$0           |

| Year | Initial Replacement Plan | Smoothed Plan |
|------|--------------------------|---------------|
| 2026 | \$238,630                | \$160,456     |
| 2027 | \$326,220                | \$161,819     |
| 2028 | \$68,508                 | \$253,896     |
| 2029 | \$86,672                 | \$157,578     |
| 2030 | \$407,109                | \$201,529     |
| 2031 | \$0                      | \$328,512     |
| 2032 | \$428,436                | \$202,292     |
| 2033 | \$0                      | \$110,079     |
| 2034 | \$0                      | \$0           |
| 2035 | \$0                      | \$117,919     |
| 2036 | \$458,657                | \$226,339     |
| 2037 | \$114,131                | \$228,262     |
| 2038 | \$96,637                 | \$0           |
| 2039 | \$379,521                | \$479,540     |
| 2040 | \$126,539                | \$126,539     |

By adopting this approach, HBMWD can replace old vehicles and establish a sustainable system for keeping the fleet up to date.

To support consistent fleet replacement, HBMWD should establish a Fleet Replacement Fund with consistent annual contributions for each asset to ensure that necessary funds are available to replace vehicles according to this schedule. Although annual expenditures are not perfectly consistent, the annual allotment to the Fleet Replacement Fund would be relatively consistent with only small corrections needed each year. The accumulation of the funds needed for fleet replacement will ensure a sufficient budget to support each year’s smoothed replacement plan.

The use of annual depreciation for calculating replacement chargebacks is a standard methodology. This methodology has the strongest correlation to determining the appropriate set-aside. This methodology calculates the total amount needed to replace a particular vehicle, it then divides it by its lifecycle and determines that every year this amount of funding must be collected to purchase this vehicle or equipment when it is due for replacement. Due to its standardized nature, and defensibility, HBMWD should base the replacement chargeback on depreciation.

**Recommendations:**

The recommendations for replacement of HBMWD’s fleet are shown below.

- 15. Make the fleet disposition recommendations recommended in this chapter.**

16. **Review available federal and state grant funding to ascertain if funding is available for EV charging infrastructure.**
17. **Contact Redwood Coast Energy Authority and PG&E for information on utility incentives for EV charging infrastructure.**
18. **Immediately create an account and file Fleet Compliance reports with the State of California through the Truck Regulation Upload, Compliance and Reporting System (TRUCRS).**
19. **Once the TRUCRS account has been created, file with CARB ACF the necessary paperwork for exemptions when replacing Unit 5 (Crane Truck) and Unit 10 (Dump Truck) in 2027 and 2026, respectively.**
20. **Follow the recommended replacement plan for all other vehicles to satisfy CARB ACF regulations on the purchase of EV units, using the Milestones Option for the replacement guidelines.**
21. **Standardize lifecycles for all vehicles and replace in a timely manner to keep the fleet in optimal condition.**
22. **Create a Fleet Replacement Fund.**

## 7. Charging Plan

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This chapter describes the phased Charging Plan recommended for HBMWD.

### 7.1 Introduction

Based on the recommended on-road vehicle fleet electrification, replacement strategy developed in the earlier tasks, this task chapter presents a summary of the Electric Vehicle Supply Equipment (EVSE) needs for the electrified fleet, an analysis of the driving patterns and operation cycles of the fleet and advise on infrastructure development at the site.

This charging plan is focused on supporting vehicles that were identified in earlier tasks as being EV candidates.

Table 1: Summary of Vehicles to be Electrified.

| Vehicle Class       | Number    |
|---------------------|-----------|
| SUV Small/Crossover | 1         |
| Truck-LD            | 8         |
| Truck MD            | 3         |
| Dump Truck          | 1         |
| Crane Truck         | 1         |
| Aerial Truck        | 1         |
| <b>Grand Total</b>  | <b>15</b> |

### 7.2 EVSE Basics and Best Practices

Electric vehicle (EV)<sup>10</sup> charging infrastructure equipment falls into two main categories: To the Meter (TTM) utility-side, and Behind the Meter (BTM) customer-side infrastructure. TTM infrastructure is located between the electric distribution lines and the customer's electric meter, while BTM infrastructure is between the meter and the EV. The EV charging infrastructure configuration from the transmission line to the vehicle is shown in **Error! Reference source not found.** Electric vehicle charging stations, also referred to as EVSE, refers to the equipment directly supplying power to an EV.

<sup>10</sup> "EV" in this report refers to both battery electric vehicles (BEVs) and plug-in electric vehicles (PHEVs).

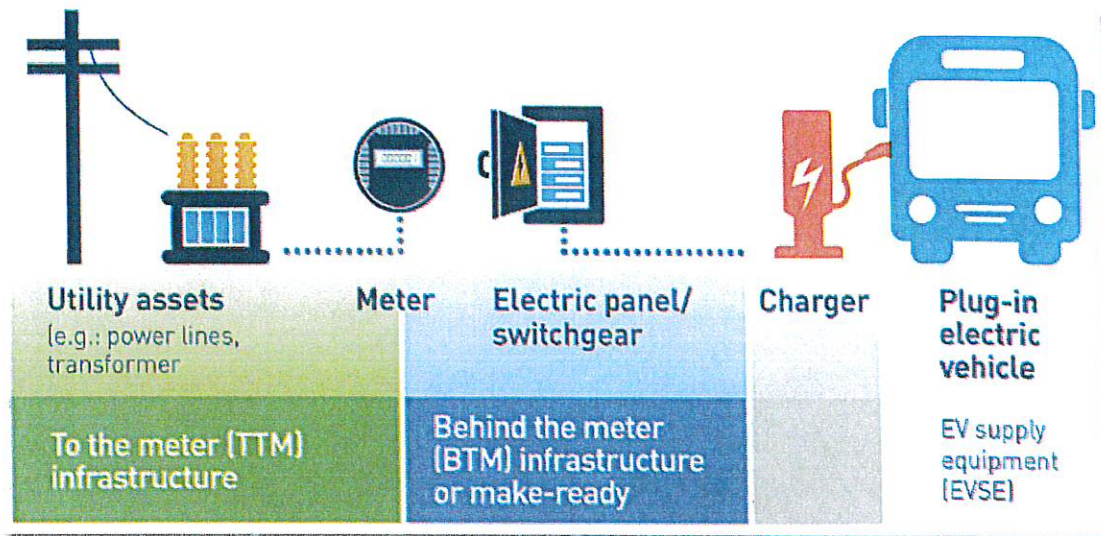


Figure 1: TTM vs. BTM Charger Comparison

### 7.2.1 EV Battery Charging Basics

For all charging levels, EV batteries can typically be charged at the maximum rated capacity of the charging station from 0% state-of-charge (SOC), to approximately 80% SOC. This is relatively consistent across battery chemistries (lithium-ion, nickel metal hydride, lead acid) and subtypes (different lithium-ion chemistries), though each has its own nuances. In general, the charging power above 80% SOC decreases over time as the battery charge approaches full due to internal losses.<sup>11</sup> EVSE charging levels are divided into three categories depending on the input voltage and output power type. Each level of charging equipment has its own benefits, drawbacks, and ideal use cases as described below:

#### Level 1

Alternating current (AC) Level 1 EVSE are the lowest power charging stations. They use a standard 120-volt AC (VAC) input power and provide 1.7 to 1.9 kilowatts (kW) of charging power. The AC input power is converted to direct current (DC) power by the EV's onboard battery charger to charge the vehicle's battery pack. Level 1 charging provides a typical light-duty vehicle with between two and five miles of driving range per hour. Light-duty EVs come with a Level 1 charging cord. The charging cord plugs into a typical three-prong 120 VAC outlet on one end and into the vehicle's charging port, also called an inlet. Level 1 EVSE use industry standard charging port connectors (SAE J3400) that are

<sup>11</sup> Kostopoulos, E., G. Spyropoulos, and J. Kaldellis, Real-world study for the optimal charging of electric vehicles, Energy Reports 6 (2020), pp. 418–426.



common across vehicle and charging station manufacturers. Level 1 EVSE are also available as a fixed-mount charging station like the more common Level 2 discussed in the next section.

For most light-duty BEVs with more than minimal daily use, Level 1 charging is not sufficient for regular daily charging use. PHEVs have a lower battery energy capacity than BEVs, so commonly can charge using only Level 1. If PHEVs are heavily used, they may require charging after every use to maximize the vehicle's greenhouse gas (GHG) reduction and operating cost savings.

The main benefit of Level 1 charging is the zero, or low equipment cost and low electrical infrastructure investment. This is especially true when the Level 1 charging cord and an existing outlet are used since many buildings have outdoor power access. Level 1 charging cords are also useful to provide resilience since they are compatible with most electrical outlets. As mentioned earlier, the main downside of Level 1 charging is the slow charging rate, which is likely not sufficient to charge vehicles for all use cases such as high usage or larger vehicles. It is also typically not possible to collect charging data directly when charging using a Level 1 charging cord and an outlet, unless the outlet is sub-metered. Most Level 1 charging stations are not networked so cannot collect or transmit charging data.

## **Level 2**

AC Level 2 charging stations use the same industry standard charging port connector as Level 1. Benefits of Level 2 charging stations include increased charging performance with higher kW and reduced charging time, and the ability to collect data and monitor use.

Like Level 1 charging, Level 2 input power is converted to DC by the vehicle's on-board charger. Level 2 charging stations use 208/240 VAC input power to provide 2.8 to 19.2 kW of charging power, adding between 10 and 80 miles of driving range per hour of charging depending on input power and hardware specifications. A typical 300-mile range BEV battery pack can be charged from 0 to 80% SOC in six to eight hours using a common 7.2 kW Level 2 charging station. Vehicles in the HBMWD fleet typically have moderate daily mileage requirements and therefore it can be assumed that Level 2 stations will be the most logical primary charging method.

Dual-port power sharing charging stations are available for a moderate cost above single port options. Dual-port charging stations have two charging cords that draw power from

a single source, allowing power to be used by one or two connected vehicles.<sup>12</sup> Installing higher power charging than the minimum required will increase costs. Higher power also provides for extra system capacity if the fleet grows or vehicle usage increases. This is known as future proofing.

### Level 3

DC Fast Charge (DCFC) stations use three-phase input power, typically at 480 VAC and provide DC power directly to the EVs' battery from 25 kW-350+ kW. The maximum charging power depends on both the DCFC power rating and the specific vehicle's DCFC capability. Higher power DCFC can charge EV batteries to 80% SOC in 15 to 60 minutes. While DCFC hardware, installation, and operation costs are much higher than for Level 2 charging stations, DCFC can charge many more vehicles per day than a Level 2 station. DCFC are useful for vehicle duty cycles with minimal downtime and dwell times between shifts or when vehicles need a mid-shift boost charge to complete its day. Because of the high DCFC costs and since Level 2 systems are typically a more cost-effective and operationally simple option, DCFC typically are not the primary charging equipment for government fleet vehicles, except for heavy-duty trucks and transit buses. In cases where Level 2 charging is not enough to charge the battery to the required SOC, DCFC can be used to provide short power boosts to the point where Level 2 charging can complete the charge in the available time.

## 7.3 Charge Planning Considerations

### 7.3.1 EV Charging Site Planning.

Fleet and facility managers must be confident when projecting the EV transition schedule (number of vehicles, power requirements, energy requirements, location, etc.) to determine the fleet's current and future charging requirements and to ensure compliance with state and federal alternative fuel vehicle mandates. Fleet Managers should also plan for flexibility to allow sites to grow with developing vehicle and charging technologies and/or changes in vehicle charging requirements. Federal guidance recommends planning for installing charging to meet medium-term (~5 years) vehicle procurement plans.<sup>13</sup> The medium-term timeline allows fleets to develop a better-informed expansion for the next round of vehicle and charging station acquisition. However, the near-term availability of federal, utility, and state incentive funding may make it advantageous to

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<sup>12</sup> Examples include the Enphase non-networked HCS-D40 Dual EV Charger and the Blink charging Fast IQ 200 Level 2 EV charging station.

<sup>13</sup> U.S. Department of Energy, Federal Energy Management Program, "Fleet Electrification Step 10: Complete Site Assessment and Design EVSE", <https://www.energy.gov/femp/fleet-electrification-step-10-complete-site-assessment-and-design-evse>.

install more charging stations up front. Fleet managers should consider future proofing by installing additional electrical capacity and extra circuits during initial construction and in earlier phases when incremental costs make sense.<sup>14</sup> The National Renewable Energy Laboratory (NREL) and Federal Emergency Management Program (FEMP) have developed fleet electrification guidance for federal agencies, which can also serve as a valuable resource for state and local agencies.

### 7.3.2 EV Charging Needs Assessment.

When first developing a charging infrastructure plan, fleet managers should plan for charging infrastructure installations to meet mid-term goals (~5 years) to reduce the number of construction projects requiring management and avoid repeating some elements of the work. However, vehicle technology, fleet inventory requirements, charging infrastructure systems, and other factors may change over time, so it is best to develop a phased approach and periodically update the infrastructure plan.

Dual-port power sharing charging stations provide a simple, flexible approach to charging as EV inventory increases and the understanding of charging station usage patterns improve. Shared charging stations should be located to allow access from multiple parking spaces and need to account for vehicle charging port location.

### 7.3.3 Managed Charging Systems

EVSE with power management capability can be controlled by a charging network management system to vary power output (on/off, power throttling,<sup>15</sup> power distribution across a connected group of charging stations, etc.) at the charging station level and distribute power to multiple EVSE across a site.

- **Unmanaged charging** is the simplest software-based solution to avoid the need for staff to move charging cords and/or vehicles. In this design solution, each EV is allowed to draw a share of the total power generated by the EVSE.

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<sup>14</sup> Pacific Gas & Electric, Chapter 5. "EV Charging at Fleet Facilities", <https://www.pge.com/en/clean-energy/electric-vehicles/ev-fleet-program.html>.

<sup>15</sup> Power throttling describes the ability of the charging station management system to control the EVSE output anywhere between 0% and 100% of the maximum rated power. Throttling can be used to dynamically allocate power to one or more charging stations on a circuit or system to ensure the combined electrical load does not exceed a certain power threshold. This can be done to manage available electric capacity, leverage time-of-use electric rates, manage the peak power load to limit demand charges, and other site-specific reasons. Power throttling is also used for electric utility demand response programs, reducing peak load during times of high demand.

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- **Equal share charging** divides the available power equally among the connected EVs, so all connected vehicles are being charged while connected until they reach the target SOC. This approach does not prioritize vehicles with lower SOC or vehicles that need to leave sooner.
- **First-come, first-served charging** systems prioritize charging for earlier arriving vehicles. The result is that vehicles that connect at other EVSE in the group later in the day will wait until the earlier vehicles finish charging before being charged. This allows for maintaining the total power draw below the available power capacity. However, this approach can become problematic when the available dwell times do not allow all vehicles to receive the desired charge.
- **Adaptive Load Management (ALM)**, sometimes referred to as demand charging, automated load management, or adaptive charging, is a sophisticated energy management method whereby power is distributed to EVs using an algorithm-based approach. This allows power to be shifted to individual EVs based on multiple factors, such as SOC, available dwell time, total battery capacity, daily travel patterns, among others. ALM can be an extremely useful tool for fleet managers. However, effective use of ALM requires complete and accurate data collection over an extended period of time and development of proper algorithms to distribute power in the most efficient and mission-compatible manner. ALM solutions for fleets are offered by various manufacturers, including [PowerFlex](#), [EverCharge](#), [Mobility House](#), and [OpConnect](#), among others.
- **Round Robin**, or sequential charging, is when a group of charging stations are connected to a single electrical circuit and share the power via a connected system controller. The control system charges each vehicle for a set amount of time (e.g., 20 minutes) before moving to the next vehicle. Once a vehicle reaches a full charge the system will skip that vehicle and focus on the vehicles that still need a charge. These systems are best used with long dwell times (e.g., during the workday, overnight, over the weekend) to ensure vehicles receive enough charge. These systems also use low-cost non-networked charging stations so can be a cost-effective solution for use cases that match their operation. Commercial examples include Liberty Plugins HYDRA-R and [CyberSwitching EV Management Controller](#).

#### 7.4 Capital and Operating Costs

Charging station equipment costs vary based on charging type, power, station features, manufacturer, and other factors. Single connector<sup>16</sup> unit costs range from \$300-\$1,000 for Level 1, \$330-\$5,000 for Level 2, and \$7,000-\$100,000+ for DCFC.<sup>17</sup> The price ranges are broad since they include low power EVSE with limited functionality as well as high power EVSE with robust charge management and payment software. It is important to consider available and required features such as networking capabilities, security, power output, power sharing, number and type of cables/connectors, number of vehicles that can simultaneously charge, and operation and maintenance when selecting a charging station to meet fleet needs.

Charging station installation includes locating or constructing a secure structure or mounting surface and providing sufficient electrical power to the charging station. Typically, the station is mounted on a concrete base for a free-standing pedestal unit or on an existing structure for a wall-mounted unit, which is the less expensive option. The distance between the electrical panel and charging station impacts the cost, as well as the type of surface and structure that the conduit must pass through. If the existing infrastructure is not sufficient, upgrades to utility electrical service and electrical panel will also add cost. Local permitting and inspection fees may also apply. The maximum power and number of charging stations that can be installed will be limited by the site's electrical capacity and other characteristics.

Networked EV charging stations cost more to purchase than non-networked charging stations due to their communication modules and control hardware. Networked EV charging stations also have additional installation costs for site validation to verify that there is a sufficient cellular signal and station activation to initiate and verify proper communication. Ongoing expenses for a networked charging station include networking fees, electricity, and maintenance. Networking fees for public-access or shared EV charging stations vary by NSP but typically cost at least \$200 per charging port per year.<sup>17</sup> The fees cover the cellular data plan and the NSP's network management and data services such as monitoring, alerts, and reporting. In addition, networked stations typically allow the EVSE owner to assign usage fees to some or all vehicles, including any non-fleet vehicles using the EVSE, allowing for recovery of some or all the operating costs including the networking fee. While consistency among various locations is desired,

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<sup>16</sup> "A connector is what is plugged into a vehicle to charge it... Connectors are sometimes called plugs.", U.S. Department of Energy, Alternative Fuels Data Center, "Developing Infrastructure to Charge Electric Vehicles" webpage, [https://afdc.energy.gov/fuels/electricity\\_infrastructure.html](https://afdc.energy.gov/fuels/electricity_infrastructure.html), accessed December 14, 2023.

<sup>17</sup> Reducing EV Charging Infrastructure Costs, Rocky Mountain Institute, 2019, <https://rmi.org/ev-charging-costs>.

access policies and user fees are customizable at the individual EVSE level, allowing fleet managers flexibility to accommodate site-specific characteristics.

## 7.5 Facility Assessment

A facility tour was conducted on November 4, 2024. The following items were noted for the shop located at 7270 West End in Arcata.

| Checklist              | Describe   |
|------------------------|--|
| Shop Organization      | Parts, supplies and equipment are stored between bays and in spaces throughout the shop which gives the appearance of the facility being unorganized.                          |
| Cleanliness            | The floors and work areas are dirty which is partly due to the nature of maintaining vehicles for a water utility in a high-precipitation mountain/ocean environment.          |
| Lighting               | A combination of overhead LEDs and T8 tubes in the shop, and skylights and T8 tubes in the line shed provide adequate lighting.  |
| Floors                 | The floors are in fair condition. The concrete in the shop has minor cracks. The concrete in the line shed is in slightly better condition.                                    |
| Tools                  | Tools are all supplied by HBMWD including the toolboxes and peg boards. Tool use operates on the honor system which works well for a small shop.                               |
| Parts Room             | Parts are principally housed on the mezzanine level in the main shop, and in some cabinets on the floor.   |
| Workstation            | Mechanics have no real workstation at the shop, and don't do much work at the line shed (it's for storage). They have access to a computer station in the supervisor's office. |
| Manuals                | There is a library on site. There are plans to purchase a digital library in the next budget cycle.  |
| Lube Dispensing        | There is a separate hazmat building for oils, lubes, paints, etc., and these supplies are brought to the shop in handheld containers.  |
| Lead Technician Office | There is an office for supervisor and assistant supervisor, under the mezzanine in the concrete block shop.  |

The shop consists of four large bays, two in the main area and two located at the line shed. The main shop with two bays appears to have been completed in a concrete block construction in the 1960s. An attached corrugated metal barn is a later addition and houses the two additional bays, one of which has a lift installed. The wooden line shed with a corrugated roof was built within the last 10 years and serves as a storage barn. Units 4 and 8 are stored in the shop.

A planned update to expand the administration building at the Winzler site will connect to the shop. This will be a two-story expansion with a storage mezzanine and additional vehicle storage.

The main facility bays are side-by-side and are one-way pull-in bays. There is an 18' door clearance. Both bays are flat bays with no lifts. One bay has a welding station. The picture below is taken from the bay area.



The other two bays are in the corrugated metal addition which is immediately adjacent. This addition has a 16' door clearance. Both bays are flat bays. One of the bays has a 15,000 lb. lift bolted into the concrete floor that is shown in the picture below.





The yard outside of the buildings is used as a drop-off area, deadline, quick fix and pickup area. There is an outdoor wash area with drainage.

Initial review shows that the bays in the corrugated metal addition would be a suitable place for EVs. Power is supplied by the electrical panel in the concrete block shop building. Power could be run from the ceiling on a post between the bays. The line shed could also be a charging location, but the building does not have its own power supply. The panel inside is fed by one of the panels from the concrete block shop.

## 7.6 EVSE Needs Assessment

The fleet's vehicles recommended to be electrified are mostly light duty vehicles, with a few medium duty trucks.

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### 7.6.1 Charging Plan Overview

Every vehicle is housed at the Winzler Control Center (Essex) which will be the focus of the charging efforts. Several vehicles work at Ruth Lake so some provision for charging must be made there as well. Due to the nature of the work, Level 1 charging is unlikely to be sufficient for any work units, even the light-duty ones. All work vehicles need to be able to charge up and get back to work without spending an 8-hour shift out of service.

### 7.6.2 Charging Plan Steps

The following are the recommended steps to create a charging plan for the organization.

- Start with four L2 chargers at the Winzler (Essex) site by 2025. These will charge the four LD/MD vehicles recommended for ZEV replacement between now and 2026. These chargers may be fed from the 225-amp service in the garage, or the 300-amp service in the control center offices shown below. The vehicles should be parked in the yard which sits between the garage to the west and the office to the east.



- Install four more L2 chargers up at Ruth Lake Headquarters by 2026 so that the ZEV units can be used at that location when they go up there each summer.
- Install a pair of L2 chargers for the line shed that houses units #5 and #10 at the Winzler (Essex) plant by 2027, so that the replacement for #10 (and also for #5 a

few years later) can be ZEV units. This assumes that the District will not get an exemption and plans to actually convert those HD trucks to ZEVs in 2027 and 2030, respectively. These chargers should be fed from the PG&E switchgear immediately east of the line shed, or the power supply to the garage a bit more to the east.

- Install four more L2 chargers at the Winzler (Essex) site by 2028. These will charge more LD/MD vehicles in the yard between the garage and the offices. They may be fed from the 225-amp service in the garage, or the 300-amp service in the control center offices.
- Install a pair of L2 chargers in the garage bays by 2029, so that the replacement for #8 (and later #4) can be ZEV units. This assumes that the District will not get an exemption and plans to actually convert those HD trucks to ZEVs in 2029 and 2038, respectively. These chargers should be fed from the 225-amp service in the garage.
- Install four more L2 chargers at the Winzler (Essex) site by 2031. These will charge more LD/MD vehicles in the yard between the garage and the offices, sufficient for all the units recommended for ZEV transition. They may be fed from the 225-amp service in the garage, or the 300-amp service in the control center offices.

In addition to these steps needed to charge units being converted, the District should consider installing L1 chargers at the Eureka offices shown in the photo below. No vehicles are domiciled there or required to work there during heavy shifts, so this is not part of the charging plan needed to support ZEV transition. The District, however, would like to see this step toward sustainability at their main office. These would be fed by the main electrical service at those offices and could include a blend of paid charging for the public as well as free charging for District employees.



Charging stations are *not* needed at the Samoa pump station or the treatment plant. No vehicles are domiciled there or required to work there during heavy shifts, so this is not part of the charging plan needed to support ZEV transition. The treatment plant does already have significant electrical infrastructure built out, so it may be easy to install a pair of L2 chargers there on a just-in-case basis.

#### Recommendations:

The recommendations for HBMWD's fleet charging are shown below.

- 23. Adopt the Charging Plan recommendations described in this chapter.**

## 8. Shop Changes and Technician Training

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### 8.1 Shop Considerations

Shop considerations include safety, facility and equipment needs and the types of repairs being done.

#### 8.1.1 Safety

Working with electric vehicles may involve new and unfamiliar safety risks. Technicians working in the shop and visitors in the shop should be informed about the following potential hazards and mitigations.

- Electric vehicles are silent, and the engine may be running without anyone being aware. Wheel chocks on at least one wheel are recommended to prevent unexpected movement of the vehicle.
- Electric vehicle batteries require special consideration. Personal Protective Equipment (PPE) such as rubber gloves, tools and surfaces should be used. Also, a fire blanket suitable for electric fires should be on hand. All staff should know where to locate these items.
- Due to the potential risks associated with batteries, they should not be allowed to overheat. Also, once a battery is replaced, the old unit should be disposed of as soon as possible.

#### 8.1.2 Facility and Equipment Requirements

Facility upgrades may be needed to safely and efficiently accommodate EVs. Space needs include room for charging stations, updated electrical systems to handle high-voltage work, and enough space for the safe handling of EV batteries.

Equipment requirements may include:

**High voltage gloves.** These gloves are needed to avoid electrocution while handling the high voltage parts that come with electric vehicles.

**Insulated tools.** These are designed to prevent the tools from causing shorts or sparks.

**Non-metal workbench.** Many existing shops are equipped with metal workbenches. These should be replaced or covered with thick rubber. Insulated rubber matting is also practical where enhanced safety is required. It is recommended for areas where

technicians may risk accidental electric shock while working on electric and hybrid vehicles.

**Lifts.** EVs are heavier than traditional ICE vehicles due to their large battery packs. The shop will need appropriately rated vehicle lifts capable of safely lifting and supporting the weight of EVs.

### 8.1.3 EV Maintenance

As electric vehicles have fewer moving parts than their ICE counterparts, they generally require less maintenance. For example, oil changes and transmission servicing are not needed in EVs. However, regular maintenance such as tire rotations, brake inspections, and battery checks, is still essential.

Some specific requirements include:

**Battery Diagnostics and Repairs.** Batteries are designed to be durable but will degrade over time. Dealerships should be able to check the state of charge, capacity, and replace individual battery cells if needed.

**Cooling Systems:** EV batteries generate heat, so it is vital to maintain the cooling system that keeps the battery at the correct temperature.

**Brake Wear:** Electric vehicles use regenerative braking, which can lead to less wear and tear on brake pads. However, the brakes still require regular checks.

**Tire Maintenance:** Proper tire maintenance is necessary for EVs, especially since they tend to be heavier than traditional gas-powered vehicles.

**Charging Infrastructure Installation and Maintenance.** The District will need to determine responsibilities for the maintenance and installation of chargers.

**Software and Technology Updates.** As EVs are essentially computers on wheels, software manages many aspects of the vehicle, from battery management to regenerative braking. Technicians should be trained to manage software updates and diagnose software-related issues.

As the vehicles and technology evolve, shops and technicians must remain flexible and innovative.

## 8.2 Technician Training

With electric vehicles, a new set of skills and knowledge is required for mechanics. Technicians must understand the intricacies of the electric drivetrain, battery systems, and specialized tools for EV repairs.

**High-Voltage Safety Training.** Technicians need specialized training to safely handle the high-voltage batteries in electric vehicles. This detailed training teaches them everything about keeping EV batteries in good condition - from regular check-ups to solving complex problems.

**Advanced Computer Diagnostics.** Technicians need to learn how to use the latest tools to find and fix problems in the complex electronics of EVs.

**Keeping Up With EV Technology.** Continuous learning is critical in the rapidly evolving world of EV technology. Technicians must constantly update their skills to stay up to date with the latest software and repair techniques.

### 8.3 Other Considerations

In the move to EVs, the District must also plan for other maintenance and repair needs as defined below.

**Roadside Assistance for EVs:** The District must provide for roadside assistance for electric vehicles, including support for depleted batteries or charging malfunctions. Roadside technicians are equipped with portable charging solutions to provide on-the-spot assistance to get EV drivers back on the road.

**Towing and Transportation:** Given that electric cars require specific towing procedures to avoid damage, an EV-friendly towing solution must be put in place.

**Storage and charging:** EVs should be stored outside the shop when they are not being actively serviced to minimize risk associated with having EVs indoors, particularly in terms of fire safety. Additionally, charging stations should be available at the shop to return the EV to the user department fully charged after servicing.

**Insurance coverage.** The unique risks associated with EVs will necessitate specific insurance coverage, given the higher costs and potential liability concerns related to battery packs and electrical systems.

By addressing these additional considerations, the District will establish a safe and efficient environment for servicing EVs.

### Recommendations:

The recommendations for HBMWD's shop and technician framework are shown below:

- 24. Explore facility upgrades to accommodate EV maintenance.**
- 25. Develop a maintenance plan and checklist specifically for EV units.**
- 26. Allocate funding for technician training.**
- 27. Investigate satisfying other considerations for EV adoption such as insurance coverage and vehicle storage.**

**DRAFT**



## 9. Communication Plan

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### 9.1 Stakeholders

Providing educational resources to stakeholder groups is an important element in the success of a Green Fleet Plan. Stakeholders include EV users, other District employees and the community at large. These groups may not know much about the technology and benefits of zero emissions vehicles (ZEVs) and have preconceived biases against them. It is therefore beneficial to establish information and awareness campaigns, marketing activities, and show total cost of ownership comparisons. The District's uniquely positioned to convene multi-stakeholder groups that include city planners, automakers, utilities, infrastructure suppliers, other municipalities, academic and research institutions, and representatives from higher levels of government.

In terms of stakeholder education, the principal means of engagement should be determined by the needs of each stakeholder group.

- **Citizens.** Citizens, outside of HBMWD employees should be kept informed through a public-facing web page. Major initiatives should be announced through local media sources.
- **Employees.** Employees should receive targeted information through an internal web page, regular email communiques, and all-hands meetings. Online education about the District's Green Plans should be made available in the form of short webinars that can be viewed individually.
- **Users.** Those employees who use EVs should view an online familiarization video showing the differences between an ICE and EV as well as tips on charging.

### 9.2 Information to Provide

Samples of general information on EVs and their benefits, suitable for online posts or webinar content can be found below.

#### Why Electric Vehicles?

One of the greatest opportunities to reduce our transportation-related GHG emissions is to switch to vehicle technologies that produce fewer GHG emissions. Ideally, we would meet all transportation requirements with zero-emission vehicles (ZEVs). In practical terms, due to market availability, this means electric vehicles (EVs).

EVs produce no tailpipe emissions. Many argue that there are GHG emissions associated with making the electric batteries and with the electricity supply if it comes from a non-renewable source. The green movement encourages manufacturers and electricity providers to use renewable energy such as solar or wind. The net result is that EVs produce about half the emissions of a comparable gasoline-powered vehicle. This gap in emissions will widen as the last coal-powered plants are decommissioned and the electricity system increases inputs from renewable sources.

### **EV Costs**

Every year, differences between the average cost of a new EV and a new gasoline-powered vehicle decrease. At the same time, there is a much wider selection of EV options in the form of cars, SUVs and pickups available for sale. This means that the District has better options to meet operational needs and can purchase the vehicles at better prices. In addition, there are often rebates when you buy or lease an eligible ZEV.

### **EV Definitions**

Using the term EV includes all types of electric vehicles available. Not all EVs, however, are purely electric. The following definitions will assist in understanding the types available.

**Battery Electric Vehicles (BEV).** Battery Electric Vehicles (BEVs) are fully electric vehicles that run entirely on electricity without using any gasoline. Examples include the Tesla Model 3, the Chevy Bolt, and Nissan Leaf. BEVs have dozens of moving parts, compared to thousands of moving parts in a gas-powered car, which reduces operating and maintenance costs. BEVs currently have driving ranges starting at about 93 miles (e.g. older Nissan Leafs) up to 311 miles for many Tesla models. BEVs can be charged externally at a charging station, including fast charging stations, and through regenerative braking. The driving range for BEVs can decrease by 30 to 50 per cent in winter temperatures.

**Plug-In Hybrid Vehicles (PHEV).** Unlike BEVs, PHEVs have smaller batteries, and pair an electric motor with a gas-powered engine. Examples include the Toyota Prius Prime and Mitsubishi Outlander. PHEVs have pure electric ranges between 15 to 53 miles, though the gas-powered engine may provide back-up power to the electric motor at highway speeds to conserve battery power. Once the pure electric range is exceeded, the gas-powered engine and electric motor work in tandem to provide hundreds of miles of additional range. The battery in PHEVs can be charged externally at charging stations, or internally by the gas-powered engine and use of regenerative brakes.

**Hybrid Vehicles.** Hybrid vehicles are a mature technology, popularized by the Toyota Prius. Numerous manufacturers have begun offering hybrid versions of their vehicles, including the Ford F-150. Hybrids have small batteries and electric motors that supplement the power of a gas-powered engine to improve fuel efficiency. Hybrid vehicles cannot be charged externally, instead relying on the gas engine and regenerative braking.

**Hydrogen Fuel Cell Vehicles.** Hydrogen fuel cell vehicles are considered an electric vehicle, where hydrogen effectively acts as a liquid battery. A limited number of hydrogen vehicles are available for sale, such as the Honda Clarity and Toyota Mira. Availability of fuel cell passenger vehicles will continue to be limited for some time due to a lack of fueling infrastructure. Hydrogen vehicles offer faster refueling times than BEVs and currently provide around 310 to 372 mile driving ranges. Hydrogen sourced from natural gas, which accounts for 95 per cent of all hydrogen today, does not offer a significant lifecycle GHG reduction relative to diesel fuel. Hydrogen sourced from renewable natural gas (e.g. gas captured from landfills) likely would offer GHG reduction benefits.

**Medium and Heavy-Duty Electric Trucks.** Unlike passenger cars and light duty trucks, it is not yet clear what fuel technologies will become most common in the medium and heavy-duty trucking sector. This sector includes delivery trucks, semi-trailers, garbage trucks and other commercial vehicles. Several established and startup companies are actively developing electric or fuel-cell medium and heavy-duty trucks, with some already available on the market. McKinsey Energy Insights (MEI) suggests that sales of medium duty electric trucks could accelerate rapidly, as they offer lower lifecycle costs to businesses.

### **EV User Orientation**

EV users should be educated on the vehicle, charging and driving habits.

- Drivers will need training on the basic terms to help them understand what it means to charge their vehicles efficiently. This includes the differences between Level 1, Level 2 and DC Fast charging, and what types of charging connectors will work with their vehicles.
- Charging protocols must be established and communicated. This might mean plugging in every night at a charger or at assigned times as managed by a charger management program.

- Drivers need to know how to connect properly and how to keep connectors safe from debris build-up, damage or misuse. They should properly stow cables after each charge and accidentally running over cables while pulling in and out.
- Drivers must understand the dynamics of how to maximize range by reducing power consumption. This includes the increased demand that comes from vehicle systems such as climate control, especially in very hot or cold weather.

There are some features in EVs that will be new to those who have only driven conventional vehicles. It is therefore important to do a walk-around and point out all the features of the vehicle. Drivers should also be informed of the role telematics will play in their work lives, including regular behaviour coaching and charging reminders based on data collected during their time driving.

Driving habits should also be discussed as there are aspects to an EV that are different from a conventional vehicle. Drivers should be taught what impacts battery life, from excessive use of temperature controls to aggressive acceleration. Also, because EVs are heavier, cornering at high speeds and sudden braking can reduce tire lifespan. Some other things to be aware of include:

- **Quiet.** Electric vehicles don't produce the same engine noise. While most EVs have a low-speed noise device that projects sound ahead and behind the vehicle, drivers must learn to be vigilant, as pedestrians and cyclists may not hear them.
- **One-pedal driving.** Drivers should understand how regenerative braking and one-pedal driving (coasting to a motor-assisted stop rather than applying the brake) work to recharge the battery, and how to adjust their driving style to make the most of these systems. One-pedal driving also helps to reduce driver fatigue.
- **Defensive driving.** Drivers should respect all principles of safe and defensive driving. They should apply gentle acceleration and observe moderate highway speeds to maximize the vehicle's range and reduce tire wear.
- **Winter driving.** To conserve range, drivers will need to schedule vehicle interior preconditioning while an EV is plugged in and prioritize wheel and seat heating or cooling whenever possible.

#### Recommendations:

28. **Develop a Communication Plan for employees and drivers that includes training on safe charging for EV units.**
29. **Set up a web page highlighting HBMWD's efforts to move to be a more sustainable organization.**

**DRAFT**

## 10. Implementation Guidance

A full list of recommendations by priority and the level of effort required to address them is included below. Priorities are allocated as A, B, and C indicating in which order they should be completed, with A being the highest and C being the lowest. The level of effort is assigned as:

1: requires less than \$25,000 and/or six months to achieve.

2: requires between 6 and 12 months and/or \$25,000 to \$50,000 to achieve.

3: requires more than 12 months and \$50,000 to achieve.

| #   | Recommendation  | Priority | Effort |
|-----|---|----------|--------|
| 1.  | Adopt the Milestones Option for ZEV compliance.   | A        | 1      |
| 2.  | Report the option selected and vehicle selection information through TRUCRS.  | C        | 1      |
| 3.  | Develop a Fleet Policy Manual.  | A        | 2      |
| 4.  | Review the utilization of all vehicles annually.  | C        | 1      |
| 5.  | Develop a system to track the number of trips per vehicle per month and capture mileage monthly for future utilization studies. | B        | 1      |
| 6.  | Include a formal Replacement Policy in the Fleet Policy Manual.   | A        | 2      |
| 7.  | Institute a formal Replacement Plan.  | A        | 2      |
| 8.  | Create a list of common upfit items for each vehicle (i.e. strobe, hitch, etc.) to standardize vehicle replacements.            | C        | 1      |
| 9.  | Review vehicle types before purchasing units for applicability to job function and fleet standardization.                       | B        | 1      |
| 10. | Dispose of decommissioned vehicles immediately.   | A        | 1      |
| 11. | Explore the use of a formal Fleet Management Information System (FMIS) for data collection and analysis.                        | A        | 2      |
| 12. | Explore the use of telematics for data collection, driver training, and repair diagnostics.                                     | A        | 2      |

| #   | Recommendation   | Priority | Effort |
|-----|--|----------|--------|
| 13. | Acquire BEV options when replacing SUVs and light-duty trucks.   | A        | 3      |
| 14. | Explore the CARB list for medium-duty vehicles for the appropriate ZEV unit when replacement is scheduled.   | B        | 1      |
| 15. | Make the fleet disposition recommendations recommended in Chapter 6.   | C        | 1      |
| 16. | Review available federal and state grant funding to ascertain if funding is available for EV charging infrastructure.  | B        | 2      |
| 17. | Contact Redwood Coast Energy Authority and PG&E for information on utility incentives for EV charging infrastructure.  | B        | 1      |
| 18. | Immediately create an account and file Fleet Compliance reports with the State of California through the Truck Regulation Upload, Compliance and Reporting System (TRUCRS).                      | A        | 1      |
| 19. | Once the TRUCRS account has been created, file with CARB ACF the necessary paperwork for exemptions when replacing Unit 5 (Crane Truck) and Unit 10 (Dump Truck) in 2027 and 2026, respectively. | B        | 1      |
| 20. | Follow the recommended replacement plan for all other vehicles to satisfy CARB ACF regulations on the purchase of EV units, using the Milestones Option for the replacement guidelines.          | A        | 1      |
| 21. | Standardize lifecycles for all vehicles and replace in a timely manner to keep the fleet in optimal condition.   | B        | 1      |
| 22. | Create a Fleet Replacement Fund.   | A        | 3      |
| 23. | Adopt the Charging Plan recommendations described in Chapter 7.  | A        | 3      |
| 24. | Explore facility upgrades to accommodate EV maintenance.   | B        | 1      |
| 25. | Develop a maintenance plan and checklist specifically for EV units.  | C        | 1      |
| 26. | Allocate funding for technician training.  | A        | 2      |
| 27. | Investigate satisfying other considerations for EV adoption such as insurance coverage and vehicle storage.  | B        | 1      |
| 28. | Develop a Communication Plan for employees and drivers that includes training on safe charging for EV units.   | B        | 2      |
| 29. | Set up a web page highlighting HBMWD's efforts to move to a more sustainable organization.   | B        | 2      |

## Appendix A: Website Addresses

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The following websites are referenced in the report and are shown here for informational purposes.

Climate Mayors EV Purchasing Collaborative: <https://driveevfleets.org>

Climate Mayors EV Offerings: <https://driveevfleets.org/offerings/>

California Air Resources Board (CARB) Zero-Emission Transportation: <https://ww2.arb.ca.gov/our-work/topics/zero-emission-transportation>

CARB List of Certified Medium and Heavy-Duty ZEVs: <https://ww2.arb.ca.gov/applications/list-certified-medium-and-heavy-duty-zevs>

Executive Order N-79-20: <https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf>

California Air Resources Board (CARB). *Advanced Clean Trucks Credit Summary Through the 2023 Model Year*: <https://ww2.arb.ca.gov/resources/fact-sheets/ACT-Credits-Summary%202023>.

California Air Resources Board (CARB). *Advanced Clean Fleets*: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets/about>.

California Air Resources Board (CARB). *TRUCRS Reporting Information*: <https://ww2.arb.ca.gov/our-work/programs/truck-bus-regulation/trucrs-reporting-information>.

CARB TRUCRS Login: [https://ssl.arb.ca.gov/trucrs\\_reporting/login.php](https://ssl.arb.ca.gov/trucrs_reporting/login.php)

Sourcewell: <https://www.sourcewell-mn.gov/register>

CALSTART - Funding Finder: <https://fundingfindertool.org/>

Redwood Coast Energy Authority: [https://redwoodcoast.formstack.com/forms/interest\\_form](https://redwoodcoast.formstack.com/forms/interest_form)

PG&E EV Program Interest Form: <https://cloud.em.pge.com/index>



Car and Driver Best Electric SUVs: <https://www.caranddriver.com/rankings/best-suvs/electric>

U.S. Department of Energy, Federal Energy Management Program, "Fleet Electrification Step 10: Complete Site Assessment and Design EVSE": <https://www.energy.gov/femp/fleet-electrification-step-10-complete-site-assessment-and-design-evse>.

Pacific Gas & Electric, Chapter 5. "EV Charging at Fleet Facilities": <https://www.pge.com/en/clean-energy/electric-vehicles/ev-fleet-program.html>.

PowerFlex: <https://www.powerflex.com/use-cases/fleets>

OpConnect: <https://opconnect-ev.com/>

EverCharge: <https://evercharge.com/solutions/workplace>

Mobility House: <https://www.mobilityhouse.com/usa/en/solutions/chargepilot>

CyberSwitching: <https://cyberswitching.com/evmc/>

Reducing EV Charging Infrastructure Costs, Rocky Mountain Institute, 2019: <https://rmi.org/ev-charging-costs>.

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

To: Board of Directors  
From: John Friedenbach  
Date: January 9, 2025  
Subject: Water Resource Planning (WRP) – Status Report

.....

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. Staff and consultants are responding to the supplemental request for information. Extension to respond request was submitted and approved to January 31, 2025.

Instream Flow Board workshop is scheduled for Monday, February 10, 2025 at 5:30 pm at the District board room. 828 7<sup>th</sup> Street, Eureka.



## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

828 Seventh Street • Eureka, California 95501-1114  
PO Box 95 • Eureka, California 95502-0095  
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BOARD OF DIRECTORS  
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SHERI WOO, DIRECTOR  
TOM WHEELER, DIRECTOR

GENERAL MANAGER  
JOHN FRIEDENBACH

December 16, 2024

VIA Email: [matthew.mccarthy@waterboards.ca.gov](mailto:matthew.mccarthy@waterboards.ca.gov)  
Mr. Matthew McCarthy  
Senior Environmental Scientist  
Permitting Section Division of Water Rights  
State Water Resources Control Board

### Re: October 17, 2024 Acceptance and Request for Information

Dear Mr. McCarthy,

We are responding to the above referenced letter containing four separate requests for additional information. Subsequent to your initial letter, we participated in a further clarification meeting with you and Monica Vazquez on October 31, 2024. Prior to that meeting on October 29<sup>th</sup>, we emailed you a copy of our Appendix G that should have been attached to our original 1707 petition applications. Subsequent to our meeting on the 31<sup>st</sup>, you emailed us on November 1<sup>st</sup> with addition requests for information that included ten additional items.

One of the information items requests our detailed water rights information between 2009 and 2013 which was not including in our initial 1707 petitions filing. Our data for these years predates our current electronic filing system. Consequently, we had to retrieve and compile our manual historical records for this time period. This has taken some time to complete. Combined with the supplemental information requests contained in your November 1<sup>st</sup> email, we respectfully request additional time to gather and compile the necessary information to provide you with a complete and accurate response to your requests.

We respectfully request an extension of time until January 31, 2025 to provide you with a complete and accurate response to your data requests.

Respectfully,

A handwritten signature in black ink, appearing to read "John Friedenbach".

John Friedenbach  
General Manager

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

**December 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 (December).

- 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.
- Second Semi-Annual 2024 Groundwater Sampling Report. A summary of activities and results for the second semi-annual groundwater sampling event was submitted by SHN and is currently being reviewed by DTSC.

b. Planned activities for the next month (January 2025) 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.
- Virtual Quarterly Update Meeting. The next virtual quarterly update meeting with DTSC, EPA, Humboldt Bay Municipal Water District, and Humboldt Waterkeeper will be held on January 29, 2025 at 1:00 PM. An agenda will be sent out closer to the meeting date.
- 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. SHN shall submit the draft HHRA report to DTSC for review and comment prior to completing the final version.
- Stormwater Sampling Report. SHN will submit a stormwater sampling report based on sampling conducted on November 20, 2024.

c. Funding Updates

- Funding in future years is likely to come from the Site Remediation Account (SRA), which was the funding source before the Cleanup in Vulnerable Communities Initiative (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 waiting for a revised report from Royal Gold.

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

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



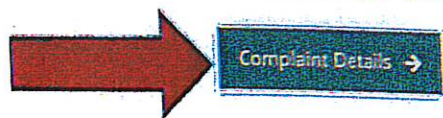
Language Preference/Preferencia de idioma  
English

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?

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

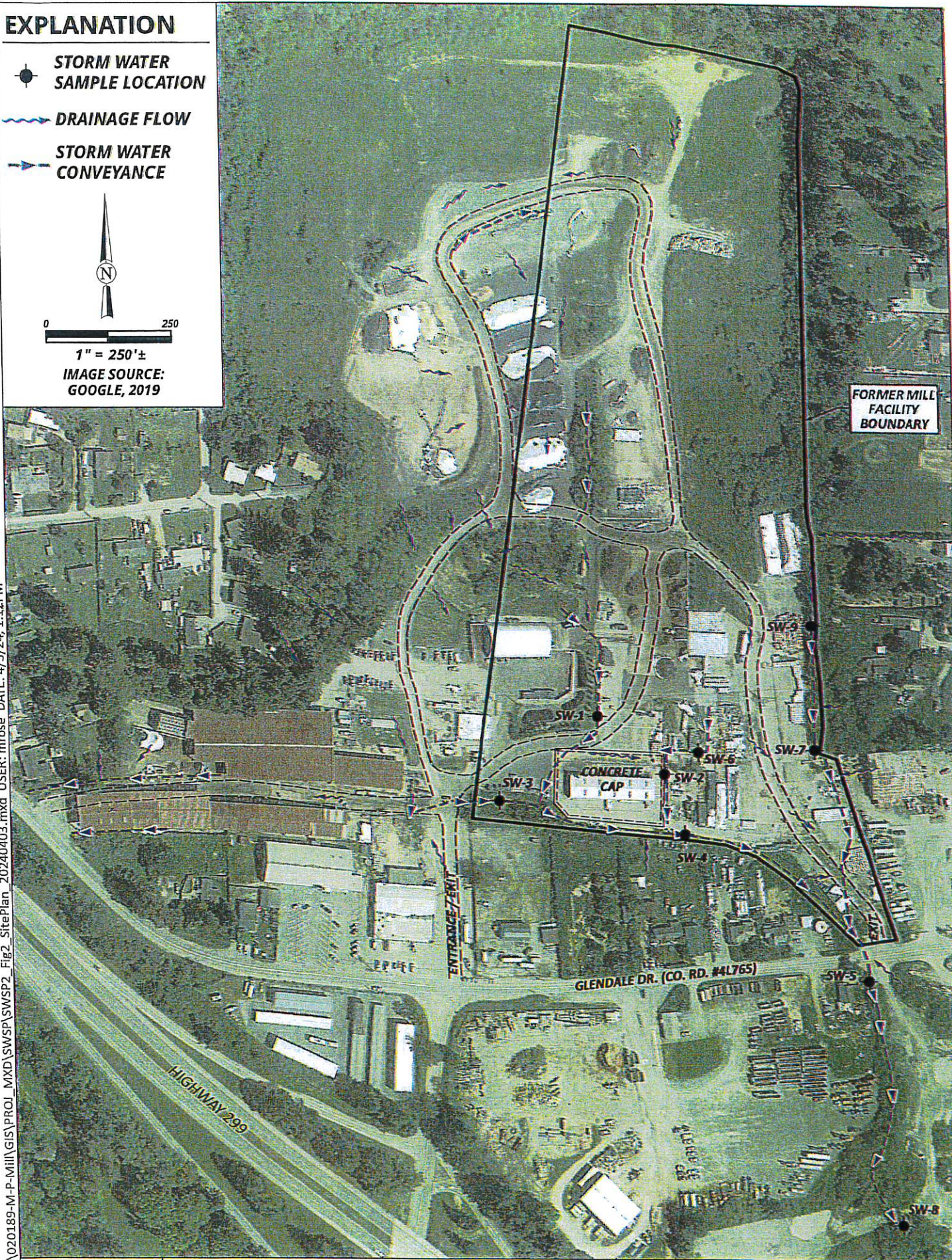
[https://www.envirostor.dtsc.ca.gov/public/profile\\_report?global\\_id=12240115](https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=12240115)

**EXPLANATION**

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



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



reka\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

Site Plan with  
 Storm Water Sample Locations

Figure



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

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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**

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**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><br>(pg/L) <sup>b</sup> | 2005 WHO TEQ <sup>c</sup><br>(pg/L) | PCP <sup>d</sup><br>(ug/L) <sup>e</sup> | TCP <sup>d</sup><br>(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

**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><br>(pg/L) <sup>b</sup> | 2005 WHO TEQ <sup>c</sup><br>(pg/L) | PCP <sup>d</sup><br>(ug/L) <sup>e</sup> | TCP <sup>d</sup><br>(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                       |

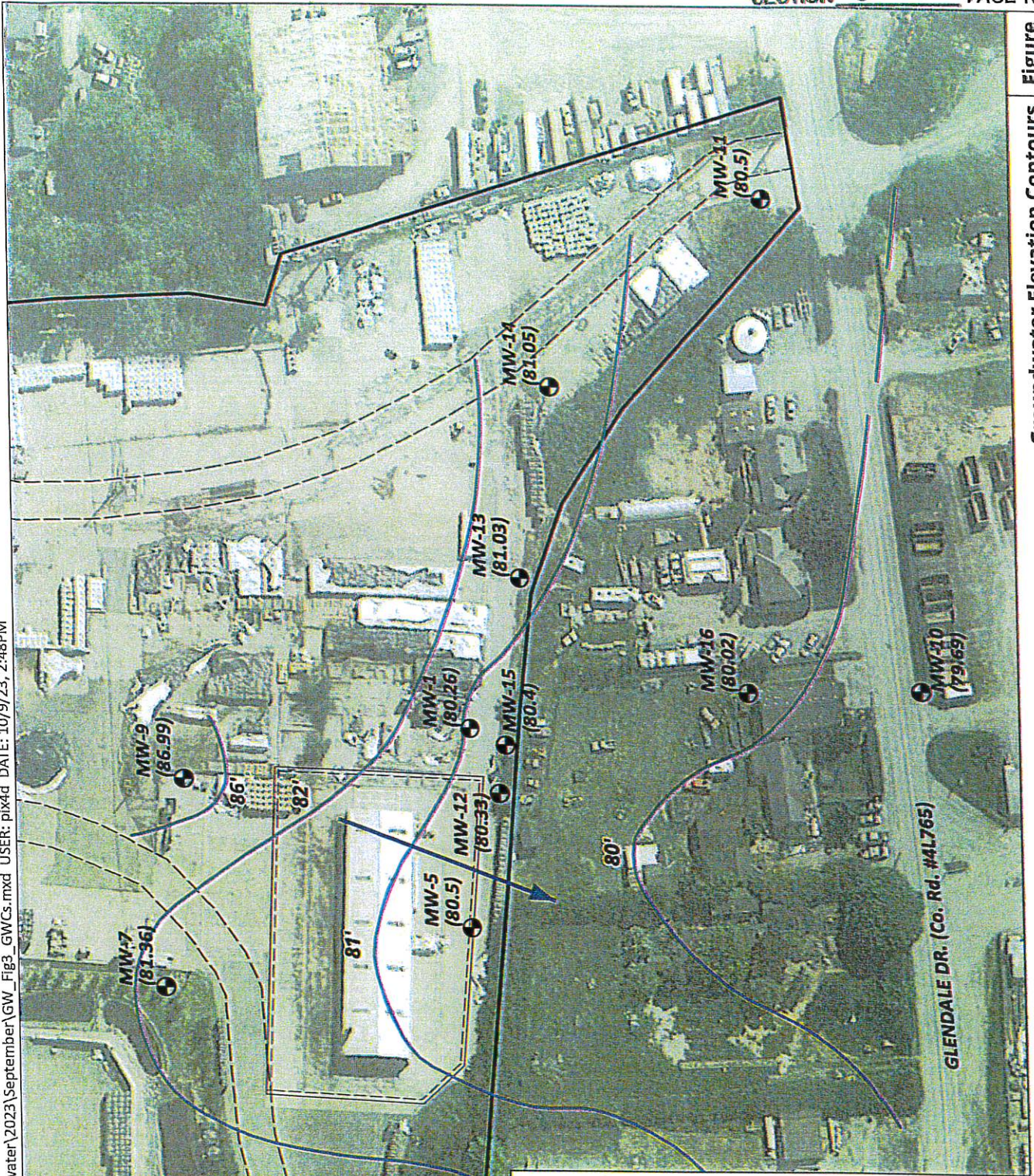


| Sample Location         | Date         | 2,3,7,8-TCDD <sup>a</sup><br>(pg/L) <sup>b</sup> | 2005 WHO TEQ <sup>c</sup><br>(pg/L) | PCP <sup>d</sup><br>(ug/L) <sup>e</sup> | TCP <sup>d</sup><br>(ug/L) |
|-------------------------|--------------|--|-------------------------------------|---|----------------------------|
|                         | 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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**XPLANATION**

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

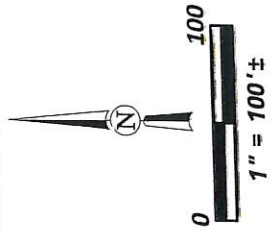



PHOTO SOURCE:  
 GOOGLE, 2019

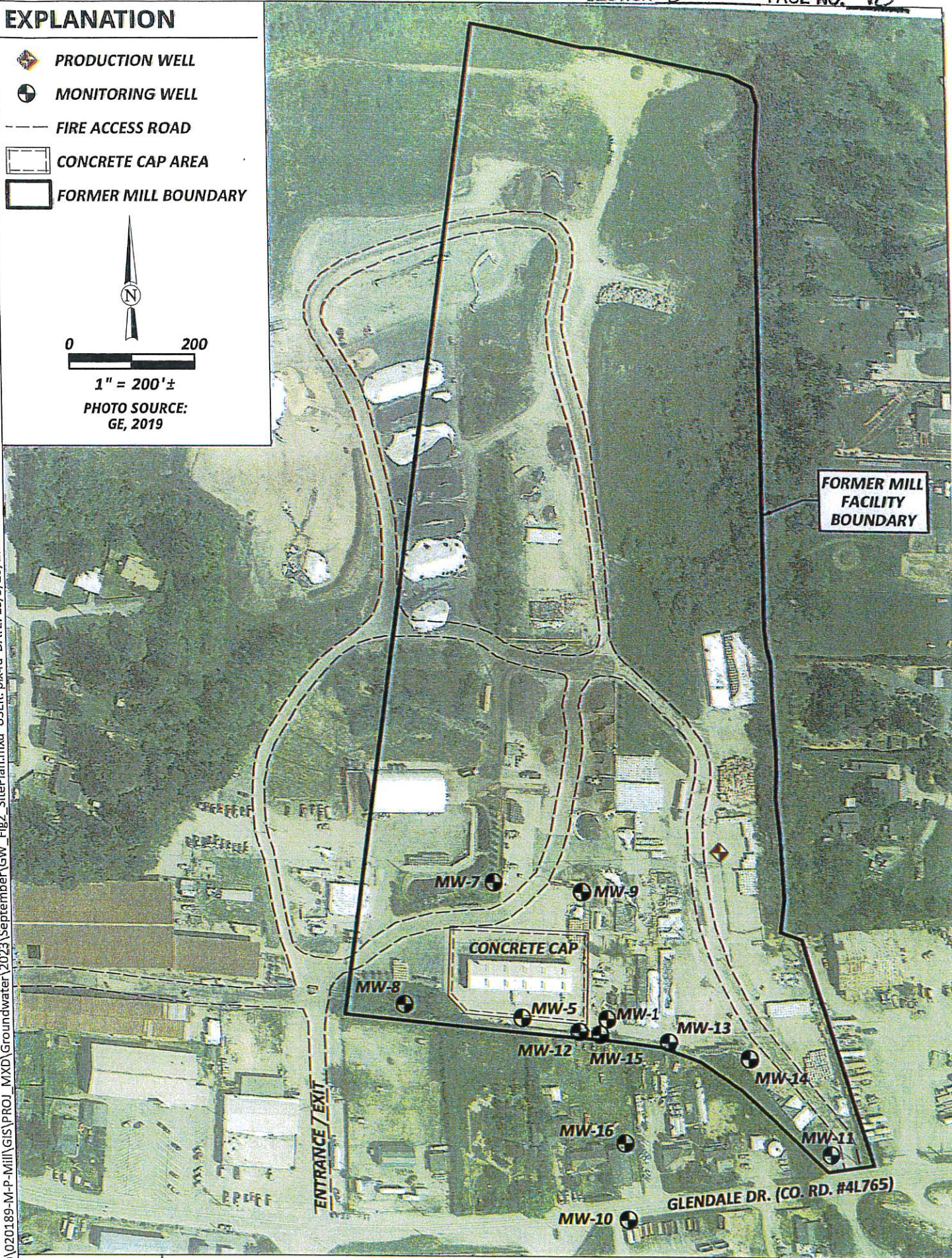
Former McNamara & Peepe Lumber Mill  
 Groundwater Monitoring  
 1619 Glendale Drive, Arcata, California



### EXPLANATION

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

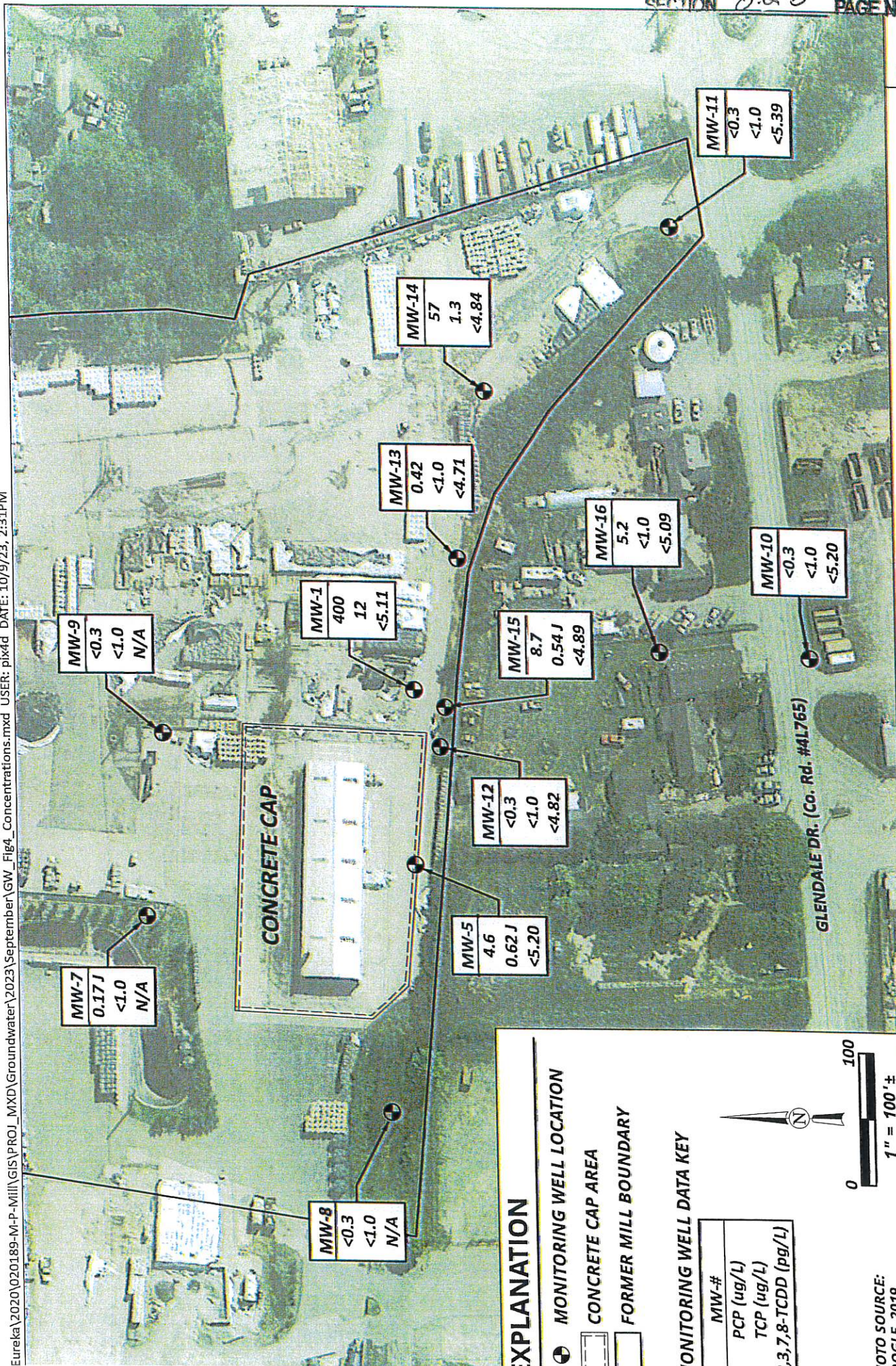
  
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Select Groundwater Concentrations  
August 22, 2023  
020189.030

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



PHOTO SOURCE: GOOGLE, 2019



**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><br>(pg/L) <sup>b</sup> | 2005 WHO<br>TEQ <sup>c</sup><br>(pg/L) | PCP <sup>d</sup><br>(µg/L) <sup>e</sup> | TCP <sup>d</sup><br>(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><br>(mg/L) <sup>b</sup> | DO <sup>c</sup><br>(mg/L) | ORP <sup>a</sup><br>(mV) <sup>c</sup> | EC <sup>a</sup><br>(umhos/cm) <sup>d</sup> | pH <sup>e</sup><br>(standard units) | Turbidity <sup>e</sup><br>(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 µg/L, 1.3 µg/L, and 0.54 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<br>Historical Groundwater Elevations |            |                                   |
|--|------------|-----------------------------------|
| Well Name                                      | Date       | Groundwater Elevation<br>(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<br>Historical Groundwater Elevations |            |                                   |
|--|------------|-----------------------------------|
| Well Name                                      | Date       | Groundwater Elevation<br>(ft msl) |
| MW-5<br>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<br>Historical Groundwater Elevations |            |                                   |
|--|------------|-----------------------------------|
| Well Name                                      | Date       | Groundwater Elevation<br>(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<br>Historical Groundwater Elevations |            |                                   |
|--|------------|-----------------------------------|
| Well Name                                      | Date       | Groundwater Elevation<br>(ft msl) |
| MW-9<br>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      |                                   |

| <b>Well Name</b> | <b>Date</b> | <b>Groundwater Elevation<br/>(ft msl)</b> |
|------------------|-------------|---|
| 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<br>Groundwater Analytical Results<br>2019 to 2023 |                 |                    |                 |          |                     |         |            |              |         |         |          |       |            |
|---|-----------------|--------------------|-----------------|----------|---------------------|---------|------------|--------------|---------|---------|----------|-------|------------|
| Well Name   | Date            | PCP                | YCP             | Chromium | Hexavalent Chromium | Nitrate | Total Iron | Ferrous 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       | 40                 | 12              | --       | --                  | --      | --         | --           | --      | --      | --       | --    | --         |
|   | MW-5            | 5/13/2015          | 39 <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   |                 | 9.3 <sup>A</sup>   | 0.65 J          | --       | --                  | --      | --         | --           | --      | --      | --       | --    | --         |
| 8/22/2023   |                 | 4.6                | 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       | 0.36 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                | 1.1     | <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     | 0.96     | --    | --         |
|   | 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               | --              | --       | --                  | --      | --         | --           | --      | --      | --       | --    |            |
| 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        | 1.0 <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       | 52 <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       | 510 <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>   | 0.61 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>    | <100 B9         | --       | --                  | --      | --         | --           | --      | --      | --       | --    | --         |
|   | 2/22/2023       | 48 <sup>A</sup>    | <1.0            | --       | --                  | --      | --         | --           | --      | --      | --       | --    | --         |
| 8/23/2023   | 57 <sup>A</sup> | 1.3                | --              | --       | --                  | --      | --         | --           | --      | --      | --       | --    |            |
| MW-15   | 8/22/2023       | 8.7 <sup>A</sup>   | 0.54 J          | --       | --                  | --      | --         | --           | --      | --      | --       | --    | --         |
| MW-16   | 8/22/2023       | 9.2 <sup>A</sup>   | <1.0            | --       | --                  | --      | --         | --           | --      | --      | --       | --    | --         |





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



**EXPLANATION**

- SOIL BORING
- ▭ CONCRETE CAP AREA

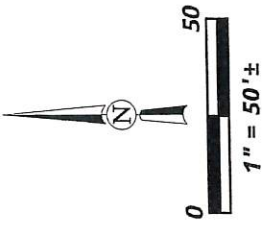


PHOTO SOURCE:  
GOOGLE, 2019

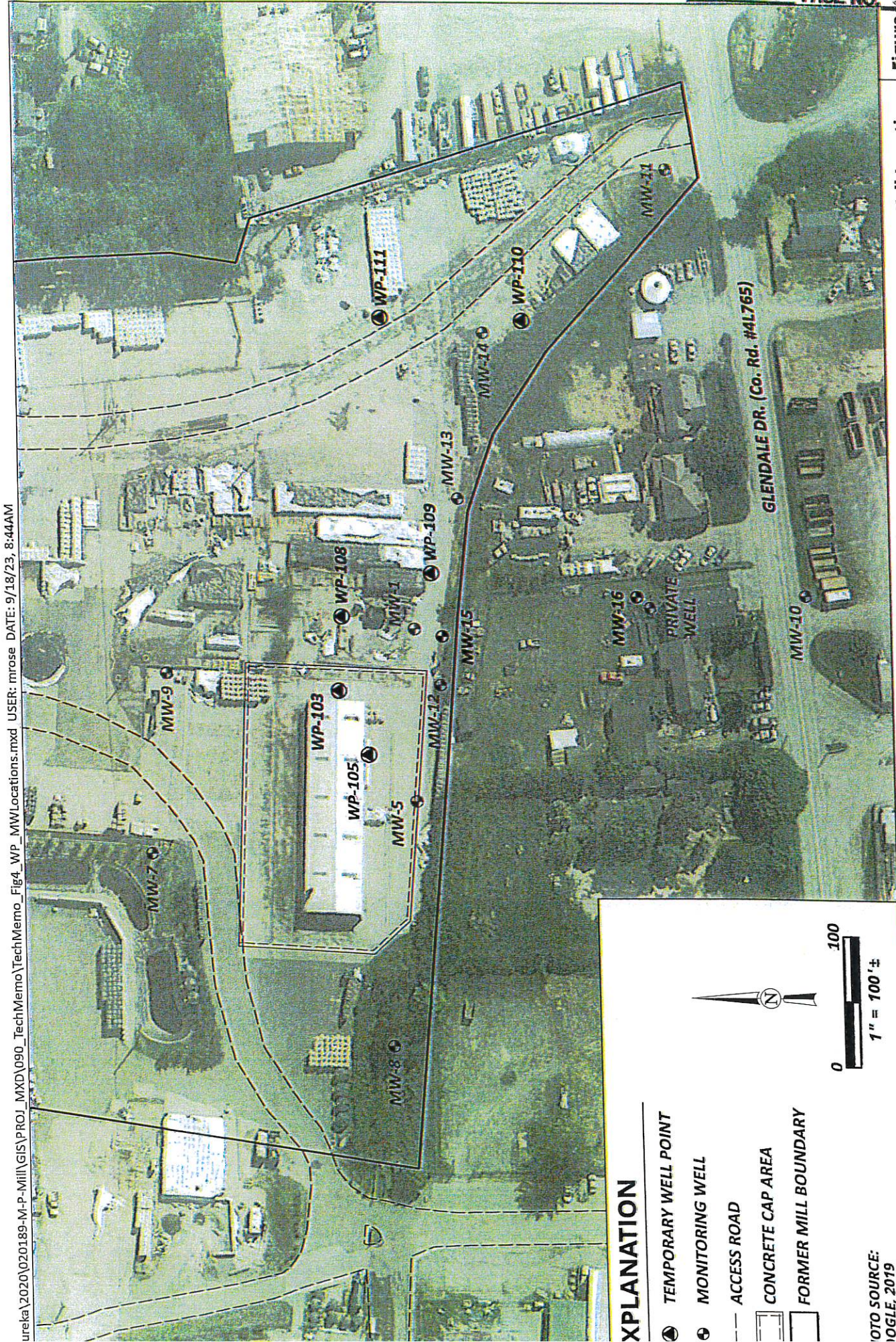
Figure **3**

CAP Area Soil Boring Locations

May 2024 - 020189.090

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





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

**XPLANATION**

- 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

Figure 4

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**







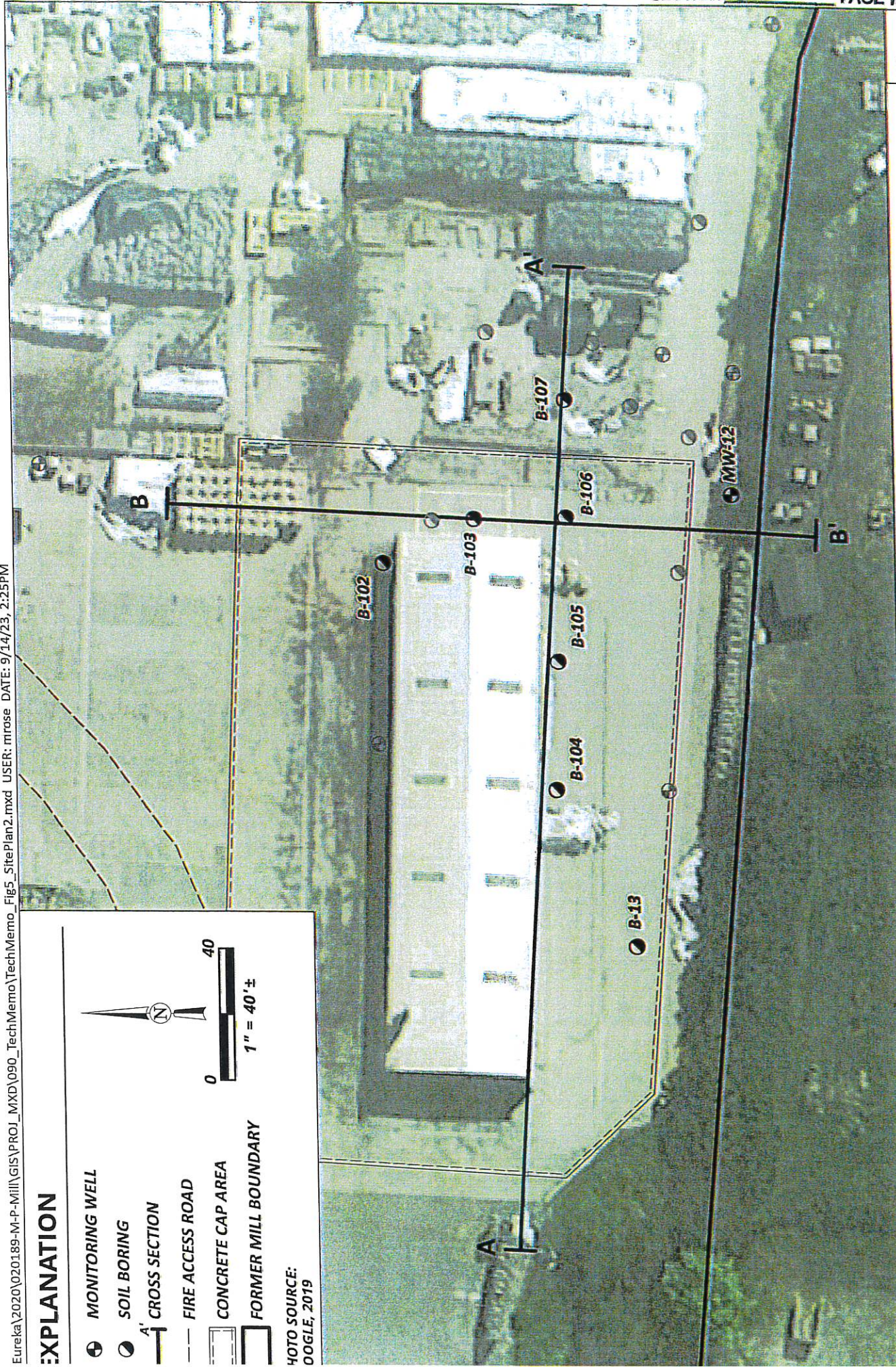
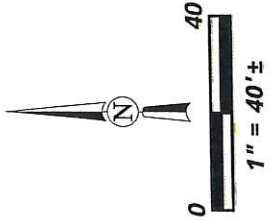
-  MONITORING WELL
-  SOIL BORING
-  CROSS SECTION
-  FIRE ACCESS ROAD
-  CONCRETE CAP AREA
-  FORMER MILL BOUNDARY

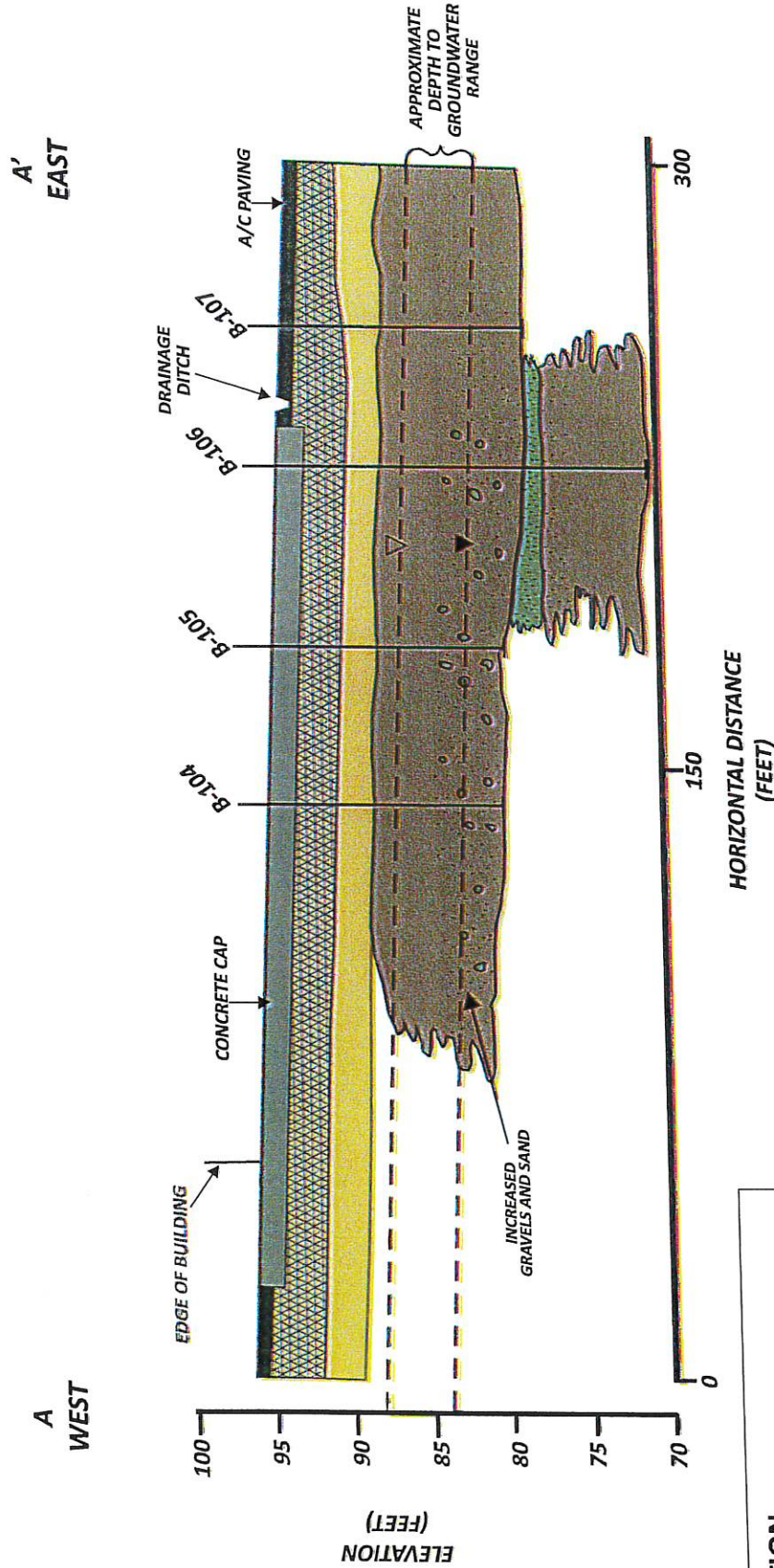
PHOTO SOURCE:  
GOOGLE, 2019



Site Plan  
with Cross Section Locations  
September 2023 - 020189.090  
Figure 5



### GEOLOGIC CROSS-SECTION A-A'



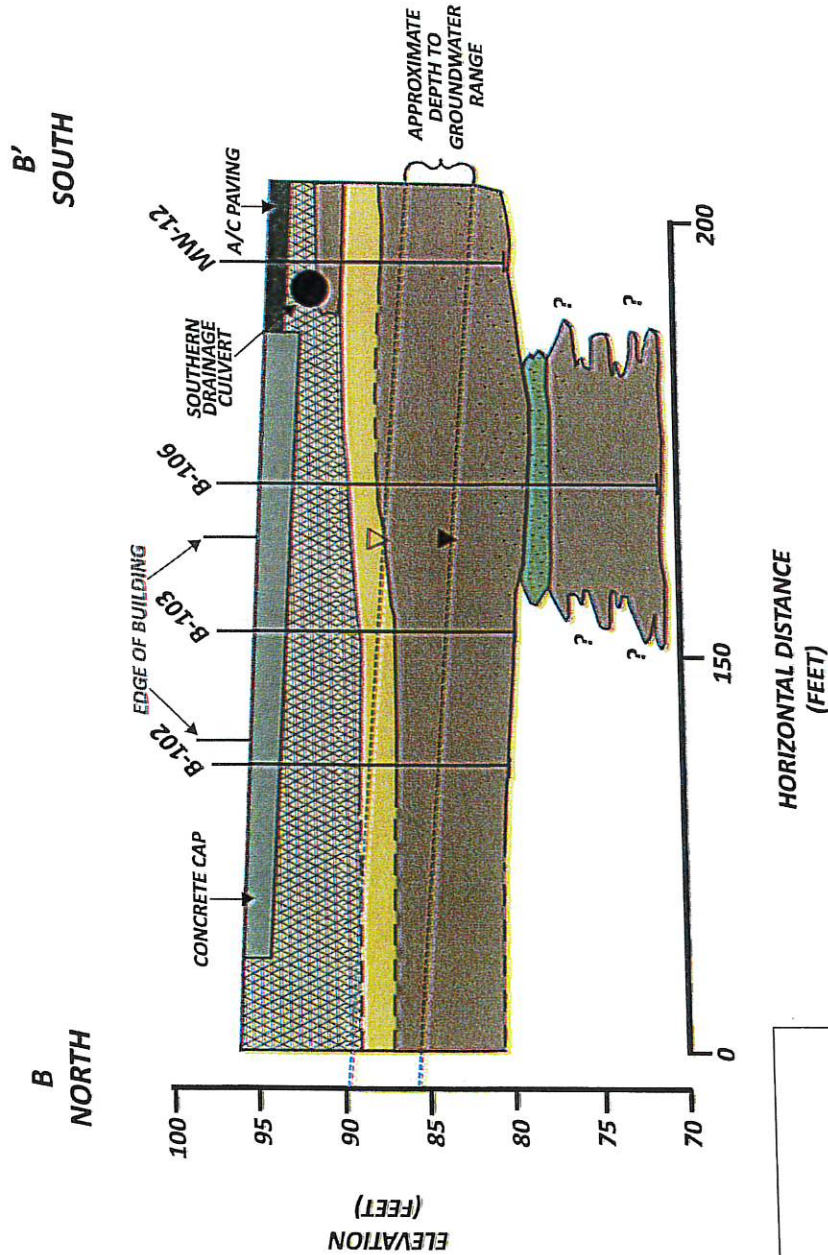
| EXPLANATION |                                   |
|-------------|-----------------------------------|
|             | FILL                              |
|             | CLAYEY SAND                       |
|             | CLAY to CLAY with SAND            |
|             | SILT to SILT with SAND and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

V.E. = 1:4



ireka\Projects\2020\020189-M-P-Mill\GIS\FIGURES\090TechMemoFig6\_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<br>V.E. = 1:4 |

Figure 7

Geologic Cross Section B-B'  
September 2023-020189.090

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



**NEW  
BUSINESS**



**FIRST AMENDMENT TO COMMUNICATIONS VAULT LEASE**

THIS FIRST AMENDMENT TO COMMUNICATIONS VAULT LEASE (this "**First Amendment**") dated \_\_\_\_\_, 202\_\_\_\_, is made effective as of the later of the signature dates below. (the "**Effective Date**") between the Humboldt Bay Municipal Water District, hereinafter referred to as "**Lessee**", and the County of Trinity, hereinafter referred to as "**Lessor**". Lessor and Lessee may be collectively referred to as the "**Parties**" or individually as a "**Party**".

**RECITALS**

WHEREAS, this First Amendment to the Communications Vault Lease (the "Lease") is made with reference to the following facts and objectives:

- A. The Parties entered into the written Lease dated October 28, 2015, in which Lessor leased to Lessee use of the premises known as Pickett's Peak, located upon Horse Ridge Lookout Road, Zenia, California 95595, APN# 018-300-006 (the "**Premises**").
- B. Pursuant to the Lease, Lessee has the right to place, operate, maintain, repair, and remove structures and equipment necessary for Lessee's operation of telecommunications equipment at the Premises, among other terms and conditions stated in the Lease.
- C. For consideration, Lessee agreed to pay Lessor rent consideration in the amount of \$250 per month, for a period of five years with a three percent (3%) increase commencing for an additional five years.
- D. The term of the Lease expires as of June 30, 2025.
- E. By way of this First Amendment, the Parties desire to amend the Lease as set forth below.

NOW, THEREFORE, for and in consideration of the promises and mutual covenants herein contained and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. **First Renewal Term.** The Term of this Lease shall renew as of midnight (00:00 a.m.) of July 1, 2025, and thereafter continue for an additional ten years through and including June 30, 2035 (the "**Renewal Term**").

2. **Rent Considerations.** As of the commencement of the Renewal Term, Lessee shall pay monthly rent in the amount of \$265 per month, for a period of 5 years. Beginning on July 1, 2030, the rent shall increase to \$274 per month for the remainder of the Renewal Term.
3. **Mislabeled Parties Corrected.** As to the signature page of the initial Lease, County of Trinity was erroneously labeled as Lessee. The Lease shall be amended to correctly label the County of Trinity as "Lessor", as is the case with this First Amendment.
4. **No Further Modification; Conflict.** Except as set forth in this First Amendment, all of the terms and provisions of the Lease shall remain unmodified and in full force and effect. In the event of any conflict between the terms, covenants, and conditions of the Lease, and the terms, covenants, and conditions of this First Amendment, the terms, covenants, and conditions of this First Amendment shall govern and control.
5. **Counterparts; Signatures.** This First Amendment may be signed in two or more counterparts. When at least one such counterpart has been signed by each party, the First Amendment shall be deemed to be one and the same agreement. This First Amendment may be executed by a party's signature transmitted by facsimile or by electronic means, and copies of this First Amendment executed and delivered by means of faxed or electronic signatures shall have the same force and effect as copies hereof executed and delivered with original signatures. All parties hereto may rely upon faxed or electronic signatures as if such signatures were originals. All parties hereto agree that a faxed or electronic signature page may be introduced into evidence in any proceeding arising out of or related to this First Amendment, or arising out of or related to the original Lease, as if it were an original signature page.

**SIGNATURE PAGE TO FOLLOW**

IN WITNESS WHEREOF, the Parties have executed this First Amendment to Communications Vault Lease as of the later of the signature dates below.

**LESSEE:**

**LESSOR:**

Humboldt Bay Municipal Water District

County of Trinity

By: \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

Its: \_\_\_\_\_

Dated: \_\_\_\_\_

Dated: \_\_\_\_\_

## HUMBOLDT BAY MUNICIPAL WATER DISTRICT Officers and Committee Assignments

| Officers of the District                     | Incumbent/Member   | Term  |
|--|--|---|
| President                                    | Michelle Fuller  | Until new appointment by Board (odd numbered years)                               |
| Vice President                               | David Lindberg   | Until new appointment by Board  |
| Secretary-Treasurer                          | J. Bruce Rupp  | Until new appointment by Board  |
| Assistant Secretary Treasurer                | David Lindberg   | Until new appointment by Board  |
| General Manager                              | John Friedenbach   | Until new appointment by Board  |
| Attorney                                     | Ryan Plotz and Russ Gans of Mitchell, Brisso, Delaney & Vrieze                         | Until new appointment by Board  |
| Auditor                                      | O'Connor & Company   | Until new appointment by Board  |
| Other Assignments/Appointments               |  |   |
| ACWA Region 1 Board Member                   | J. Bruce Rupp  | Next Election   |
| ACWA-JPIA Board Member                       | J. Bruce Rupp (regular)<br>John Friedenbach (alternate)<br>Michelle Fuller (alternate) | Until new appointment by Board  |
| JPIA Employee Benefits Committee             | J. Bruce Rupp  | Until new appointment   |
| JPIA Executive Committee                     | J. Bruce Rupp  | Until new appointment   |
| ACWA Finance Committee, Vice Chair           | J. Bruce Rupp  | Until new appointment   |
| RREDC Board Member                           | David Lindberg (regular)<br>Michelle Fuller (alternate)                                | Until new appointment by Board  |
| RCEA Board Member                            | Sheri Woo (regular)<br>Michelle Fuller (alternate)                                     | Until new appointment by Board  |
| Countywide RDA Oversight Board Member        | J. Bruce Rupp  | Until Next Election Cycle   |
| Committee Assignments<br>(Charters Attached) |  |   |
| Audit Committee (Standing)                   | J. Bruce Rupp and David Lindberg   | Secretary/Treasurer is standing member and second Director appointed year-to-year |

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
Officers and Committee Assignments**

| <b>Committee Assignments (Con't)<br/>(Charters Attached)</b>  |   |                       |
|---|---|-----------------------|
| Water Task Force (Standing)   | One Board/Council member and one management representative from District and each Municipality (may also include a representative from wholesale industrial customer) and Ruth Lake CSD<br><br>HBMWD Members: President Michelle Fuller and GM<br>Alternate: David Lindberg | Until new appointment |
| Water Resource Planning Advisory Committee (Ad Hoc)   | Bruce Rupp and Sheri Woo  | Until new appointment |
| Committee to Support and Advance Local Water Sales and Advance Consideration of "Transport" Option (Ad Hoc) | J. Bruce Rupp and   | Until new appointment |
| Committee to Support Consideration of an Instream Flow Dedication in the Mad River (Ad Hoc)                 | Sheri Woo and Michelle Fuller   | Until new appointment |
| Board Policy & Evaluations Committee (Ad Hoc)   | President Michelle Fuller and J. Bruce Rupp   | Until new appointment |
| Education and Outreach Committee (Ad Hoc)   | David Lindberg and Michelle Fuller  | Until new appointment |
| District Website Social Media Ad-Hoc Committee (Ad Hoc)   | Sheri Woo and Michelle Fuller, Business Manager   | Until new appointment |
| Mad River Policy Committee (Ad Hoc)   | Michelle Fuller and David Lindberg  | Until new appointment |
| Trinity County Master Lease Committee (Ad Hoc)  | J. Bruce Rupp and Sheri Woo   | Until new appointment |

**INACTIVE COMMITTEES  
Charters attached**

| <b>Committee</b>                                     | <b>Prior Members</b>         | <b>Status</b>      |
|--|------------------------------|--------------------|
| Ad Hoc Committee for Negotiating Wholesale Contracts | Neal Latt<br>Bruce Rupp      | Inactive Committee |
| Joint Agency Aquatic Invasive Species Committee      | Sheri Woo<br>Michelle Fuller | Inactive Committee |
|  |                              |                    |

**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: John Friedenbach/Contessa Dickson  
Date: January 2, 2025

Re: Cal Poly HSU Senior Capstone Projects

**Discussion**

As some of you may recall the District partnered in 2022 with Cal Poly Humboldt Environmental Resources Engineering Class senior capstone projects. Dr. Archibald has inquired if we would participate in their capstone project again for this spring 2025 semester. Staff has agreed to participate, but will only offer up one project. Staff has yet to determine the parameters for the project. At the end of the semester, when the students make their project summary presentations, staff will invite the Directors to attend. As this project progresses, staff will keep the Board informed.

For the capstone projects in 2022, the following projects were selected.

1. **Station 6 weir enhancement**. This project will involve the analysis of the river flow immediately upstream from Station 6 to design improvements to our existing river control weir. The existing weir does not adequately direct all of the river flow from the north bank to the south bank entrance to Station 6. For the continued operation of Station 6, it is essential that we have adequate flow to the forebay to be able to operate the pumping and water delivery system.
2. **Stream Enhancement at Station 6**. This project will involve the analysis and design of large items such as boulders and/or tree root balls strategically placed on the south river edge immediately upstream from Station 6. The desired result is to create natural scour around these structures thereby creating a naturally deeper channel along the south river bank to naturally draw the river flow toward the Station 6 entrance.
3. **Collector 4 river channel re-direction**. This project will involve the analysis and design of a project to re-direct the river channel near Collectors 4 and 5. The high river flows and flooding that occurred during the winter of 2019 dramatically changed the previous river channel such that Collector 4 now has river flowing all around it which makes access with heavy equipment for maintenance very costly and problematic.
4. **R. W. Matthews Dam syphon**. This project will involve the analysis and hydraulic flow calculations to determine how to construct multiple syphon pipes to carry water from Ruth reservoir over the dam down to the tailrace or through the spillway to the plunge pool. These would be necessary in the event of an emergency condition at the dam where the rapid lowering of the lake level would facilitate repairs to the dam.

**Staff Recommendation**

Staff recommends that the Board authorize participation with the Cal Poly Humboldt, Spring 2025, Humboldt Environmental Resources Engineering Class capstone projects with one project to be determined by staff.

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

SECTION 9.d PAGE NO. 1

To: Board of Directors

Date: January 09, 2025

From: Contessa Dickson

RE: 2025 Trades Day

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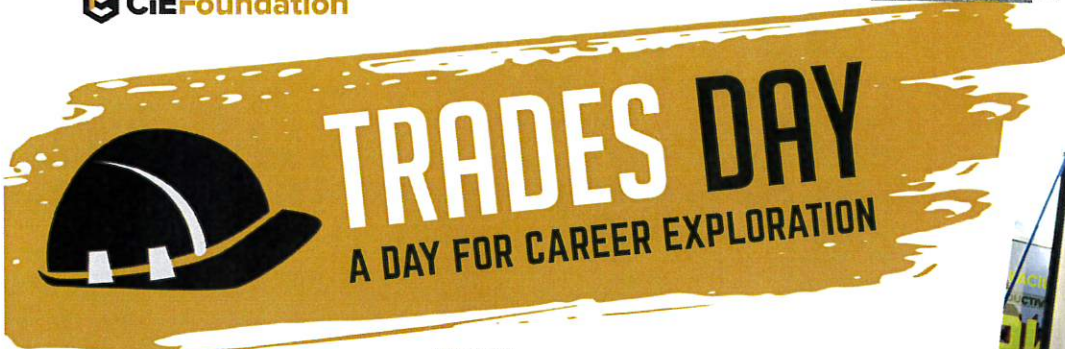
**Discussion**

On April 24, 2025, the Humboldt County Office of Education will host a Trades Day at Redwood Acres, an event aimed at fostering collaboration among trade, industry, and post-secondary education and training program partners.

In the past the District has participated in the Humboldt County Trades Day, most recently in April of 2024. By participating the District hopes to promote the Water Operator profession by empowering youth to explore this career option. Additionally, the District may choose to be a sponsor by donation, as outlined in the event flyer.

**Recommendation**

Staff requests direction from the Board. Do they want to participate and/or be a sponsor? If you wish to sponsor, at what level of support do you want to offer?



EVENT PARTNERS:



# INVEST IN THE NEXT GENERATION



## *Inspire New Career Pathways*

Trades Day introduces high schoolers to industry career opportunities in construction, design, sub-contracting, heavy equipment, engineering, and other skilled trades.



## *Empower Youth to Pursue*

We hope you--our partners from the trades, industry, training and post-secondary programs, and others--will join us to inspire local students to pursue careers in construction.



Bring a hands-on activity for students to explore all the industry has to offer; teach them how to swing a hammer, try their hand at mixing cement, scale a wall for roofing, or throw on some PPE and get them welding. Anything to get their hands and minds moving! Take part in an exciting opportunity to pass along what excites you about your profession.

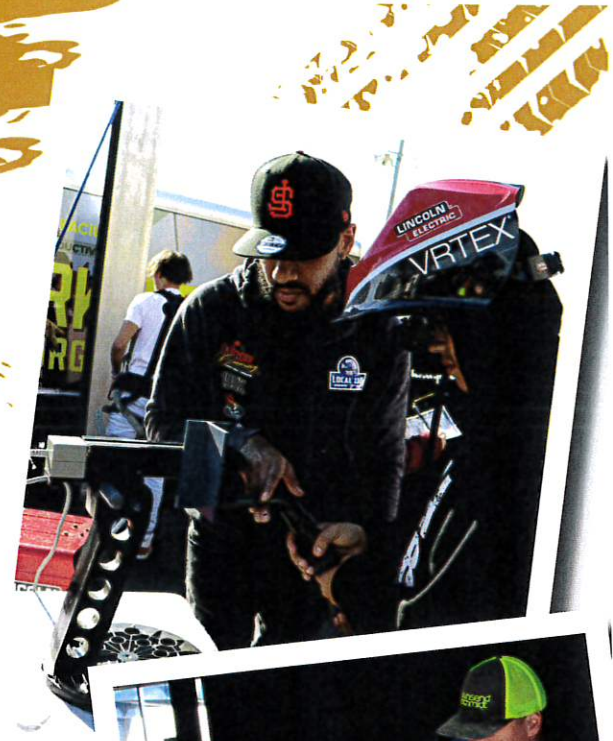
*Where Industry Meets the Classroom*

**REGISTER NOW**

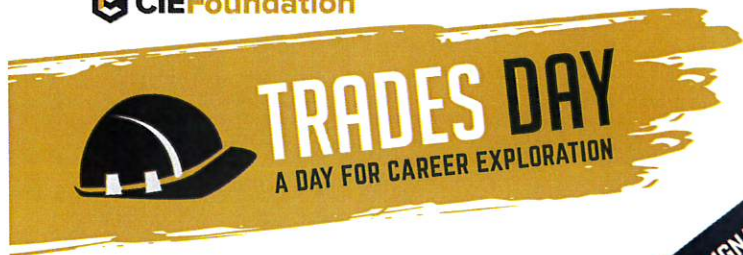
📅 APRIL 24, 2025 | 8:30 AM - 12:30 PM

📍 REDWOOD ACRES FAIRGROUNDS

📞 Brittany Albaugh | 214.241.1090 | balbaugh@cie.foundation







**PRE-EVENT RECOGNITION**

- Website Presence
- \*Social Media Promotion
- Logo on Collateral Materials + Flyers
- Press Release Recognition
- Banner Ad on CIEF Website (60 Days)

|   | SIGNATURE<br>\$5,000 | GOLD<br>\$2,500 | SILVER<br>\$1,000 | BRONZE<br>\$500 | * EXHIBITOR<br>\$250 |
|---|----------------------|-----------------|-------------------|-----------------|----------------------|
| LOGO                                    | LOGO                 | LOGO            | LOGO              | LOGO            |                      |
| X                                       | X                    | X               |                   |                 |                      |
| X                                       | X                    | X               |                   |                 |                      |
| X                                       | X                    |                 |                   |                 |                      |
| X                                       |                      |                 |                   |                 |                      |
| <b>ON-SITE RECOGNITION</b>              |                      |                 |                   |                 |                      |
| Exhibit Space                           | PREMIUM              | PREMIUM         | INCLUDED          | INCLUDED        | INCLUDED             |
| Recognition in Digital Event Program    | LOGO                 | LOGO            | LOGO              | NAME            | NAME                 |
| Featured on Student Time-card           | NAME                 | NAME            | NAME              | NAME            | NAME                 |
| Event Promotional Materials             | X                    | X               | X                 | X               | X                    |
| Sponsor Banner                          | X                    | X               | X                 |                 |                      |
| Verbal Mention and Thank you            | X                    | X               |                   |                 |                      |
| Speaking Opportunity at Safety Talk     | X                    |                 |                   |                 |                      |
| <b>POST-EVENT RECOGNITION</b>           |                      |                 |                   |                 |                      |
| Workforce Development Newsletter        | X                    | X               | X                 |                 |                      |
| School Contact List & Instructor Intro. | X                    | X               |                   |                 |                      |
| Wrap up Email Recognition               | X                    | X               |                   |                 |                      |
| *Social Media Shout out                 | X                    |                 |                   |                 |                      |

SCAN OR CLICK BELOW TO REGISTER ONLINE!



**MARK YOUR SELECTION**

**\* DO YOU QUALIFY FOR THE EXHIBITOR SPONSOR WAIVER?**

- I represent a public community college/university and qualify for a exhibitor sponsor waiver (\$250 value)
- I am providing a hands-on demonstration for students and qualify for a exhibitor sponsor waiver (\$250 value)

NAME: \_\_\_\_\_ COMPANY: \_\_\_\_\_

STREET ADDRESS: \_\_\_\_\_ CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

PHONE: \_\_\_\_\_ EMAIL: \_\_\_\_\_

INVOICE OUR COMPANY  CHECK ENCLOSED  CREDIT CARD: \_\_\_ MASTERCARD \_\_\_ VISA \_\_\_ AMEX \_\_\_ DISCOVER

NAME ON CARD: \_\_\_\_\_ AMOUNT OF CHARGE: \_\_\_\_\_

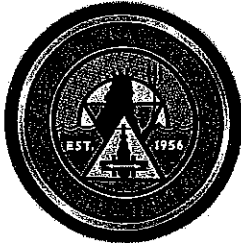
CARD NUMBER: \_\_\_\_\_ CVC: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ EXPIRATION DATE: \_\_\_\_\_

Additional social media promotional details can be found at the Trades Day Resource Page.

Make your company check payable to: Construction Industry Education Foundation - 5370 Elvas Avenue, Sacramento, CA 95819  
or register online at: www.tradesday.org | Construction Industry Education Foundation | Tax ID: 20-0595531

**ENGINEERING**



## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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 EMAIL [OFFICE@HBMWD.COM](mailto:OFFICE@HBMWD.COM)  
 Website: [www.hbmwd.com](http://www.hbmwd.com)

**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

January 9, 2025

Nicole Klueckler, Grant Specialist – Coastal Unit  
 Hazard Mitigation Assistance Branch  
 California Governor's Office of Emergency Services  
 3650 Schriever Avenue  
 Mather, CA 95655

**RE: Reservoirs Seismic Retrofit Project Match Commitment Letter – Revised January 9, 2025**  
**HMGP # 4344-PJ0040**

Dear Nicole,

As part of the Hazard Mitigation Grant Program process, a local funding match is required. This letter serves as Humboldt Bay Municipal Water District's commitment to meet the matching fund requirements for the updated funding request for our Reservoirs Seismic Retrofit Project under the Hazard Mitigation Grant Program.

**Name of funding source:** Municipal customer rate payers.

**Funding type:** Wholesale water rates.

The local matching fund requirement for the grant funded portion of the project is \$1,811,539 (1,435,173 + 376,366) and is available as of January 9, 2025.

The total project cost is \$7,917,509. Current grant funding, including the most recent supplemental budget request, is \$5,434,613.50 which results in a grant unfunded project total cost amount of \$2,482,895.50.


The grant funded match plus the grant unfunded project costs total \$2,482,895.50 which is the total project match commitment by HBMWD for the project.

If additional federal funds are requested, an additional local match fund commitment letter is required to be submitted.

If you have any questions, please do not hesitate to contact us.

Sincerely,

John Friedenbach  
 General Manager

|   |  |
|---|--|
|  | <p align="center"><b>HUMBOLDT BAY MUNICIPAL WATER DISTRICT</b></p> <p align="center"><b>Request for Qualifications (RFQ)</b></p> <p align="center"><b>R.W. Matthews Dam Seismic Stability Project</b></p> <p align="center"><b>Ruth Lake, Trinity County, California</b></p> <p align="center">Engineering, Geotechnical, Surveying, Seismic Stability<br/>Analysis and Design, Environmental, Permitting, Construction<br/>Management, and Grant Assistance</p> |
|---|--|

## **A. Invitation**

The Humboldt Bay Municipal Water District (HBMWD or District) is inviting qualified consultants to submit a Statement of Qualifications (SOQ) and other materials, in accordance with the outline below, to be considered for selection by the District to perform services related to the District's R.W. Matthews Dam Seismic Stability Project as described in this Request for Qualifications (RFQ).

[2 C.F.R. § 200.320 (b) (2)]

***The deadline to submit an SOQ is provided in Table 1 in Section F of this RFQ.***

## **B. Project Overview**

R.W. Matthews Dam is located on the Mad River in Trinity County approximately 50 miles southeast of Eureka, CA. In the event of dam failure, inundation flooding would affect the entire downstream reach of the Mad River.

The dam is overall in good condition. The proposed project is a seismic retrofit, not a repair. This project will reduce the risk of dam and spillway failure at R.W. Matthews Dam resulting from a seismic event by performing a seismic stability analysis based on the controlling seismic ground motion for the area and developing and implementing the designs for seismic retrofits that result from the analysis. This project will include studies and engineering designs that will be used to characterize conditions at the dam and spillway and determine appropriate actions to make the dam and spillway more resilient to seismic events.

A 2016 study found that the controlling ground motion for the dam is a M9.2 event on the Cascadia Subduction Zone, resulting in an 84th percentile peak ground acceleration (PGA) of 0.70g. The stability of the dam in response to this seismic event has not been analyzed. Due to the nature of the grant funding (see Section C), the project will be completed in two phases: 1) Advance Assistance Phase, and 2) Final Design and Construction Phase.

Provided below in this section is a summary of the major project components. See Section E for more detail on the work to be completed.

The proposed project shall be designed to meet current dam safety and seismic standards, and any proposed retrofit designs will be closely reviewed by the State of California Division of Safety of Dams (DSOD) and the Federal Energy Regulatory Commission (FERC) and will require approval from these agencies.

### **Advance Assistance Phase**

This Phase will include all work required to perform a seismic stability analysis for the dam and spillway, including, but not necessarily limited to, the following:

- Performing a geological/geotechnical assessment of the area.
- Conducting a LiDAR survey and a supplemental ground topographic survey.
- Using the geotechnical and survey data to perform a seismic stability analysis of the dam and spillway in response to the controlling seismic ground motion for the area.
- Developing alternatives for proposed retrofits based on the results of the seismic stability analysis.
- Advancing the preferred alternative to the 65% design level.
- Performing associated environmental studies, permitting, and preparing an associated environmental document.
- Preparing a Hazard Mitigation Grant Program (HMGP) project grant sub-application to the California Office of Emergency Services (Cal OES) for final design and construction funding for the proposed seismic retrofit alternative.

The District's intent is to execute one agreement with a single consultant firm or team to provide the services under this Phase.

### **Final Design and Construction Phase**

If a grant for final design and construction is awarded, the District may elect to award a contract for professional services during the Final Design and Construction Phase to the consultant that is selected out of this RFQ process or go through another RFQ process for this Phase. This Phase will include all work related to preparing final bid documents (plans and specifications), administering the bidding process, and performing construction management and construction inspection duties.

## **C. Funding Sources and SOQ Submission Restrictions**

The District has received partial funding for the Advance Assistance Phase through a Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant being administered by the California Governor's Office of Emergency Services (Cal OES) via the Robert T. Stafford Emergency Assistance and Disaster Relief Act for a FEMA Hazard Mitigation Grant Program (HMGP) project. The Advance Assistance Phase of this project is specifically funded by the HMGP Advance Assistance program. One use of Advance Assistance funding is to develop hazard mitigation projects, including engineering design and feasibility studies for larger or complex critical facility retrofits. The Advance Assistance program does not fund final design or construction; however, the goal of any Advance Assistance project is to lead to a construction project. As such, the final deliverable for the Advance Assistance Phase of the project will be a project sub-application to Cal OES under the HMGP for final design and construction of the proposed project. The Final Design and Construction Phase will be initiated if grant funding is awarded.

Note that due to the interpretations of 2 CFR § 200.319 by FEMA and Cal OES, consultants that assist in sub-application development for a project funded by the HMGP are precluded from competing for future work associated with the project that is funded by the HMGP. Consequently, GHD, Inc. is precluded from responding to this RFQ.

Project activities must adhere to the requirements of both federal and state agencies related to the Hazard Mitigation Grant Program (HMGP), National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA).

## **D. Selection Process**

The District will establish a Selection Committee to review the SOQ submittals received. The Selection Committee will request a scope of work and fee proposal from the most qualified firm/team that is subject to negotiation of a fair and reasonable price. If negotiations are not successful, the District will terminate negotiations with the selected consultant and will begin to negotiate with other qualified consultants in the order of their respective SOQ ranking (from highest to lowest) until an agreement is reached. The final proposal will be brought to the District's Board of Directors for potential approval.

## **E. Work to be Completed**

See Section C of this SOQ regarding phasing of the project and associated anticipated contract award information.

### **Advance Assistance Phase**

#### **1. Project Management**

- 1.1 Attend and document design meetings
- 1.2 Prepare correspondence
- 1.3 Manage subcontractors
- 1.4 Maintain project files
- 1.5 Manage and direct overall design and environmental teams

#### **2. Quality Control and Quality Assurance of all work products**

#### **3. Grant Administration**

- 3.1 Coordinate the FEMA Hazard Mitigation grant administration with FEMA and/or Cal OES and District staff.
- 3.2 Ensure scope of the project is consistent with scope defined in the grant applications and/or agreements.
- 3.3 Ensure compliance with the grant program requirements and funding agreements.

#### **4. Geotechnical Assessment**

- 4.1 Obtain permits that may be required for geotechnical borings, including, but not limited to, permits from FERC and DSOD. This may include developing a coring and repair plan.
- 4.2 Install borings at the spillway floor to determine how well the concrete spillway is bonded to the underlying bedrock; assess the condition of the bedrock underlying the spillway, flip bucket, and left lower one-third of the spillway chute; and adequately characterize subsurface conditions at the spillway to allow for the development of a seismic stability analysis.

##### **Background:**

As is common with many spillways of this age, there is not a detailed geological map of the spillway chute. Accordingly, there is an inherent uncertainty characterizing the engineering geological properties of the bedrock below the chute. From the construction photographs, the bedrock generally appears to be of better quality near the ogee weir (upstream end of the spillway) than at the flip bucket (downstream end of the spillway). The construction photographs and the boring data from PH-4 suggest the left lower one-third of the spillway could be grounded on more erodible bedrock.

- 4.3 Install other borings (anticipated to be downstream shell of dam, consultant to confirm) and assess the regional geology to evaluate the likelihood of a global stability failure of the area encompassing the dam and spillway that could result from seismic activity. A calibrated Becker hammer drill or cone penetration testing (CPT) rig may be required to get adequate in place densities in the river alluvium under the dam shells that may not have been removed during construction to see if it is potentially liquefiable.
- 4.4 Prepare a draft geotechnical report for HBMWD review detailing the findings of the investigation and providing conclusions and recommendations, with an analysis of feasibility for seismic retrofit work at the spillway and dam. The report will specifically analyze the composition of the dam itself and materials underlying the dam and spillway. Results of this comprehensive geotechnical assessment will include information on how cohesive the materials are that compose the dam and implications for slope stability, whether the dam and spillway are founded on bedrock material (and if so, how well the concrete of the spillway is bonded to the underlying bedrock and an assessment of the condition of the bedrock/materials), whether the materials underlying the dam are prone to liquefaction, and other information relevant to performing a seismic stability analysis for a 9.2M event.
- 4.5 Prepare a final geotechnical report.

See the "Geotech Borings" outline as shown in the legend in Figure 2 in Tab 6 of Attachment 3 for a general vicinity of proposed geotechnical borings and access.

If geotechnical work is anticipated to be performed during February 1<sup>st</sup> – July 9<sup>th</sup>, bio surveys may need to be performed as described in the Environmental Special Studies task.

## **5. LiDAR Survey**

- 5.1 Obtain survey data sufficient to perform a seismic stability analysis. Sufficient data is anticipated to be a digital terrain model with 1-foot elevation contours.
- 5.2 Establish control points as required.
- 5.3 Perform a supplemental ground topographic survey if required to supplement and rectify LiDAR data.

## **6. Seismic Stability Analysis and Alternatives Analysis**

- 6.1 Analyze the stability of the dam and spillway under seismic loading, including slope stability analyses of the upstream and downstream slopes for static and dynamic (i.e., seismic loading) conditions. Perform slope stability analyses for long-term steady-state, rapid drawdown, pseudo static, and post-earthquake conditions. Use available piezometer data at the dam to select phreatic surfaces for analysis. Consider the potential for soil strength loss due to the design input seismic loading. Evaluate the potential for liquefaction and cyclic softening.
- 6.2 Estimate seismically-induced slope deformations sufficient to satisfy FERC and DSOD requirements for a modern analysis. Consider available freeboard of the dam and character and configuration of the embankment materials when evaluating the severity of the estimated crest and slope deformations.
- 6.3 If excessive deformations are computed, develop and analyze alternatives for potential remedial actions.
- 6.4 Prepare a draft Seismic Stability and Alternatives Analysis report to document the analysis and submit for review and acceptance by HBMWD, and subsequently, FERC and DSOD. Determine the most feasible, constructible, cost-effective, environmentally superior spillway and/or dam seismic retrofit and design that will meet the intent of the grant.
- 6.5 Prepare a final Seismic Stability and Alternatives Analysis.

## **7. 65% Seismic Stability Retrofit Design**

- 7.1 Prepare 30% engineering plans and an opinion of probable construction cost (OPCC) for the preferred alternative developed under Task 6. Submit to HBMWD for review and approval. Provide FERC and DSOD with the option to review and approve. 30% drawings shall be sufficient for establishing a project study boundary for performing NEPA and CEQA special studies.
- 7.2 Prepare draft 65% plans, specifications, contract documents, and OPCC for HBMWD, FERC, and DSOD review.
- 7.3 Incorporate review comments into final 65% plans, specifications, contract documents, and OPCC.

## **8. Environmental Special Studies**

- 8.1 Conduct site-specific botanical, biological, sensitive communities, wetlands, and cultural/archaeological resources studies sufficient to allow for the completion of the NEPA (completed by FEMA) and CEQA processes and other permits that may be required for the project. If geotechnical field work is proposed to occur between February 1<sup>st</sup> and July 9<sup>th</sup>, northern spotted owl surveys will be required following the protocol described in the letter and associated exhibit included as Attachment 4.
- 8.2 Phase I Investigation (if required) – Complete a limited Phase I investigation, if required, to assess whether it is likely that any hazardous materials or impacted soil or groundwater will be encountered during the construction of the proposed project.
- 8.3 Prepare draft and technical memoranda or reports for all studies completed.

## **9. Permitting**

- 9.1 Consultant to confirm which permits are required to allow for construction of the project. It is assumed that the following permits will be required to be prepared by the consultant:
  - i. North Coast Regional Water Quality Control Board 401 Water Quality Certification
  - ii. U.S. Army Corps of Engineers CWA Section 404 permit
  - iii. California Department of Fish and Wildlife 1600 Lake and Streambed Alteration Agreement
  - iv. California Department of Fish and Wildlife Incidental Take Permit (ITP)
  - v. Trinity County Conditional Use Permit
  - vi. Trinity County Encroachment Permit
  - vii. Biological Assessment and Biological Opinion (BABO)
- 9.2 Prepare permit applications, coordinate with and respond to requests of the permitting or regulatory agencies, and acquire all necessary permits.

## **10. CEQA Document**

- 10.1 Prepare an appropriate CEQA document for the project, which is assumed to be an Environmental Impact Report. Consultant to confirm.
- 10.2 Coordinate with all relevant agencies and stakeholders.
- 10.3 Prepare a Notice of Preparation (NOP).
- 10.4 Preliminary Draft EIR (DEIR).
- 10.5 Participate in and lead Draft EIR review meeting.
- 10.6 Prepare public DEIR .
- 10.7 Prepare a Notice of Completion (NOC) and Notice of Availability (NOA).
- 10.8 Prepare draft final EIR, response to comments, and coordinate and lead a review meeting with relevant agencies.
- 10.9 Prepare a draft Mitigation Monitoring and Reporting Program (MMRP) based on the impact analysis and comments on the DEIR.
- 10.10 Prepare a Final EIR and Final MMRP.



10.11 Prepare Notice of Determination (NOD).

#### **11. Project Sub-application and Final Benefit-Cost Analysis**

11.1 After completion of all the other tasks under the Advance Assistance Phase, the selected consultant will complete a project sub-application that meets HMGP requirements for final design and construction of the proposed seismic stability retrofit. This will include an application, Benefit-Cost Analysis (BCA), and other attachments and supporting documents that comprise a complete HMGP project sub-application and that meet the Cal OES / FEMA requirements for HMGP project grant applications at the time of submission.

### **Final Design and Construction Phase (Award not Guaranteed)**

#### **12. Project Management**

- 12.1 Attend and document design meetings
- 12.2 Prepare correspondence
- 12.3 Manage subcontractors
- 12.4 Maintain project files
- 12.5 Manage and direct overall design and environmental teams

#### **13. Quality Control and Quality Assurance of all work products**

#### **14. Grant Administration**

- 14.1 Coordinate the FEMA Hazard Mitigation grant administration with FEMA and/or Cal OES and District staff.
- 14.2 Ensure scope of the project is consistent with scope defined in the grant applications and/or agreements.
- 14.3 Ensure compliance with the grant program requirements and funding agreements.

#### **15. Final Design**

- 15.1 Advance the design from the Advance Assistance Phase and prepare 90% engineering drawings, specifications, contract documents, and OPCC for HBMWD, FERC, and DSOD review.
- 15.2 Prepare a bid set of engineering drawings, specifications, contract documents, and OPCC.

#### **16. Bid period assistance**

- 16.1 Assist the District with distributing and advertising the plans, specifications, and project documents for a competitive sealed bid process for project construction.
- 16.2 Respond to contractor questions during the bid phase in the form of formal addenda.
- 16.3 Review and evaluate construction bids for compliance with project specifications. Confirm that the low-cost bidder is responsible and responsive per CA state law, meets the project bond requirements, holds a valid contractor license, is registered with the California Department of Industrial Relations, and is not ineligible for participation in federal assistance programs.
- 16.4 Following review of contractor bids, prepare a recommendation of award memorandum to HBMWD staff and Board of Directors.

#### **17. Construction management and inspection services**

- 17.1 Provide construction inspection services to monitor contractor compliance with the plans and specifications. This will include daily inspections, reports, photo documentation, and other standard construction inspection tasks.

- 17.2 Consult and coordinate with the District throughout construction. Continually provide the District with ongoing construction documentation.
- 17.3 Develop agendas and minutes for and coordinate and conduct project construction meetings.
- 17.4 Receive, log, and respond to Contractor's submittals. Engage the District as necessary and include District staff on correspondence.
- 17.5 Receive, log, and respond to Contractor's Requests for Information (RFIs). Engage the District as necessary and include District staff on correspondence.
- 17.6 Receive, log, review, and assist the District with processing legitimate change orders.
- 17.7 Receive, log, review, and assist the District with processing pay requests.
- 17.8 Confirm that the contractor provides as-built drawing markups and review for adequacy and accuracy.
- 17.9 Provide one clean, complete, set of as-built drawing markups that incorporate redlines from the contractor, construction manager, and owner and rectify any conflicts. Prepare final as-built drawings for submission to the District.
- 17.10 Prepare contract closeout documents and prepare the Notice of Completion.
- 17.11 Prepare grant closeout documents.
- 17.12 Provide the District with a compiled package of all construction management documentation to be used for District records and for grant closeout purposes.

## **F. Consultant Selection Schedule**

The following schedule has been established for the consultant selection process. The District reserves the right to modify this schedule as required.

**Table 1** *Consultant selection schedule*

|   |                                       |
|---|---------------------------------------|
| Issue RFQ   | December 26, 2024                     |
| Deadline to submit questions                      | January 20, 2025 (5:00 pm PST)        |
| Deadline for addenda to be issued                 | January 24, 2025                      |
| <b>Deadline to submit SOQ</b>                     | <b>February 5, 2025 (3:00 pm PST)</b> |
| Selection committee review                        | February 6 to February 12, 2025       |
| Notify apparent most qualified consultant         | February 13, 2025                     |
| Selected consultant submits scope of work and fee | February 20, 2025                     |
| Scope and fee negotiation                         | February 20 to February 27, 2025      |
| District Board considers contract approval        | March 13, 2025                        |
| Execute consultant contract if approved by Board  | March 14, 2025                        |

## G. Project Schedule

The following is an estimated schedule for the project. The Advance Assistance Phase deliverables submission date provided is firm. If consultant believes that this date cannot feasibly be met, justification shall be provided as described in Section H.1. Dates provided after the Advance Assistance Phase completion date are estimates and depend on the timing for release of grant funding for the Final Design and Construction Phase.

**Table 2** *Estimated project schedule*

|   |                |
|---|----------------|
| Execute consultant contract if approved by Board        | March 14, 2025 |
| Submit Advance Assistance Phase deliverables to Cal OES | April 1, 2026  |
| Funding awarded for Final Design and Construction Phase | September 2027 |
| Final Design completed and approved by FERC and DSOD    | October 2027   |
| Project issued for bid                                  | November 2027  |
| Construction bids due                                   | January 2028   |
| Construction contract awarded                           | February 2028  |
| Construction begins                                     | May 2028       |
| Construction complete                                   | October 2029   |
| Grant closed out  | February 2030  |

This estimated project schedule is subject to change and may be modified by the District if required.

## H. SOQ Requirements

### H.1 SOQ Contents

Firms or teams who are interested in providing the consultant services described herein are to submit a Statement of Qualifications. The SOQ shall include the following:

1. Table of Contents
2. Cover Letter

Provide a cover letter, maximum length of 1 page, indicating the Consultant's interest and summary of qualifications. Include Consultant's name, office location, and years in operation. Include name and contact information for the officer authorized to represent the firm for any correspondence and negotiations.

3. Project Understanding and Approach

Summarize the Consultant's understanding of the services to be performed and specific challenges that are related to the delivery of the anticipated Scope of Services. The Approach section should include the following:

- How the Consultant will address the identified project challenges.
- Project management plan highlighting communication plan, schedule management, and how the consultant will integrate the District into the process.
- Schedule for the Advance Assistance Phase of the project showing dates for major deliverables and a completion date of the Advance Assistance Phase as shown in Table 2 in Section G. If the Advance

Assistance Phase completion date is not feasible to achieve, Consultant shall explain the reasoning in their SOQ.

4. Experience and Qualifications of Firm

Provide a project organization chart showing each team member who would be assigned to the project. Identify prime and subconsultants. Identify key team members who Consultant feels would be critical to the success of the project and describe how each will contribute to the project. Provide examples of project assignments in which they have played a similar role. Short resumes of key team members shall be included.

Describe qualifications of Consultant's firm and specific experience within the last ten years providing similar services to those anticipated for this project. Include information related to Consultant's firm with state and federal grant funded projects, with a particular emphasis on knowledge of FEMA's Hazard Mitigation Grant Program as it relates to this project.

Demonstrate Consultant's knowledge of Federal, State, and local laws, rules, regulations, or ordinances relevant to this project.

Provide descriptions (size, type, year, amount, and location) of three similar projects completed by the proposed staff within the last ten years. Provide contact information (name, title, phone number, and e-mail address) for each reference project provided. Cross reference key team members to the listed projects.

5. Provide information regarding present workload and staff availability.
6. List any potential conflicts of interest and a strategy for negating them.

## H.2 Page Limit

SOQs shall be limited to a total of 15 pages which shall be numbered in consecutive order. The page limit excludes the SOQ cover page, table of contents, cover letter, section dividers, and resumes. SOQs shall be submitted on 8½ by 11 pages only with each double-sided sheet counted as two pages.

## H.3 SOQ Submittal Requirements

Applicants who are interested in providing the services for this project are required to submit a Statement of Qualifications no later than the time and date noted in Table 1 in Section F. All SOQs and materials submitted in response to this RFQ will become the property of the District and will not be returned. The District is not responsible for any costs incurred in the preparation of a response to this RFQ. Please submit the SOQ to:

John Friedenbach, General Manager  
Humboldt Bay Municipal Water District  
828 7th Street  
Eureka, CA 95501-1114

SOQs received after the deadline, regardless of postmark, will be rejected.

Applicants shall submit five bound copies of their SOQ, one unbound copy, and one electronic pdf copy on a CD or flash drive. All submission materials shall be included in a sealed envelope labeled with the following:

- Submitting firm's name and address
- "Statement of Qualifications for HBMWD R.W. Matthews Dam Seismic Stability Project"

## H.4 Questions and Addenda

Questions regarding this RFQ must be submitted in writing, by e-mail only, to John Friedenbach, General Manager, at [friedenbach@hbmwd.com](mailto:friedenbach@hbmwd.com) by the deadline shown in Table 1 in Section F. Questions will be responded to in writing. Written summaries of all questions and answers will be distributed to each consultant. Addenda will be issued, if necessary, and posted to the District's website ([www.hbmwd.com](http://www.hbmwd.com)).

Site visits are available upon request. Requests shall be in writing via email and directed to John Friedenbach, General Manager, at [friedenbach@hbmwd.com](mailto:friedenbach@hbmwd.com) and Dale Davidsen, Superintendent, at [supt@hbmwd.com](mailto:supt@hbmwd.com).

## **I. Selection Criteria**

The District's Selection Committee will evaluate all submitted SOQs in accordance with the criteria stated below. The District reserves the right to request interviews of the top ranked firms. Should interviews be required, those consultants participating in the interview process will have their SOQs rescored after the interview process, and final rankings will be based on those scores.

The Selection Committee will decide which applicant will be invited to submit a scope and fee proposal. Evaluation and selection criteria will include the following:

1. Consultant's understanding of the project and conceptual approach – 20 points
2. Consultant firm or team's qualifications and experience on similar projects, including seismic stability analysis, dam and spillway seismic retrofit design, and expertise regarding dam structures – 20 points
3. Qualifications and experience of the project manager and key personnel – 20 points
4. Consultant's experience with grant-funded projects, particularly those funded through the FEMA Hazard Mitigation Grant Program – 10 points
5. Consultant Team's present workload, staff availability, and ability to meet established project schedule or justification as to why project schedule is infeasible – 10 points
6. References for prime and key subconsultants – 15 points
7. Consultant Team's ability to negate any identified conflicts of interest – 5 points

## **J. Attachments**

Use the provided web link to obtain the documents listed below: <https://www.hbmwd.com/request-for-qualifications-rfq-r-w-matthews-dam-seismic-stability>

- Attachment 1: RFQ Distribution List
- Attachment 2: Example Professional Services Agreement and applicable required contract provisions under 2 CFR § 200
- Attachment 3: Relevant Documents from HMGP Advance Assistance Grant Application
  - Tab 1: Subapplication
  - Tab 4: Supporting Documents (includes previous related studies)[**Responding firms must sign Confidentiality agreement prior to receiving these documents**]
  - Tab 5: Grant Scope of Work
  - Tab 6: Maps
  - Tab 7: Photos
  - Tab 9: Cost Estimate
- Attachment 4: Northern Spotted Owl Requirements

**FINANCIAL**

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
STATEMENT OF FUND BALANCES - PAGE 1 OF 2



| <u>BANK ACCOUNT BALANCES AT MONTH-END</u>                     | December 31, 2024           | December 31, 2023           |
|---|-----------------------------|-----------------------------|
| <b>GENERAL ACCOUNTS</b>                                       |                             |                             |
| 1. US Bank - General Account                                  | 1,753,308.73                | 1,370,878.94                |
| 2. US Bank - Xpress BillPay/Electronic Payments Account       | 6,461.94                    | 5,775.62                    |
| <i>Subtotal</i>   | <u>1,759,770.67</u>         | <u>1,376,654.56</u>         |
| <b>INVESTMENT &amp; INTEREST BEARING ACCOUNTS</b>             |                             |                             |
| 3. US Bank - DWR/SRF Money Markey Acctnt                      | -                           | 29,796.70                   |
| 4. US Bank - DWR/SRF Reserve CD Account                       | -                           | 547,336.94                  |
| 5. US Bank - PARS Investment Account                          | 976,078.39                  | 861,842.77                  |
| <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)           | 1,831,496.09                | 1,760,799.90                |
| 8. CalTRUST - General Reserve Account (Short-Term)            | 4,336,419.57                | 4,605,814.04                |
| <i>Total CalTRUST Accounts</i>                                | <u>6,167,915.66</u>         | <u>6,366,613.94</u>         |
| 9. California CLASS - DWFP Reserve Account                    | 268,908.09                  | 255,162.21                  |
| 10. California CLASS - ReMat Reserve Account                  | 1,639,095.66                | 1,413,517.51                |
| 11. California CLASS - General Reserve Account                | 2,674,668.95                | -                           |
| <i>Total California CLASS Accounts</i>                        | <u>4,582,672.70</u>         | <u>1,668,679.72</u>         |
| 12. Humboldt County - SRF Loan Payment Account                | 693,913.72                  | 555,555.14                  |
| 13. Humboldt County - 1% Tax Account                          | 376,568.34                  | 1,325,884.29                |
| 14. Inactive Humboldt County Investment Accounts              | 145.72                      | (410,360.87)                |
| 15. Principle Investment Account                              | -                           | 42,009.78                   |
| <i>Subtotal</i>   | <u>13,277,938.85</u>        | <u>13,116,161.42</u>        |
| <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>   | <u>27,700.00</u>            | <u>27,650.00</u>            |
| <b>TOTAL CASH</b>   | <u><u>15,065,409.52</u></u> | <u><u>14,520,465.98</u></u> |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
STATEMENT OF FUND BALANCES - PAGE 2 OF 2

| <u>FUND BALANCES AT MONTH-END</u>                     | December 31, 2024      | December 31, 2023      |
|---|------------------------|------------------------|
| <b>RESTRICTED FUNDS - ENCUMBERED</b>                  |                        |                        |
| 1. Prior-Year Price Factor 2 Rebate                   | (10,869.98)            | (11,848.50)            |
| 2. Prior-Year Restricted AP Encumbrances              | (652,673.00)           | (705,696.00)           |
| 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  | (602,959.29)           | (676,906.17)           |
| 7. Advanced Charges - Redundant Pipeline              | (445,282.68)           | (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              | (154,999.98)           | (45,000.00)            |
| 16. Advanced Charges - Capital Financing/Debt Service | (946,799.54)           | (324,402.04)           |
| <i>Subtotal</i>                                       | (5,554,882.44)         | (5,529,121.82)         |
| <b>RESTRICTED FUNDS - OTHER</b>                       |                        |                        |
| 17. 1% Tax Credit to Muni's                           | (376,568.34)           | (182,445.72)           |
| 18. DWR Reserve for SRF Payment                       | -                      | (29,796.70)            |
| 19. DWR Reserve for SRF Loan                          | -                      | (547,336.94)           |
| 20. Pension Trust Reserves                            | (976,078.39)           | (861,842.77)           |
| 21. ReMat Deposit                                     | (27,000.00)            | (27,000.00)            |
| 22. HB Retail Capital Replacement Reserves            | (246,868.94)           | (198,826.96)           |
| <i>Subtotal</i>                                       | (1,626,515.67)         | (1,847,249.09)         |
| <b>UNRESTRICTED FUNDS</b>                             |                        |                        |
| <b>BOARD RESTRICTED</b>                               |                        |                        |
| 23. MSRA Reserves                                     | (480,644.32)           | (460,123.29)           |
| 24. DWFP Reserves                                     | (268,908.09)           | (255,162.21)           |
| 25. ReMat Reserves                                    | (1,639,095.66)         | (1,413,517.51)         |
| 27. Principle Investment Reserves                     | -                      | (42,009.78)            |
| 28. Northern Mainline Extension Study Prepayment      | 56.40                  | 56.40                  |
| 29. Blue Lake Rancheria Extension Study Prepayment    | (4,235.37)             | 5,764.63               |
| <i>Subtotal</i>                                       | (2,388,591.67)         | (2,170,756.39)         |
| <b>UNRESTRICTED RESERVES</b>                          |                        |                        |
| 29. Accumulation for SRF Payment                      | -                      | (144,027.61)           |
| 30. General Fund Reserves                             | (5,495,419.74)         | (4,834,943.51)         |
| <i>Subtotal</i>                                       | (5,495,419.74)         | (4,973,338.68)         |
| <b>TOTAL NET POSITION</b>                             | <b>(15,065,409.52)</b> | <b>(14,520,465.98)</b> |



HUMBOLDT BAY MUNICIPAL WATER DISTRICT

REVENUE REPORT

December 31, 2024

50%  
Of Budget Year



**A. REVENUE RETURNED TO CUSTOMERS VIA PF2**

|   | MTD<br>RECEIPTS | YTD<br>RECEIPTS | PRIOR<br>YEAR  | BUDGET           | % OF<br>BUDGET |
|---|-----------------|-----------------|----------------|------------------|----------------|
| <b>1. Humboldt Bay Retail Water Revenue</b> | 31,124          | 196,938         | 186,531        | 350,000          | 56%            |
| <b>General Revenue</b>                      |                 |                 |                |                  |                |
| Power Sales (Net ReMat)                     | 4,856           | 29,866          | 0              | 125,000          | 24%            |
| Tax Receipts (1% Taxes)                     | 440,914         | 440,914         | 529,900        | 1,000,000        | 44%            |
| Interest - Muni PF2 Retained                | 0               | 10,933          | 7,684          |                  |                |
| <b>2. Miscellaneous Revenue*</b>            | 307             | 3,030           | 124,167        | 50,000           | 6%             |
| <i>*Detail on following page</i>            |                 |                 |                |                  |                |
| <b>TOTAL PF2 REVENUE CREDITS</b>            | <b>477,202</b>  | <b>681,681</b>  | <b>848,282</b> | <b>1,525,000</b> | <b>45%</b>     |

**B. DISTRICT REVENUE**

|   | MTD<br>RECEIPTS  | YTD<br>RECEIPTS  | PRIOR<br>YEAR    | BUDGET           | % OF<br>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                                  | 271,125          | 806,057          | 766,566          | 1,538,900        | 52%            |
| City of Blue Lake                               | 17,305           | 105,370          | 102,155          | 202,362          | 52%            |
| City of Eureka                                  | 0                | 1,522,833        | 1,790,911        | 3,617,684        | 42%            |
| Fieldbrook CSD                                  | 17,280           | 102,687          | 99,413           | 194,298          | 53%            |
| Humboldt CSD                                    | 95,432           | 571,575          | 559,693          | 1,105,724        | 52%            |
| Manila CSD                                      | 0                | 46,399           | 45,143           | 90,372           | 51%            |
| McKinleyville CSD                               | 109,448          | 652,220          | 633,464          | 1,266,298        | 52%            |
| <i>Subtotal Municipal Water Revenue</i>         | 510,590          | 3,807,141        | 3,997,344        | 8,015,638        | 47%            |
| <b>TOTAL INDUSTRIAL &amp; WHOLESALE REVENUE</b> | <b>510,590</b>   | <b>3,807,141</b> | <b>3,997,344</b> | <b>8,015,638</b> | <b>47%</b>     |
| <b>5. Power Sales</b>                           |                  |                  |                  |                  |                |
| Power Sales (ReMat Revenue)                     | 12,079           | 62,887           | 0                | 300,000          | 21%            |
| Interest (ReMat Revenue)                        | 0                | 0                | 0                | 0                |                |
| <b>TOTAL REMAT REVENUE</b>                      | <b>12,079</b>    | <b>62,887</b>    | <b>0</b>         | <b>300,000</b>   | <b>21%</b>     |
| <b>6. Other Revenue and Grant Reimbursement</b> |                  |                  |                  |                  |                |
| HB Retail Capital Replacement Rev.              | 3,948            | 23,536           | 23,980           |                  |                |
| FCSD Contract                                   | 22,089           | 190,884          | 145,154          |                  |                |
| FEMA/CalOES Grant Revenue                       | 69,333           | 143,411          | 152,968          |                  |                |
| SWRCB In-Stream Flow Grant Revenue              | 0                | 0                | 14,653           |                  |                |
| Ouagga Grant Revenue                            | 65,307           | 65,307           | 0                |                  |                |
| Misc. Grant Revenue                             | 0                | 1,120            | 332,644          |                  |                |
| CalFire Healthy Forest Funding                  | 103,125          | 103,125          | 0                |                  |                |
| Interest Earned                                 | 0                | 0                | 0                |                  |                |
| Net Increase/(Decrease) Investment Accounts     | 61,087           | 339,082          | 244,982          |                  |                |
| <b>TOTAL OTHER/GRANT REVENUE</b>                | <b>324,889</b>   | <b>866,465</b>   | <b>914,382</b>   |                  |                |
| <b>GRAND TOTAL REVENUE</b>                      | <b>1,324,759</b> | <b>5,418,174</b> | <b>5,760,008</b> | <b>9,840,638</b> | <b>55%</b>     |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 MISCELLANEOUS REVENUE - DETAIL REPORT  
 December 31, 2024



**B. MISCELLANEOUS RECEIPTS (RETURNED TO CUSTOMERS VIA PF2)**

|   | MTD<br>RECEIPTS | YTD<br>RECEIPTS |
|---|-----------------|-----------------|
| <u>Miscellaneous Revenue</u>                  |                 |                 |
| Dividend - Principal Life                     | -               | -               |
| Fees - Park Use                               | -               | 100             |
| Rebate - CALCard                              | -               | 367             |
| Refund - Diesel Fuel Tax                      | -               | 38              |
| Refunds - Miscellaneous                       | -               | 227             |
| Sale - Scrap Material                         | 170             | 347             |
| Reimb - Blue Lake SCADA/Internet Monthly Fees | -               | -               |
| Reimb. - Copies & Postage                     | 27              | 124             |
| Reimb. - Gas                                  | -               | -               |
| Reimb. - Misc. Employee                       | -               | -               |
| Reimb. - Telephone                            | -               | -               |
| UB - Water Processing Fees                    | 30              | 90              |
| UB - Hydrant Rental Deposit/Use               | -               | -               |
| Sale of Scrap Metal/Equipment/Gravel          | -               | 576             |
| <u>Ruth Area</u>                              |                 |                 |
| Lease - Don Bridge                            | -               | -               |
| Rent - Ruth Cabin                             | 80              | 1,160           |
| Ruth Annual Lessee Water Fees                 | -               | -               |
| <b>TOTAL MISCELLANEOUS REVENUE</b>            | <b>307</b>      | <b>3,030</b>    |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
MONTHLY EXPENDITURE REPORT - PAGE 1 OF 3  
December 31, 2024



**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                        | 209,875.88        | 1,136,995.99        | 1,128,967.07        | 2,662,800        | 49%         |
| <i>1a. 10/24 Salary Adjustment</i>        | <i>(5,112.83)</i> | <i>(12,318.73)</i>  |                     |                  |             |
| 2. Wages - Sick                           | 10,413.40         | 51,701.31           | 46,968.00           |                  |             |
| 3. Wages - Vacation                       | 9,728.87          | 114,373.99          | 128,480.59          |                  |             |
| <i>Subtotal</i>                           | <i>224,905.32</i> | <i>1,290,752.56</i> | <i>1,304,415.66</i> | <i>2,662,800</i> | <i>48%</i>  |
| 4. Wages - Overtime                       | 57.61             | 5,975.94            | 6,942.80            | 17,647           |             |
| 5. Wages - Holiday (Worked)               | 2,048.88          | 6,190.56            | 5,975.75            | 17,647           |             |
| <i>Subtotal</i>                           | <i>2,106.49</i>   | <i>12,166.50</i>    | <i>12,918.55</i>    | <i>35,294</i>    | <i>34%</i>  |
| 6. Wages - Part-Time                      | 3,090.71          | 40,596.06           | 32,300.49           | 124,775          | 33%         |
| 7. Wages - Shift Differential             | 1,022.08          | 6,109.77            | 5,634.84            | 11,765           | 52%         |
| 8. Wages - Standby                        | 9,605.50          | 53,754.03           | 50,770.70           | 96,595           | 56%         |
| 9. Director Compensation                  | 4,940.00          | 17,600.00           | 12,880.00           | 40,300           | 44%         |
| 10. Secretarial Fees                      | 159.00            | 1,552.25            | 1,706.26            | 3,150            | 49%         |
| 11. Payroll Tax Expenses                  | 17,115.71         | 104,562.13          | 105,431.93          | 230,460          | 45%         |
| <i>11a. 10/24 Salary Adj. Payroll Tax</i> | <i>(380.91)</i>   | <i>(917.75)</i>     |                     |                  |             |
| <i>Subtotal</i>                           | <i>35,552.09</i>  | <i>223,256.49</i>   | <i>208,724.22</i>   | <i>507,045</i>   | <i>44%</i>  |
| <b>Employee Benefits</b>                  |                   |                     |                     |                  |             |
| 12. Health, Life, & LTD Ins.              | 49,580.10         | 272,759.22          | 270,095.04          | 645,993          | 42%         |
| 13. Air Medical Insurance                 | 395.00            | 474.00              | 2,370.00            | 2,370            | 20%         |
| 14. Retiree Medical Insurance             | 13,679.24         | 70,409.05           | 55,073.24           | 106,496          | 53%         |
| <i>14a. Retiree Medical Reimb.</i>        | <i>(2,194.83)</i> | <i>(14,150.28)</i>  | <i>(7,581.04)</i>   |                  |             |
| 15. Employee Dental Insurance             | 2,573.47          | 14,997.91           | 16,505.89           | 36,597           | 41%         |
| 16. Employee Vision Insurance             | 587.08            | 3,426.34            | 3,527.41            | 7,091            | 48%         |
| 17. Employee EAP                          | 78.45             | 457.84              | 471.27              | 1,245            | 37%         |
| 18. Fitness Stipend                       | 112.50            | 515.49              | -                   | 10,230           | 5%          |
| 19. 457b District Contribution            | 3,869.07          | 22,975.00           | 22,662.50           | 44,700           | 51%         |
| 20. CalPERS Expenses                      | 32,486.22         | 521,338.61          | 386,399.12          | 638,003          | 82%         |
| <i>20a. 10/24 Salary Adj. CalPERS</i>     | <i>(1,861.01)</i> | <i>(4,652.53)</i>   |                     |                  |             |
| 21. Workers Comp Insurance                | -                 | 43,681.91           | 58,201.69           | 121,521          | 36%         |
| <i>Subtotal</i>                           | <i>99,305.29</i>  | <i>932,232.56</i>   | <i>807,725.12</i>   | <i>1,614,246</i> | <i>58%</i>  |
| <b>TOTAL S.E.B</b>                        | <b>361,869.19</b> | <b>2,458,408.11</b> | <b>2,333,783.55</b> | <b>4,819,385</b> | <b>51%</b>  |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
MONTHLY EXPENDITURE REPORT - PAGE 2 OF 3  
December 31, 2024



**SERVICE & SUPPLY EXPENDITURES (S & S)**

|                                     | Month-to-Date    | Year-to-Date      | Prior Year        | Budget         | % of Budget |
|-------------------------------------|------------------|-------------------|-------------------|----------------|-------------|
| <b>Operations &amp; Maintenance</b> |                  |                   |                   |                |             |
| 1. Auto Maintenance                 | 3,654.81         | 29,616.85         | 24,028.01         | 44,500         | 67%         |
| 2. Engineering                      | -                | 14,835.54         | 18,076.75         | 75,000         | 20%         |
| 3. Lab Expenses                     | 770.00           | 7,171.00          | 12,815.00         | 14,000         | 51%         |
| 4. Maintenance & Repairs            |                  |                   |                   |                |             |
| General                             | 1,873.58         | 26,074.47         | 14,366.19         | 41,600         | 63%         |
| TRF                                 | 3,149.77         | 4,900.45          | 2,429.88          | 17,000         | 29%         |
| <i>Subtotal</i>                     | <i>5,023.35</i>  | <i>30,974.92</i>  | <i>16,796.07</i>  | <i>58,600</i>  | <i>53%</i>  |
| 5. Materials & Supplies             |                  |                   |                   |                |             |
| General                             | 1,909.50         | 25,622.53         | 28,068.47         | 42,000         | 61%         |
| TRF                                 | 20,354.56        | 42,912.97         | 23,180.24         | 38,000         | 113%        |
| <i>Subtotal</i>                     | <i>22,264.06</i> | <i>68,535.50</i>  | <i>51,248.71</i>  | <i>80,000</i>  | <i>86%</i>  |
| 6. Radio Maintenance                | 578.09           | 6,961.15          | 6,018.54          | 8,500          | 82%         |
| 7. Ruth Lake License                | -                | 1,500.00          | 1,500.00          | 1,500          | 100%        |
| 8. Safety Equip./Training           |                  |                   |                   |                |             |
| General                             | 2,935.73         | 9,193.42          | 7,765.48          | 18,700         | 49%         |
| TRF                                 | -                | 177.50            | 153.00            | 2,000          | 9%          |
| <i>Subtotal</i>                     | <i>2,935.73</i>  | <i>9,370.92</i>   | <i>7,918.48</i>   | <i>20,700</i>  | <i>45%</i>  |
| 9. Tools & Equipment                | 30.36            | 1,262.77          | 1,323.80          | 5,000          | 25%         |
| 10. USGS Meter Station              | -                | 9,110.00          | 8,600.00          | 9,000          | 101%        |
| <i>Operations Subtotal</i>          | <i>35,256.40</i> | <i>179,338.65</i> | <i>148,325.36</i> | <i>316,800</i> | <i>57%</i>  |

**General & Administration**

|                               |          |            |            |         |      |
|-------------------------------|----------|------------|------------|---------|------|
| 11. Accounting Services       | 605.00   | 21,157.50  | 19,805.00  | 35,000  | 60%  |
| 12. Bad Debt Expense          | -        | -          | -          | -       | 0    |
| 13. Dues & Subscriptions      | 31.20    | 33,113.92  | 32,128.56  | 35,900  | 92%  |
| 14. IT & Software Maintenance | 8,235.52 | 64,291.12  | 32,386.46  | 91,200  | 70%  |
| 15. Insurance                 | -        | 176,755.98 | 130,217.44 | 139,000 | 127% |
| 16. Internet                  | 906.11   | 5,341.70   | 4,135.07   | 11,150  | 48%  |
| 17. Legal Services            | 732.00   | 5,063.00   | 7,880.60   | 35,000  | 14%  |
| 18. Miscellaneous             | 352.54   | 3,130.04   | 4,583.82   | 10,000  | 31%  |
| 19. Office Building Maint.    | 1,369.81 | 9,740.93   | 10,071.23  | 19,000  | 51%  |
| 20. Office Expense            | 4,459.29 | 22,138.24  | 23,987.59  | 39,600  | 56%  |
| 21. Professional Services     | 136.00   | 7,312.50   | 1,433.75   | 20,000  | 37%  |
| 22. Property Tax              | -        | 2,764.00   | 2,764.00   | 3,000   | 92%  |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 MONTHLY EXPENDITURE REPORT - PAGE 3 OF 3  
 December 31, 2024



50%  
Of Budget Year

| <b>SERVICE &amp; SUPPLY EXPENDITURES (con't)</b> |                   |                   |                   |                     |             |
|--|-------------------|-------------------|-------------------|---------------------|-------------|
|  | Month-to-Date     | Year-to-Date      | Prior Year        | Budget              | % of Budget |
| 23. Regulatory Agency Fees                       | 49,412.27         | 134,703.38        | 129,912.57        | 202,900             | 66%         |
| 24. Ruth Lake Programs                           | -                 | -                 | -                 | 5,000               | 0%          |
| 25. Safety Apparel                               | 4,323.07          | 7,695.25          | 2,807.44          | 10,050              | 77%         |
| 26. Technical Training                           | -                 | -                 | 314.23            | 14,000              | 0%          |
| 27. Telephone                                    | 1,330.67          | 6,336.42          | 6,339.58          | 19,000              | 33%         |
| 28. Travel & Conference                          | 1,417.79          | 10,352.29         | 10,340.17         | 22,000              | 47%         |
| <i>Gen. &amp; Admin. Subtotal</i>                | <i>73,311.27</i>  | <i>509,896.27</i> | <i>419,107.51</i> | <i>711,800</i>      | <i>72%</i>  |
| <b>TOTAL SERVICE &amp; SUPPLY</b>                | <b>108,567.67</b> | <b>689,234.92</b> | <b>567,432.87</b> | <b>1,028,600.42</b> | <b>67%</b>  |

| <b>Power</b>                                  |                   |                     |                     |                  |            |
|---|-------------------|---------------------|---------------------|------------------|------------|
| 29. Essex - PG & E                            | 66,075.43         | 489,040.60          | 544,311.35          |                  |            |
| 30. 2Mw Generator Fuel                        | -                 | -                   | -                   |                  |            |
| <i>Subtotal Essex Pumping</i>                 | <i>66,075.43</i>  | <i>489,040.60</i>   | <i>544,311.35</i>   | <i>1,017,911</i> |            |
| 31. All other PG & E                          | 18,381.22         | 61,828.72           | 59,263.63           | 113,389          |            |
| <i>Subtotal All Power</i>                     | <i>84,456.65</i>  | <i>550,869.32</i>   | <i>603,574.98</i>   | <i>1,131,300</i> | <i>49%</i> |
| <b>Total Service and Supplies incl. Power</b> | <b>193,024.32</b> | <b>1,240,104.24</b> | <b>1,171,007.85</b> | <b>2,159,900</b> | <b>57%</b> |

|                             |                   |                     |                     |                     |            |
|-----------------------------|-------------------|---------------------|---------------------|---------------------|------------|
| <b>GRAND TOTAL EXPENSES</b> | <b>554,893.51</b> | <b>3,698,512.35</b> | <b>3,504,791.40</b> | <b>6,979,285.86</b> | <b>53%</b> |
|-----------------------------|-------------------|---------------------|---------------------|---------------------|------------|

**OTHER EXPENSES**

|                              |        |          |   |  |  |
|------------------------------|--------|----------|---|--|--|
| 33. ReMat Consultant Exp.    | 867.24 | 7,983.80 | - |  |  |
| 34. Capital Replacement Exp. | -      | -        | - |  |  |

**TOTAL EXPENSES WITH OTHER EXPENSES**

|  |                   |                     |                     |  |  |
|--|-------------------|---------------------|---------------------|--|--|
|  | <b>555,760.75</b> | <b>3,706,496.15</b> | <b>3,504,791.40</b> |  |  |
|--|-------------------|---------------------|---------------------|--|--|

# HUMBOLDT BAY MUNICIPAL WATER DISTRICT PROJECT PROGRESS REPORT

December 31, 2024

50% Of Budget Year



## A. CAPITAL PROJECTS

|   | MTD           | YTD           |                   | % OF      |
|---|---------------|---------------|-------------------|-----------|
| GRANT FUNDED PROJECTS   | EXPENSES      | TOTAL         | BUDGET            | BUDGET    |
| 1 Grant - TRF Generator<br><i>(Treatment Facility Project, \$1.9M - FEMA, Approved)</i>                               | 11,223        | 56,166        | 1,996,016         | 3%        |
| 2 Grant - Collector Mainline Redundancy Pipeline<br><i>(Treatment/Base Facility Project, \$3.2M - FEMA, Approved)</i> | 0             | 0             | 3,200,000         | 0%        |
| 3 Grant - 2x Tank Seismic Retro   | 2,860         | 45,082        | 5,619,079         | 1%        |
| 3A Grant - 1x Tank (Industrial) Seismic Retrofit<br><i>(\$5.7M - FEMA, Approved)</i>                                  | (2,472)       | (17,814)      |                   |           |
| 4 Adv. Assistance Spillway Seismic Grant<br><i>(\$1.5M - FEMA, Pending Approval)</i>                                  | 0             | 2,928         | 1,500,000         | 0%        |
| <b>TOTAL GRANT FUNDED CAPITAL PROJECTS</b>  | <b>11,610</b> | <b>86,362</b> | <b>12,315,095</b> | <b>1%</b> |

## NON-GRANT FUNDED CAPITAL PROJECTS

|  |            |                |                |            |
|--|------------|----------------|----------------|------------|
| 5 Replace Pump 2-2 (Pre-Approved 04/2024)      | 0          | 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                 | 645        | 23,527         | 37,250         | 63%        |
| 11 Storage Barn at Headquarters                | 0          | 0              | 220,000        | 0%         |
| <b>TOTAL NON-GRANT FUNDED CAPITAL PROJECTS</b> | <b>645</b> | <b>293,529</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        | 368    | 5,250  | 7%     |
| 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<br><i>(Treatment Facility Project)</i>       | 0        | 11,301 | 11,500 | 98%    |
| 19 Replace Turbidimeters<br><i>(Treatment Facility Project)</i>                        | 0        | 39,847 | 41,500 | 96%    |
| 20 Chlorine Analyzer Replacement - Phase 1 of 2<br><i>(Treatment Facility Project)</i> | 0        | 0      | 7,500  | 0%     |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 PROJECT PROGRESS REPORT - PAGE 2 OF 5  
 December 31, 2024

50% Of Budget Year

**B. EQUIPMENT AND FIXED ASSET PROJECTS (con't)**

|  | MTD<br>EXPENSES | YTD<br>TOTAL  | BUDGET         | % OF<br>BUDGET |
|--|-----------------|---------------|----------------|----------------|
| 21 Purchase VFD for N-Poly Pump<br><i>(Treatment Facility Project)</i>                   | 3,508           | 7,975         | 6,500          | 123%           |
| 22 TRF Filter Gallery Heaters and Air Circulation<br><i>(Treatment Facility Project)</i> | 0               | 0             | 9,000          | 0%             |
| 23 Air Actuated Chemical Pump<br><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   | 320             | 1,484         | 0              | 0              |
| 28 Tesla Battery Project - ESSEX   | 0               | 0             | 0              | 0              |
| 28A FY25 SB198   | 5,397           | 5,397         | 0              | 0              |
| <b>TOTAL EQUIPMENT &amp; FIXED ASSET PROJECTS</b>  | <b>9,225</b>    | <b>68,635</b> | <b>152,750</b> | <b>45%</b>     |

**C. MAINTENANCE PROJECTS**

|   | MTD<br>EXPENSES | YTD<br>TOTAL | BUDGET | % OF<br>BUDGET |
|---|-----------------|--------------|--------|----------------|
| 29 FY25 Pipeline Maintenance  | 25              | 901          | 14,000 | 6%             |
| 30 FY25 Main Line Meter Flow Calibration  | 0               | 0            | 16,000 | 0%             |
| 31 FY25 Technical Support and Software Updates  | 0               | 5,535        | 24,000 | 23%            |
| 32 FY25 Generator Services  | 0               | 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               | 59,988       | 64,750 | 93%            |
| 44 FY25 Pipeline R-O-W Maintenance  | 0               | 0            | 20,000 | 0%             |
| 45 FY25 TRF Generator Service<br><i>(Treatment Facility Project)</i>                  | 0               | 0            | 500    | 0%             |
| 46 FY25 TRF Limitorque Valve Retrofit Supplies<br><i>(Treatment Facility Project)</i> | 0               | 0            | 15,000 | 0%             |
| 47 TRF Valve Network Upgrade (Phase 2)<br><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%             |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
PROJECT PROGRESS REPORT - PAGE 3 OF 5  
December 31, 2024

50% Of Budget Year

**C. MAINTENANCE PROJECTS (con't)**

|   | MTD<br>EXPENSES | YTD<br>TOTAL  | BUDGET         | % OF<br>BUDGET |
|---|-----------------|---------------|----------------|----------------|
| 50 FY25 LTO Insurance                   | 0               | 0             | 6,000          | 0%             |
| 51 FY25 Spillway Repairs                | 0               | 4,282         | 10,000         | 43%            |
| 52 FY25 Howell Bungler Valve Inspection | 0               | 0             | 1,500          | 0%             |
| 53 FY25 Log Boom Inspection             | 0               | 3,681         | 1,500          | 245%           |
| 54 Replace Hydro Plant Hydraulic Pump   | 0               | 2,020         | 2,500          | 81%            |
| 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>25</b>       | <b>88,112</b> | <b>453,350</b> | <b>6</b>       |

**D. PROFESSIONAL & CONSULTING SERVICES**

|  | MTD<br>EXPENSES | YTD<br>TOTAL | BUDGET | % OF<br>BUDGET |
|--|-----------------|--------------|--------|----------------|
| 57 FY25 Crane Testing/Certification                      | 0               | 7,992        | 12,000 | 67%            |
| 58 FY25 Chlorine System Maintenance                      | 7,555           | 7,555        | 20,750 | 36%            |
| 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          | 0               | 10,660       | 12,000 | 89%            |
| 62 FY25 Technical Training                               | 0               | 0            | 24,500 | 0%             |
| 63 FY25 O & M Training                                   | 0               | 924          | 20,000 | 5%             |
| 64 FY25 Backflow Tester Certification                    | 0               | 1,334        | 3,000  | 44%            |
| 65 EAP Tabletop Exercise                                 | 0               | 14,345       | 15,000 | 96%            |
| 66 Fleet Electrification Analysis and Plan               | 8,000           | 20,000       | 20,000 | 100%           |
| 67 Recruitment Consultant for Next General Manager       | 10,935          | 23,753       | 25,000 | 95%            |
| 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 | 0               | 1,500        | 0      | 0%             |



HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
PROJECT PROGRESS REPORT - PAGE 4 OF 5  
December 31, 2024

50% Of Budget Year

**D. PROFESSIONAL & CONSULTING SERVICES (CON'T)**

|   | MTD           | YTD            |                | % OF       |
|---|---------------|----------------|----------------|------------|
|   | EXPENSES      | TOTAL          | BUDGET         | BUDGET     |
| 79 FY25 Dam Spillway Wall Monument Survey               | 0             | 11,500         | 17,500         | 66%        |
| 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                           | 0             | 1,896          | 5,000          | 38%        |
| 84 FY25 FERC Chief Dam Safety Engineer                  | 0             | 3,827          | 12,000         | 32%        |
| <b>TOTAL PROF/CONSULTING SERVICES</b>                   | <b>26,490</b> | <b>102,512</b> | <b>470,050</b> | <b>22%</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% |

**F. CARRY-OVER PROJECTS FROM PRIOR YEAR**

|                                 |          |          |          |           |
|---------------------------------|----------|----------|----------|-----------|
| <b>TOTAL CARRYOVER PROJECTS</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0%</b> |
|---------------------------------|----------|----------|----------|-----------|

**G. ADVANCED CHARGES & DEBIT SERVICE FUNDS COLLECTED**

|   | MTD           | YTD            | BUDGET         | % BUDGET   |
|---|---------------|----------------|----------------|------------|
| 91 On-Site Generation of Chlorine<br><i>(\$1.4M - FY24/25 Treatment Facility Project)</i> | 7,875         | 47,250         | 94,500         | 50%        |
| 92 Prof. Services for New Capital Debt  | 13,517        | 81,100         | 162,200        | 50%        |
| 93 Grant - Collector Mainline Redundancy Pipeline   | 8,333         | 50,000         | 100,000        | 50%        |
| 94 Storage Barn for Ruth Headquarters   | 10,833        | 65,000         | 130,000        | 50%        |
| <b>TOTAL ADVANCED CHARGES COLLECTED</b>   | <b>40,558</b> | <b>243,350</b> | <b>486,700</b> | <b>50%</b> |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
PROJECT PROGRESS REPORT - PAGE 5 OF 5  
December 31, 2024

50% Of Budget Year

**H. PROJECTS NOT CHARGED TO MUNICIPAL CUSTOMERS**

|   | MTD<br>EXPENSES | YTD<br>TOTAL   | BUDGET           | % OF<br>BUDGET |
|---|-----------------|----------------|------------------|----------------|
| 95 On-Site Generation of Chlorine<br><i>(\$1.4M - FY25, Treatment Facility Project)</i> | 3,951           | 33,552         | 767,380          | 4%             |
| 96 Humboldt Bay Radio Read Meters<br><i>(Capital Replacement Funds)</i>                 | 0               | 9,979          | 9,500            | 105%           |
| 97 Ruth Paving and Repairs<br><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   | 550             | 550            | 0                | 0%             |
| 100 CalFire Healthy Forest Grant<br><i>(CalFire Grant)</i>                              | 0               | 135,634        | 5,000,000        | 3%             |
| 101 Domestic Water System Cathodic Protection Updates                                   | 0               | 4,531          | 0                | 0%             |
| 102 Grant - 1x Tank (Industrial) Seismic Retrofit                                       | 2,472           | 17,814         | 0                | 0%             |
| 103 Grant - Quagga  | 15,394          | 49,059         | 0                | 0%             |
| <b>TOTAL NOT CHARGED TO CUSTOMERS</b>   | <b>6,974</b>    | <b>203,080</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    | 645              | 293,529            | 811,250             | 36%        |
| <i>Treatment Facility Portion</i>          | 0                | 0                  | 0                   |            |
| TOTAL EQUIPMENT & FIXED ASSET PROJECTS     | 9,225            | 68,635             | 152,750             | 45%        |
| <i>Treatment Facility Portion</i>          | 3,508            | 59,124             | 78,000              |            |
| TOTAL MAINTENANCE PROJECTS                 | 25               | 88,112             | 453,350             | 19%        |
| <i>Treatment Facility Portion</i>          | 0                | 0                  | 67,000              |            |
| TOTAL PROF/CONSULTING SERVICES             | 26,490           | 102,512            | 470,050             | 22%        |
| <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           | 243,350            | 486,700             | 50%        |
| <i>Treatment Facility Portion</i>          | \$0              | \$0                | \$0                 |            |
| <b>TOTAL CUSTOMER CHARGES</b>              | <b>\$76,944</b>  | <b>\$796,139</b>   | <b>\$2,387,350</b>  | <b>33%</b> |
| NON-CUSTOMER CHARGES (CURRENT FY)          | MTD              | YTD                | BUDGET              | % BUDGET   |
| TOTAL GRANT FUNDED CAPITAL PROJECTS        | 11,610           | 86,362             | 12,315,095          | 1%         |
| TOTAL NON-CUSTOMER CHARGES                 | 6,974            | 203,080            | 5,888,880           | 3%         |
| TOTAL USE OF ENCUMBERED FUNDS              | 30,436           | 356,887            | 1,009,560           | 35%        |
| <b>TOTAL NON-CUSTOMER CHARGES</b>          | <b>\$49,019</b>  | <b>\$646,330</b>   | <b>\$19,213,535</b> | <b>3%</b>  |
| <b>GRAND TOTAL PROJECT BUDGET ACTIVITY</b> | <b>\$125,964</b> | <b>\$1,442,468</b> | <b>\$21,600,885</b> | <b>7%</b>  |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
ENCUMBERED FUNDS RECONCILIATION REPORT  
December 31, 2024



|  | MTD<br>EXPENSES | YTD<br>TOTAL | AMOUNT<br>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                                      | 0               | 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                                | 14,220          | 15,443       | 23,500               | 8,058     |
| 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  | 0               | 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 | 3,700           | 9,911        | 31,047               | 21,136    |
| 16E Salary Survey  | 263             | 2,914        | 3,393                | 479       |
| 17E Samoa Peninsula ROW EIR (GHD)                                  | 12,002          | 93,780       | 160,947              | 67,167    |
| 18E Water Quality Monioting Plan Update                            | 0               | 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                                 | 250             | 22,655       | 218,044              | 195,389   |

|                               |        |         |           |         |
|-------------------------------|--------|---------|-----------|---------|
| <b>ENCUMBERED FUNDS TOTAL</b> | 30,436 | 356,887 | 1,009,560 | 652,673 |
|-------------------------------|--------|---------|-----------|---------|

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                          | 12/04/2024 | Equipment Upgrade at Dam                               | 250.00      |
| 101 NETLINK                          | 12/04/2024 | 2 Gigabyte Overage - Ruth Lake Internet                | 108.00      |
| 101 NETLINK                          | 12/04/2024 | Ruth Data Link/Internet                                | 290.00      |
| Total 101 NETLINK:                   |            |  | 648.00      |
| <b>ACWA/JPIA</b>                     |            |  |             |
| ACWA/JPIA                            | 12/18/2024 | COBRA Vision   | 37.12       |
| ACWA/JPIA                            | 12/18/2024 | COBRA Dental   | 130.40      |
| ACWA/JPIA                            | 12/18/2024 | RETIREE MEDICAL  | 13,511.72   |
| Total ACWA/JPIA:                     |            |  | 13,679.24   |
| <b>Advanced Display &amp; Signs</b>  |            |  |             |
| Advanced Display & Signs             | 12/26/2024 | Signs for Ruth   | 216.86      |
| Total Advanced Display & Signs:      |            |  | 216.86      |
| <b>AirGas NCN</b>                    |            |  |             |
| AirGas NCN                           | 12/26/2024 | Paint material for Samoa Booster Pump Station manifold | 89.27       |
| Total AirGas NCN:                    |            |  | 89.27       |
| <b>AT &amp; T</b>                    |            |  |             |
| AT & T                               | 12/04/2024 | Eureka Office/Alarm                                    | 62.86       |
| AT & T                               | 12/04/2024 | TRF  | 30.65       |
| AT & T                               | 12/04/2024 | Essex office/Modem/Control Alarm System                | 30.65       |
| AT & T                               | 12/04/2024 | Arcata/Essex Landline                                  | 31.57       |
| AT & T                               | 12/04/2024 | Eureka/Essex Landline                                  | 31.57       |
| AT & T                               | 12/26/2024 | Essex office/Modem/Control Alarm System                | 32.59       |
| AT & T                               | 12/26/2024 | TRF  | 32.59       |
| AT & T                               | 12/26/2024 | Eureka Office/Alarm                                    | 66.74       |
| AT & T                               | 12/26/2024 | Arcata/Essex Landline                                  | 31.57       |
| AT & T                               | 12/26/2024 | Eureka/Essex Landline                                  | 31.57       |
| Total AT & T:                        |            |  | 382.36      |
| <b>ATS Communications</b>            |            |  |             |
| ATS Communications                   | 12/04/2024 | Monthly ProIT support for Essex                        | 1,305.00    |
| Total ATS Communications:            |            |  | 1,305.00    |
| <b>City of Eureka</b>                |            |  |             |
| City of Eureka                       | 12/11/2024 | Eureka office water/sewer                              | 142.50      |
| Total City of Eureka:                |            |  | 142.50      |
| <b>Coastal Business Systems Inc.</b> |            |  |             |
| Coastal Business Systems Inc.        | 12/04/2024 | Essex copy/fax machine                                 | 1,360.51    |
| Coastal Business Systems Inc.        | 12/04/2024 | Essex copy/fax machine                                 | 486.50      |
| Total Coastal Business Systems Inc.: |            |  | 1,847.01    |
| <b>Dale H. Davidsen</b>              |            |  |             |
| Dale H. Davidsen                     | 12/26/2024 | Reimbursement for miscellaneous supplies               | 167.29      |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
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| Vendor Name                                 | Date Paid  | Description   | Amount Paid |
|---|------------|---|-------------|
| Total Dale H. Davidsen:                     |            |   | 167.29      |
| <b>Downey Brand Attorneys LLP</b>           |            |   |             |
| Downey Brand Attorneys LLP                  | 12/19/2024 | Legal Fees Sept 2024 - Instream Flow Investigation      | 2,550.00    |
| Downey Brand Attorneys LLP                  | 12/19/2024 | Legal Fees Oct 2024 - BL Rancheria Water                | 250.00      |
| Downey Brand Attorneys LLP                  | 12/19/2024 | Legal Fees Oct 2024 - Instream Flow Investigation       | 1,150.00    |
| Downey Brand Attorneys LLP                  | 12/19/2024 | Legal Fees Oct 2024 - BL Rancheria Water                | 300.00      |
| Total Downey Brand Attorneys LLP:           |            |   | 4,250.00    |
| <b>Electrical Reliability Services, Inc</b> |            |   |             |
| Electrical Reliability Services, Inc        | 12/26/2024 | Ruth Hydro Synchronizer Testing #25-0054                | 14,220.00   |
| Total Electrical Reliability Services, Inc: |            |   | 14,220.00   |
| <b>Englund Marine Supply</b>                |            |   |             |
| Englund Marine Supply                       | 12/26/2024 | Unit 4 fiberglass repairs                               | 35.67       |
| Total Englund Marine Supply:                |            |   | 35.67       |
| <b>Ethan Schillinger</b>                    |            |   |             |
| Ethan Schillinger                           | 12/10/2024 | Per Diem for Travel to Certification Testing in Redding | 264.30      |
| Total Ethan Schillinger:                    |            |   | 264.30      |
| <b>Eureka Chrysler Dodge Jeep</b>           |            |   |             |
| Eureka Chrysler Dodge Jeep                  | 12/11/2024 | Unit 2 brake pedal sensor                               | 263.14      |
| Eureka Chrysler Dodge Jeep                  | 12/11/2024 | Sales tax not charged by vendor                         | 5.38        |
| Eureka Chrysler Dodge Jeep                  | 12/11/2024 | Sales tax to be paid                                    | 5.38-       |
| Eureka Chrysler Dodge Jeep                  | 12/11/2024 | Unit 6 repairs  | 307.50      |
| Total Eureka Chrysler Dodge Jeep:           |            |   | 570.64      |
| <b>Eureka Oxygen</b>                        |            |   |             |
| Eureka Oxygen                               | 12/26/2024 | IW emergency generator propane tank refill              | 40.79       |
| Eureka Oxygen                               | 12/26/2024 | cylinder rental   | 141.40      |
| Total Eureka Oxygen:                        |            |   | 182.19      |
| <b>FEDEX</b>                                |            |   |             |
| FEDEX                                       | 12/26/2024 | Ship Sperian SCBA #1 annual flow testing                | 29.64       |
| Total FEDEX:                                |            |   | 29.64       |
| <b>Franchise Tax Board</b>                  |            |   |             |
| Franchise Tax Board                         | 12/05/2024 |   | 65.00       |
| Franchise Tax Board                         | 12/18/2024 |   | 65.00       |
| Total Franchise Tax Board:                  |            |   | 130.00      |
| <b>Frontier Communications</b>              |            |   |             |
| Frontier Communications                     | 12/04/2024 | Ruth HQ   | 75.57       |
| Frontier Communications                     | 12/04/2024 | Ruth Hydro/Ruth Dataline                                | 295.78      |
| Total Frontier Communications:              |            |   | 371.35      |

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| Vendor Name                               | Date Paid  | Description   | Amount Paid |
|---|------------|---|-------------|
| <b>GHD</b>                                |            |   |             |
| GHD                                       | 12/26/2024 | Essex OSHG Installation and Integration Design #23-0091 | 3,951.17    |
| GHD                                       | 12/26/2024 | Reservoirs Seismic Retrofit Phs 2 #24-0812              | 705.90      |
| GHD                                       | 12/26/2024 | Reservoirs Seismic Retrofit Phs 2 #24-0812              | 2,153.66    |
| GHD                                       | 12/26/2024 | Samoa Peninsula ROW EIR #23-0625                        | 12,002.25   |
| Total GHD:                                |            |   | 18,812.98   |
| <b>Grainger</b>                           |            |   |             |
| Grainger                                  | 12/19/2024 | Safety latch kit  | 35.98       |
| Total Grainger:                           |            |   | 35.98       |
| <b>Harrington Industrial Plastics LLC</b> |            |   |             |
| Harrington Industrial Plastics LLC        | 12/04/2024 | Plast-o-matic pressure relief valve for TRF             | 1,432.40    |
| Harrington Industrial Plastics LLC        | 12/04/2024 | Plast-o-matic pressure relief valve for TRF             | 1,402.02    |
| Total Harrington Industrial Plastics LLC: |            |   | 2,834.42    |
| <b>Health Equity Inc</b>                  |            |   |             |
| Health Equity Inc                         | 12/09/2024 | HSA Admin Fee Dec 2024 - 19 employees                   | 56.05       |
| Health Equity Inc                         | 12/09/2024 | HSA Admin Fee Dec 2024 - 6 employees                    | 17.70       |
| Total Health Equity Inc:                  |            |   | 73.75       |
| <b>Hensel Hardware</b>                    |            |   |             |
| Hensel Hardware                           | 12/26/2024 | Paint supplies  | 46.61       |
| Hensel Hardware                           | 12/26/2024 | Supplies  | 77.20       |
| Hensel Hardware                           | 12/26/2024 | Tools for Ruth hydro                                    | 30.36       |
| Hensel Hardware                           | 12/26/2024 | Paint supplies  | 95.41       |
| Total Hensel Hardware:                    |            |   | 249.58      |
| <b>Henwood Associates, Inc</b>            |            |   |             |
| Henwood Associates, Inc                   | 12/04/2024 | Consultant Services Agreement- Oct 2024                 | 433.62      |
| Total Henwood Associates, Inc:            |            |   | 433.62      |
| <b>Humboldt County Treasurer</b>          |            |   |             |
| Humboldt County Treasurer                 | 12/19/2024 | Capital Financing Project                               | 45,611.43   |
| Total Humboldt County Treasurer:          |            |   | 45,611.43   |
| <b>Humboldt Redwood Company, LLC</b>      |            |   |             |
| Humboldt Redwood Company, LLC             | 12/11/2024 | Mt Pierce Lease site                                    | 320.59      |
| Total Humboldt Redwood Company, LLC:      |            |   | 320.59      |
| <b>Industrial Electric</b>                |            |   |             |
| Industrial Electric                       | 12/04/2024 | Supplies  | 34.29       |
| Total Industrial Electric:                |            |   | 34.29       |
| <b>Johnson's Mobile Rentals LLC</b>       |            |   |             |
| Johnson's Mobile Rentals LLC              | 12/11/2024 | Temporary fence rental for TRF Tesla battery project    | 232.74      |
| Johnson's Mobile Rentals LLC              | 12/26/2024 | Temporary fencing for TRF Tesla Battery Project         | 87.61       |

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| Vendor Name                         | Date Paid  | Description                              | Amount Paid |
|-------------------------------------|------------|--|-------------|
| Total Johnson's Mobile Rentals LLC: |            |  | 320.35      |
| <b>JTN Energy, LLC</b>              |            |  |             |
| JTN Energy, LLC                     | 12/04/2024 | Consultant Services Agreement - Oct 2024 | 433.62      |
| Total JTN Energy, LLC:              |            |  | 433.62      |
| <b>Keenan Supply</b>                |            |  |             |
| Keenan Supply                       | 12/04/2024 | New 905 tank installation plumbing       | 645.23      |
| Keenan Supply                       | 12/04/2024 | Laurel Tree meter installation materials | 139.62      |
| Total Keenan Supply:                |            |  | 784.85      |
| <b>Matrix Consulting Group</b>      |            |  |             |
| Matrix Consulting Group             | 12/11/2024 | Fleet Electrification Master Plan        | 8,000.00    |
| Total Matrix Consulting Group:      |            |  | 8,000.00    |
| <b>McMaster-Carr Supply</b>         |            |  |             |
| McMaster-Carr Supply                | 12/19/2024 | Wire brush                               | 47.62       |
| McMaster-Carr Supply                | 12/11/2024 | TRF chemical system plumbing             | 150.20      |
| Total McMaster-Carr Supply:         |            |  | 197.82      |
| <b>Microbac Laboratories, Inc</b>   |            |  |             |
| Microbac Laboratories, Inc          | 12/12/2024 | Lab Tests - Humboldt Bay Retail          | 110.00      |
| Microbac Laboratories, Inc          | 12/12/2024 | Lab Tests - FBGCSD                       | 110.00      |
| Microbac Laboratories, Inc          | 12/12/2024 | Lab Tests - Humboldt Bay Retail          | 260.00      |
| Microbac Laboratories, Inc          | 12/12/2024 | Lab Tests - Humboldt Bay Retail          | 180.00      |
| Microbac Laboratories, Inc          | 12/12/2024 | Lab Tests - Humboldt Bay Retail          | 110.00      |
| Microbac Laboratories, Inc          | 12/12/2024 | Lab Tests - FBGCSD                       | 110.00      |
| Microbac Laboratories, Inc          | 12/12/2024 | Lab Tests - Humboldt Bay Retail          | 110.00      |
| Microbac Laboratories, Inc          | 12/12/2024 | Lab Tests - FBGCSD                       | 110.00      |
| Total Microbac Laboratories, Inc:   |            |  | 1,100.00    |
| <b>Miller Farms Nursery</b>         |            |  |             |
| Miller Farms Nursery                | 12/26/2024 | Gate wheel for TRF                       | 27.99       |
| Total Miller Farms Nursery:         |            |  | 27.99       |
| <b>MISCOwater</b>                   |            |  |             |
| MISCOwater                          | 12/11/2024 | Chemical pump inventory parts            | 137.16      |
| Total MISCOwater:                   |            |  | 137.16      |
| <b>Mission Linen</b>                |            |  |             |
| Mission Linen                       | 12/11/2024 | maintenance supplies & uniform rentals   | 66.40       |
| Mission Linen                       | 12/11/2024 | maintenance supplies & uniform rentals   | 56.50       |
| Mission Linen                       | 12/11/2024 | maintenance supplies & uniform rentals   | 93.47       |
| Mission Linen                       | 12/11/2024 | maintenance supplies & uniform rentals   | 33.85       |
| Mission Linen                       | 12/11/2024 | maintenance supplies & uniform rentals   | 53.47       |
| Mission Linen                       | 12/11/2024 | maintenance supplies & uniform rentals   | 80.54       |
| Mission Linen                       | 12/11/2024 | maintenance supplies & uniform rentals   | 22.57       |

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| Vendor Name                                  | Date Paid  | Description                               | Amount Paid |
|--|------------|---|-------------|
| Total Mission Linen:                         |            |   | 406.80      |
| <b>Napa Auto Parts</b>                       |            |   |             |
| Napa Auto Parts                              | 12/26/2024 | Unit 4 service                            | 90.03       |
| Napa Auto Parts                              | 12/26/2024 | Shop supplies                             | 15.08       |
| Napa Auto Parts                              | 12/26/2024 | Headlight bulbs for Unit #2               | 92.76       |
| Napa Auto Parts                              | 12/26/2024 | Annual forklift service                   | 271.08      |
| Total Napa Auto Parts:                       |            |   | 468.95      |
| <b>Northern California Safety Consortium</b> |            |   |             |
| Northern California Safety Consortium        | 12/19/2024 | HAZWOPER Refresher training -3 employees  | 300.00      |
| Northern California Safety Consortium        | 12/19/2024 | HAZWOPER Refresher training -3 employees  | 300.00      |
| Northern California Safety Consortium        | 12/19/2024 | HAZWOPER Refresher training -3 employees  | 300.00      |
| Total Northern California Safety Consortium: |            |   | 900.00      |
| <b>NTU Technologies, Inc</b>                 |            |   |             |
| NTU Technologies, Inc                        | 12/19/2024 | TRF Treatment Chemical                    | 2,520.00    |
| NTU Technologies, Inc                        | 12/19/2024 | Use Tax - Added                           | 195.30      |
| NTU Technologies, Inc                        | 12/19/2024 | Use Tax - Payable                         | 195.30-     |
| NTU Technologies, Inc                        | 12/19/2024 | TRF water treatment polymer               | 1,647.00    |
| NTU Technologies, Inc                        | 12/19/2024 | Use Tax - Added                           | 127.64      |
| NTU Technologies, Inc                        | 12/19/2024 | Use Tax - Payable                         | 127.64-     |
| Total NTU Technologies, Inc:                 |            |   | 4,167.00    |
| <b>Optimum</b>                               |            |   |             |
| Optimum                                      | 12/04/2024 | Essex internet                            | 267.23      |
| Optimum                                      | 12/04/2024 | Essex Phones                              | 67.30       |
| Optimum                                      | 12/04/2024 | Eureka Internet                           | 210.95      |
| Optimum                                      | 12/04/2024 | Fieldbrook-Glendale CSD Internet          | 333.33      |
| Optimum                                      | 12/04/2024 | TRF Internet                              | 29.93       |
| Optimum                                      | 12/04/2024 | TRF Internet - Blue Lake SCADA Monitoring | 59.84       |
| Optimum                                      | 12/04/2024 | TRF Internet - Fieldbrook-Glendale CSD    | 59.84       |
| Total Optimum:                               |            |   | 1,028.42    |
| <b>PACE Engineering, Inc.</b>                |            |   |             |
| PACE Engineering, Inc.                       | 12/19/2024 | TRF Generator Project                     | 11,223.00   |
| Total PACE Engineering, Inc.:                |            |   | 11,223.00   |
| <b>Pacific Gas &amp; Electric Co.</b>        |            |   |             |
| Pacific Gas & Electric Co.                   | 12/11/2024 | Eureka Office                             | 155.38      |
| Pacific Gas & Electric Co.                   | 12/11/2024 | Jackson Ranch Rd Rectifier                | 20.75       |
| Pacific Gas & Electric Co.                   | 12/11/2024 | HWY 299 Rectifier                         | 49.77       |
| Pacific Gas & Electric Co.                   | 12/11/2024 | West End Road Rectifier                   | 215.15      |
| Pacific Gas & Electric Co.                   | 12/11/2024 | TRF                                       | 11,084.06   |
| Pacific Gas & Electric Co.                   | 12/11/2024 | Ruth Hydro Valve Control                  | 49.12       |
| Pacific Gas & Electric Co.                   | 12/11/2024 | Ruth Hydro                                | 30.34       |
| Pacific Gas & Electric Co.                   | 12/11/2024 | Samoa Booster Pump Station                | 1,185.95    |
| Pacific Gas & Electric Co.                   | 12/11/2024 | Samoa Dial Station                        | 75.96       |
| Pacific Gas & Electric Co.                   | 12/12/2024 | Essex Pumping Nov 2024                    | 5,448.54    |
| Pacific Gas & Electric Co.                   | 12/12/2024 | Essex Pumping Nov 2024                    | 1,404.00    |
| Pacific Gas & Electric Co.                   | 12/12/2024 | Essex Pumping Nov 2024                    | 64,527.85   |



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| Vendor Name                                   | Date Paid  | Description   | Amount Paid |
|---|------------|---|-------------|
| Pacific Gas & Electric Co.                    | 12/26/2024 | <i>Ruth Bunk House</i>                                    | 31.48       |
| Pacific Gas & Electric Co.                    | 12/26/2024 | <i>Ruth HQ</i>  | 178.30      |
| Total Pacific Gas & Electric Co.:             |            |   | 84,456.65   |
| <b>Pacific Paper Co./Arcata Stationers</b>    |            |   |             |
| Pacific Paper Co./Arcata Stationers           | 12/19/2024 | <i>Essex office supplies</i>                              | 186.56      |
| Pacific Paper Co./Arcata Stationers           | 12/19/2024 | <i>Essex office supplies</i>                              | 308.81      |
| Pacific Paper Co./Arcata Stationers           | 12/19/2024 | <i>Essex office supplies</i>                              | 131.67-     |
| Total Pacific Paper Co./Arcata Stationers:    |            |   | 363.70      |
| <b>Pierson Building Center</b>                |            |   |             |
| Pierson Building Center                       | 12/26/2024 | <i>Level for Unit 8</i>                                   | 26.20       |
| Pierson Building Center                       | 12/26/2024 | <i>Pipeline Maintenance</i>                               | 25.26       |
| Total Pierson Building Center:                |            |   | 51.46       |
| <b>Pitney Bowes Global Financial Services</b> |            |   |             |
| Pitney Bowes Global Financial Services        | 12/04/2024 | <i>postage meter lease - Oct 20, 2024 - Jan 19, 2025</i>  | 208.64      |
| Total Pitney Bowes Global Financial Services: |            |   | 208.64      |
| <b>Platt Electric Supply</b>                  |            |   |             |
| Platt Electric Supply                         | 12/19/2024 | <i>Electrical shop supplies</i>                           | 27.63       |
| Platt Electric Supply                         | 12/19/2024 | <i>Electrical shop supplies</i>                           | 92.70       |
| Total Platt Electric Supply:                  |            |   | 120.33      |
| <b>PPG Architectural Coatings</b>             |            |   |             |
| PPG Architectural Coatings                    | 12/04/2024 | <i>Painting supplies</i>                                  | 84.06       |
| Total PPG Architectural Coatings:             |            |   | 84.06       |
| <b>Price Paige &amp; Company</b>              |            |   |             |
| Price Paige & Company                         | 12/26/2024 | <i>FY23/24 GASB 68 Audit</i>                              | 605.00      |
| Total Price Paige & Company:                  |            |   | 605.00      |
| <b>Purchase Power</b>                         |            |   |             |
| Purchase Power                                | 12/11/2024 | <i>Postage Refill</i>                                     | 502.25      |
| Total Purchase Power:                         |            |   | 502.25      |
| <b>Recology Arcata</b>                        |            |   |             |
| Recology Arcata                               | 12/11/2024 | <i>Essex Garbage/Recycling Service - Nov 2024</i>         | 812.76      |
| Total Recology Arcata:                        |            |   | 812.76      |
| <b>Recology Humboldt County</b>               |            |   |             |
| Recology Humboldt County                      | 12/11/2024 | <i>Eureka office garbage/recycling service - Nov 2024</i> | 110.05      |
| Total Recology Humboldt County:               |            |   | 110.05      |
| <b>Regional Government Services Authority</b> |            |   |             |
| Regional Government Services Authority        | 12/26/2024 | <i>Compensation &amp; Benefit Study #24-0874</i>          | 263.40      |

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| Vendor Name                                   | Date Paid  | Description   | Amount Paid |
|---|------------|---|-------------|
| Total Regional Government Services Authority: |            |   | 263.40      |
| <b>Rexel USA, Inc</b>                         |            |   |             |
| Rexel USA, Inc                                | 12/26/2024 | VFD for N-Poly Pump   | 3,507.57    |
| Total Rexel USA, Inc:                         |            |   | 3,507.57    |
| <b>Ruth Lake C.S.D.</b>                       |            |   |             |
| Ruth Lake C.S.D.                              | 12/11/2024 | Quagga Grant expense reimbursement - Pass Thru Reimburseme  | 15,394.48   |
| Total Ruth Lake C.S.D.:                       |            |   | 15,394.48   |
| <b>SCBA Safety Check, Inc</b>                 |            |   |             |
| SCBA Safety Check, Inc                        | 12/04/2024 | Annual flow test of Sperian SCBA #2                         | 88.97       |
| Total SCBA Safety Check, Inc:                 |            |   | 88.97       |
| <b>Scrapper's Edge</b>                        |            |   |             |
| Scrapper's Edge                               | 12/11/2024 | Copies of Ruth Hydro drawings                               | 7.50        |
| Total Scrapper's Edge:                        |            |   | 7.50        |
| <b>Security Lock &amp; Alarm</b>              |            |   |             |
| Security Lock & Alarm                         | 12/11/2024 | Spare key for Unit 15                                       | 81.94       |
| Total Security Lock & Alarm:                  |            |   | 81.94       |
| <b>Solo Sports</b>                            |            |   |             |
| Solo Sports                                   | 12/04/2024 | Hat order for District employees                            | 1,530.00    |
| Solo Sports                                   | 12/26/2024 | Safety Apparel  | 2,324.07    |
| Solo Sports                                   | 12/26/2024 | Embroidery of logo on hats                                  | 90.00       |
| Total Solo Sports:                            |            |   | 3,944.07    |
| <b>State Water Resources Control Board</b>    |            |   |             |
| State Water Resources Control Board           | 12/11/2024 | Essex Annual Permit Fee - Facility ID 1B03079WNHU           | 563.00      |
| State Water Resources Control Board           | 12/11/2024 | Ruth Lake Annual Permit Fee - Facility ID 1B04156WNHU       | 563.00      |
| State Water Resources Control Board           | 12/11/2024 | NPDES Drinking Water Purveyors Annual Permit Fee - Facility | 3,630.00    |
| Total State Water Resources Control Board:    |            |   | 4,756.00    |
| <b>SWRCB Accounting Office</b>                |            |   |             |
| SWRCB Accounting Office                       | 12/26/2024 | Wholesaler Water System Annual Fees FY 2024/25              | 17,716.15   |
| Total SWRCB Accounting Office:                |            |   | 17,716.15   |
| <b>Telstar Instruments</b>                    |            |   |             |
| Telstar Instruments                           | 12/26/2024 | Chlorine system maintenance                                 | 7,555.00    |
| Total Telstar Instruments:                    |            |   | 7,555.00    |
| <b>Thatcher Company, Inc</b>                  |            |   |             |
| Thatcher Company, Inc                         | 12/26/2024 | TRF chemicals   | 15,367.23   |
| Total Thatcher Company, Inc:                  |            |   | 15,367.23   |

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|--|------------|--|-------------|
| <b>The Mill Yard</b>                       |            |  |             |
| The Mill Yard                              | 12/26/2024 | Silicone for McKinleyville meter pull              | 9.54        |
| Total The Mill Yard:                       |            |  | 9.54        |
| <b>The Mitchell Law Firm, LLP</b>          |            |  |             |
| The Mitchell Law Firm, LLP                 | 12/19/2024 | Legal Services- Nov 2024                           | 732.00      |
| Total The Mitchell Law Firm, LLP:          |            |  | 732.00      |
| <b>Thrifty Supply</b>                      |            |  |             |
| Thrifty Supply                             | 12/26/2024 | Air release valves for FB                          | 1,061.13    |
| Total Thrifty Supply:                      |            |  | 1,061.13    |
| <b>Trinity County General Services</b>     |            |  |             |
| Trinity County General Services            | 12/19/2024 | Pickett Peak site lease                            | 257.50      |
| Total Trinity County General Services:     |            |  | 257.50      |
| <b>Trinity County Solid Waste</b>          |            |  |             |
| Trinity County Solid Waste                 | 12/19/2024 | Ruth HQ dump fees                                  | 13.25       |
| Trinity County Solid Waste                 | 12/19/2024 | Ruth Hydro dump fees                               | 13.25       |
| Total Trinity County Solid Waste:          |            |  | 26.50       |
| <b>Tripepi Smith &amp; Associates, Inc</b> |            |  |             |
| Tripepi Smith & Associates, Inc            | 12/19/2024 | General Manager Recruiting Services #25-0081       | 10,935.01   |
| Total Tripepi Smith & Associates, Inc:     |            |  | 10,935.01   |
| <b>U.S. Bank Corporate Payment System</b>  |            |  |             |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Low suction pressure switch for TRF                | 466.46      |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Dummy Camera's for Collector 2                     | 27.09       |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Storage racks                                      | 436.98      |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Hose hangers                                       | 30.34       |
| U.S. Bank Corporate Payment System         | 12/11/2024 | 2 AWWA Standards books                             | 222.00      |
| U.S. Bank Corporate Payment System         | 12/11/2024 | D3 certification rescheduling fee - E. Schillinger | 25.00       |
| U.S. Bank Corporate Payment System         | 12/11/2024 | ACWA Conference Registration - J. Friedenbach      | 899.00      |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Fraud Charge - To be refunded                      | 114.82      |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Fraud Charge - To be refunded                      | 33.88       |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Eyewash station                                    | 1,142.72    |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Essex Office Supplies                              | 118.34      |
| U.S. Bank Corporate Payment System         | 12/11/2024 | AEDs for 2 vehicles                                | 3,430.45    |
| U.S. Bank Corporate Payment System         | 12/11/2024 | AED for Ruth Bunkhouse                             | 1,966.50    |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Hotel for ACWA Region 1 Event - B. Rupp            | 518.79      |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Burn Permit - Ruth Lake Shoreline Debris Removal   | 80.00       |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Sales Tax - To be paid                             | 22.09-      |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Ramp cover plate for Ruth HQ Dock                  | 220.32      |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Sales Tax - not charged by vendor                  | 14.42       |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Sales Tax - To be paid                             | 14.42-      |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Hinges for Ruth HQ Dock safety repair              | 35.04       |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Crane signal placard                               | 73.00       |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Heat exchanger for Hydro Plant                     | 647.53      |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Drum taps and oil transfer pump for Hydro Plant    | 63.11       |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Floor cleaner for Hydro Plant                      | 111.15      |
| U.S. Bank Corporate Payment System         | 12/11/2024 | Sealant for Hydro Plant                            | 49.44       |

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|---|------------|--|-------------|
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>New brake lock module for Unit #4</i>                   | 300.04      |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Sales tax - not charged by vendor</i>                   | 22.09       |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Eureka Office Supplies</i>                              | 72.89       |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Eureka Office Supplies</i>                              | 23.48       |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Supplies for Ruth</i>                                   | 254.90      |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Snow plow shoe &amp; kick stand for Ruth</i>            | 266.62      |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Essex Office Supplies</i>                               | 59.24       |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Repair tape for inventory</i>                           | 89.72       |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Past Due Paper - HB Retail</i>                          | 9.59        |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Annual renewal of Microsoft 365 - Director Laptops</i>  | 99.99       |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Call-em-all credits - FB</i>                            | 85.00       |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Billing Postcards - FB</i>                              | 232.88      |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Billing Postcards - HB</i>                              | 118.69      |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Sales Tax - To be paid</i>                              | 25.16       |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>O &amp; M Employment Ad - Lost Coast Communications</i> | 200.00      |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>O &amp; M Employment Ad - Craigslist</i>                | 40.00       |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Employee Recognition</i>                                | 145.25      |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Annual renewal of Microsoft 365 - GM laptop</i>         | 69.99       |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Eureka Office Supplies</i>                              | 97.23       |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Past Due Paper - FB</i>                                 | 27.29       |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Essex Office Supplies</i>                               | 114.78      |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Spendwise Monthly Subscription</i>                      | 90.00       |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Eureka Office Supplies</i>                              | 71.85       |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Safety Apparel</i>                                      | 237.03      |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>Fly-U-Home airmed - Reimbursed by P. Jorgensen</i>      | 136.00      |
| U.S. Bank Corporate Payment System        | 12/11/2024 | <i>AirMed Memberships - 5 employees</i>                    | 395.00      |
| Total U.S. Bank Corporate Payment System: |            |  | 13,924.26   |
| <b>U.S. Postal Service</b>                |            |  |             |
| U.S. Postal Service                       | 12/11/2024 | <i>Annual PO Box Rental</i>                                | 232.00      |
| Total U.S. Postal Service:                |            |  | 232.00      |
| <b>USA Blue Book</b>                      |            |  |             |
| USA Blue Book                             | 12/26/2024 | <i>TRF lab supplies</i>                                    | 30.93       |
| Total USA Blue Book:                      |            |  | 30.93       |
| <b>USC Foundation</b>                     |            |  |             |
| USC Foundation                            | 12/19/2024 | <i>Backflow prevention Annual Membership - FB</i>          | 88.80       |
| USC Foundation                            | 12/19/2024 | <i>Backflow Prevention Annual Membership - HB</i>          | 31.20       |
| Total USC Foundation:                     |            |  | 120.00      |
| <b>USDA Forest Service</b>                |            |  |             |
| USDA Forest Service                       | 12/26/2024 | <i>US Forest Service Special Use Permit 2025</i>           | 13,430.06   |
| USDA Forest Service                       | 12/26/2024 | <i>US Forest Service Special Use Permit 2025</i>           | 13,430.06   |
| Total USDA Forest Service:                |            |  | 26,860.12   |
| <b>VALEO Networks</b>                     |            |  |             |
| VALEO Networks                            | 12/11/2024 | <i>Eureka office monthly computer maintenance</i>          | 1,866.79    |
| VALEO Networks                            | 12/11/2024 | <i>Server Upgrade</i>                                      | 4,893.75    |
| Total VALEO Networks:                     |            |  | 6,760.54    |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 12/1/2024-12/31/2024Page: 10  
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| Vendor Name                               | Date Paid  | Description                             | Amount Paid |
|---|------------|---|-------------|
| <b>Valley Pacific Petroleum Serv. Inc</b> |            |   |             |
| Valley Pacific Petroleum Serv. Inc        | 12/11/2024 | Cardlock-Pumping & Control              | 618.82      |
| Valley Pacific Petroleum Serv. Inc        | 12/11/2024 | Cardlock-Water Quality                  | 618.82      |
| Valley Pacific Petroleum Serv. Inc        | 12/11/2024 | Cardlock-Maintenance                    | 618.82      |
| Valley Pacific Petroleum Serv. Inc        | 12/11/2024 | Cardlock-HB Retail                      | 160.88      |
| Valley Pacific Petroleum Serv. Inc        | 12/11/2024 | Cardlock-FBGCS                          | 457.92      |
| Total Valley Pacific Petroleum Serv. Inc: |            |   | 2,475.26    |
| <b>Verizon Wireless</b>                   |            |   |             |
| Verizon Wireless                          | 12/11/2024 | General Manager                         | 41.42       |
| Verizon Wireless                          | 12/11/2024 | Humboldt Bay Retail                     | 11.96       |
| Verizon Wireless                          | 12/11/2024 | Fieldbrook Glendale CSD                 | 34.05       |
| Verizon Wireless                          | 12/11/2024 | Humboldt Bay IPAD                       | 9.88        |
| Verizon Wireless                          | 12/11/2024 | Fieldbrook Glendale CSD IPAD            | 28.13       |
| Verizon Wireless                          | 12/11/2024 | Ruth Area                               | 21.10       |
| Verizon Wireless                          | 12/11/2024 | Ruth Hydro                              | 21.10       |
| Total Verizon Wireless:                   |            |   | 167.64      |
| <b>Watt's Cleaning Services</b>           |            |   |             |
| Watt's Cleaning Services                  | 12/11/2024 | Eureka Office Cleaning 11/13 & 11/27/24 | 278.00      |
| Total Watt's Cleaning Services:           |            |   | 278.00      |
| Grand Totals:                             |            |   | 356,001.56  |

## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

*SUPPLEMENTAL* - FIELDBROOK-GLENDALE CSD CONTRACT SERVICES  
 MONTHLY BILLING/EXPENSE REPORT  
 November 30, 2024



|  | Month-to-Date    | Year-to-Date      | Prior Year        | Difference       |
|--|------------------|-------------------|-------------------|------------------|
| <b><i>Contract Services Billing</i></b>        |                  |                   |                   |                  |
| Administrative                                 | 1,232.87         | 6,164.35          | 7,167.84          | (1,003.49)       |
| Indirect/Overhead                              | 976.81           | 4,884.05          | 5,679.18          | (795.13)         |
| Maintenance/Operations/Supplies                | 18,406.80        | 153,432.71        | 128,773.10        | 24,659.61        |
| <b>Total FB-GCSD Billing</b>                   | <b>20,616.48</b> | <b>164,481.11</b> | <b>141,620.12</b> | <b>22,860.99</b> |
| <b><i>Contract Services Expenses</i></b>       |                  |                   |                   |                  |
| Employee Wages                                 | 10,736.23        | 66,087.83         | 66,561.68         | (473.85)         |
| Employee Benefits                              | 4,583.76         | 29,186.80         | 31,852.99         | (2,666.19)       |
| Operations & Maintenance Expenses              | 953.81           | 18,107.98         | 3,201.34          | 14,906.64        |
| General & Administrative Expenses              | 469.59           | 9,473.28          | 11,282.88         | (1,809.60)       |
| <b>Total FB-GCSD Expenses</b>                  | <b>16,743.39</b> | <b>122,855.89</b> | <b>112,898.89</b> | <b>9,957.00</b>  |
| <b><i>NET Fieldbrook Contract Services</i></b> | <b>3,873.09</b>  | <b>41,625.22</b>  | <b>28,721.23</b>  | <b>12,903.99</b> |

**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: Chris Harris  
Date: January 9, 2025  
Re: Final Staffing Reports from RGS – Salary Survey

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**Background****From March 14, 2024 Staff Report**

*In December 2023, the Board approved entering into a contract with Regional Government Services (RGS) to complete a District Salary Survey to include the following (summarized):*

- *Review job descriptions and compare to actual work performed by employees*
- *Compare District compensation and benefits to similar agencies*
- *Make recommendations regarding needed revisions (if any) to current staffing levels, future staffing needs, compensation, and benefits offered by the District*

*RGS began their search for comparable agencies at a statewide level. Feedback from the District's Project Lead included: "We all agree, HBMWD is special! It was very challenging to find agencies similar to HBMWD, even casting a statewide net". Criteria for the RGS selection included the following:*

**Preferred Comparable Criteria List**

1. *Both wholesale service and retail service*
2. *Population served*
3. *Type of agency (no Cities or Counties, prefer stand-alone agencies)*
4. *Cost of Living*
5. *Cost of Housing*
6. *Budget*
7. *FTE's (Full-Time Equivalent Employees)*
8. *D4 & T4 Certifications*

**From August 14, 2024 Staff Report (Complete Staff Report Included in Attachments)**

*Regardless of the number of comparable agencies used, the data does appear to show a disparity between HBMWD's base salaries and other similar agencies across the state. The two positions with the smallest disparity (Accounting Specialist II and Regulatory Analyst II) recently had the job descriptions rewritten and the base salaries reviewed and increased by Board approval (April 2022). All other positions have not had a review nor increase in their base rate since the last salary survey in 2007. Additionally, the majority (19 of 28) of District employees have "stepped-out" (they have reached the end of their positions 5-step salary schedule). Employees that are "stepped-out" do not*

receive any merit increases. District employees do receive longevity incentive pay at 5 (2.5%), 10 (5%), 20 (7.5%), 25 (5%), 30 (5%), and 35 (5%) years.

Based on the large range of disparity between District positions (Salary Comparisons Between Agencies chart), staff suggests that while each position needs to be considered individually, it is not possible to create a salary schedule update for each specific, individual position. Some positions are linked via succession planning and it is essential that the District avoid salary compaction.

Additionally, it is not financially feasible to burden the rate payers with one large equity adjustment. In order to provide a more financially feasible approach, staff suggests using multiple tiers. Staff is proposing a four-tiered plan that spans FY25-FY28 to complete a comprehensive HBMWD Salary Schedule Update. Using a tiered approach also allows these adjustments to be factored into the District CIP/Financial Plan being completed by Bartel Wells Associates. This Financial Plan will be completed during FY25 and will cover the next 10-years.

During the August Board Meeting, the Directors approved Part One of a four-part proposed Salary Schedule Update. Parts Two-Four will be presented during the future FY26-FY28 budget processes for discussion and possible approval. Please see attachment #4 for an explanation of all four parts of the proposed Salary Schedule Update.

### **Discussion**

As part of their final obligation, RGS has provided the District with a Staffing Assessment Report and a Compensation Study Report. While the Directors have previously seen much of the data within the Compensation Study Report (this data was used in the August 2024 staff report), there are additional comparisons between Classis & PEPRA retirement plan expenses. New information provided by RGS includes the results of their analysis and comparison of actual work performed by District staff as compared to the staff's job description. RGS suggested 5-positions that should be considered for possible review/revision. Staff has also included one minor change for the General Manager position.

Water Operations Supervisor (revisions included)  
Assistant Maintenance & Electrical Supervisor (no revisions deemed necessary)  
Water Operations Specialist (revisions included)  
Operations and Customer Service Specialist (revisions included)  
Hydroelectric Operator/Ruth Representative (revisions included)  
General Manager (included based on staff request)

After a review of the RGS findings, staff has discussed and inserted suggested changes provided by both the impacted staff and the Superintendent.

### **Recommendation**

Staff recommends approval of the attached revised job descriptions.



**Attachments**

1. Suggested Revisions to Job Descriptions
  - a. General Manager
  - b. Water Operations Supervisor
  - c. Water Operations Specialist
  - d. Operations and Customer Service Specialist
  - e. Hydroelectric Operator/Ruth-Area Representative
2. Humboldt Bay Municipal Water District - Staffing Assessment Report 2024
3. Humboldt Bay Municipal Water District - Compensation Study Report 2024
4. Previous August 14, 2024 Staff Report (less attachments)

Attachment 1 – Job Descriptions

## Humboldt Bay Municipal Water District

### GENERAL MANAGER - M1

#### Position Description

#### GENERAL PURPOSE

This is the Chief Executive Officer position responsible for carrying out the Board of Director's policies, directing District operations, controlling District expenditures, and overseeing all programs and activities of the District. May act as Secretary/Treasurer and performs other duties as required.

#### ESSENTIAL FUNCTIONS AND DUTIES

1. Serves as Chief Executive Officer of the District.
2. Provides leadership and management including planning, goal setting, and evaluating District effectiveness.
3. Supervises, develops, and evaluates the District Superintendent, Business Manager, and Executive Assistant/Board Secretary.
4. Provides full charge and control over construction, maintenance, and operations of the regional water system. Ensures compliance with water quality laws and regulations, and ensures sufficient water supply capability to meet customer demands.
5. ~~Prepares;~~ Works collaboratively with the Business Manager to prepare and recommends for Board approval, and administers the District's annual budget including salaries, maintenance, and capital projects.
6. Directs and oversees development of a comprehensive Capital Improvement Plan. Advances high-priority projects and develops funding mechanisms to ensure the regional water system continues to reliably serve the community's needs.
7. Supports and plays a critical role in the District's Water Resource Planning process to secure new customers or uses for the District's available water supply.
8. Directs and oversees the District's aquatic Habitat Conservation Plan, and other efforts in the watershed involving the District.
9. Oversees the District's safety program. Ensures compliance with Federal, State, and local safety regulations. Develops and supports a strong safety culture in the organization.
10. Serves as the Dam Safety Coordinator pursuant to the District's Owner Dam Safety Program. Ensures compliance with Federal and State dam safety regulations. Develops and supports a strong and effective Dam Safety Program.
11. Maintains full power and authority to employ and discharge employees and prescribe their duties. Develops and maintains the District's personnel system in accordance with Board-approved policies.
12. Maintains a close working relationship with the Board, Board committees, the District's legal counsel, auditor, and other consultants who advise the Board.

13. Prepares monthly Board meeting agendas and packets including well-developed and written staff reports.
14. Serves as liaison representing the District to the general public, the District's wholesale municipal customers, regulatory agencies, the media, and civic or community organizations.
15. Participates in the negotiation of water sale contracts and administers the contracts once implemented.
16. Provides legislative review and advocacy on Federal, State, or local issues affecting District operations.
17. Performs the duties of District Secretary/Treasurer as required.

### **REQUIRED KNOWLEDGE, SKILLS, and ABILITIES**

1. Excellent written and oral communication skills, as well as the ability to make effective and persuasive presentations.
2. Principles and practices of management and public administration.
3. Principles and practices of planning, analyzing, and developing sound business recommendations.
4. Principles and practices of financial planning, budgeting, expenditure control, and reporting.
5. Principles of supervision and personnel management, including public sector employment law.
6. Basic knowledge of engineering and construction principles applicable to the planning, design, and construction of District facilities.
7. Contract development and administration.
8. Safety regulations and programs.
9. Principles and practices of water utility cost-of-service and ratemaking.
10. General understanding of the following:
  - a. Laws, regulations, and processes governing special districts;
  - b. Safe Drinking Water laws, regulations, and practices governing water quality, treatment, and distribution;
  - c. Federal and State regulations and practices governing the safety of a high-hazard dam and hydro-electric power plant;
  - d. Federal and State environmental regulations and permit processes for river operations;
  - e. State law and practices governing water rights;
11. Computer operation and standard applications software.
12. Public, media, and staff relations.

### **REQUIRED TRAINING AND EXPERIENCE**

Any combination of training and experience that provides the required knowledge and abilities is qualifying. A typical way to obtain the requisite knowledge and abilities would be:

1. Bachelor's Degree from an accredited university or college with a major in Business Administration, Public Administration, Engineering, Water Resources, or closely related field.
2. Ten-to-fifteen years of increasingly responsible and broad experience in engineering, administration, or management in a private or public agency. Strong preference for experience in utility or water resource fields. Background should include experience working with elected Board or Commission, and responsibility for planning, development, and implementation of programs, budgets, and operations.

### **SPECIAL REQUIREMENTS**

1. Must possess a valid California Driver's license, and must maintain a driving record acceptable to the District and its insurance carrier. Compliance with this requirement is a condition of continuing employment.
2. Must qualify for fiduciary bonding.
3. Must be able to occasionally work evenings and weekends. Must be available to work following an emergency that affects the District's operations.
4. Must be able to serve as the District's Dam Safety Coordinator pursuant to the FERC's Owner Dam Safety Program regulatory requirements.

### **ESSENTIAL PHYSICAL ABILITIES**

Individuals selected for appointment to this position must pass a pre-employment medical examination which the District pays for. Because this position is considered "safety sensitive" in nature, the person selected for appointment to this position must pass a pre-employment drug screening which the District also pays for. The medical examination and drug screening are intended to evaluate the applicant's ability to meet the physical and health requirements for this classification.

A person employed in this position must be able to:

1. Operate a motor vehicle;
2. Operate a variety of office equipment (computer, copy machine, fax, etc.);
3. Understand and carry out oral and written directions;
4. Communicate well with others, verbally and in writing;
5. Work cooperatively and get along well with the Board, District staff, customers, and the public;
6. Sit for extended periods of time;
7. Perform minor physical activities which involve bending, lifting, and reaching.

**Humboldt Bay Municipal Water District****WATER OPERATIONS SUPERVISOR - M5  
(Chief Operator)****Position Description****GENERAL PURPOSE**

Under general direction, supervises and participates in the work of staff responsible for the water pumping, distribution, and treatment systems; oversees and participates in work involving meter reading, water service connection, backflow compliance, and customer services; supervises ~~oversees~~ and participates in work involving District IT systems including but not limited to SCADA, ~~and~~ GIS, networking and all related servers & equipment; and performs other related work as required.

Serves as the District's Chief Treatment and Distribution Operator pursuant to California safe drinking water regulations.

**ESSENTIAL FUNCTIONS AND DUTIES**

1. Responsible for overseeing and leading operations of the District's water pumping, treatment, and distribution system.
2. Responsible for Supervising staff in the following positions, ~~Water Operations Specialist, Assistant Operations Supervisor, Water Operations Specialist, Customer Service and Operations and Maintenance Technicians.~~
3. ~~Also~~ Responsible for operation, ~~and maintenance and~~ ~~of~~ upgrades of the District's Supervisory Control and Data Acquisition System (SCADA) used to monitor and control the water system. Supervises and participates in all aspects of District operations to carry out this responsibility
4. Responsible for the ~~operation~~ management and maintenance of the District's computer software platforms including but not limited to VM Ware, ArcGIS, Historian and Active Directory ~~systems and programs~~
1. Responsible for the management, maintenance and upgrades of the District's multiple networks, servers and database systems.
5. Manages the online reporting and scheduling of power production at the Ruth Hydro facility
6. Responsible for the management and implementation of the District's backflow policy including conducting hazard assessments.
2. Monitoring and controlling the operation of water pumping, treatment, and distribution facilities to achieve proper processing and distribution of water within mandated operating requirements
3. Starting and controlling plant processes and chemical systems to treat water in accordance with DHS' Permit and other operating requirements
4. Assisting in handling and storage of water treatment chemicals
- Performing water sample collection and various laboratory testing and analytical procedures
6. Monitoring, starting, and controlling power generation equipment in a safe manner

- ~~7~~.10. Responding to alarms, identifying operating problems, and initiating or implementing appropriate response and corrective actions
- ~~8~~.11. Supervises and participates in meter reading, service connection, backflow device installation and testing, and customer services
- ~~9~~.12. Conducts periodic inspections of equipment and facilities to ensure proper operation and to identify and plan for repairs and maintenance
- ~~10~~.13. Assists with the implementation of a comprehensive work safety program. Ensures adherence to safety requirements, conducts inspections for hazards, conducts accident investigations, and prepares incident reports
- ~~11~~.14. Designs and implements energy conservation programs
- ~~12~~.15. Assists in the identification, planning, and prioritization of operations and maintenance projects, including the determination of personnel & materials requirements, and personnel assignments
- ~~13~~.16. Works with contractor and/or customer to properly size and locate new meter service requests
- ~~14~~.17. Provides input on budget and cost proposals for maintenance and operations
- ~~15~~.18. Directs departmental record keeping activities; prepares requisitions; prepares a variety of reports
- ~~16~~.19. Handles customer inquiries and complaints. Keeps records of all complaints per State regulations.
- ~~17~~.20. Performs supervisory functions. Assures that subordinate staff acquire and maintain all necessary licenses, certifications, and training; plans and conducts in-service training programs; prepares periodic evaluations of employees; assists in the selection of new water operations staff
- ~~18~~.21. Performs duties of an Operations and Maintenance Technician as needed, and may act as District Superintendent

## **REQUIRED KNOWLEDGE, SKILLS, and ABILITIES**

1. Principles, practices, and operation of water pumping, treatment, and distribution
2. Federal and State regulations relating to water quality, treatment, and distribution
3. Principles and practices of programming
4. Standard desktop operating system and Microsoft Office applications (spreadsheet and database)
5. Specialized program applications, including Allan Bradley Ladder Logic and HMI languages, SCADA, and VBA
- 2.6. Mathematical and analytical skills necessary for a Network Administrator. Ability to maintain and troubleshoot fiber-optic, wireless communications, and ethernet systems
- ~~3~~.7. Collecting water samples and performing laboratory testing procedures
- ~~4~~.8. Reading meters and accurately recording water usage
- ~~5~~.9. Budgeting, project planning, and cost estimation for service installations
- ~~6~~.10. Safety regulations, programs, and safe work practices

- ~~7~~.11. Interpretation of user manuals, repair manuals, schematic diagrams, and blueprints
- ~~8~~.12. Operating a variety of vehicles and power-driven equipment
- ~~9~~.13. Dealing tactfully and courteously with customers. Handling customer inquiries and complaints
- ~~10~~. Develop cooperative working relationships. Use teamwork to solve practical problems and to plan and coordinate workload among a small, close-knit workforce.
- ~~11~~. Strong working knowledge of computers using both standard (Microsoft Office) and specialized application software (Allan-Bradley Ladder Logic, MMI languages, SCADA, ESRI ArcGIS/GPS)
- ~~11~~.15. Strong Working knowledge of computer systems, advanced networking protocols, and SCADA
- ~~12~~.16. Strong written and oral communication skills
- ~~13~~.17. Ability to compose routine correspondence and reports
- ~~14~~. Strong arithmetic and basic mathematics skills

## **TRAINING AND EXPERIENCE**

Any combination of training and experience that provides the required knowledge and abilities is qualifying. A typical way to obtain the requisite knowledge and abilities would be:

- ~~High school diploma or GED~~ High school diploma or GED
- 1. ~~Community College~~
- 2. **Bachelor's degree**, ~~technical~~ Computer Science, Engineering or other course work relevant for this position are beneficial
- 3. Five-to-ten years of increasingly responsible experience in the operation and maintenance of water pumping, treatment, and distribution system and facilities. Supervisory experience beneficial and desirable. Experience with Supervisory Control and Data Acquisition Systems also beneficial and desirable
- ~~3~~.4. Cross Connection Control (CCC) Specialist and backflow tester certificates
- ~~4~~.5. Grade IV Treatment and/or Distribution certificates

## **SPECIAL REQUIREMENTS**

1. Must possess the category of California Driver's license required by the State Department of Motor Vehicles to perform the essential duties of the position. Employees must maintain a driving record acceptable to the District and its insurance carrier. Compliance with these requirements and established District vehicle operation standards are a condition of continuing employment.
2. May work odd shifts, weekends, or holidays and perform standby duties as assigned. Must be available to respond to emergencies which affect the District such as earthquakes, power outages, pipeline breaks, high water events, and other similar incidents.
3. In order to wear respiratory protection or other safety equipment facial hair must be maintained as to keep hair growth out from between the skin and the facepiece sealing surface (such as stubble beard growth, beard, mustache, or sideburns).



4. Must be able to participate in confined space operations.
5. Must possess and maintain a Grade IV Water Treatment Operator's Certificate and a Grade IV Water Distribution Certificate pursuant to State drinking water regulations. If an employee does not initially possess this level of certification, the District will allow a period of time for them to obtain the required certifications. Employees must also meet the State's continuing education requirements to maintain certifications. Compliance with the State certification requirements is a condition of continuing employment.
6. Must ~~posses~~possess and maintain Backflow Certification pursuant to State drinking water regulations. If an employee does not initially possess this certification, the District will allow a period of time for them to obtain the required certification.
7. Must acquire basic American Red Cross First Aid/CPR certificates during the initial year of employment.

### **ESSENTIAL PHYSICAL ABILITIES**

Individuals selected for appointment to this position must pass a pre-employment medical examination paid for by the District. Because this position is considered "safety sensitive" in nature, the person selected for appointment to this position must pass a pre-employment drug screening also paid for by the District. The medical examination and drug screening is intended to evaluate the applicant's ability to meet the physical and health requirements for this classification.

A person employed in this position must be able to:

1. Investigate and solve complex problems involving the ability to:
  - a. Perform visual inspections
  - b. Hear/discern normal versus abnormal noises/sounds
  - c. View and respond to operational control screens (including alarms)
  - d. Think critically
2. Sit for extended periods of time
3. Operate a variety of office equipment (computer, copy machine, fax, etc.)
4. Operate motor vehicles and other equipment
5. Operate a variety of hand and electric tools
6. Perform a variety of physical activities which may involve reaching, bending, squatting, kneeling, crouching, crawling, climbing, and manual dexterity
7. Perform additional physical activities to position or move tools, equipment, and supplies which may involve lifting and pushing or pulling motions
8. Wear a respirator and other personal protective equipment
9. Understand and carry out oral and written directions
10. Communicate well with others, verbally and in writing
11. Work cooperatively and get along well with other people

## Humboldt Bay Municipal Water District

### **WATER OPERATIONS SPECIALIST - OM1**

#### Position Description

#### **GENERAL PURPOSE**

This position is somewhat unique in that it contains an element of another District position (the Operations and Maintenance Technician), but it also performs and is responsible for a variety of highly technical and specialized work related to the District's network and computer systems, including the District's Supervisory Control and Data Acquisition System (SCADA).

Under general supervision, programs, organizes, administers, and maintains automated process control, data acquisition, software systems, microcomputer networks, and related peripheral equipment. Acts as technical resource to other staff on use of automated equipment and software. Performs full range of Operations and Maintenance Technician duties and other related work as required.

#### **ESSENTIAL FUNCTIONS AND DUTIES**

- ~~1.—Performs water system operations duties and responsibilities of the Operations and Maintenance Technician position. Operational duties include:
 
  - ~~a.—Monitoring and controlling the operation of water pumping, treatment, and distribution facilities to achieve proper processing and distribution of water within mandated operating requirements~~
  - ~~b.—Starting and controlling plant processes and chemical systems to treat water in accordance with DHS Permit and other operating requirements~~
  - ~~c.—Assisting in handling and storage of water treatment chemicals~~
  - ~~d.—Performing water sample collection and various laboratory testing and analytical procedures~~
  - ~~e.—Responding to alarms, identifying operating problems, and initiating or implementing appropriate response and corrective actions~~~~
- 2.—Monitors, starts, and controls power generation equipment in a safe manner.
- 3.—Uses process control, data acquisition, and special application software to meet District operational needs.
- 4.1. Responsible for administrative networked systems which includes over 40 computers and multiple peripheral devices. Responsible for the District's Supervisory Control and Data Acquisition System (SCADA). The control system is a local area complexed network of approximately 20+ programmable logic controllers (PLCs) linked through ethernet, fiber-optic, and wireless radio communications, and modems. The administrative system is a network of computers linked to each other through an ethernet LAN and also linked to the control system. Acts as network supervisor for plant operations, and They This position will assists electricians with physical maintenance of the administrative and control network.

- 5.2. Installs and activates sensors and other instrumentation. Assists in the setup and configuration of automated equipment, computers, and related peripherals. Adds ladder logic and HMI programming to display and data log these sensors and related SCADA inputs. Performs software upgrades to the PLC and HMI, including sensor calibrations and range programming.
- 6.3. Performs daily checks and analyses to maintain complete functionality of computer systems. Performs routine cleaning of computers and printer equipment. Interacts as requested with computer consultants to identify and resolve computer/network problems. In the event of system or network failure, expedites professional trouble-shooting procedures to return the system to full capability.
- 7.4. Performs Database Administrator functions. Diagnoses and responds to varying symptoms evidenced in the data that could result in production, water quality and/or environmental concerns. Performs PC archiving and backup duties. Provides data acquisition services and produces special monthly reports and graphs.
5. Utilizes the VBA programming language to improve software and user interfaces. Innovates to introduce new systems and/or processes to improve capability or efficiency of operations.
- Responsible for both administrative and control system backups. Review and update backup policies and procedures to make sure the district is protected from new and emerging threats.
- 8.6.
7. Acts as resource for the entire organization on operation of computers and peripheral equipment. Provides technical assistance and training for personnel in the use of computers, HMI, and related hardware and software. Sets up procedures for a variety of office support, record keeping, disc handling, and system library tasks.
8. Performs water system operations duties and responsibilities of the Operations and Maintenance Technician position. Operational duties include:
- a. Monitoring and controlling the operation of water pumping, treatment, and distribution facilities to achieve proper processing and distribution of water within mandated operating requirements
  - b. Starting and controlling plant processes and chemical systems to treat water in accordance with DHS' Permit and other operating requirements
  - c. Assisting in handling and storage of water treatment chemicals
  - d. Performing water sample collection and various laboratory testing and analytical procedures
  - e. Responding to alarms, identifying operating problems, and initiating or implementing appropriate response and corrective actions
  - f. Operate and monitor power generation equipment in a safe manner.
- 10.9. \_\_\_\_\_ May periodically fill-in and act as Assistant Water Operations Supervisor
- 11.1. ~~\_\_\_\_\_ Responsible for both administrative and control system backups. Review and update backup policies and procedures to make sure the district is protected from new and emerging threats.~~

## **REQUIRED KNOWLEDGE, SKILLS, and ABILITIES**

1. Principles and practices of programming
2. Standard desktop operating system and Microsoft Office applications (spreadsheet and database)
3. Specialized program applications, including Allan Bradley Ladder Logic and HMI languages, SCADA, VB, and VBA
4. Mathematical and analytical skills necessary for a Network Administrator. Ability to maintain and troubleshoot fiber-optic, wireless communications, and ethernet/CAT5 LAN systems
5. Design and implementation of -new systems or procedures for process control automation
6. Operation of water pumping, treatment and distribution facilities. Principles and practices of water quality and water treatment
7. Interpreting gauges, recording devices, and other monitoring equipment for plant operations
8. Basic water sample collection and laboratory testing procedures
9. Budgeting, project planning, and cost estimation for service installations
10. Strong written and oral communication skills
- 8.—Ability to compose routine correspondence and reports.
- 11.
- 9:12. \_\_\_\_\_ Repair and maintenance of water pumping, treatment, and distribution equipment
- 10:13. \_\_\_\_\_ Interpreting repair manuals, schematic diagrams, blueprints, and preventative maintenance programs
- 11:14. \_\_\_\_\_ Safety program and safe work practices
- 12:15. \_\_\_\_\_ Cooperative working relationships. Teamwork to solve practical problems and coordinate work among a small, close-knit workforce

## **TRAINING AND EXPERIENCE**

Any combination of training and experience that provides the required knowledge and abilities is qualifying. A typical way to obtain the requisite knowledge and abilities would be:

1. High school diploma or GED
2. Community College, technical or other course work relevant for this position is highly desirable.—A Bachelors Degree, or equivalent professional-level coursework in data processing, computer systems analysis, and/or symbolic programming is beneficial and desirable.
3. Five-to-seven years of increasingly responsible experience in the operation of water distribution, treatment, and pumping facilities, with particular experience in process control and data acquisition systems, and related network and computer application software.
4. Grade IV Treatment and/or Distribution certificates

## **SPECIAL REQUIREMENTS**

1. Must possess the category of California Driver's license required by the State Department of Motor Vehicles to perform the essential duties of the position. Employees must maintain a driving record

acceptable to the District and its insurance carrier. Compliance with these requirements and established District vehicle operation standards are a condition of continuing employment.

2. May work odd shifts, weekends, or holidays and perform standby duties as assigned. Must be available to respond to emergencies which affect the District such as earthquakes, power outages, pipeline breaks, high water events, and other similar incidents.
3. In order to wear respiratory protection or other safety equipment, facial hair must be maintained as to keep hair growth out from between the skin and the facepiece sealing surface (such as stubble beard growth, beard, mustache, or sideburns). Must be able to participate in confined space operations.
4. Must possess and maintain a Grade IV Water Treatment Operator's Certificate and a Grade IV Water Distribution Certificate pursuant to State drinking water regulations. If an employee does not initially possess this level of certification, the District will allow a period of time for the incumbent to obtain the required certifications. Employees must also meet the State's continuing education requirements to maintain certifications. Compliance with the State certification requirements is a condition of continuing employment.
5. Must acquire basic American Red Cross First Aid/CPR certificates during the initial year of employment.

### **ESSENTIAL PHYSICAL ABILITIES**

Persons selected for appointment to this position must pass a pre-employment medical examination which the District pays for. Because this position is considered "safety sensitive" in nature, the person selected for appointment to this position must pass a pre-employment drug screening which the District also pays for. The medical examination and drug screening is intended to evaluate the applicant's ability to meet the physical and health requirements for this classification.

A person employed in this position must be able to:

1. Sit for extended periods of time;
2. Operate a variety of office equipment (computer, copy machine, fax, etc.);
3. Operate motor vehicles and other equipment;
4. Operate a variety of hand and electric tools;
5. Perform a variety of physical activities which may involve reaching, bending, squatting, kneeling, crouching, crawling, climbing, and also manual dexterity;
6. Perform additional physical activities to position or move tools, equipment, and supplies which may involve lifting and pushing or pulling motions;
7. Wear a respirator and other personal protective equipment;
8. Understand and carry out oral and written directions;
9. Communicate well with others, verbally and in writing;
10. Work cooperatively and get along well with other people;
11. Investigate and solve complex problems which involves the ability to perform visual inspections, ability to hear/discern normal versus abnormal noises/sounds, ability to view and respond to operational control screens including alarms, and the ability to think critically.

## Humboldt Bay Municipal Water District

### **OPERATIONS and CUSTOMER SERVICE SPECIALIST - OM3c**

#### Position Description

#### GENERAL PURPOSE

This position is ~~some~~ unique in that it contains elements of other District positions (the Operations and Maintenance Technician), and it also performs a variety of water quality and retail-level distribution and customer service work.

Under general supervision, this position performs the duties of the Operations and Maintenance Technician position, and also performs retail customer service and distribution system activities such as constituent sampling, meter reading, pipeline flushing, backflow device testing, and pipeline locating. ~~Provides assistance to the Water Operations Specialist.~~

In general, a greater portion of time will be spent in Customer Service, and in Operations and providing support to the Assistant and Operations Supervisors, when the Turbidity Reduction Facility (TRF) is operational. Conversely, a greater portion of time will be spent in the field performing retail customer service functions and system planned maintenance, when the TRF is not operational.

#### ESSENTIAL FUNCTIONS AND DUTIES

- ~~1. Performs water system operations duties and responsibilities of the Operations and Maintenance Technician position. Operational duties include:~~
  - ~~a. Monitoring and controlling the operation of water pumping, treatment, and distribution facilities to achieve proper processing and distribution of water within mandated operating requirements;~~
  - ~~b.a. Starting and controlling plant processes and chemical systems to treat water in accordance with DHS Permit and other operating requirements;~~
  - ~~c.a. Assisting in handling and storage of water treatment chemicals;~~
  - ~~d.a. Performing water sample collection and various laboratory testing and analytical procedures;~~
  - ~~e.a. Responding to alarms, identifying operating problems, and initiating or implementing appropriate response and corrective actions.~~
- ~~2. Monitor, start, and control power generation equipment in a safe manner.~~
- ~~3.1. Records operation actions including flows, chemical dosages, filtration rates, and other information in appropriate log sheets/books. Notes operational or maintenance problems and writes work orders for repairs.~~
- ~~2. Reads water meters following an established schedule, and checks for inoperative, defaced, or bypassed meters. Makes minor adjustments or repairs to meters/appurtenances. Turns water service on/off and handles inquiries with respect to retail service.~~
- ~~3. Oversees the ordering, procurement, and inventory management of distribution system parts and components.~~

- ~~4.~~ Assists management with ~~Manages the~~ budgeting, planning, and execution of annual distribution system projects, including but not limited to meter replacements, valve book updates, and upgrades to distribution system.
4. \_\_\_\_\_
5. Performs weekly, monthly and annual, water quality sampling for two separate service areas per regulatory requirements using prescribed sampling procedures.
- ~~5.6.~~ Performs emergency Bacteriological sampling during water quality events in accordance with State regulations.
- ~~6.7.~~ Responsible for valve exercising and system flushing programs according to prescribed procedures.
- ~~7.8.~~ Determines need for backflow and cross-connection equipment, and tests all backflow devices for compliance with regulations Also is responsible for backflow equipment calibrations at specified intervals.
9. Locates and identifies District equipment and pipelines for customers, contractors, and other public agencies.
10. Responds to water leaks and collaborates with the Operations Supervisor to develop and implement appropriate dewatering, filling, and repressurizing plans in accordance with AWWA standards.
- ~~8.~~ Engages with the public to address concerns related to water quality, leaks, usage discrepancies, and any other issues that may arise.
11. \_\_\_\_\_
- ~~9.12.~~ \_\_\_\_\_ Maintains a variety of records and reports relating to water service, customers, and equipment.
- ~~10.13.~~ \_\_\_\_\_ May assist or work independently in the repair and maintenance of District equipment and facilities; Including may assist maintenance staff in the installation, repair, and maintenance of meters, pipelines, and other water distribution equipment.
- ~~11.14.~~ \_\_\_\_\_ Use computers to enter operational data into spreadsheets for calculation of average flows, chemical dosages, CT values, and water usage, and prepares a variety of operating and statistical reports. Produce simple written reports and memoranda.
- ~~12.~~ Support and provide back-up capability to the Water Operations Specialist with respect to maintenance and operation of the District's process control, data acquisition, and special application software.
- ~~13.~~ May periodically fill-in and act as Assistant Water Operations Supervisor.
- ~~\_\_\_\_\_~~ Monitor power generation equipment in a safe manner.
15. Performs water system operations duties and responsibilities of the Operations and Maintenance Technician position. Operational duties include:
- a. Monitoring and controlling the operation of water pumping, treatment, and distribution facilities to achieve proper processing and distribution of water within mandated operating requirements;
  - b. Starting and controlling plant processes and chemical systems to treat water in accordance with DHS' Permit and other operating requirements;

- c. Assisting in handling and storage of water treatment chemicals;
- d. Performing water sample collection and various laboratory testing and analytical procedures;
- e. Responding to alarms, identifying operating problems, and initiating or implementing appropriate response and corrective actions.
- f. Operate and monitor power generation equipment in a safe manner.

## **REQUIRED KNOWLEDGE, SKILLS, and ABILITIES**

1. Operation of water pumping, treatment, and distribution facilities
2. Principles, practices, and regulations of water quality, water treatment, and distribution
3. Interpreting gauges, recording devices, and other monitoring equipment for plant and facility operations
4. Collecting water samples and performing laboratory-testing procedures
5. Reading meters and accurately recording usage
6. Performing backflow testing and line flushing procedures
7. Dealing tactfully with customers, contractors, and others encountered in the course of work
8. Operating a variety of vehicles and power-driven equipment
9. Safety program and safe work practices
10. Operation of computers using both standard applications (e.g. Office-based) and specialized applications as needed
11. Cooperative working relationships. Teamwork to solve practical problems and coordinate work among a small, close-knit workforce

## **TRAINING AND EXPERIENCE**

Any combination of training and experience that provides the required knowledge and abilities is qualifying. A typical way to obtain the requisite knowledge and abilities would be:

1. High school diploma or GED
2. Community College, technical or other course work relevant for this position are beneficial.
3. Two-to-three years of increasingly responsible experience in the operation of water distribution, treatment, and pumping facilities; and/or distribution system activities such as backflow testing, meter reading, and customer service. Backflow certification also desirable.
4. Grade III Treatment and/or Distribution certificates

## **SPECIAL REQUIREMENTS**



1. Must possess the category of California Driver's license required by the State Department of Motor Vehicles to perform the essential duties of the position. Employees must maintain a driving record acceptable to the District and its insurance carrier. Compliance with these requirements and established District vehicle operation standards are a condition of continuing employment.
2. May work odd shifts, weekends, or holidays and perform standby duties as assigned. Must be available to respond to emergencies which affect the District such as earthquakes, power outages, pipeline breaks, high water events, and other similar incidents.
3. In order to wear respiratory protection or other safety equipment, facial hair must be maintained as to keep hair growth out from between the skin and the facepiece sealing surface (such as stubble beard growth, beard, mustache, or sideburns).
4. Must be able to participate in confined space operations.
5. Must possess and maintain a Grade III Water Treatment Operator's Certificate and a Grade III Water Distribution Certificate pursuant to State drinking water regulations. If an employee does not initially possess this level of certification, the District will allow a period of time for them to obtain the required certifications. Employees must also meet the State's continuing education requirements to maintain certifications. Compliance with the State certification requirements is a condition of continuing employment.
6. Must possess and maintain Backflow Certification pursuant to State drinking water regulations. If an employee does not initially possess this certification, the District will allow a period of time for them to obtain the required certification.
7. Must acquire basic American Red Cross First Aid/CPR certificates during the initial year of employment.

### **ESSENTIAL PHYSICAL ABILITIES**

Persons selected for appointment to this position must pass a pre-employment medical examination which the District pays for. Because this position is considered "safety sensitive" in nature, the person selected for appointment to this position must pass a pre-employment drug screening which the District also pays for. The medical examination and drug screening is intended to evaluate the applicant's ability to meet the physical and health requirements for this classification.

A person employed in this position must be able to:

1. Sit for extended periods of time;
2. Operate a variety of office equipment (computer, copy machine, fax, etc.);
3. Operate motor vehicles and other equipment;
4. Operate a variety of hand and electric tools;
5. Perform a variety of physical activities which may involve reaching, bending, squatting, kneeling, crouching, crawling, climbing, and also manual dexterity;
6. Perform additional physical activities to position or move tools, equipment, and supplies which may involve lifting, and pushing or pulling motions;
7. Wear a respirator and other personal protective equipment;
8. Understand and carry out oral and written directions;
9. Communicate well with others, verbally and in writing;

10. Work cooperatively and get along well with other people;
11. Investigate and solve complex problems which involves ability to perform visual inspections, ability to hear/discern normal versus abnormal noises/sounds, ability to view and respond to operational control screens including alarms, and ability to think critically.

## Humboldt Bay Municipal Water District

### **HYDROELECTRIC OPERATOR/RUTH-AREA REPRESENTATIVE - OM3a**

#### Position Description

#### **GENERAL PURPOSE**

Under general supervision, operates, maintains, and controls the District's hydroelectric generating facilities, R.W. Matthews Dam, reservoir equipment, and Ruth Lake facilities; acts as District's on-site Ruth area representative and performs other related duties as required.

#### **ESSENTIAL FUNCTIONS AND DUTIES**

1. Controls the operation of hydroelectric generation, R.W. Matthews Dam, reservoir, and water release equipment and facilities at Ruth Lake using established operating parameters.
2. Reads and records voltage level and kilowatt hour production of hydroelectric plant; reads gauges and flow meters to determine and record water levels and flow rates; reports data and plant conditions to other staff.
3. Stops and starts power plant following established procedures; checks annunciators, gauges, and dials to assess plant conditions; checks equipment for malfunctions or maintenance needs.
4. Performs needed maintenance and repair on District facilities; keeps machinery, equipment, structures, piping, work areas, grounds, and landscaped areas in a clean and orderly condition; assists others with complex machinery and equipment maintenance, repair, and overhaul.
5. Inspects control equipment, facilities, and grounds for needed maintenance, repairs, and unusual operating conditions.
6. Operates a variety of District vehicles and equipment; prepares a variety of operating reports; makes rounds of District property to secure facilities and ensure safety.
- 6.7. Operates the District utility boat to perform shoreline inspections of District property and to clear debris from the log-boom.
- 7.8. Oversee the work of other staff assigned to assist in the operation and maintenance of District equipment, R.W. Matthews Dam, and facilities at Ruth Lake.
- 8.9. Acts as District representative to public agencies, lessees of District properties, and the general public; assures that the development and usage of District real property complies with District requirements.
- 9.10. Responds to hydroelectric plant alarms and emergencies; performs powerhouse and R.W. Matthews Dam inspections in the event of an earthquake; coordinates the Emergency Action Plan activities at Ruth Lake.
- 10.11. Make visual observations of dam, abutments, and surrounding geology per our Dam Safety and Surveillance Monitoring Plan (DSSMP).

**REQUIRED KNOWLEDGE, SKILLS, and ABILITIES**

1. Principles and practices of dams, penstocks, and hydroelectric plants, including electrical generators, turbines, high voltage breakers, transformers, compressors, valves, and pumps
2. Hydro-electric facility operations including monitoring, controlling, and adjusting operations and output
3. Reservoir capacity, water flow, and electric generation calculations
4. Repair and maintenance procedures for hydroelectric plants, dams, and related equipment
5. Planning and overseeing construction and maintenance work conducted by third-party contractors
6. Basic water sample collection and laboratory testing procedures
7. Basic operation of computers, automated equipment, and standard applications software
8. Safe work practices and safety regulations
9. Public and media relations
10. Cooperative working relationships. Teamwork to solve practical problems and coordinate work among a small, close-knit workforce

**TRAINING AND EXPERIENCE**

Any combination of training and experience that provides the required knowledge and abilities is qualifying. A typical way to obtain the requisite knowledge and abilities would be:

1. High school diploma or GED
2. Community College, technical or other course work relevant for this position are beneficial
3. Three-to-five years of increasingly responsible experience in the operation and maintenance of hydroelectric generation, dams, and reservoir facilities; or three-to-five years of experience in skilled industrial plant mechanical maintenance and repair, preferably with some direct experience at a water facility.
4. Grade II Treatment and/or Distribution certificates

**SPECIAL REQUIREMENTS**

1. Must possess the category of California Driver's license required by the State Department of Motor Vehicles to perform the essential duties of the position. Employees must maintain a driving record acceptable to the District and its insurance carrier. Compliance with these requirements and established District vehicle operation standards are a condition of continuing employment.
2. May work odd shifts, weekends, or holidays and perform standby duties as assigned. Must be available to respond to emergencies which affect the District such as earthquakes, power outages, and high water events.

3. In order to wear respiratory protection or other safety equipment, facial hair must be maintained as to keep hair growth out from between the skin and the facepiece sealing surface (such as stubble beard growth, beard, mustache, or sideburns).
4. Must be able to participate in confined space operations.
5. Must possess and maintain a Grade II Water Treatment Operator's Certificate and a Grade II Water Distribution Certificate pursuant to State drinking water regulations. If an employee does not initially possess this level of certification, the District will allow a period of time for them to obtain the required certifications. Employees must also meet the State's continuing education requirements to maintain certifications. Compliance with the State certification requirements is a condition of continuing employment.
6. Must acquire basic American Red Cross First Aid/CPR certificates during the initial year of employment.
- ~~6.7.~~ Must acquire a California Boater Card during the initial year of employment.

### **ESSENTIAL PHYSICAL ABILITIES**

Persons selected for appointment to this position must pass a pre-employment medical examination which the District pays for. Because this position is considered "safety sensitive" in nature, the person selected for appointment to this position must pass a pre-employment drug screening which the District also pays for. The medical examination and drug screening is intended to evaluate the applicant's ability to meet the physical and health requirements for this classification.

A person employed in this position must be able to:

1. Sit for extended periods of time;
2. Operate a computer;
3. Operate motor vehicles and other equipment;
4. Operate a variety of hand and electric tools;
5. Perform a variety of physical activities which may involve reaching, bending, squatting, kneeling, crouching, crawling, climbing, and also manual dexterity;
6. Perform additional physical activities to position or move tools, equipment, and supplies which may involve lifting, and pushing or pulling motions;
7. Wear a respirator and other personal protective equipment;
8. Understand and carry out oral and written directions;
9. Communicate well with others, verbally and in writing;
10. Work cooperatively and get along well with other people;
11. Investigate and solve complex problems which involves ability to perform visual inspections, ability to hear/discern normal versus abnormal noises/sounds, ability to view and respond to operational control screens including alarms, and ability to think critically.

Attachment 2 – RGS HBMWD Staffing Assessment Report

# HUMBOLDT BAY MUNICIPAL WATER DISTRICT STAFFING ASSESSMENT REPORT 2024

Prepared for:



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**2024 STAFFING ASSESSMENT REPORT**

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**ATTACHMENTS**

Attachment A – Classification Specification Template and Sample



## 2024 STAFFING ASSESSMENT REPORT

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### EXECUTIVE SUMMARY

In January 2024, the Humboldt Bay Municipal Water District (District) engaged Regional Government Services (RGS) to conduct an agency-wide staffing assessment and total compensation study.

### STAFFING ASSESSMENT GOALS

The goals and objectives of the classification study were to:

- Obtain detailed information regarding each position through various techniques, including the Staffing Assessment Questionnaires (SAQs), interviews with employees and management, and other District and comparable agency documents.
- Recommend updates to the classification plan and class specifications (job descriptions) to reflect the work performed and to align with Human Resources best practices.
- Provide documentation to allow the District to administer and maintain the classification system on a regular basis.

### METHODOLOGY

The methodology employed in conducting the staffing assessment was as follows:

- Review and analyze the Staffing Assessment Questionnaire (SAQ) completed by the incumbents (when available), the current classification specifications for the positions held by the incumbents, and other related classification information and documents.
- Interview incumbents of the various positions and their respective managers to clarify and confirm all submitted information and review the positions' duties and responsibilities.
- Analyze the scope and complexity of the responsibilities and tasks and the required skills, knowledge, and abilities.
- Develop recommendations based on the analysis of the above information.

### KEY CLASSIFICATION CONCEPTS EMPLOYED

Standard classification concepts were used during the study to help ensure consistency with best practices for recommendations related to classification updates, retitling, and the development of new classifications. The classification concepts used in this study are listed below.

#### Class Specification

Defines a job based on the duties, responsibilities, and requirements necessary to perform the job successfully.

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**Duty Statements**

Duty statements are broad and general in the description of a duty or responsibility to allow for organizational flexibility of assignment.

**Whole Job Analysis**

Compares jobs with one another based on an overall evaluation of the whole job, including factors such as autonomy, authority, consequence of error in decision-making, level of supervision given and received, complexity, and scope.

**Time of Study Analysis**

A classification study captures the essential nature of a position at a specific point in time.

**Preponderance of Work**

Many positions perform a wide variety of tasks. A classification study looks at the preponderance of work performed by each position to determine the most appropriate type and level of classification for the duties and responsibilities performed.

**FINDINGS/RECOMMENDATIONS**

Based on the study findings, the following summarizes RGS' classification recommendations. The first section includes general recommendations for changes and updates to their class specifications. The final section provides the District with our recommendations for specific classifications within the District.

**GENERAL STAFFING/CLASSIFICATION RECOMMENDATIONS**

It is recommended that the District class specifications be updated to include:

- A format that reflects Human Resources best practices, including standard headings and layout,
- Clear and concise minimum qualifications, including years of related experience (which is described), education, and certifications that are required at the time of hire,
- Removal of terms such as "a minimum of," "desirable," and "preferred" when describing qualifications,
- Appropriate physical requirements and environmental settings.

RGS has provided a sample class specification (Attachment A) for the District's review and consideration when updating its classification plan.

**SPECIFIC DEPARTMENT FINDINGS/RECOMMENDATIONS**

The majority of employees work within their respective classifications. Other than the general updates listed above, no other changes are recommended for the following class specifications.

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- Accounting Specialist II
- Accounting Tech I
- Accounting Tech II
- Assistant Operations Supervisor
- Business Manager
- Electrical - Instrumentation Tech
- Executive Asst./Board Secretary
- General Manager
- Maintenance & Electric Supervisor
- Maintenance Mechanic
- Maintenance Worker
- Operations & Maintenance Tech
- Regulatory Analyst II
- Superintendent

For the following classifications, the analysis shows discrepancies between the work performed by the incumbents and the work identified in their respective class specifications. RGS recommends that the district review and consider updating these class specifications to reflect each classification's duties and responsibilities accurately.

Water Operations Supervisor

This classification supervises and participates in the work of staff responsible for the water pumping, distribution, and treatment systems, meter reading, water service connection, backflow compliance, and customer service. The incumbent serves as the District's Chief Operator pursuant to California safe drinking water regulations.

The incumbent supervises and oversees the work of all operational staff and supervises scheduling to ensure staff are appropriately scheduled for shifts and tasks, considering operational needs, training requirements, and regulatory compliance.

Two of the most critical areas of responsibility for this classification are duties related to the Chief Operator of the District's drinking water system and IT oversight and implementation.

The incumbent analyzes, develops, and implements GIS application systems and programs, as well as field collection applications and databases required for managing data within and outside the GIS system. This requires the incumbent to have extensive experience using various programming languages.

The incumbent provides training and technical support to users of GIS data and mapping tools and serves as a GIS analyst when needed, producing maps and datasets. The incumbent manages the district's two networks, enhancing cybersecurity awareness and implementing cybersecurity measures as needed; ensures that the networks operate smoothly and securely; determines data storage methods and content; and ensures data integrity. This includes the management of the district's hardware and software infrastructure, including 13 servers, more than 30 computers, and numerous network devices.

The incumbent is responsible for a variety of duties as Chief Operator, including overseeing and managing the water treatment and distribution staff within the district; ensuring that the plant

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is operated in compliance with all state and regulatory mandates; supervising and managing the annual water sampling schedule; prioritizing and coordinating maintenance and repairs of equipment; and collaborating with state regulators to ensure the district's compliance with their operational permit.

The analysis showed the majority of the incumbent's work aligns with the classification specification as written. However, the technology-related responsibilities of the position seem to be greater than and insufficiently emphasized in the classification specification. It is recommended that, at a minimum, the classification specification be updated to reflect the predominant IT-related duties. This should include ensuring that the qualifications reflect the experience and education required to perform these duties successfully.

**Operations & Customer Service Specialist**

The classification specification describes this position as "somewhat unique in that it contains elements of other District positions (the Operations and Maintenance Technician), and it also performs a variety of water quality and retail-level distribution and customer service work." Incumbents perform retail customer service and distribution system activities such as meter reading, pipeline flushing, backflow device testing, and pipeline locating. They also support and assist the Water Operations Specialist. The proportion of time spent on these differing assignments is determined by when the Turbidity Reduction Facility (TRF) is operational and when it is not.

The incumbent is responsible for the monthly reading of the water meters in the District's system and the Fieldbrook-Glendale CSD. The incumbent spends most of his time in the field in all weather conditions and responds to customers' calls regarding water quality, leaks, backflow requirements, and service connection issues.

The incumbent is responsible for coordinating all required water sampling with the Operations Supervisor. He plans his schedule around taking bacteria samples and chlorine residuals three weeks out of the month for the annual state report. The incumbent checks the functionality of distribution and treatment equipment in the field at valving, fire hydrants, and sampling sites and performs USAs (underground service alerts).

The analysis showed that the incumbent may be performing duties beyond the scope of their current classification. Much of the incumbent's work is done independently, requires a great deal of organizational skill, and involves significant customer contact. It is recommended that the class specification be updated to accurately reflect the duties the incumbent performs.

**Water Operations Specialist**

The classification specification describes this position as "somewhat unique in that it contains an element of another District position (the Operations and Maintenance Technician), but it also performs and is responsible for a variety of highly technical and specialized work related to

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the District's network and computer systems, including the District's Supervisory Control and Data Acquisition System (SCADA).“ The incumbent programs, administers, and maintains automated process control, data acquisition and software systems, microcomputer networks, and related peripheral equipment. He serves as a technical resource to other staff on the use of automated equipment and software and performs the full range of Operations and Maintenance (O&M) Technician duties.

The incumbent is responsible for the District's computer system maintenance. He assists the Operations Supervisor with network and troubleshooting issues, maintains the data collection software, verifies the accuracy of the data collected, and provides reports and other information required for regulatory reporting. The incumbent is responsible for all aspects of IT related to the District's operation and cyber security and effectively communicates technical IT issues with others.

The duties require the incumbent to be knowledgeable in SCADA operations, systems administration, and data management, to troubleshoot and remedy IT issues, and to implement and maintain adequate security features. This is in addition to the required knowledge, experience, and water treatment and distribution certification.

The analysis showed that the majority of the incumbent's work is aligned with the class specification as written. However, the technology-related responsibilities and duties are not fully addressed or sufficiently emphasized in the classification specification. Therefore, it is recommended that the class specification be updated to accurately reflect the duties the incumbent performs. If or when the technology-related responsibilities grow, the District may consider developing a separate classification that combines all of these duties into a single specification.

**Assistant Maintenance & Electrical Supervisor**

The Assistant Maintenance & Electrical (M&E) Supervisor directly assists and supports the M&E Supervisor and participates in the work of staff responsible for the construction, repair, calibration, and maintenance of District pumping, water treatment, distribution, storage, hydroelectric, communications, electrical, electronic, and other facilities. The incumbent is responsible for coordinating and facilitating the District Safety program and Regulatory Safety Compliance program.

The incumbent spends approximately half his time assisting the M&E Supervisor, including the construction, repair, calibration, and maintenance of District pumping, water treatment, distribution, storage, hydroelectric, communications, and electrical facilities. He performs administrative duties such as tracking staff timesheets, processing work orders and POs, project scheduling, inventory management, tracking hazardous waste disposal, budget tracking, and maintaining related files and records.

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The incumbent spends the remainder of his time on Safety Officer duties. These include promoting the Safety Program and Regulatory Safety Compliance Program and ensuring compliance with OSHA regulations. He creates and presents the meeting agendas and materials and takes all minutes for the safety meetings. The incumbent creates safety training materials and quizzes using PowerPoint, maintains attendance and training records for staff as required, and updates and/or creates safety records, programs, and policies. The incumbent stays current on required training and ensures that the staff and the District meet these requirements.

The classification requires the possession and maintenance of a Class A Commercial License and a Crane Operator's License. The incumbent's duties require the ability to operate lab testing equipment, SCADA control, treatment plant processes, and valve operation and controls. The incumbent also assists with maintaining the dam and hydroelectric plant and helps with spillway, penstock, and hydro plant inspection and repairs. The incumbent assists with maintaining and repairing various high-voltage electrical components, which requires high-voltage training.

The analysis indicates that the incumbent spends nearly half of his time performing Safety Officer duties, including developing and providing staff training and staying up to date on regulations related to training. While safety duties are noted in the classification specification, the proportion of time spent on these duties seems to be equal to or greater than the rest of the assigned duties. It is recommended that the District consider revising the current classification specification to reflect better the full scope of the duties being performed.

**Hydroelectric Operator/Ruth Area Representative**

This classification operates, maintains, and controls the District's hydroelectric generating facilities, R.W. Matthews Dam and reservoir equipment, and Ruth Lake facilities and acts as the District's on-site Ruth area representative.

The incumbent lives on-site in a District-owned residence. He performs maintenance and repair work on district facilities and equipment. This includes landscape maintenance, weed abatement for fire prevention, and maintenance of the water filtration system for residential irrigation and the fire prevention system. The incumbent handles various issues that arise in a remote location, including limited or no services, downed trees across roads, multiple feet of snow, power outages, lack of law enforcement, wildfires, and floods.

The incumbent is responsible for controlling the operation of the hydroelectric plant and water release into the Mad River. This includes manually starting and stopping the generators and increasing and decreasing electric production/water flow. Twice a day, the incumbent walks through the plant, checking and recording various functions, and visually observes the dam and its spillway, looking for any changes. The incumbent uses a district-owned boat to inspect for

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hillside erosion and unapproved development on lease lots and to remove debris from the log boom.

The incumbent is responsible for training and scheduling two part-time relief hydro plant operators, reviewing and approving timesheets and mileage reimbursement requests, and ensuring these operators attend required safety training. He also acts as the District representative to lessees of District properties at the Dam and the general public, ensuring the development of District property complies with District requirements.

The analysis indicates that the incumbent is performing duties outside of the classification specification as it is written. These duties include boat operation to complete inspections, maintenance of the District residence where they reside, remaining on call, and responding at all times. While mentioned briefly in the class specification, the duties of being the District representative require specific skills and knowledge that appear to be outside the classification specification. It is recommended that the District consider revising the current classification specification to better reflect the extent and full scope of the duties being performed.

**MAINTAINING THE CLASSIFICATION PLAN**

This classification report is a “snapshot” of the District’s current classification plan. It is important to remember that to be effective, the plan must be fluid and adaptable. The duties and responsibilities of positions may need to be updated, or new classifications created based on technological changes, funding sources, service delivery systems and other factors. The District’s classification plan must be updated periodically to accommodate these changes.

The following key concepts will assist the District in maintaining this classification plan. The following factors should be reviewed when considering updating current classifications or creating new classifications.

**LEVEL OF KNOWLEDGE AND SKILL REQUIRED**

This is the level of knowledge and skills required to perform the classification duties successfully.

Entry Level

Depending on the position, entry-level knowledge and skill may be obtained by possessing a high school diploma (or GED), basic technical certification, or a four-year degree from an accredited college or university.

Journey Level

Journey-level knowledge refers to a classification that is expected to be able to perform the full range of duties independently within specified guidelines. At this level, instruction to fellow employees can be expected. Supervision is available as needed.

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**Advanced Journey Level**

At the advanced journey level, an employee is expected to perform all required duties and handle virtually any situation during work. Guidelines are provided, but the completion of the work relies on the creative problem-solving and analytical ability of the incumbent.

**SUPERVISION RECEIVED**

This is the level of supervision/direction generally required to ensure incumbents successfully perform the duties and responsibilities of their positions.

**Direct Supervision**

This level of supervision is generally provided for entry-level positions. Detailed instruction and ongoing oversight are available.

**General Supervision**

This level of supervision is generally provided for journey-level positions. Instruction is given, but due to the incumbent's level of knowledge and skills, supervision is available on an "as-needed" basis.

**General Direction**

This level of supervision is typically provided for supervisors and managers. These incumbents organize and oversee the day-to-day activities of a work unit, division, function, and/or program that require extensive and specific knowledge in their area of expertise.

**Administrative Direction**

This level of supervision is provided for department heads. Incumbents are fully responsible for overseeing their department's varied and complex functions and coordinating their departments' activities with those of other departments and outside agencies. Incumbents at this level provide general direction and supervision to management, supervisory, professional, technical, and administrative staff. This supervision may be exercised directly or through subordinate management and supervisory staff.

**Policy Direction**

This level of supervision is provided to the General Manager by the Board of Directors. The incumbent is accountable for the governance of the District, the enforcement of codes and regulations, the conduct of all financial activities, and the overall efficient and effective performance of the District's operations.

**SUPERVISION EXERCISED**

This defines the level of supervisory and/or management level responsibility of the incumbent. This includes staff supervision, either directly or through subordinate-level supervision, and



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may also include short and long-range planning, budget development and administration, resource allocation, policy and procedure development, and staff direction.

**No Ongoing Supervision of Staff**

No supervision or oversight of staff is exercised.

**Lead Supervision**

Day-to-day oversight of work and training is provided to subordinate staff. May be responsible for scheduling staff and ensuring projects meet set timelines. At this level, incumbents may provide supervisory and/or management staff input regarding employee selection and performance. However, they are not responsible for final employee selection decisions or the formal evaluation of staff.

**First Line Supervision**

Incumbents are responsible for overseeing assigned staff and program(s). Incumbents may be involved in selecting, evaluating, and disciplining assigned staff. Incumbents work closely with management-level staff to ensure the completion of goals related to the assigned program.

**Managerial Level**

Incumbents at this level are usually responsible for the work of an entire team or division. Incumbents are often required to create and administer the budget for their area of responsibility. They also act as liaisons between their department and upper management. Often referred to as mid-management, incumbents at this level are responsible for supervising through subordinate staff.

**Department Head level**

The employee is the director of a specified department, typically reporting to the General Manager.

**General Manager (Chief Executive Officer) Level**

The employee has total administrative responsibility for the District.

**WORKING CONDITIONS**

This includes the physical and mental demands of the classification, as well as the environmental condition in which the incumbent is required to work.

**Office or Similar Setting**

The work is performed in a typical office or similar setting during regular office hours (occasional overtime may be required but compensated for). Responsibilities include meeting standard deadlines, using office and related equipment, lifting materials weighing up to 25 pounds, and communicating with others in a generally non-stressful manner.

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Varied Working Conditions

The work is typically performed indoors but may have some exposure to noise, heat, weather, or other uncomfortable conditions. Stand-by, call-back, or regular overtime may be required. Employees may have to meet frequent deadlines, work extended hours, maintain attention to detail at a computer or other machinery, deal with difficult people, or regularly perform moderate physical activity.

Difficult Working Conditions and/or Physical Demands

The work has distinct and regular challenging demands. Shift work (24-7 or rotating) and exposure to hazardous materials or conditions may be required; the employee may be subject to regular emergency callback and extended shifts; and/or the work may require extraordinary physical demands.

## **Attachment A**

# **Classification Specification Template and Sample**

The following documents are meant to be a guide for the District when updating its classification plan. The first is a Class Specification Template. The template provides the basic format for a standard class specification and includes a brief explanation of the purpose of each section (shown in *italics*).

The second document is a Sample Class Specification. This document does not represent a specific District classification. It is meant to be an example of how the different sections of the class specification template should be completed. The District's logo has been added to this document to illustrate how the class specification could be branded to identify the District.

Agency Logo

**CLASSIFICATION TITLE***Descriptive, brief, appropriate to a level consistent with other titles in the classification plan***DEFINITION***Provides a summary description of the primary purpose and responsibilities of the classification.***DISTINGUISHING CHARACTERISTICS***Used to amplify the definition and to summarize the criteria for classifying a position at this level where there is the possibility of confusion. This section is also used to distinguish between the next higher level in this series or between similar classes or class-series if appropriate.***SUPERVISION RECEIVED AND EXERCISED***Explanation of the reporting relationship of the classification. Who the class reports to and whether the position exercises functional or direct supervision of subordinate staff.***EXAMPLES OF DUTIES:***Below is a descriptive list of the range of duties performed by employees in this classification. These examples are not intended to reflect all duties performed within the job and not all duties listed are necessarily performed by each individual.*

- *Representative of the range and breadth of the classification but not exhaustive*
- *Specific and clear*
- *Avoid technical jargon or acronyms.*
- *Use action verbs that describe what is done, not verbs such as "assists in."*
- *Describe combinations of tasks as they occur in the position, arranged generally in order of importance or in the order of the work process*

**QUALIFICATIONS***In general, all minimum qualifications (knowledge, abilities, education, and experience) need to follow these guidelines:*

- *Must be directly related to duties,*
- *Must be minimum for entry to the class,*
- *Must be consistent with other classes in the series.*
- *Must be specific and measurable.*

**Knowledge of:**

- *Knowledge the incumbent needs to possess to be successful in the position.*
- *Some should be specific to the area of expertise of the position.*
- *Some may be related to general knowledge needed to work successfully in the organization.*

**Ability to:**

- *Abilities the incumbent needs to possess to be successful in the position.*
- *Some should be specific to the areas of expertise of the position.*

Class Title  
Page 2 of 2

- *Some may be related to general knowledge needed to work successfully in the organization.*

**Education and Experience:**

*Any combination of training and experience that would provide the knowledge, skills, and abilities necessary to perform the duties of the position. A typical way to obtain the knowledge and abilities would be:*

**Education**

- *Education should, if necessary, be specific to coursework and not general degrees unless mandated by law.*
- *College requirements should allow for the specific degree's equivalency to eliminate artificial hiring barriers.*

**Experience**

- *The specific number of years and type of experience required to be hired.*
- *Experience should be specific and enable personnel to differentiate candidates*

**Licenses and Certifications:**

- *Specific licenses and certifications needed upon hire. If required after hire, the specific time limit should be specified. The time limit should be less than the length of probation for the position.*

**SPECIAL REQUIREMENTS**

*Any special class requirements, i.e., need to work evenings, weekends, holidays.*

**PHYSICAL AND MENTAL DEMANDS**

*The physical and mental demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

**Physical Demands:**

*The physical requirements of the classification*

**WORKING CONDITIONS**

*The specific working conditions of the classification*

**Mental Demands:**

*The mental demands of the classification*

**HISTORY**

References specific details regarding the class specification

Adopted: XX-XXXX

Revised: XX-XXX

FLSA Status: Exempt or Non-exempt



## ACCOUNTING ASSISTANT

### DEFINITION

Under supervision, performs a variety of routine to complex financial functions, including accounts payable and receivable; processes and maintains financial records; performs a variety of administrative duties in support of the Administration Service Department and Finance division activities; and performs related duties as required.

### DISTINGUISHING CHARACTERISTICS

The Accounting Assistant is an entry-level classification. Initially, under close supervision, incumbents perform the more routine duties while learning City policies and procedures and becoming familiar with the variety of systems and practices. As experience is gained, duties become more diversified and are performed under more general supervision. This class is distinguished from the Accounting Supervisor in that the latter has full supervisory responsibility for all of the City's accounting functions.

### SUPERVISION RECEIVED AND EXERCISED

Receives supervision from the Accounting Supervisor or their designee.

### EXAMPLES OF DUTIES:

*Below is a descriptive list of the range of duties performed by employees in this classification. These examples are not intended to reflect all duties performed within the job, and not all duties listed are necessarily performed by each individual.*

- Reviews invoices for accuracy, routes to appropriate individuals for approval, and processes for payment.
- Creates checks and electronic payment files, verifies for accuracy, and distributes for payment and processing.
- Initiates invoices for goods and services; obtains all backup materials and maintains files and records.
- Generates monthly accounts receivable statements and monitors accounts for timely payment.
- Provides support to others in the Administrative Services department, including filing, photocopying, scanning, and mailing.
- Maintains a variety of financial and statistical records and files.
- Serves as backup/alternate for processing biweekly payroll; calculates deductions and remits payments as required.
- Maintains records of assets, including keys and equipment; issues inventory tags as needed; prepares annual reports to assist with physical inventory.
- Performs other related duties as required.

## QUALIFICATIONS

### Knowledge of:

- Principles of accounting, accounts payable, and accounts receivable.
- Basic knowledge of municipal accounting system requirements and procedures.
- Basic practices and procedures of financial record keeping and file maintenance.
- Business arithmetic as applied to accounting.
- Basic cash handling and accounting principles.
- Basic payroll rules, regulations, and policies applicable to the work.
- Office procedures, methods and equipment including computers and applicable software such as word processing, spreadsheets, and data bases.
- Principles and practices of customer service.
- English grammar, spelling, vocabulary, and punctuation.

### Ability to:

- Interpret and apply City policies and procedures.
- Perform office assistance, and clerical support duties.
- Analyze situations carefully and adopt effective courses of action.
- Prepare, maintain, and reconcile various financial, accounting, billing and numerical records.
- Make accurate arithmetic calculations, timely account entry, and recordkeeping work.
- Complete reports required by outside agencies and organizations.
- Learn, understand, and apply a variety of policies and procedures.
- Effectively communicate verbally and in writing.
- Establish and maintain accurate records and data files that are suitable for audit purposes.
- Perform detailed clerical accounting duties.
- Operate office equipment including telephones, copy machines, calculators, computers and related software.
- Establish and maintain effective working relationships with those contacted in the course of work.

### Education and Experience:

*Any combination of training and experience that would provide the knowledge, skills, and abilities necessary to perform the duties of the position. A typical way to obtain the knowledge and abilities would be:*

#### Education

Equivalent to an associate's degree or equivalent college semester hours/credits from an accredited college or university in accounting, business, or a closely related field.

#### Experience

- One (1) year of experience performing accounts payable or receivable duties or financial and statistical record-keeping work.



**Licenses and Certifications:**

- None required.

**SPECIAL REQUIREMENTS**

Employees may be required to work evenings, weekends, and holidays at meetings or City events.

**PHYSICAL AND MENTAL DEMANDS**

*The physical and mental demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

**Physical Demands:**

While performing the duties of this class, the employee is constantly required to sit and frequently stand, walk, talk, and hear, both in person and by telephone; use hands or fingers to handle, touch, or operate standard office equipment; and reach with hands and arms. Employee occasionally reaches for items above or below desk level and lifts and carries records and documents, typically weighing under 20 pounds.

**Vision:** Specific vision abilities required by this job include close vision and the ability to adjust focus and travel by vehicle while conducting City business.

**Hearing:** Effectively hear and comprehend oral instructions and communication.

**WORKING CONDITIONS**

The employee typically works in an office environment. Non-traditional work hours may be required to accommodate the City's needs, including attendance at City Council meetings, special City events, and matters requiring the presence of the incumbent. These hours may include but are not limited to weekends, evenings, and holidays. The employee may be required to travel using public transportation. Generally clean work environment with limited exposure to dust, fumes, odors, or noise. Travel throughout the City may be required.

**Mental Demands:**

While performing the duties of this class, the employee is regularly required to use oral and written communication skills; exercise sound judgment in the absence of specific guidelines; establish priorities and work on multiple assignments and projects concurrently; meet intense and changing deadlines given continual interruptions; and interact appropriately with staff, management, City officials, Boards, Commissions, contractors, consultants, and others encountered in the course of work.

**HISTORY**

Adopted: Jan 2020

Revised: Dec 2024

FLSA Status: Non-exempt

Attachment 3 – RGS HBMWD Compensation Study Report

# HUMBOLDT BAY MUNICIPAL WATER DISTRICT COMPENSATION STUDY REPORT 2024

Prepared for:



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Prepared By:



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**2024 COMPENSATION STUDY REPORT**

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**ATTACHMENTS**

- Attachment A - Comparable Agency Analysis Worksheet
- Attachment B - Compensation Data Worksheets

## 2024 COMPENSATION STUDY REPORT

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### EXECUTIVE SUMMARY

In January 2024, the Humboldt Bay Municipal Water District (District) engaged Regional Government Services (RGS) to conduct an agency-wide staffing assessment and total compensation study.

### COMPENSATION STUDY GOALS

The goals of the compensation study are to:

- Determine the compensation for similar classifications in the District's identified comparable agencies.
- Determine the level of benefits provided by agencies comparable to similar classifications.
- Evaluate whether the District's compensation and benefits are competitive with the job market utilizing the data obtained from the District.
- Recommend a compensation plan that is both externally competitive and internally equitable.

### METHODOLOGY

#### KICK-OFF MEETING

RGS met with the General Manager, Business Manager, and Superintendent in January 2024 to initiate the study. Organizational data was requested, and the comparable agencies, classifications to be surveyed, and the compensation components to be included in the study were discussed. In addition, information regarding agency expectations, timelines, data collection methods, deliverables, and other pertinent information was shared.

#### ORGANIZATIONAL DATA

RGS requested and reviewed key organizational materials and information to understand the District's current structure, policies, procedures, challenges, and practices related to compensation systems and administration. Those materials included:

- Organizational Charts
- Existing classification specifications
- Benefit summaries and employer/employee cost data
- Salary schedules
- Applicable policies, procedures, and ordinances

**2024 COMPENSATION STUDY REPORT****MARKET COMPARATORS**

The District requested that RGS conduct an analysis to determine the comparable agencies to be surveyed for the study. RGS selected and reviewed various factors of twenty-five (25) water districts/agencies throughout California. These factors included:

- Operating budgets
- Number of employees
- Cost of living
- Cost of housing
- Number of wholesale sites
- Population served (wholesale and direct)
- Type/grade of facility

Of those agencies, RGS recommended the following eleven (11) agencies be included based on the criteria. (A detailed description of the comparable agency analysis can be found in Attachment B).

- Amador Water Agency
- Monte Vista Water District
- San Juan Water District
- Kern County Water Agency
- Inland Empire Utilities Agency
- South San Joaquin Irrigation District
- Placer County Water Agency
- Sonoma County Water Agency
- Muni Water District of Orange Co
- Zone 7 (Alameda County)
- San Diego County Water Authority

**SURVEYED CLASSIFICATIONS**

The District requested sixteen (16) of the District's current classifications be included in the study:

- Accounting Specialist II
- Accounting Technician II
- Business Manager
- District Superintendent
- Electrician/Instrument Technician
- Executive Assistant/Board Secretary
- Hydro Operator
- Maintenance Mechanic
- Maintenance Worker
- Maintenance/Electrical Supervisor
- Operation & Maint Technician
- Operations/Customer Service Specialist
- Regulatory Analyst II
- Water Operations Specialist
- Water Operations Supervisor

## 2024 COMPENSATION STUDY REPORT

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### COMPENSATION COMPONENTS

The initial compensation components for the study were provided to RGS by the District and included the following:

**Monthly Base Salary:** The top of the salary range (excluding longevity salary steps). All figures are presented on a monthly basis.

#### Insurance

**Medical Insurance:** The maximum monthly amount the agency contributes to medical premiums for the employee and dependents. This amount is included in the total compensation calculation. The maximum monthly amount paid by the employee and the total cost is presented for informational purposes.

**Dental Insurance:** The maximum monthly amount the agency contributes to dental premiums for the employee and dependents. This amount is included in the total compensation calculation. The maximum monthly amount paid by the employee and the total cost is presented for informational purposes.

**Vision Insurance:** The maximum monthly amount the agency contributes to vision premiums for the employee and dependents. This amount is included in the total compensation calculation. The maximum monthly amount paid by the employee and the total cost is presented for informational purposes.

#### Pension (for Classic and PEPRAs employees)

**Employee Paid Member Contribution:** The amount the employee pays of the employee's statutory required contribution to the retirement system. This amount is presented for informational purposes.

**Employee Paid Employer Contribution:** The amount the employee agrees to pay of the statutorily required employer contribution to the retirement system. This amount is included in the total compensation calculation (shown as a negative number).

**Employer Paid Member Contribution:** The amount the agency agrees to pay of the statutorily required employee contribution to the retirement system. This amount is included in the total compensation calculation.

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**Minimum Required Employer Contribution:** The annual cost of service accrual for active employees for the upcoming fiscal year (Normal Cost).

**Leaves**

**Vacation Leave:** The number of vacation hours accrued per year by all employees in the classification after five years of employment. The number of days has been converted to a monthly dollar amount based on the base rate of pay for each classification and is included in the total compensation calculation.

**Sick Leave:** The number of sick hours accrued per year by all employees in the classification. The number of hours has been converted to a monthly dollar amount based on the base rate of pay for each classification and is included in the total compensation calculation.

**Holiday Leave:** The number of holiday hours accrued per year by employees in the classifications. The number of hours has been converted to a monthly dollar amount based on the base rate of pay for each classification and is included in the total compensation calculation.

**Administrative/Management/Personal Leave:** The number of hours normally available to management to reward employees for extraordinary effort in lieu of overtime. Personal leave may be available to other groups of employees to augment vacation or other time off. The number of hours has been converted to a monthly dollar amount based on the base pay rate for each classification and is included in the total compensation calculation.

**Additional Benefits**

**Deferred Compensation Match or Contribution:** This is the monthly amount the agency contributes to the agency-sponsored deferred compensation plan on behalf of the employee. This amount is included in the total compensation calculation. If the contribution is based on longevity, the amount contributed at five years of services is used.

**Longevity Pay:** This is the amount provided to employees who have reached a specific number of years of service as determined by the employer. The amount provided at fifteen years of service is included in the total compensation calculation.

**Other Compensation:** This category includes any additional compensation benefits available to the incumbents in a classification.



**2024 COMPENSATION STUDY REPORT**

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**DATA COLLECTION PROCESS****DETERMINING MATCH CLASSIFICATIONS**

One of the most critical factors in conducting a compensation study is ensuring the classifications selected from the comparator agencies match the District's benchmark classifications as closely as possible. When comparing appropriate matches, the analysis must include more than job titles. Due to different titling conventions, job titles alone can be misleading. Therefore, a more extensive analysis is performed. The District's class specifications were analyzed, and RGS discussed specific aspects of various classifications with the District to ensure the most up-to-date and accurate information was used in the analysis. Classifications at the comparable agencies were compared to those at the District, and match classifications were determined using the following criteria.

- Education and experience requirements
- Scope and complexity of the work
- Knowledge, skills, and abilities required to perform the work.
- Supervision received and exercised.
- Consequence of error.
- Special certification or license requirements.
- Organizational structure of the division/department where the classification is found.

RGS considers fewer than four (4) comparison matches insufficient for analysis because fewer matches make salary variations more significant, and results may not accurately reflect the market.

**COMPENSATION DATA COLLECTION**

Compensation data was collected for the benchmark from all the designated comparator agencies through websites, direct contact with agency human resources, finance, and management staff, and an in-depth review of agency documents, including class specifications, memoranda of understanding, organizational charts, personnel allocations, and budget documents. RGS verified salary and benefits data for the agencies, analyzed the data received, and compared it to data obtained from the District.

The compensation charts provided include the median (midpoint) of the maximum monthly base pay and total compensation data, including separate calculations for CalPERS Classic and PEPRA members for each surveyed classification. RGS recommends using the median instead of the mean, which is the average of all market data collected. The median is the exact midpoint,

**2024 COMPENSATION STUDY REPORT**

with 50% of market data below and 50% above. Unlike the mean, the median methodology eliminates distortion caused by exceptionally high or low salary values.

**FINDINGS AND ANALYSIS****EXTERNAL MARKET ANALYSIS**

RGS collected salary and benefits for twenty-three classifications. RGS found sufficient match classifications for all but the following five classifications:

- Business Manager
- Hydo Operator
- Operations/Customer Service Specialist
- Regulatory Analyst II
- Water Operations Specialist

When analyzing compensation, it is customary to consider competitiveness in the relevant labor market. While the District may consider a different adjustment standard, as an industry rule, if a classification falls within five percent (5%) above or below the market, it is considered competitive based on our experience, and adjustments are not typically recommended. The five percent (5%) above or below market differences allow for slight differences between job duties, assignments, and benefits packages.

The charts below and the following narrative summarize the survey results and compare the District's compensation to that of the comparable agencies. All listed salary data is based on the top step (excluding longevity) of the respective salary range collected from the District and the comparable agencies surveyed. In the first chart, the percentages represent the difference in the base salary of the District to the median base pay of all market comparators. In the second chart, the percentage represents the difference in the total compensation of the District's CalPERS Classic employees to the median total compensation of all market comparators' CalPERS Classic employees. In the third chart, the percentage represents the difference in the total compensation of the District's CalPERS PEPRA employees to the median total compensation of all market comparators' CalPERS PEPRA employees.

**Base Pay Comparison**

| BENCHMARK CLASSIFICATION TITLE | # of Comps | HBMWD Base Salary | Market Median Salary | HBMWD to Market Median | Top Step to the Median of Market |
|--------------------------------|------------|-------------------|----------------------|------------------------|----------------------------------|
| Accounting Specialist II       | 6          | \$6,424           | \$7,016              | -8.44%                 | Below                            |
| Accounting Technician II       | 9          | \$5,548           | \$6,754              | -17.85%                | Below                            |
| District Superintendent        | 6          | \$10,768          | \$13,932             | -22.71%                | Below                            |

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|                                     |   |         |          |         |       |
|-------------------------------------|---|---------|----------|---------|-------|
| Electrician/Instrument Tech         | 9 | \$7,433 | \$10,932 | -32.01% | Below |
| Executive Assistant/Board Secretary | 7 | \$5,824 | \$9,099  | -35.99% | Below |
| Maintenance Mechanics               | 8 | \$6,424 | \$8,452  | -24.00% | Below |
| Maintenance Worker                  | 8 | \$4,228 | \$6,335  | -33.26% | Below |
| Maintenance/Electrical Supervisor   | 6 | \$8,901 | \$11,711 | -24.00% | Below |
| Operation & Maint Technicians       | 9 | \$6,424 | \$9,230  | -24.00% | Below |
| Water Operations Supervisor         | 9 | \$8,733 | \$13,328 | -30.41% | Below |

Top monthly salary market results show that:

- One classification is below market by more than 5% and less than 10%.
- One classification is below the market by more than 15% and less than 20%.
- The remaining eight classifications are below the market by more than 20%.

**Total Compensation Comparison (CalPERS Classic Employees)**

| BENCHMARK CLASSIFICATION TITLE      | # of Comps | HBMWD<br>Total Comp | Market<br>Median Total<br>Comp | HBMWD to<br>Market<br>Median<br>Total Comp | Total Comp<br>to the<br>Market<br>Median |
|-------------------------------------|------------|---------------------|--------------------------------|--|--|
| Accounting Specialist II            | 6          | \$11,645            | \$12,233                       | -4.81%                                     | Competitive                              |
| Accounting Technician II            | 9          | \$10,419            | \$12,058                       | -13.59%                                    | Below                                    |
| District Superintendent             | 6          | \$17,729            | \$22,850                       | -22.41%                                    | Below                                    |
| Electrician/Instrument Tech         | 9          | \$13,177            | \$17,200                       | -23.39%                                    | Below                                    |
| Executive Assistant/Board Secretary | 7          | \$10,806            | \$14,975                       | -27.84%                                    | Below                                    |
| Maintenance Mechanics               | 8          | \$11,810            | \$13,922                       | -15.17%                                    | Below                                    |
| Maintenance Worker                  | 8          | \$8,572             | \$11,085                       | -22.67%                                    | Below                                    |
| Maintenance/Electrical Supervisor   | 6          | \$15,114            | \$17,930                       | -15.71%                                    | Below                                    |
| Operation & Maint Technicians       | 9          | \$11,810            | \$13,922                       | -15.17%                                    | Below                                    |
| Water Operations Supervisor         | 9          | \$14,880            | \$19,640                       | -23.26%                                    | Below                                    |

Total compensation market results for CalPERS Classic employees show that:

- One classification is competitive with the market (with 5% +/- of the median).
- One classification is below the market by more than 10% and less than 15%.
- Three classifications are below the market by more than 15% and less than 20%.
- The remaining five classifications are below the market by more than 20%.

**2024 COMPENSATION STUDY REPORT****Total Compensation Comparison (CalPERS PEPRA Employees)**

| BENCHMARK CLASSIFICATION TITLE      | # of Comps | HBMWD Total Comp | Market Median Total Comp | HBMWD to Market Median Total Comp | Total Comp to the Market Median |
|-------------------------------------|------------|------------------|--------------------------|-----------------------------------|---------------------------------|
| Accounting Specialist II            | 6          | \$10,938         | \$11,956                 | -8.51%                            | Below                           |
| Accounting Technician II            | 9          | \$9,808          | \$11,514                 | -14.81%                           | Below                           |
| District Superintendent             | 6          | \$16,543         | \$22,256                 | -25.67%                           | Below                           |
| Electrician/Instrument Tech         | 9          | \$12,359         | \$16,379                 | -24.54%                           | Below                           |
| Executive Assistant/Board Secretary | 7          | \$10,165         | \$13,890                 | -26.82%                           | Below                           |
| Maintenance Mechanics               | 8          | \$11,103         | \$13,280                 | -16.39%                           | Below                           |
| Maintenance Worker                  | 8          | \$8,106          | \$11,085                 | -26.87%                           | Below                           |
| Maintenance/Electrical Supervisor   | 6          | \$14,134         | \$17,679                 | -20.05%                           | Below                           |
| Operation & Maint Technicians       | 9          | \$11,103         | \$13,280                 | -16.39%                           | Below                           |
| Water Operations Supervisor         | 9          | \$13,918         | \$18,537                 | -23.46%                           | Below                           |

Total compensation market results for CalPERS PEPRA employees show that:

- One classification is below market by more than 5% and less than 10%
- One classification is below the market by more than 10% and less than 15%
- Two classifications are below the market by more than 15% and less than 20%
- The remaining six classifications are below the market by more than 20%

**BENEFIT FINDINGS**

In general, RGS found little difference in the District's benefits costs and those of the comparable agencies. The following summarizes the comparison of benefits included in the total compensation calculations for the comparable agencies and the District. The Compensation Worksheet and the Benefits Notes in Attachment B provide a more detailed description of these, and the other benefits data collected.

**Medical Insurance**

- All agencies contribute to medical benefits for their employees.
- The amount contributed to medical insurance by the comparator agencies ranges from \$1,744 – \$2,996/month.
- The District currently contributes \$2,400/month toward medical insurance.

**Dental Insurance**

- Eight agencies contribute dental benefits on behalf of their employees.

**2024 COMPENSATION STUDY REPORT**

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- The amount contributed to dental insurance by the comparator agencies ranges from \$56-\$155/month.
- The District contributes \$106/month toward dental insurance.

**Vision Insurance**

- Eight agencies contribute to vision benefits on behalf of their employees.
- The amount contributed to medical insurance by the comparator agencies ranges from \$15 - \$24/month
- The District contributes \$18.50/month toward vision insurance.

**Leaves****Vacation Leave (at five years of service):**

- All agencies provide vacation leave for their employees.
- The number of vacation hours provided ranges from 96 to 144 per year for their employees.
- The District provides 120 hours of vacation to their employees per year.

**Sick Leave:**

- All agencies provide sick leave for their employees.
- Each provides 96 hours of sick leave to their employees each year.
- The District also provides 96 hours of sick leave annually.

**Holiday Leave:**

- All agencies provide holiday leave for their employees.
- The number of holidays provided ranges from 12-15 per year (including floating holidays).
- The District provides 15 holidays (12 regular and 3 floating holidays) per year.

**Administrative/Management Leave**

- Eight agencies provide administrative/management leave to some or all of their employees.
- One agency provides between 1-3 days depending on years of service
- The remaining agencies provide administrative/management leave ranging from 40 to 104 hours per year
- The District provides 16-32 hours of management leave to specific management classifications. The amount of leave is dependent on classification.

**2024 COMPENSATION STUDY REPORT**

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**Other Benefits****Deferred Compensation Match or Contribution:**

- Three agencies contribute to a deferred compensation plan for their employees.
- Two agencies provide a flat dollar contribution of \$145 and \$184/month to a deferred compensation plan.
- One agency contributes a 50% match of up to 15% of their employees' gross wages.
- The District provides a flat dollar contribution of \$100-\$250, depending on longevity, for those employees who participate in the plan. The District also provides a flat dollar contribution of \$50/month for employees who do not participate in the plan.

**INTERNAL SALARY ALIGNMENT**

The market median data is only one factor in establishing a competitive and equitable compensation plan. As the external salary data is collected separately for each classification, the resulting data can be affected by several factors, such as whether positions are designated FLSA exempt or non-exempt, the number of match classes identified, the type or agency where they were found, and the overall staffing level/structure of those agencies. Because of the inconsistencies that may arise from the market data alone, it is critical to analyze how it aligns with the District's established compensation plan and industry standards. This includes considering the following factors:

**Relationship to Classifications Within the Same Reporting Structure**

Classifications related to each other by discipline, duties, or responsibilities but separated by level of complexity or authority, such as entry, journey, lead or senior, supervisor, and manager, should be separated by approximately 10-15%. This practice provides a healthy separation between classification levels and avoids salary compaction. Salary compaction occurs when classifications are within 5% or less of each other.

**Relationship to Classifications Across the Class Plan**

Classifications with similar authority, autonomy, and responsibilities but assigned to different sections or departments, such as department heads, division heads, and managers, are often compensated similarly. When reviewing internal equity in an organization, classifications are often reviewed for impacts across the class plan for positions with similar authority, autonomy, and core responsibilities.

**2024 COMPENSATION STUDY REPORT****Classifications with Insufficient External Market Data**

To set salaries for non-benchmark classifications or those with insufficient external data, RGS recommends conducting an internal salary alignment analysis, as described above. They should be evaluated based on various classification factors such as education and experience, scope and complexity of the work, knowledge, skills, and abilities required to perform the work, and the supervision received and exercised.

**Other Factors Related to Setting Compensation**

While RGS has provided suggestions to address any compensation inequities between the District and the market, this report is simply a tool for discussing how to set compensation. Other factors must also be considered, such as:

**Impediments to recruitment**—The labor market shifts at various times during an organization's life, and for various reasons, a position or positions may become extremely difficult to recruit for. When this occurs, compensation is one factor to consider.

**Value to the Organization** – Some classifications have a greater value to an organization than others. It is critical to consider the value of each classification when reviewing compensation.

**Ripple Effect of an Increase** – Depending on the differentials set between classifications within and across series, modifying all classifications within a series or related to a classification for which an organization is adjusting compensation may become appropriate. Therefore, it is crucial to understand the other classifications that will be affected and the additional administrative and overhead costs associated with the compensation adjustment when implementing a change in compensation.

**RECOMMENDATIONS**

The analysis found that the disparity in the District's total compensation to that of the comparable agencies is mainly due to base pay and not the benefits provided by the District. As all classifications were found to be below the market (many significantly), RGS recommends the District develop a multi-year compensation plan. This could include a series of increases over the next ~3-4 years, particularly for classifications that were found to be more than 10% below the market. A phased approach will allow the District to balance the need for a competitive compensation plan with the District's fiscal responsibilities.

**COMPENSATION POLICY**

RGS recommends the District create a compensation policy to establish and codify a strategy for setting compensation. This policy should identify the comparator agencies to be surveyed (or, at minimum, the type of agencies to be surveyed), the benefit components to be used, the

**2024 COMPENSATION STUDY REPORT**

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method of collecting information, the criteria for determining when compensation studies will be conducted, how the comparable data will be determined, and how the data will be implemented.

RGS recommends that the policy include how the District plans to set compensation in relation to the market data. For example, using the median as the set point for salaries, using either base pay or total compensation, and setting salaries equal to the median or some percentage above or below the median.

In addition to market placement, there are many other factors to consider when setting salaries. The policy should include recruitment, retention, and promotion issues, salaries of other similar positions within the same series or across the organization (internal parity), the value of the work performed to the organization, and fiscal sustainability. The District's total compensation package value may also be a factor to consider when determining policy parameters.

Adopting a compensation policy that includes compensation-setting guidance based on these factors will provide a fact-based and analytical foundation and give the District the tools needed to resist short-term pressures in favor of long-term equity and fiscal sustainability.



## **Attachment A**

### **Comparable Agency Analysis Worksheet**

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
COMPARABLE AGENCY ANALYSIS

| Wholesale Sites                              | City, Co or Sep | Match Points | Cost of Living <sup>1</sup> | Match Points | Cost of Housing <sup>2</sup> | Match Points | Wholesale Population Served | Direct Population Served | Total Population Served | Match Points | Alloc FTEs  | Match Points | Budget              | Match Points w/D4 | Classes w/74 | Match Points | Total     | Notes  |
|--|-----------------|--------------|-----------------------------|--------------|------------------------------|--------------|-----------------------------|--------------------------|-------------------------|--------------|-------------|--------------|---------------------|-------------------|--------------|--------------|-----------|--|
| Amador Water Agency                          | 6+              | 5 Sep        | 111                         | 5            | 120                          | 5            | Unk                         | Unk                      | 10,000                  | 3            | 40.0        | 5            | \$12,366,600        | 5                 | 1            | 1            | 35        | Small community systems, storm drain services. Distribution Supervisor = D-4 Cert. Wastewater Wholesale, direct water customers. D4 in one class, D5 in one class, max T3.     |
| Monte Vista Water District                   | 1               | 0 Sep        | 119                         | 5            | 151                          | 3            | 77,058                      | 56,422                   | 133,480                 | 5            | 41.5        | 5            | \$29,104,595        | 5                 | 2            | 3            | 31        | Wholesale, direct water customers  |
| San Juan Water District                      | 5               | 3 Sep        | 127                         | 3            | 167                          | 1            | 111,659                     | 29,712                   | 141,371                 | 3            | 50.1        | 3            | \$66,423,600        | 3                 | 5            | 2            | 29        | Wholesale, direct water customers  |
| Kern County Water Agency                     | 13              | 0 Sep        | 100                         | 5            | 97                           | 5            | 185,000                     | N/A                      | 185,000                 | 1            | 32.0        | 5            | \$494,500,000       | 0                 | 2            | 3            | 27        | Wholesale only   |
| Inland Empire Utilities Agency               | 7               | 5 Sep        | 119                         | 5            | 151                          | 3            | Unk                         | Unk                      | 935,000                 | 0            | 340.0       | 0            | \$429,100,000       | 0                 | 2            | 3            | 26        | Wholesale, direct water customers, wastewater treatment  |
| South San Joaquin Irr District               | 3               | 1 Sep        | 125                         | 3            | 163                          | 1            | 216,000                     | N/A                      | 216,000                 | 0            | 117.0       | 0            | \$13,310,634        | 5                 | 0            | 2            | 18        | Wholesale only - at least 2 classes req a T4 - those are req'd to have a D3.   |
| Placer Co Water Agency                       | 3+              | 3 Sep        | 139                         | 1            | 211                          | 0            | Unk                         | 41,000                   | 41,000                  | 5            | 234.0       | 0            | \$164,900,000       | 0                 | 2            | 1            | 17        | Wholesale, direct water customers, power generation - Wholesale, flood control, wastewater - D4 in one class, D5 in one class  |
| Sonoma County Water Agency                   | 9               | 3 Sep        | 152                         | 1            | 253                          | 0            | 735,000                     | N/A                      | 735,000                 | 0            | 200.0       | 0            | \$71,900,000        | 3                 | 2            | 3            | 15        | Wholesale water supplier and resource planning agency. Dependent special district under Alameda Co. Flood Control and Water Conservation District Act. 2 classes req. T5 Cert. |
| Muni Water Dist of Orange Co                 | 27              | 0 Sep        | 165                         | 0            | 298                          | 0            | Unk                         | Unk                      | 3,200,000               | 0            | 50.0        | 3            | \$226,212,248       | 0                 | 2            | 3            | 14        | An independent public agency that serves as San Diego County's regional water wholesaler.  |
| Zone 7 (Alameda County)                      | 4               | 3 Co         | 155                         | 0            | 377                          | 0            | Unk                         | Unk                      | 260,000                 | 0            | 122.0       | 0            | \$149,523,000       | 0                 | 2            | 3            | 9         |  |
| San Diego County Water Authority             | 24              | 0 Sep        | 155                         | 0            | 260                          | 0            | Unk                         | Unk                      | 3,300,000               | 0            | 250.0       | 0            | \$1,700,000,000     | 0                 | 1            | 1            | 6         |  |
| <b>Humboldt Bay Municipal Water District</b> | <b>7</b>        | <b>5 Sep</b> | <b>108</b>                  | <b>5</b>     | <b>132</b>                   | <b>5</b>     | <b>75,000</b>               | <b>13,000</b>            | <b>88,000</b>           | <b>5</b>     | <b>28.0</b> | <b>5</b>     | <b>\$20,802,124</b> | <b>5</b>          | <b>5</b>     | <b>4</b>     | <b>45</b> |  |

Note: Populations Served are estimates

<sup>1</sup> Cost of Living: Numbers based on the U.S. Overall Cost of Living = 100 (CA Cost of Living = 150).

<sup>2</sup> Cost of Housing: Numbers based on U.S. Cost of Housing = 100 (CA Cost of Housing = 235)

Separate agency = 5; City/County = 0  
 Cost of Living: 108 +/- 15 = 5, 108 +/- 30 = 3, 108 +/- 45 = 1, otherwise 0  
 Cost of Housing: 131.5 +/- 15 = 5, 100 +/- 30 = 3, 100 +/- 45 = 1, otherwise 0 (Based on County location)  
 FTEs: 28 +/- 20 = 5, 28 +/- 40 = 3, 28 +/- 72 = 1, >100 = 0  
 Population: 88000 +/- 50,000 = 5, 88,000 +/- 80,000 = 3, 88000 +/- 100,000 = 1, >188,000 = 0  
 Budget: 20,000 +/- = 5, 55,000 +/- = 3, 85,000 +/- = 1, >85,000 +/- = 0  
 Distance = within 200 miles = 5, within 300 miles = 3, within 400 miles = 1, 400+ miles = 0  
 D4/T4 Certs req'd (must have at least 1 of either); 3+ classes = 5, 2 classes = 3, 1 class, 0 classes = 0

**Other Agencies Reviewed - Not Comparable**

County of Butte: South Feather Water & Power Agency - Water treatment/distribution (residential and commercial); raw untreated water for agricultural irrigation. No wholesale; Cal Water (San Jose Based Co.) Services 496,400 customer connections thru 23 districts, including Chico, throughout the state - not comparable  
 County of Colusa: Colusa County Water District - non-potable water only - several different agencies use wells  
 County of Lake: All small agencies - no wholesale - not comparable  
 Madera Irrigation District - well water, no wholesale, T1 only  
 County of Plumas: Plumas Co Flood Control/Water Conservation District delivers municipal and irrigation water supplies - no water emps/no D4 or T4 classes  
 County of Sutter: Yuba City Utilities - obtains water through four different permits/contracts; no wholesale  
 County of Mariposa: Mariposa Public Utilities District - Small agency - no wholesale  
 County of Merced: Various - Mostly groundwater/Agr use or small districts on wells  
 County of Fresno: All agencies use wells from Fresno Sole Source Aquifer  
 County of Shasta: Shasta County Water Agency - no D4 or T4 requirements - Co special district / ~150 other small non-comparable agencies  
 County of Tehama: 10 small water agencies - no wholesale  
 County of Yuba: Yuba Water Agency - Wholesale only  
 County of Stanislaus: Stanislaus Regional Water Authority - direct water customers; Modesto Irrigatin District - direct water customers - community owned/not-for-profit; City of Modesto - draws water from 77 wells and 12 water tanks - direct water customers - no wholesale  
 County of Calaveras: All small agencies - no wholesale - not comparable

## **Attachment B**

### **Compensation Data Worksheets**

Humboldt Bay Municipal Water District  
 Overview of Competitiveness Within the Labor Market  
 Above, Below, Competitive  
 2024

| BENCHMARK CLASSIFICATION TITLE      | # of Comps | BASE PAY          |                      |                          |                                  | CLASSIC EMPLOYEES |                          |                                |                                    | PEPRA EMPLOYEES  |                          |                                   |                                    | CLASSIC EMPLOYEES            |                                      |                                   |                                    | PEPRA EMPLOYEES              |                                      |                                   |                                    |
|-------------------------------------|------------|-------------------|----------------------|--------------------------|----------------------------------|-------------------|--------------------------|--------------------------------|------------------------------------|------------------|--------------------------|-----------------------------------|------------------------------------|------------------------------|--------------------------------------|-----------------------------------|------------------------------------|------------------------------|--------------------------------------|-----------------------------------|------------------------------------|
|                                     |            | HBMWD Base Salary | Market Median Salary | HBMWD to Market Median % | Top Step to the Median of Market | HBMWD Total Comp  | Market Median Total Comp | HBMWD Market Median Total Comp | Total Comp to the Median of market | HBMWD Total Comp | Market Median Total Comp | HBMWD to Market Median Total Comp | Total Comp to the Median of market | HBMWD Base pay to Total Comp | Market Median Base pay to Total Comp | HBMWD to Market Median Total Comp | Total Comp to the Median of market | HBMWD Base pay to Total Comp | Market Median Base pay to Total Comp | HBMWD to Market Median Total Comp | Total Comp to the Median of market |
| Accounting Specialist II            | 6          | \$6,424           | \$7,016              | -8.44%                   | Below                            | \$11,645          | \$12,233                 | -4.81%                         | Competitive                        | \$10,938         | \$11,956                 | -8.51%                            | Below                              | -45%                         | -43%                                 | -8.51%                            | Below                              | -45%                         | -43%                                 | -8.51%                            | Below                              |
| Accounting Technician II            | 9          | \$5,548           | \$6,754              | -17.85%                  | Below                            | \$10,419          | \$12,058                 | -13.59%                        | Below                              | \$9,808          | \$11,514                 | -14.81%                           | Below                              | -47%                         | -44%                                 | -14.81%                           | Below                              | -47%                         | -44%                                 | -14.81%                           | Below                              |
| District Superintendent             | 6          | \$10,768          | \$13,932             | -22.71%                  | Below                            | \$17,895          | \$22,850                 | -21.69%                        | Below                              | \$16,709         | \$22,256                 | -24.92%                           | Below                              | -40%                         | -39%                                 | -24.92%                           | Below                              | -40%                         | -39%                                 | -24.92%                           | Below                              |
| Electrician/Instrument Tech         | 9          | \$7,433           | \$10,932             | -32.01%                  | Below                            | \$13,177          | \$17,200                 | -23.39%                        | Below                              | \$12,359         | \$16,379                 | -24.54%                           | Below                              | -44%                         | -36%                                 | -24.54%                           | Below                              | -40%                         | -33%                                 | -24.54%                           | Below                              |
| Executive Assistant/Board Secretary | 7          | \$5,824           | \$9,099              | -35.99%                  | Below                            | \$10,806          | \$14,975                 | -27.84%                        | Below                              | \$10,165         | \$13,890                 | -26.82%                           | Below                              | -46%                         | -39%                                 | -26.82%                           | Below                              | -43%                         | -34%                                 | -26.82%                           | Below                              |
| Maintenance Mechanics               | 8          | \$6,424           | \$8,452              | -24.00%                  | Below                            | \$11,810          | \$13,922                 | -15.17%                        | Below                              | \$11,103         | \$13,280                 | -16.39%                           | Below                              | -46%                         | -39%                                 | -16.39%                           | Below                              | -42%                         | -36%                                 | -16.39%                           | Below                              |
| Maintenance Worker                  | 8          | \$4,228           | \$6,335              | -33.26%                  | Below                            | \$8,572           | \$11,085                 | -22.67%                        | Below                              | \$8,106          | \$11,085                 | -26.87%                           | Below                              | -51%                         | -43%                                 | -26.87%                           | Below                              | -48%                         | -43%                                 | -26.87%                           | Below                              |
| Maintenance/Electrical Supervisor   | 6          | \$8,901           | \$11,711             | -24.00%                  | Below                            | \$15,217          | \$17,930                 | -15.13%                        | Below                              | \$14,237         | \$17,679                 | -19.47%                           | Below                              | -42%                         | -35%                                 | -19.47%                           | Below                              | -37%                         | -34%                                 | -19.47%                           | Below                              |
| Operation & Maint Technicians       | 9          | \$6,424           | \$9,230              | -24.00%                  | Below                            | \$11,810          | \$13,922                 | -15.17%                        | Below                              | \$11,103         | \$13,280                 | -16.39%                           | Below                              | -46%                         | -34%                                 | -16.39%                           | Below                              | -42%                         | -34%                                 | -16.39%                           | Below                              |
| Water Operations Supervisor         | 9          | \$8,733           | \$13,328             | -30.41%                  | Below                            | \$14,980          | \$19,640                 | -23.26%                        | Below                              | \$14,019         | \$18,537                 | -23.46%                           | Below                              | -42%                         | -32%                                 | -23.46%                           | Below                              | -38%                         | -28%                                 | -23.46%                           | Below                              |

CLASSIFICATIONS WITH INSUFFICIENT DATA

|                               |   |                                  |
|-------------------------------|---|----------------------------------|
| Business Manager              | 3 | INSUFFICIENT DATA FOR COMPARISON |
| Hydro Operator                | 0 | INSUFFICIENT DATA FOR COMPARISON |
| Operations/Customer Svc Spec. | 0 | INSUFFICIENT DATA FOR COMPARISON |
| Regulatory Analyst II         | 3 | INSUFFICIENT DATA FOR COMPARISON |
| Water Operations Specialist   | 1 | INSUFFICIENT DATA FOR COMPARISON |



































**HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
COMPENSATION STUDY NOTES**

| <b>Employer Paid Health Benefits</b> |  |
|--------------------------------------|--|
| Amador Water Agency                  | ER pays: Anthem Advantage Medical \$1840.72; Delta Dental \$122.90; VSP Vision \$\$23.66   |
| Inland Empire Utilities Agency       | CalPERS Medical: ER Pays Cafeteria towards medical, dental, and vision. GEneral, Professional, & Supervisors, Unrepresented, Executive: \$1,808.00; Operators & Laboratory Units: \$1,755.00                                   |
| Kern County Water Agency             | ER pays: Anthem Blue-Cross Classic PPO Medical \$1828.07; Delta Dental \$122.90; VSP Vision \$21.32  |
| Monte Vista Water District           | CalPERS Medical: ER Pays \$1950.00 Cafeteria towards medical, dental, and vision.  |
| Muni Water Dist of Orange Co         | PPO Plan Classic: ER Pays: Medical-\$1743.62; Dental-\$118.66; Vision-\$23.66  |
| Placer Co Water Agency               | ER paid medical, dental and vision for full family   |
| San Diego County Water Authority     | ER paid medical, dental and vision for full family   |
| San Juan Water District              | ER paid medical and vision for full family. ER paid dental for EE only. EE pays cost of dependents.  |
| Sonoma County Water Agency           | <b>Medical FF Cost</b> -ER: 100% - \$1,202.50 semi-monthly; <b>Dental</b> - EE: \$14.13/ER: \$45.15 semi-monthly All EE's except Local 39 - EE: \$13.04/ER: \$46.24 semi-monthly. <b>Vision</b> - ER: 100% \$7.45 semi-monthly |
| South San Joaquin Irr District       | <b>Anthen CALCARE HMO</b> - Union: Medical FF Cost -ER: \$2995.99 EE: \$360/mo, Management: Medical FF Cost -ER: \$2697.31 EE: \$658.68/mo; <b>Anthem Dental</b> : ER 100%: \$138.78/mo.; <b>VSP Vision</b> : ER 100%: \$23.66 |
| Zone 7 (Alameda County)              | <b>Medical FF Cost</b> -EE: 10/ER:90% - \$139.63/\$1256.67 semi-monthly; <b>Dental</b> - EE: \$0/ER: \$61.94 semi-monthly; <b>Vision</b> - EE paid: \$12.56 semi-monthly   |

| <b>Employer Paid Retirement Benefits</b> |   |
|--|---|
| Amador Water Agency                      | Classic: 2% @ 55, ER 11.88%, EE 7%; PEPRA, ER 7.87%, EE 7.75%   |
| Inland Empire Utilities Agency           | Classic: 2% @55; PEPRA: 2% @ 62; Classic: EE Rate 7%/6.75%; ER: 10.38% (Blended-Classic & PEPRA)  |
| Kern County Water Agency                 | Kern County Employees' Retirement Association - Hired before 1/1/2010 = Tier 1 3% @ 60, ER 58.19%, EE between 6.52%-11.9% based on age at entry - 9.21% (half) used in the spreadsheet; PEPRA Tier II, ER 43.54%, EE 6.4% |
| Monte Vista Water District               | Classic: 2.5% @ 55/PEPRA: 2% @ 62; Classic: EE Rate 8%/6.75%; ER 14.13%/7.87%   |
| Muni Water Dist of Orange Co             | Classic: 2% @ 55; PEPRA: 2% @ 62; EE Rate 7%/7.75%; ER 12.52%/7.87%   |
| Placer Co Water Agency                   | Classic: 2.7% at 55; Contributions: EE:8% ER:11.93% PEPRA:2% at 62; Contributions: EE: 7.5% ER: 11.93%  |
| San Diego County Water Authority         | Classic: 2.5% at 55; Contributions: EE:8% ER:12.52% PEPRA: 2% at 62; Contributions EE: 6.75% ER: 12.52%   |
| San Juan Water District                  | Classic: 3% at 60; Contributions: EE:8% ER:17.26%; PEPRA: 2% at 62; Contributions EE: 7.75% ER: 7.68%   |
| Sonoma County Water Agency               | <b>SCERA</b> : Plan A/Classic: 3% @60 EE: 9.89% EE Paid ER: 3.03% ER: 20.47% (13.15%+7.32% UAAL); Plan B/PEPRA: 2.5% @67 EE: 7.74% EE Paid ER: 3.03% ER: 16.52% (7.74%+8.78% UAAL)  |
| South San Joaquin Irr District           | CalPERS: Classic: 2.5% @55 Union EE: 8% ER Paid EE: 4% ER: 14.13%, <b>Management</b> EE: 8% ER Paid EE: 8% (reported as special compensation) ER: 14.13%; PEPRA: 2% @62 EE:7.75% ER: 7.87%                                |
| Zone 7 (Alameda County)                  | <b>ACERA</b> : 2.61% @62 (Classic): EE: 10.17% ER paid EE: 3.0% ER" 24.77%; Tier IV (PEPRA): 2.5% @67 EE: 9.3% ER 23.10%  |

| Vacation Leave (at completion of year 5) |  |
|--|--|
| Amador Water Agency                      | 12 days/year   |
| Inland Empire Utilities Agency           | Professional/Supervisory/General/Laboratory/Operators: 96 hours/yr |
| Kern County Water Agency                 | 15 days/year   |
| Monte Vista Water District               | 96 hours/year  |
| Muni Water Dist of Orange Co             | 120 hours/year   |
| Placer Co Water Agency                   | 120 hours/year   |
| San Diego County Water Authority         | 128 hours/year   |
| San Juan Water District                  | 120 hours/year   |
| Sonoma County Water Agency               | 5.25 hrs/pp  |
| South San Joaquin Irr District           | 18 days/144 hrs/yr.  |
| Zone 7 (Alameda County)                  | 3 weeks/120 hrs.   |

| Sick Leave                       |   |
|----------------------------------|---|
| Amador Water Agency              | 12 days/year  |
| Inland Empire Utilities Agency   | Professional/Supervisory/General/Laboratory/Operators: 96 hours/yr; |
| Kern County Water Agency         | 12 days/year  |
| Monte Vista Water District       | 8 hours/month   |
| Muni Water Dist of Orange Co     | 96 hours/year   |
| Placer Co Water Agency           | 8 hours/month   |
| San Diego County Water Authority | 8 hours/month   |
| San Juan Water District          | 8 hours/month   |
| Sonoma County Water Agency       | 3.68 hrs/pp   |
| South San Joaquin Irr District   | 8 hrs/mo.   |
| Zone 7 (Alameda County)          | 4 hrs/pp  |

| Holiday (Including Floating Holidays) |  |
|---------------------------------------|--|
| Amador Water Agency                   | 13 days/year   |
| Inland Empire Utilities Agency        | Professional/Operators: 9+6 floating; Supervisory: 9+8 floating; General: 9+60 hours/FY; Laboratory: 9+5 floating. |
| Kern County Water Agency              | 10 holidays and 3 floating holidays  |
| Monte Vista Water District            | 12 holidays + 1 floating. As of 7/1 we will be going to 4/10 with 11 holidays and 2 floating holidays              |
| Muni Water Dist of Orange Co          | 12 days/96 hours   |
| Placer Co Water Agency                | 10 holidays and 3 floating holidays  |
| San Diego County Water Authority      | 11 holidays and 2 floating holidays  |
| San Juan Water District               | 11 holidays and 1 floating holiday   |
| Sonoma County Water Agency            | 12 + 1 floating  |
| South San Joaquin Irr District        | 10 + 2 floating  |
| Zone 7 (Alameda County)               | 11 + 4 floating  |

**Personal/Administrative Leave**

|                                  |  |
|----------------------------------|--|
| Amador Water Agency              | Executive Mngt only: HR/RM Manager 8 days/year; Operations & Engineering Manager 13 days/year; General Manager 12 days/year  |
| Inland Empire Utilities Agency   | Professional/Supervisory/General/Laboratory/Operators: N/A   |
| Kern County Water Agency         | May be granted to all EEs, based on years of service: 10 - 19 years = 1 day, 20-29 years = 2 days, 30+ years = 3 days  |
| Monte Vista Water District       | Executive management – 40 hours Non-exempt – 24 hours  |
| Muni Water Dist of Orange Co     | 40 hours   |
| Placer Co Water Agency           | Management positions that were matches in this study are not exempt from overtime and are covered by Power Systems and Water Systems MOU.  |
| San Diego County Water Authority | 40 hours/year for Senior Management, non-represented. 7 days/yr. for exempt represented managerial/supervisory EE. An additional 3 days/yr may be granted when EE receives above standard or outstanding performance evaluation. |
| San Juan Water District          | 40 hours/year for exempt positions.  |
| Sonoma County Water Agency       |  |
| South San Joaquin Irr District   | Exempt EE's: 40 hrs/yr. administrative leave   |
| Zone 7 (Alameda County)          | Personal Leave 2 days/yr.  |

**Longevity Pay**

|                                  |   |
|----------------------------------|---|
| Amador Water Agency              | N/A   |
| Inland Empire Utilities Agency   | Professional/Supervisory/General/Laboratory: N/A  |
| Kern County Water Agency         | General EEs: 10 years - 2%, 15 years - 4% (included on spreadsheet), 20 year - 6%, 30 yrs - 8%. Middle Managers: 15 years - 2%, 20 years - 4%. 25 years - 6%. Executive Management: N/A |
| Monte Vista Water District       | N/A   |
| Muni Water Dist of Orange Co     | N/A   |
| Placer Co Water Agency           | 2.5% after 10 years with additional 2.5% after 15 years.  |
| San Diego County Water Authority | N/A   |
| San Juan Water District          | N/A   |
| Sonoma County Water Agency       | N/A   |
| South San Joaquin Irr District   | N/A   |
| Zone 7 (Alameda County)          | SEIU: 10 yrs. = 1%; 20 yrs = 2%   |

| Employer Contribution to Deferred Compensation |  |
|--|--|
| Amador Water Agency                            | Up to \$1,500 match/year General EEs; up to \$2,500 match/year Management EEs  |
| Inland Empire Utilities Agency                 | Professional/Supervisory/General/Laboratory/General: \$25/ppd matching   |
| Kern County Water Agency                       | 457 plan: General and Middle Management EEs: Tier 1 - \$25/pay period match (used on spreadsheet); N/A for Executive EEs. General EEs Tier 2 - up to 3% match of base salary. Middle Management and Executive EEs Tier 2 - 4.5% match of base salary. 401A plan (no match req'd): Middle Management EEs - \$50/pay period; Executive Management EEs - \$100/pay period . |
| Monte Vista Water District                     | \$65 match monthly   |
| Muni Water Dist of Orange Co                   | None   |
| Placer Co Water Agency                         | None   |
| San Diego County Water Authority               | ER matches EE contributions up to \$250/yr.  |
| San Juan Water District                        | None   |
| Sonoma County Water Agency                     | SEIU: Voluntary participation; Local 39: ER Cont. .25% of base pay to 401 (a); Unrepresented/Confidential: ER Cont. 1.9% of base pay to 401(a) + 1% match to 457; Management: ER Cont3% of base pay to IRSP + 1% base pay to 457.  |
| South San Joaquin Irr District                 | Union: District matches up to \$3000/yr,; Management: District matches up to \$4,000/yr.   |
| Zone 7 (Alameda County)                        | No Match; voluntary  |

| <b>Other Forms of Compensation</b> |   |
|------------------------------------|---|
| Amador Water Agency                | Cell phone \$55/month. Retiree Health Contribution \$100/month.<br>Not included in worksheet: Standby on weekdays \$50; standby on weekend days \$70. Reimburse safety boots up to \$200/year (if the boot expense is less than \$200, the difference is considered taxable income)   |
| Inland Empire Utilities Agency     | <b>Operators-Fatigue Pay</b><br><b>Any On-Call Operator</b> who works sixteen (16) or more hours in a twenty-four (24) hour period, starting with the beginning of the Operator's work shift, shall receive his/her next working shift off (fatigue time). Unless the shift is the last day of the regular work schedule. If an Operator fatigues out on his/her last day of their regular work schedule, he/she shall receive a one-hundred dollar (\$100) stipend.<br><b>Any Operator not On-Call</b> who works eighteen (18) or more hours in a twenty-four (24) hour period, starting with the beginning of the Operator's work shift, shall receive ten (10) hours of rest before starting their next work shift, unless the shift is the last day of the regular work schedule. |
| Kern County Water Agency           | Not included in worksheet: Executive Management may receive a vehicle allowance pursuant to the annual rate structure of the agency, and receive a ham or turkey in the middle of November or the middle of December. Middle management have preferential use of a pool car when available for traveling to and from work/conducting agency business. General EEs receive a ham or turkey in the middle of November or the middle of December. All EEs have access to free coffee, tea, and hot   |
| Monte Vista Water District         | None  |
| Muni Water Dist of Orange Co       | None  |
| Placer Co Water Agency             | \$250 annual uniform/footwear allowance for designated classes  |
| San Diego County Water Authority   | None  |
| San Juan Water District            | None  |
| Sonoma County Water Agency         | <b>HRA:</b> 2400 lump sum + ( \$.58 per hour SEIU, Local 39/ \$.88 per hour Unrepresented/Confidential). <b>Staff Development/Wellness Reimbursement:</b> SEIU: Non-Supervisory \$500/fy, Supervisory \$650/fy; Local 39: \$565/fy; <b>Staff Development Reimbursement:</b> Unrepresented/Confidential: \$500/fy; <b>Administrative; Management:</b> \$1000/fy. This will sunset 6/30/2025; <b>Wellness/Emergency Preparedness Lump sum:</b> Unrepresented/Confidential: \$750/fy; <b>Administrative Management:</b> \$1000/fy; <b>Safety Boots/Shoes:</b> Local 39: \$300/yr.  |
| South San Joaquin Irr District     | Work Boots: \$275/yr for designated classes.  |
| Zone 7 (Alameda County)            | Plant Maintenance Laborer: Boot Allowance: \$325/yr   |



The following benefit is for informational purposes only. This benefit is not included in the total compensation calculation as the actual cost varies between employees within each classification

| <b>Certification Pay</b>         |  |
|----------------------------------|--|
| Amador Water Agency              | Certifications 1 grade higher than required earn a one-time payment of \$250   |
| Inland Empire Utilities Agency   | <p><b>Professional/Supervisory/General/Laboratory/Operators:</b> Professional Development Stipend \$1,000/yr</p> <p><b>Professional/General:</b> Degree Incentive-One-time payment, \$175 for AA/AS, \$300 for BA/BS, \$300 for Master's.</p> <p><b>Supervisory:</b> SWRCB Grade IV or Grade V wastewater treatment cert one-time \$2000/certification for Operations Supervisors. Max of \$4,000/Ops Supervisor.</p> <p><b>General:</b> See page 37 &amp; 38 of MOU.</p> <p><b>Laboratory:</b> None.</p>  |
| Kern County Water Agency         | None   |
| Monte Vista Water District       | N/A  |
| Muni Water Dist of Orange Co     |  |
| Placer Co Water Agency           | Water Treatment Operators with certification beyond those required as minimum qualifications receive 2.5% for first level above minimum and additional 2.5% for 2nd level above min. Distribution Operators with certification beyond those required as minimum qualifications receive 2.5% for first level above minimum and are limited to a total of 2.5% increase, regardless of how many levels above minimum they hold. Maintenance Worker II receives 2.5% for Class A driver's license.  |
| San Diego County Water Authority | None   |
| San Juan Water District          | None   |
| Sonoma County Water Agency       | <p><b>Senior Plant Operator</b> who receives a <b>California Wastewater Plant Operator Grade IV</b> or <b>California Water Treatment Plant Operator Grade T5</b> certificate while employed by the Water Agency will receive a <b>one-time \$1,000 bonus</b> for each certificate received.</p> <p><b>Water Agency Mechanic or Lead Mechanic</b> who receives a <b>California Water Environment Association Plant Maintenance Mechanical Technologist Grade II</b> certificate while employed by the Water Agency will receive a <b>one-time \$1,000 bonus</b>.</p> <p><b>Electrician/Instrumentation Technician</b> -receives a <b>California Water Environment Association Plant Maintenance Electrical/Instrumentation Technician Grade II</b> certificate receives a <b>one-time \$1,000 bonus</b></p> <p>Any Water Agency Plant Operator, Senior Plant Operator, Water Agency Mechanic, Electrician/Instrumentation Technician, Water Agency Chemist or Environmental Compliance Inspector who earns any one certificate in the <b>Distribution Certificate series (D1, D2, or D3)</b> will receive a <b>one-time bonus of \$500</b>.</p> |
| South San Joaquin Irr District   | Reimbursement only for license or certification required for position.   |
| Zone 7 (Alameda County)          | Reimbursement only for license or certification required for position.   |

Attachment 4 – Complete August 14, 2024 Staff Report

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

To: Board of Directors

Date: August 14, 2024

From: Chris Harris

RE: Salary Survey

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**Background – From March 14, 2024 Staff Report**

*In December 2023, the Board approved entering into a contract with Regional Government Services (RGS) to complete a District Salary Survey to include the following (summarized):*

- *Review job descriptions and compare to actual work performed by employees*
- *Compare District compensation and benefits to similar agencies*
- *Make recommendations regarding needed revisions (if any) to current staffing levels, future staffing needs, compensation, and benefits offered by the District*

*RGS began their search for comparable agencies at a statewide level. Feedback from the District's Project Lead included: "We all agree, HBMWD is special! It was very challenging to find agencies similar to HBMWD, even casting a statewide net". Criteria for the RGS selection included the following:*

**Preferred Comparable Criteria List**

1. *Both wholesale service and retail service*
2. *Population served*
3. *Type of agency (no Cities or Counties, prefer stand-alone agencies)*
4. *Cost of Living*
5. *Cost of Housing*
6. *Budget*
7. *FTE's (Full-Time Equivalent Employees)*
8. *D4 & T4 Certifications*

*After statewide research was complete, a list of twenty-five potential comparative agencies was compiled. During a more thorough review of the twenty-five agencies, fourteen were eliminated due to non-comparable features. The remaining eleven agencies went through a more in-depth analysis. Three (originally two<sup>1</sup>) more were considered "not recommended" (red on the chart below), one agency was considered "not ideal, but recommend use" (yellow) and seven agencies made the final cut (green). Since RGS considers seven agencies (green) to be a small comparison group, they recommended the District also consider including the yellow agency for a total of eight comparable agencies.*

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<sup>1</sup> Based on data provided in the December 2023 staff report. After further review, RGS reconsidered the inclusion of Municipal Water District of Orange County and recommended not including this agency as a comparable.

Agency Comparison Charts

| Agency Comparison - Wholesale Customers and Estimated Population Served |   |                                       |   |              |                                  |              |   |              |
|---|---|---------------------------------------|---|--------------|----------------------------------|--------------|---|--------------|
|   | Agency  | Location (County)                     | Type of Agency <sup>2</sup>   | Match Points | Wholesale Customers <sup>3</sup> | Match Points | Est. Total Population Served <sup>4</sup> | Match Points |
|   | <b>HBMWD</b>  | Humboldt                              | Sp. District  |              | 7                                |              | 88k (94k)                                 |              |
| <b>1</b>  | Amador Water Agency   | Amador                                | W. Agency   | 5            | 6+                               | 5            | 10k                                       | 3            |
| <b>2</b>  | Monte Vista Water District  | San Bernardino (Unincorporated Areas) | W. Agency   | 5            | 1                                | 0            | 134k                                      | 5            |
| <b>3</b>  | San Juan Water District   | East Sacramento & South Placer        | C. S. District  | 5            | 5                                | 3            | 145k                                      | 3            |
| <b>4</b>  | Kern County Water District  | Kern                                  | W. Agency   | 5            | 13                               | 0            | 185k                                      | 1            |
| <b>5</b>  | Inland Empire Utilities Agency  | San Bernardino                        | Sp. District  | 5            | 9 (DW)<br>7 (Sewer)              | 5            | 935k                                      | 0            |
| <b>6</b>  | South Joaquin Irrigation District   | San Joaquin                           | Irr. District   | 5            | 3                                | 1            | 216k                                      | 0            |
| <b>7</b>  | Placer County Water Agency  | Placer                                | W. Agency   | 5            | 3+                               | 3            | 41k                                       | 5            |
| <b>8</b>  | Sonoma County Water Agency  | Sonoma                                | Sp. District  | 5            | 9                                | 3            | 735k                                      | 0            |
| <b>9</b>  | Municipal Water District of Orange County   | Orange                                | Grand total 14 match points, eliminated due to structure of agency. |              |                                  |              |   |              |
| <b>10</b>   | Alameda County Flood Control and Water Conservation District (Zone 7, Alameda County) | Alameda                               | Grand total 9 match points  |              |                                  |              |   |              |
| <b>11</b>   | San Diego County Water Authority  | San Diego                             | Grand total 6 match points  |              |                                  |              |   |              |

<sup>2</sup> Type of Agency – Separate Agency = 5; City or County = 0

<sup>3</sup> Wholesale Customers – 6-8 = 5; 4-5 or 9-10 = 3; 2-4 or 11-12 = 1; Other = 0

<sup>4</sup> Populations – +/-50k = 5; +/-80k = 3; +/- 100k = 1; <188k = 0

Agency Comparison Charts (con't)

| <b>Agency Comparison - Cost of Living and Cost of Housing</b> |                                       |                             |              |                              |              |
|---|---------------------------------------|-----------------------------|--------------|------------------------------|--------------|
|   | Agency                                | Cost of Living <sup>5</sup> | Match Points | Cost of Housing <sup>6</sup> | Match Points |
|   | United States (average)               | 100                         |              | 100                          |              |
|   | California (average)                  | 150                         |              | 235                          |              |
|   | <b>HBMWD</b>                          | <b>108</b>                  |              | <b>132</b>                   |              |
| 1   | Amador Water Agency                   | 111                         | 5            | 120                          | 5            |
| 2   | Monte Vista Water District            | 119                         | 5            | 151                          | 3            |
| 3   | San Juan Water District               | 127                         | 3            | 167                          | 1            |
| 4   | Kern County Water Agency              | 100                         | 5            | 97                           | 5            |
| 5   | Inland Empire Utilities Agency        | 119                         | 5            | 151                          | 3            |
| 6   | South San Joaquin Irrigation District | 125                         | 3            | 163                          | 1            |
| 7   | Placer County Water Agency            | 139                         | 1            | 211                          | 0            |
| 8   | Sonoma County Water Agency            | 152                         | 1            | 253                          | 0            |

| <b>Agency Comparison - Permanent FTE's and Annual Budget</b> |                                       |                              |              |                            |              |
|--|---------------------------------------|------------------------------|--------------|----------------------------|--------------|
|  | Agency                                | Permanent FTE's <sup>7</sup> | Match Points | Annual Budget <sup>8</sup> | Match Points |
|  | <b>HBMWD</b>                          | <b>28</b>                    |              | <b>\$20,802,000</b>        |              |
| 1  | Amador Water Agency                   | 40                           | 5            | \$12,367,000               | 5            |
| 2  | Monte Vista Water District            | 41.5                         | 5            | \$29,105,000               | 5            |
| 3  | San Juan Water District               | 50                           | 3            | \$66,424,000               | 3            |
| 4  | Kern County Water Agency              | 32                           | 5            | \$494,500,000              | 0            |
| 5  | Inland Empire Utilities Agency        | 340                          | 0            | \$429,100,000              | 0            |
| 6  | South San Joaquin Irrigation District | 117                          | 0            | \$13,311,000               | 5            |
| 7  | Placer County Water Agency            | 234                          | 0            | \$164,900,000              | 0            |
| 8  | Sonoma Water Agency                   | 200                          | 0            | \$71,900,000               | 3            |

<sup>5</sup> Cost of Living = +/-15 = 5; +/-30 = 3; +/-45 = 1; Others = 0

<sup>6</sup> Cost of Housing = +/-15 = 5; +/-30 = 3; +/-45 = 1; Others = 0

<sup>7</sup> Permanent FTE's = +/-20 = 5; +/-40 = 3; +/-72 = 1; Others = 0

<sup>8</sup> Budget = +/- \$20,000,000 = 5; +/- \$55,000,000 = 3; +/- \$85,000,000 = 1; Others = 0

Agency Comparison Charts (con't)

| <b>Agency Comparison - Classes (Positions) Requiring D4 and T4</b> |                                       |                                   |              |                      |              |
|--|---------------------------------------|-----------------------------------|--------------|----------------------|--------------|
|  | Agency                                | Classes Requiring D4 <sup>9</sup> | Match Points | Classes Requiring T4 | Match Points |
|  | <b>HBMWD</b>                          | <b>5</b>                          |              | <b>3</b>             |              |
| <b>1</b>   | Amador Water Agency                   | 1                                 | 1            | 1                    | 1            |
| <b>2</b>   | Monte Vista Water District            | 2                                 | 3            | 0                    | 0            |
| <b>3</b>   | San Juan Water District               | 5                                 | 5            | 2                    | 3            |
| <b>4</b>   | Kern County Water Agency              | 2                                 | 3            | 2                    | 3            |
| <b>5</b>   | Inland Empire Utilities Agency        | 2                                 | 3            | 4                    | 5            |
| <b>6</b>   | South San Joaquin Irrigation District | 0                                 | 0            | 2                    | 3            |
| <b>7</b>   | Placer County Water Agency            | 2                                 | 3            | 1                    | 1            |
| <b>8</b>   | Sonoma Water Agency                   | 2                                 | 3            | 0                    | 0            |

| <b>Agency Comparison - Grand Total Match Points</b> |                                       |  |                    |
|---|---------------------------------------|--|--------------------|
|   | Agency                                | Location (County)                            | Total Match Points |
|   | <b>HBMWD</b>                          | Humboldt County                              | <b>40</b>          |
| <b>1</b>  | Amador Water Agency                   | Amador County                                | 35                 |
| <b>2</b>  | Monte Vista Water District            | San Bernardino County (Unincorporated Areas) | 31                 |
| <b>3</b>  | San Juan Water District               | East Sacramento County & South Placer County | 29                 |
| <b>4</b>  | Kern County Water Agency              | Kern County                                  | 27                 |
| <b>5</b>  | Inland Empire Utilities Agency        | San Bernardino County                        | 26                 |
| <b>6</b>  | South San Joaquin Irrigation District | San Joaquin County                           | 18                 |
| <b>7</b>  | Placer County Water Agency            | Placer County                                | 18                 |
| <b>8</b>  | Sonoma Water Agency                   | Sonoma County                                | 15                 |

<sup>9</sup> Classes requiring D4 and T4 (must have at least one of either) = 3+ Classes = 5; 2 Classes = 3; 1 Class = 1; Others = 0

**Discussion**

Staff has provided four different groups of data using the final eight comparable agencies. The “Salary Comparisons Between Agencies” chart (following page) is based on the following:

| <b>Number of Agencies Used - Salary Comparisons</b> |  |                           |                       |                       |                      |                     |
|---|--|---------------------------|-----------------------|-----------------------|----------------------|---------------------|
|   |  | <b>Final Match Points</b> | <b>Eight Agencies</b> | <b>Seven Agencies</b> | <b>Five Agencies</b> | <b>Two Agencies</b> |
| <b>1</b>  | <b>Amador Water Agency</b>                   | <b>35</b>                 |                       |                       |                      |                     |
| <b>2</b>  | <b>Monte Vista Water District</b>            | <b>32</b>                 |                       |                       |                      |                     |
| <b>3</b>  | <b>San Juan Water District</b>               | <b>26</b>                 |                       |                       |                      |                     |
| <b>4</b>  | <b>Kern County Water Agency</b>              | <b>27</b>                 |                       |                       |                      |                     |
| <b>5</b>  | <b>Inland Empire Utilities Agency</b>        | <b>24</b>                 |                       |                       |                      |                     |
| <b>6</b>  | <b>South San Joaquin Irrigation District</b> | <b>20</b>                 |                       |                       |                      |                     |
| <b>7</b>  | <b>Placer County Water Agency</b>            | <b>20</b>                 |                       |                       |                      |                     |
| <b>8</b>  | <b>Sonoma Water Agency</b>                   | <b>15</b>                 |                       |                       |                      |                     |

For each comparable agency, RGS reviewed both base salaries and benefit levels. During this comparison, the District’s benefits levels (Medical, Dental, Vision, and Leave Banks) were found to be similar and comparable to other agencies. The largest differences were in CalPERS benefits paid by the individual agencies due to the diverse CalPERS contracts. While both Classic and PEPRA employee compensation was compared in the RGS analysis, in order to focus on the position and not the individual, staff has based the following graphs on base salaries only.

There are several positions omitted from the Salary Comparisons Between Agencies chart including:

- General Manager – This position did not participate in the Salary Survey and is hired via a separate employment/contract agreement between the GM and the Board of Directors;
- Assistant Supervisors – These positions did participate in the Salary Survey but are considered succession positions (linked to the Supervisor positions) so are not listed separately in the base pay comparison.
- Accounting Tech I - This position did participate in the Salary Survey but is considered a succession position (linked to the Accounting Tech II and Accounting Specialist I positions) so is not listed separately in the base pay comparison.

Based on the very specialized classifications at the District, some positions do not have many comparable positions at other agencies. The total number of comparable positions is listed in the “# Agencies w/Classification” rows. Please see the Notes section below the table for comments related to specific positions (Notes 1-4).

| <b>Salary Comparisons Between Agencies</b> |   |                |                |               |              |         |
|--|---|----------------|----------------|---------------|--------------|---------|
|  |   | Eight Agencies | Seven Agencies | Five Agencies | Two Agencies | Average |
| <b>MANAGEMENT</b>                          | <b>Superintendent</b>                               | -22.71%        | -23.47%        | -23.47%       | -26.74%      | -24.10% |
|  | <i># Agencies w/Classification</i>                  | 4              | 3              | 3             | 2            |         |
|  | <b>Business Manager (1)</b>                         | -44.01%        | -48.12%        | N/A           | N/A          | -46.07% |
|  | <i># Agencies w/Classification</i>                  | 2              | 1              | 0             | 0            |         |
|  | <b>Maintenance/Electrical Supervisor</b>            | -21.57%        | -21.57%        | -24.00%       | -21.57%      | -22.18% |
|  | <i># Agencies w/Classification</i>                  | 5              | 5              | 4             | 1            |         |
| <b>ADMINISTRATION</b>                      | <b>Water Operations Supervisor</b>                  | -31.19%        | -27.34%        | -31.19%       | -25.85%      | -28.89% |
|  | <i># Agencies w/Classification</i>                  | 7              | 6              | 5             | 2            |         |
|  | <b>Accounting Specialist II</b>                     | -8.27%         | -8.27%         | -13.70%       | N/A          | -10.08% |
|  | <i># Agencies w/Classification</i>                  | 4              | 3              | 2             | 0            |         |
|  | <b>Accounting Tech II</b>                           | -20.10%        | -22.14%        | -22.14%       | -22.36%      | -21.69% |
|  | <i># Agencies w/Classification</i>                  | 6              | 5              | 5             | 1            |         |
| <b>OPERATIONS AND MAINTENANCE</b>          | <b>Executive Assistant/Board Secretary</b>          | -31.45%        | -31.45%        | -39.97%       | -51.89%      | -38.69% |
|  | <i># Agencies w/Classification</i>                  | 5              | 5              | 3             | 1            |         |
|  | <b>Regulatory Analyst II</b>                        | -16.96%        | -8.02%         | -8.02%        | 3.07%        | -7.48%  |
|  | <i># Agencies w/Classification</i>                  | 3              | 2              | 2             | 1            |         |
|  | <b>Electrician</b>                                  | -28.28%        | -27.86%        | -24.28%       | -25.85%      | -26.57% |
|  | <i># Agencies w/Classification</i>                  | 7              | 6              | 4             | 1            |         |
| <b>OPERATIONS AND MAINTENANCE</b>          | <b>Hydro Plant Operator/Ruth Representative (2)</b> | N/A            | N/A            | N/A           | N/A          | N/A     |
|  | <i># Agencies w/Classification</i>                  | 0              | 0              | 0             | 0            |         |
|  | <b>Maintenance Mechanic</b>                         | -20.90%        | -19.69%        | -19.69%       | -18.44%      | -19.68% |
|  | <i># Agencies w/Classification</i>                  | 7              | 6              | 4             | 1            |         |
|  | <b>Maintenance Worker</b>                           | -27.37%        | -28.31%        | -28.31%       | -34.53%      | -29.63% |
|  | <i># Agencies w/Classification</i>                  | 6              | 5              | 3             | 2            |         |
|  | <b>Operations/Customer Service Specialist (3)</b>   | N/A            | N/A            | N/A           | N/A          | N/A     |
|  | <i># Agencies w/Classification</i>                  | 0              | 0              | 0             | 0            |         |
|  | <b>Operations &amp; Maintenance Technician</b>      | -28.25%        | -28.25%        | -28.25%       | -27.79%      | -28.14% |
|  | <i># Agencies w/Classification</i>                  | 7              | 7              | 5             | 2            |         |
|  | <b>Water Operations Specialist (4)</b>              | N/A            | N/A            | N/A           | N/A          | N/A     |
|  | <i># Agencies w/Classification</i>                  | 0              | 0              | 0             | 0            |         |



**Notes from RGS Salary Survey Results**

1. Business Manager position: Consistent across comparable agencies: No single position performs the duties of HBMWD Business Manager. Most common: Finance Director/Manager and Human Resources Director/Manager (and/or Risk Director/Manager).
2. Hydro Plant Operator/Ruth Representative: Only one comparable agency has hydroelectric operations; this agency did not require the same full range of duties performed by the HBMWD Hydro Plant Operator.
3. Operations/Customer Service Specialist: Consistent across comparable agencies: No single position performs the duties of HBMWD Operations/Customer Service Specialist.
4. Water Operations Specialist: Consistent across comparable agencies: No single position performs the duties of HBMWD Water Operations Specialist.

**Considerations**

Regardless of the number of comparable agencies used, the data does appear to show a disparity between HBMWD's base salaries and other similar agencies across the state. The two positions with the smallest disparity (Accounting Specialist II and Regulatory Analyst II) recently had the job descriptions rewritten and the base salaries reviewed and increased by Board approval (April 2022). All other positions have not had a review nor increase in their base rate since the last salary survey in 2007. Additionally, the majority (19 of 28) of District employees have "stepped-out" (they have reached the end of their positions 5-step salary schedule). Employees that are "stepped-out" do not receive any merit increases. District employees do receive longevity incentive pay at 5 (2.5%), 10 (5%), 20 (7.5%), 25 (5%), 30 (5%), and 35 (5%) years.

Based on the large range of disparity between District positions (Salary Comparisons Between Agencies chart), staff suggests that while each position needs to be considered individually, it is not possible to create a salary schedule update for each specific, individual position. Some positions are linked via succession planning and it is essential that the District avoid salary compaction.

Additionally, it is not financially feasible to burden the rate payers with one large equity adjustment. In order to provide a more financially feasible approach, staff suggests using multiple tiers. Staff is proposing a four-tiered plan that spans FY25-FY28 to complete a comprehensive HBMWD Salary Schedule Update. Using a tiered approach also allows these adjustments to be factored into the District CIP/Financial Plan being completed by Bartel Wells Associates. This Financial Plan will be completed during FY25 and will cover the next 10-years.

**Proposed HBMWD Salary Schedule Update**

All parts of the proposed tiers are separate from any possible future COLA adjustments. Any applicable step/longevity adjustments have been calculated into the estimated cost of these plans.

**Proposal Part One:** All staff receive an increase of 6.8% effective October 1, 2024, to be funded with a combination of budget savings and District Reserves. Budget savings include: Available funds for both the part-time GIS Assistance position and part-time Grant Administration position that will not be utilized during FY25. Additional budget savings include a reduced Worker's Compensation x-mod rate effective July 1, 2024.

Two positions, the Accounting Specialist II and Regulatory Analyst II will not receive any additional salary adjustment other than this 6.8%.

**Proposal Part One Estimated Cost:**

|  |                         |
|--|-------------------------|
| Salaries                                   | \$130,000               |
| <u>Benefits</u>                            | <u>\$32,700</u>         |
|  | <b>\$162,700</b>        |
| GIS Assistance                             | <\$22,500>              |
| Grant Admin.                               | <\$17,300>              |
| <u>W. Comp.</u>                            | <u>&lt;\$46,000&gt;</u> |
| <b>Estimated Cost to District Reserves</b> | <b>\$76,900</b>         |

**Proposal Part Two:** After receiving the Part One 6.8% increase above, selected positions would receive six additional increases of 2% each over the course of the following three fiscal years (FY26, FY27, and FY28). These increases would be further split into six-month intervals: July 2025, January 2026, July 2026, January 2027, July 2027, and January 2028. Part Two would be factored into the 10-year HBMWD Financial Plan by Bartel Wells and would be funded during the annual budgeting process.

This would create a total salary increase of approximately 19% over a three-year period for these positions. These positions include:

*Accounting Tech I and II*  
*Maintenance Mechanic*  
*Water Operations Specialist*

**Proposal Part Two Estimated Cost:**

|                                       |                 |
|---------------------------------------|-----------------|
| July 2025 Salaries/Benefits           | \$6,800         |
| <u>January 2026 Salaries/Benefits</u> | <u>\$7,100</u>  |
| <b>Part Two Total FY26</b>            | <b>\$13,900</b> |
| July 2026 Salaries/Benefits           | \$7,400         |
| <u>January 2027 Salaries/Benefits</u> | <u>\$7,600</u>  |
| <b>Part Two Total FY27</b>            | <b>\$15,000</b> |
| July 2027 Salaries/Benefits           | \$7,900         |
| <u>January 2028 Salaries/Benefits</u> | <u>\$8,200</u>  |
| <b>Part Two Total FY27</b>            | <b>\$16,100</b> |

**Proposal Part Three:** After receiving the Part One 6.8% increase above, selected positions would receive six additional increases of 3% each over the course of the following three fiscal years (FY26, FY27, and FY28). These increases would be further split into six-month intervals: July 2025, January 2026, July 2026, January 2027, July 2027, and January 2028. Part Three would be factored into the 10-year HBMWD Financial Plan by Bartel Wells and would be funded during the annual budgeting process.

This would create a total salary increase of approximately 25% over a three-year period for these positions. These positions include:

*Maintenance/Electrical Supervisor and Assistant Supervisor  
Water Operations Supervisor and Assistant Supervisor  
Electrician  
Hydro-Plant Operator/Ruth Representative  
Operations/Customer Service Specialist  
Operations and Maintenance Technician  
Superintendent*

**Proposal Part Three Estimated Cost:**

|                                       |                 |
|---------------------------------------|-----------------|
| July 2025 Salaries/Benefits           | \$34,300        |
| <u>January 2026 Salaries/Benefits</u> | <u>\$35,300</u> |
| <b>Part Three Total FY26</b>          | <b>\$69,600</b> |
| July 2026 Salaries/Benefits           | \$36,500        |
| <u>January 2027 Salaries/Benefits</u> | <u>\$37,600</u> |
| <b>Part Three Total FY27</b>          | <b>\$74,100</b> |
| July 2027 Salaries/Benefits           | \$39,000        |
| <u>January 2028 Salaries/Benefits</u> | <u>\$40,200</u> |
| <b>Part Three Total FY27</b>          | <b>\$79,200</b> |

**Part Four:** After receiving the Part One 6.8% increase above, selected positions would receive six additional increases of 4% each over the course of the following three fiscal years. (FY26, FY27, and FY28). These increases would be further split into six-month intervals: July 2025, January 2026, July 2026, January 2027, July 2027, and January 2028. Part Four would be factored into the 10-year HBMWD Financial Plan by Bartel Wells and would be funded during the annual budgeting process.

This would create a total salary increase of approximately 30% over a three-year period for these positions. These positions include:

*Business Manager*  
*Executive Assistant/Board Secretary*  
*Maintenance Worker*

**Proposal Part Four Estimated Cost:**

|                                       |                 |
|---------------------------------------|-----------------|
| July 2025 Salaries/Benefits           | \$7,800         |
| <u>January 2026 Salaries/Benefits</u> | <u>\$8,200</u>  |
| <b>Part Three Total FY26</b>          | <b>\$16,000</b> |

|                                       |                 |
|---------------------------------------|-----------------|
| July 2026 Salaries/Benefits           | \$8,700         |
| <u>January 2027 Salaries/Benefits</u> | <u>\$9,000</u>  |
| <b>Part Three Total FY27</b>          | <b>\$17,700</b> |

|                                       |                 |
|---------------------------------------|-----------------|
| July 2027 Salaries/Benefits           | \$9,400         |
| <u>January 2028 Salaries/Benefits</u> | <u>\$9,800</u>  |
| <b>Part Three Total FY27</b>          | <b>\$19,200</b> |

**Total Estimated Cost of HBMWD Salary Schedule Update**

|             |                   |  |   |
|-------------|-------------------|--|---|
| <b>FY25</b> | Part One:         | \$76,900 (Total \$162,700, \$82,000 funded by budget savings/adjustment) |   |
| <b>FY26</b> | Part Two:         | \$13,900   |   |
|             | Part Three:       | \$69,600   |   |
|             | <u>Part Four:</u> | <u>\$16,000</u>  |   |
|             | Total             | \$99,500   | <i>To be factored into the 10-year Financial Plan; Subject to Board approval during FY26 Budget process</i> |
| <b>FY27</b> | Part Two:         | \$15,000   |   |
|             | Part Three:       | \$74,100   |   |
|             | <u>Part Four:</u> | <u>\$17,700</u>  |   |
|             | Total             | \$106,800  | <i>To be factored into the 10-year Financial Plan; Subject to Board approval during FY27 Budget process</i> |
| <b>FY28</b> | Part Two:         | \$16,100   |   |
|             | Part Three:       | \$79,200   |   |
|             | <u>Part Four:</u> | <u>\$19,200</u>  |   |
|             | Total             | \$114,500  | <i>To be factored into the 10-year Financial Plan; Subject to Board approval during FY28 Budget process</i> |

A comparison of the average disparity and the proposed Salary Schedule Update is shown on the graph below.

| Average Difference and Proposed Adjustment |   |         |              |                        |                        |                        |                         |
|--|---|---------|--------------|------------------------|------------------------|------------------------|-------------------------|
|  |   | Average | October 2024 | FY 26 (July & January) | FY 27 (July & January) | FY 28 (July & January) | Total Equity Adjustment |
| <b>MANAGEMENT</b>                          | Superintendent                              | -24.10% | 6.8%         | 6%                     | 6%                     | 6%                     | 24.8%                   |
|  | Business Manager                            | -46.07% | 6.8%         | 8%                     | 8%                     | 8%                     | 30.8%                   |
|  | Maintenance/Electrical Supervisor           | -22.18% | 6.8%         | 6%                     | 6%                     | 6%                     | 24.8%                   |
|  | Maintenance/Electrical Assistant Supervisor | N/A     | 6.8%         | 6%                     | 6%                     | 6%                     | 24.8%                   |
|  | Water Operations Supervisor                 | -28.89% | 6.8%         | 6%                     | 6%                     | 6%                     | 24.8%                   |
|  | Water Operations Assistant Supervisor       | N/A     | 6.8%         | 6%                     | 6%                     | 6%                     | 24.8%                   |
| <b>ADMINISTRATION</b>                      | Accounting Specialist II                    | -10.08% | 6.8%         |                        |                        |                        | 6.8%                    |
|  | Accounting Tech II                          | -21.69% | 6.8%         | 4%                     | 4%                     | 4%                     | 18.8%                   |
|  | Accounting Tech I                           | N/A     | 6.8%         | 4%                     | 4%                     | 4%                     | 18.8%                   |
|  | Executive Assistant/Board Secretary         | -38.69% | 6.8%         | 8%                     | 8%                     | 8%                     | 30.8%                   |
|  | Regulatory Analyst II                       | -7.48%  | 6.8%         |                        |                        |                        | 6.8%                    |
| <b>OPERATIONS AND MAINTENANCE</b>          | Electrician                                 | -28.28% | 6.8%         | 6%                     | 6%                     | 6%                     | 24.8%                   |
|  | Hydro Plant Operator/Ruth Representative    | N/A     | 6.8%         | 6%                     | 6%                     | 6%                     | 24.8%                   |
|  | Maintenance Mechanic                        | -19.68% | 6.8%         | 4%                     | 4%                     | 4%                     | 18.8%                   |
|  | Maintenance Worker                          | -29.63% | 6.8%         | 8%                     | 8%                     | 8%                     | 30.8%                   |
|  | Operations/Customer Service Specialist      | N/A     | 6.8%         | 6%                     | 6%                     | 6%                     | 24.8%                   |
|  | Operations & Maintenance Technician         | -28.14% | 6.8%         | 6%                     | 6%                     | 6%                     | 24.8%                   |
|  | Water Operations Specialist                 | N/A     | 6.8%         | 4%                     | 4%                     | 4%                     | 18.8%                   |

The following chart shows the estimated final impact of all updates (Part's One - Four) at January 2028. Amounts are estimates and do not include any possible future approved COLA's.

| <b>PROPOSED SALARY SCHEDULE UPDATE</b>            |  |
|---|--|
| <b>Salary Schedule Update Proposal Part One</b>   | 6.8% Increase Effective 10/01/2024   |
| <b>Salary Schedule Update Proposal Part Two</b>   | 6.8% Increase Effective 10/01/2024,<br>Six additional 2% increases spread over three years (FY26-FY28) |
| <b>Salary Schedule Update Proposal Part Three</b> | 6.8% Increase Effective 10/01/2024,<br>Six additional 3% increases spread over three years (FY26-FY28) |
| <b>Salary Schedule Update Proposal Part Four</b>  | 6.8% Increase Effective 10/01/2024,<br>Six additional 4% increases spread over three years (FY26-FY28) |

| <b>Position (Classification)</b>           |  | <b>Step 1</b> | <b>Step 2</b> | <b>Step 3</b> | <b>Step 4</b> | <b>Step 5</b> |
|--|--|---------------|---------------|---------------|---------------|---------------|
| <b>MANAGEMENT</b>                          | <b>Superintendent</b>                          |               |               |               |               |               |
|  | Current Monthly Salary                         | \$9,663       | \$10,147      | \$10,654      | \$11,187      | \$11,746      |
|  | Proposed Monthly Salary After January 2028     | \$12,060      | \$12,664      | \$13,296      | \$13,961      | \$14,659      |
|  | <b>Business Manager</b>                        |               |               |               |               |               |
|  | Current Monthly Salary                         | \$8,765       | \$9,203       | \$9,664       | \$10,147      | \$10,654      |
|  | Proposed Monthly Salary After January 2028     | \$11,465      | \$12,038      | \$12,641      | \$13,272      | \$13,935      |
|  | <b>Maintenance/Electrical Supervisor</b>       |               |               |               |               |               |
|  | Current Monthly Salary                         | \$7,988       | \$8,387       | \$8,806       | \$9,247       | \$9,709       |
|  | Proposed Monthly Salary After January 2028     | \$9,969       | \$10,467      | \$10,990      | \$11,540      | \$12,117      |
|  | <b>Asst. Maintenance/Electrical Supervisor</b> |               |               |               |               |               |
| Current Monthly Salary                     | \$7,607  | \$7,988       | \$8,387       | \$8,806       | \$9,247       |               |
| Proposed Monthly Salary After January 2028 | \$9,494  | \$9,969       | \$10,467      | \$10,990      | \$11,540      |               |
| <b>Water Operations Supervisor</b>         |  |               |               |               |               |               |
| Current Monthly Salary                     | \$7,837  | \$8,229       | \$8,640       | \$9,073       | \$9,526       |               |
| Proposed Monthly Salary After January 2028 | \$9,781  | \$10,270      | \$10,783      | \$11,323      | \$11,889      |               |
| <b>Asst. Water Operations Supervisor</b>   |  |               |               |               |               |               |
| Current Monthly Salary                     | \$7,464  | \$7,837       | \$8,229       | \$8,640       | \$9,072       |               |
| Proposed Monthly Salary After January 2028 | \$9,315  | \$9,781       | \$10,270      | \$10,783      | \$11,322      |               |
| <b>ADMINISTRATION</b>                      | <b>Accounting Specialist I *</b>               |               |               |               |               |               |
|  | Current Monthly Salary                         | \$5,764       | \$6,053       | \$6,356       | \$6,674       | \$7,007       |
|  | Proposed Monthly Salary After January 2028     | \$6,156       | \$6,465       | \$6,788       | \$7,127       | \$7,483       |
|  | <b>Accounting Specialist II *</b>              |               |               |               |               |               |
| Current Monthly Salary                     | \$7,356  | \$7,724       | \$8,110       | \$8,515       | \$8,941       |               |
| Proposed Monthly Salary After January 2028 | \$7,856  | \$8,249       | \$8,661       | \$9,094       | \$9,549       |               |

|  |  |         |         |         |          |          |
|--|--|---------|---------|---------|----------|----------|
| <b>MAINTENANCE AND OPERATIONS</b>          | <b>Accounting Tech I</b>                       |         |         |         |          |          |
|  | Current Monthly Salary                         | \$3,794 | \$3,984 | \$4,183 | \$4,393  | \$4,613  |
|  | Proposed Monthly Salary After January 2028     | \$4,507 | \$4,733 | \$4,970 | \$5,219  | \$5,480  |
|  | <b>Accounting Tech II</b>                      |         |         |         |          |          |
|  | Current Monthly Salary                         | \$4,978 | \$5,227 | \$5,489 | \$5,763  | \$6,052  |
|  | Proposed Monthly Salary After January 2028     | \$5,914 | \$6,209 | \$6,520 | \$6,847  | \$7,189  |
|  | <b>Executive Assistant and Board Secretary</b> |         |         |         |          |          |
|  | Current Monthly Salary                         | \$5,227 | \$5,489 | \$5,763 | \$6,050  | \$6,353  |
|  | Proposed Monthly Salary After January 2028     | \$6,837 | \$7,179 | \$7,538 | \$7,914  | \$8,310  |
|  | <b>Regulatory Analyst I *</b>                  |         |         |         |          |          |
|  | Current Monthly Salary                         | \$5,764 | \$6,053 | \$6,356 | \$6,674  | \$7,007  |
|  | Proposed Monthly Salary After January 2028     | \$6,156 | \$6,465 | \$6,788 | \$7,127  | \$7,483  |
|  | <b>Regulatory Analyst II *</b>                 |         |         |         |          |          |
|  | Current Monthly Salary                         | \$7,356 | \$7,724 | \$8,110 | \$8,515  | \$8,941  |
|  | Proposed Monthly Salary After January 2028     | \$7,856 | \$8,249 | \$8,661 | \$9,094  | \$9,549  |
|  | <b>Electrician/Instrument Tech</b>             |         |         |         |          |          |
|  | Current Monthly Salary                         | \$6,670 | \$7,004 | \$7,354 | \$7,722  | \$8,108  |
|  | Proposed Monthly Salary After January 2028     | \$8,324 | \$8,741 | \$9,178 | \$9,637  | \$10,118 |
|  | <b>Hydro Operator/Ruth Representative</b>      |         |         |         |          |          |
|  | Current Monthly Salary                         | \$5,764 | \$6,053 | \$6,356 | \$6,674  | \$7,007  |
| Proposed Monthly Salary After January 2028 | \$7,194  | \$7,554 | \$7,932 | \$8,329 | \$8,745  |          |
| <b>Maintenance Mechanics</b>               |  |         |         |         |          |          |
| Current Monthly Salary                     | \$5,764  | \$6,053 | \$6,356 | \$6,674 | \$7,007  |          |
| Proposed Monthly Salary After January 2028 | \$6,848  | \$7,191 | \$7,551 | \$7,928 | \$8,324  |          |
| <b>Maintenance Worker</b>                  |  |         |         |         |          |          |
| Current Monthly Salary                     | \$3,794  | \$3,984 | \$4,183 | \$4,393 | \$4,613  |          |
| Proposed Monthly Salary After January 2028 | \$4,963  | \$5,211 | \$5,472 | \$5,746 | \$6,033  |          |
| <b>Operations/Customer Svc Spec.</b>       |  |         |         |         |          |          |
| Current Monthly Salary                     | \$5,764  | \$6,053 | \$6,356 | \$6,674 | \$7,007  |          |
| Proposed Monthly Salary After January 2028 | \$7,194  | \$7,554 | \$7,932 | \$8,329 | \$8,745  |          |
| <b>Operation &amp; Maint Technicians</b>   |  |         |         |         |          |          |
| Current Monthly Salary                     | \$5,764  | \$6,053 | \$6,356 | \$6,674 | \$7,007  |          |
| Proposed Monthly Salary After January 2028 | \$7,194  | \$7,554 | \$7,932 | \$8,329 | \$8,745  |          |
| <b>Water Operations Specialist</b>         |  |         |         |         |          |          |
| Current Monthly Salary                     | \$7,006  | \$7,356 | \$7,723 | \$8,109 | \$8,515  |          |
| Proposed Monthly Salary After January 2028 | \$8,323  | \$8,738 | \$9,175 | \$9,633 | \$10,116 |          |

\*For the Regulatory Analyst and Accounting Specialist positions, there is only one position. Whether a new employee is placed into the I or II position will be based on experience and qualification.

**Staff Recommendation**

1. Staff requests any feedback or suggestions from the Directors for the HBMWD Salary Schedule Update as described above.
2. Staff recommends approval of the HBMWD Salary Schedule Update as described above or with suggestions/edits provided by the Directors.

**Attachments**

California County Map

~~HCSD Current Salary Schedule~~

~~MCSD Current Salary Schedule~~

~~RGS Summary Data~~



*not included in January staff report*



### Counties of California



# **OPERATIONS**

Memo to: HBMWD Board of Directors  
From: Dale Davidsen, Superintendent  
Date: January 2, 2025  
Subject: Essex/Ruth December 2024 Operational Report

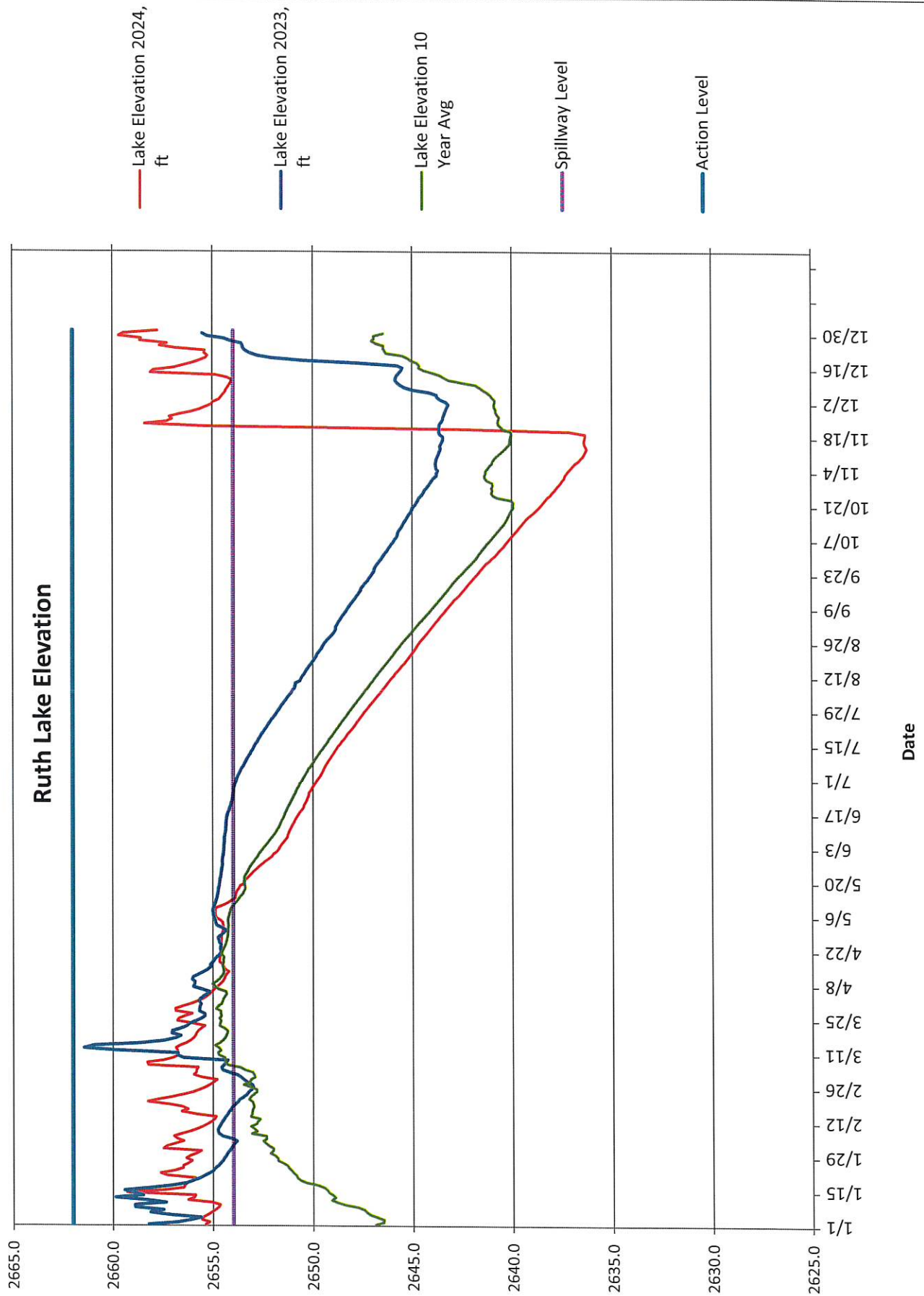
### **Upper Mad River, Ruth Lake, and Hydro Plant**

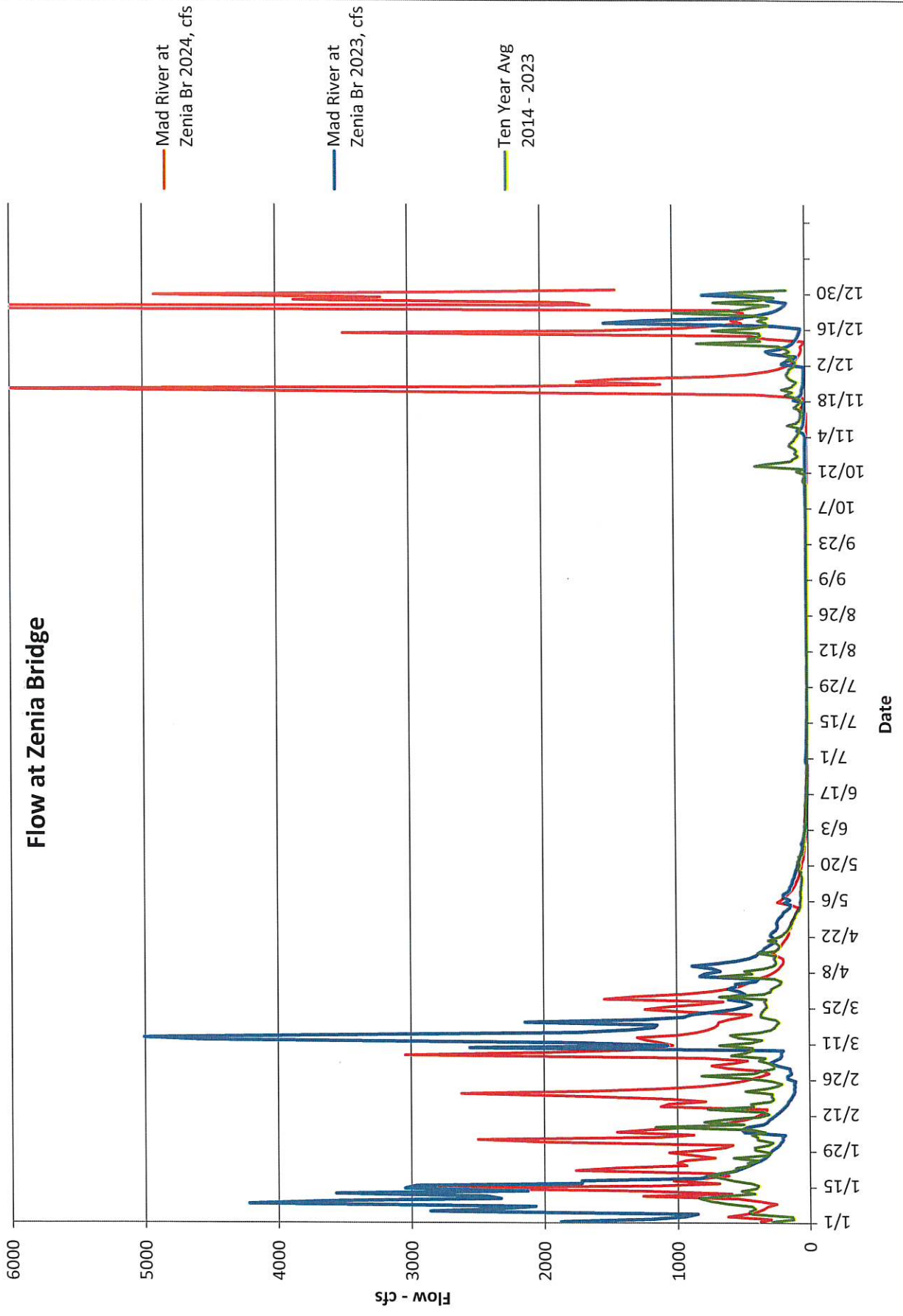
1. Average flow at Mad River above Ruth Reservoir (Zenia Bridge) in December was 1114 cfs. The maximum flow was 4920 cfs on December 29<sup>th</sup>.
2. The conditions at Ruth Lake for December were as follows:  
The lake level on December 31<sup>st</sup> was 2657.78 feet which is:
  - 2.44 feet higher than November 30<sup>th</sup>, 2024;
  - 2.28 feet higher than December 31<sup>st</sup>, 2023;
  - 3.28 feet higher than the ten-year average;
  - 3.78 feet above the spillway.
3. Ruth Headquarters recorded 19.16 inches rainfall in December.
4. Ruth Hydro produced 808,800 KWh in December. There was no shut down.
5. The lake discharge averaged 1428 cfs with a high of 5105 cfs on December 29<sup>th</sup>.

### **Lower Mad River, Winzler Control, and TRF**

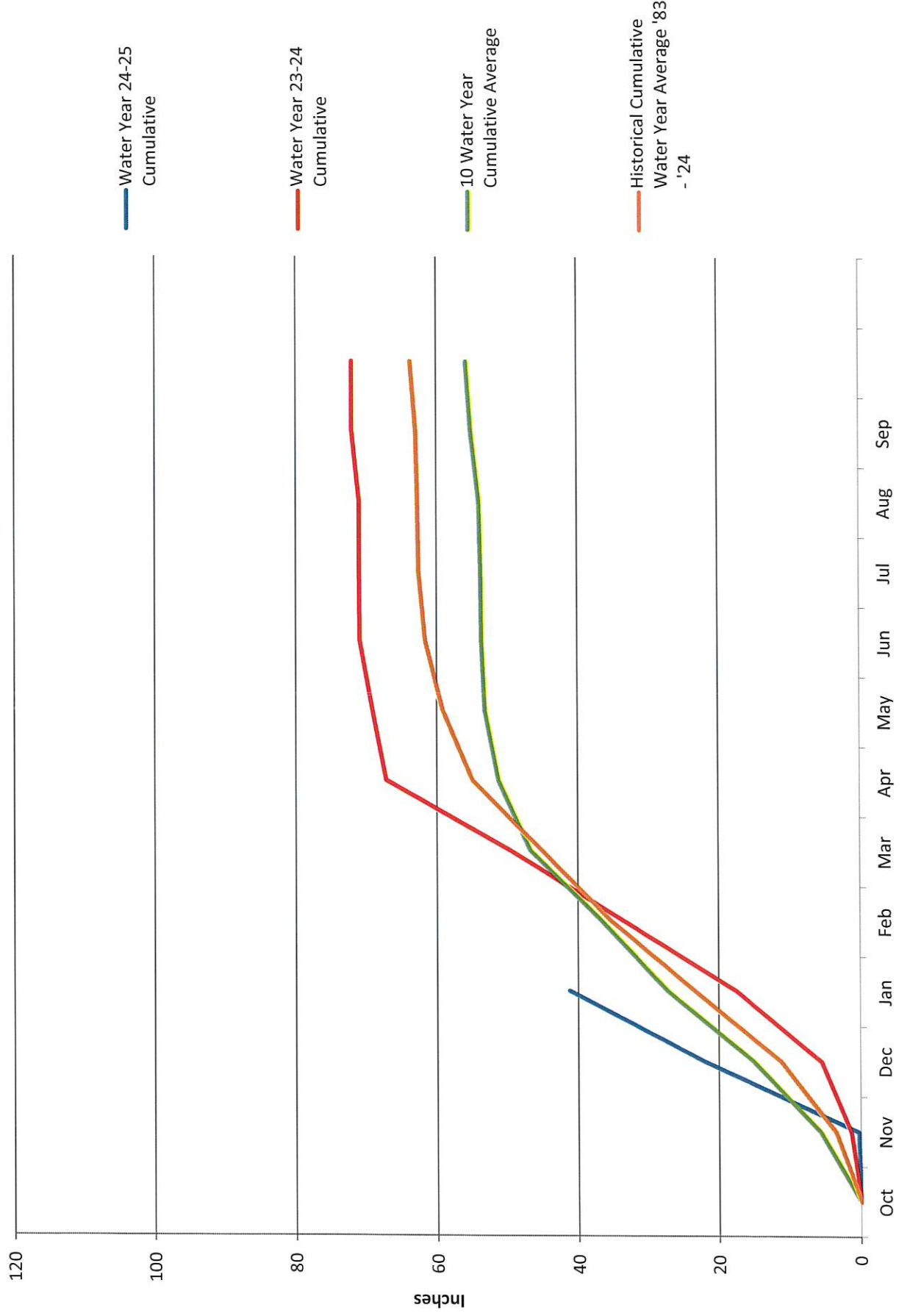
6. The river at Winzler Control Center, for December, had an average flow of 4121 cfs. The river flow was at a high of 15200 cfs on December 30<sup>th</sup>
7. The domestic water conditions were as follows:
  - a. The domestic water turbidity average was 0.12 NTU, which meets Public Health Secondary Standards;
  - b. As of December 31<sup>st</sup>, we pumped 220.651MG at an average of 7.118 MGD;
  - c. The maximum metered daily municipal use was 9.194 MG on December 1<sup>st</sup>
8. The TRF is online:
  - a. Average monthly source water turbidity was 1.72 NTU;
  - b. Average monthly filtered water turbidity was 0.11 NTU;
  - c. Number of monthly filter backwashes was 85.

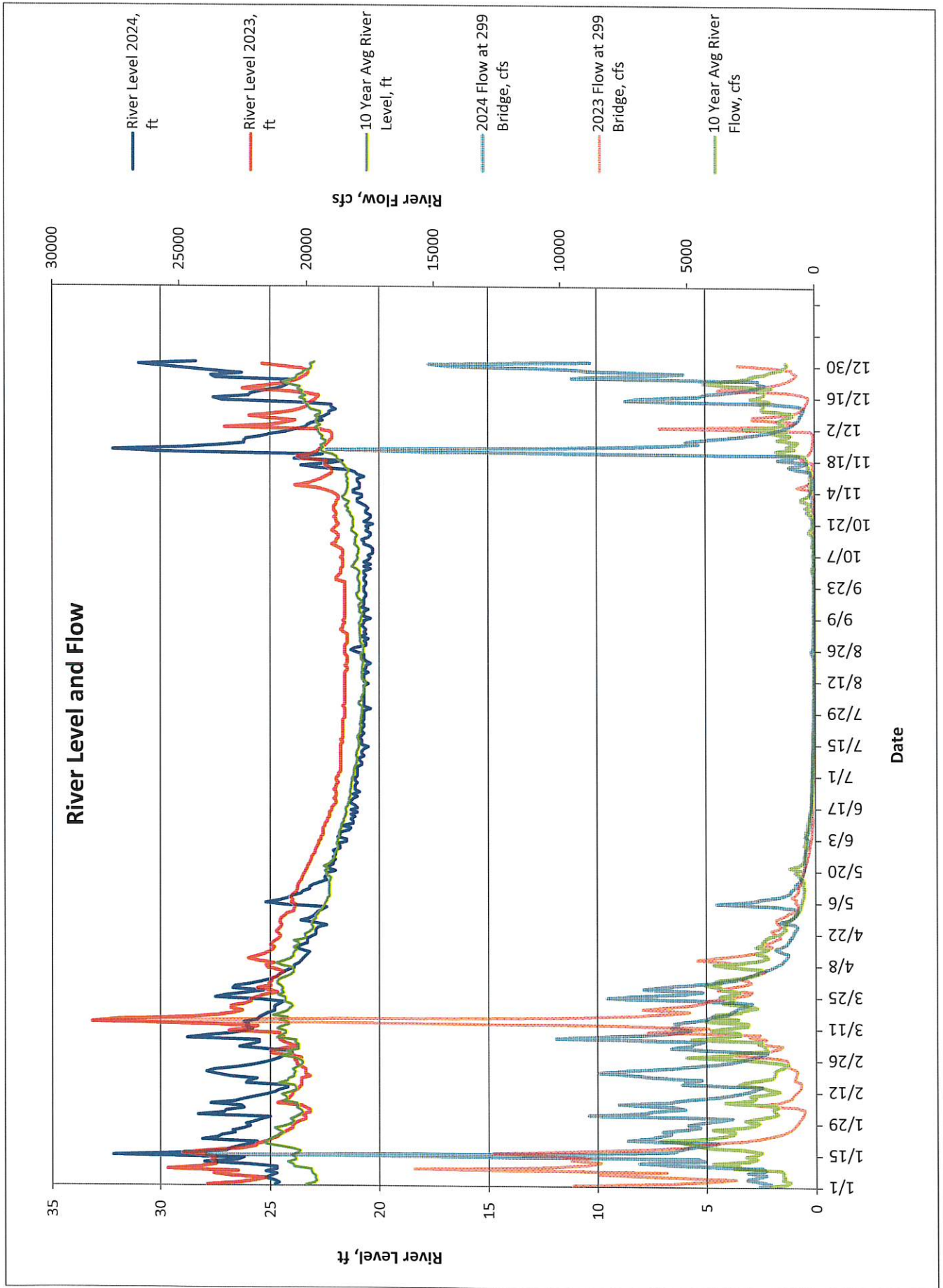
9. December 4<sup>th</sup> – Hazwoper 8 hr. refresher class at NCSC for 3 Essex staff
10. December 5<sup>th</sup>
  - a. Hazwoper 8 hr. refresher class at NCSC for 3 Essex staff
  - b. Multiple earthquakes, M7.0 being the largest. Fortunately, no major damage to our system.
11. December 6<sup>th</sup>
  - a. Quarterly water quality calibrations
  - b. Hazwoper 8 hr. refresher class at NCSC for 3 Essex staff
12. December 9<sup>th</sup> – Interviewed 4 candidates for the O & M Tech position.
13. December 11<sup>th</sup> – Maintenance went to Ruth to replace the Renk bearing seals on Generator 2 and complete installation of tiltmeters.
14. December 17<sup>th</sup> – Installed temporary conduit for McKinleyville meter signal, due to tank retro-fit project.
15. December 19<sup>th</sup>
  - a. Safety meetings
    - i. Hazard Communications
    - ii. Trenching / Shoring
16. December 30<sup>th</sup> - Assistant operations supervisor went to Ruth to work with Advanced Security on rouge alarm issue.
17. December 31<sup>st</sup> – Units 4 & 8 to Cummins for CARB compliance testing
18. Current and Ongoing Projects
  - a. Ruth dam camera system – Installation complete. Training left to be done.
  - b. Collector 2 and Collector 2-meter, Communications project –Complete
  - c. Tesla battery bank projects – In progress
  - d. Work with contractor as needed on - Reservoirs seismic retro-fit project.
  - e. Prep and painting of pipes in SBPS.
  - f. Routine annual equipment maintenance and services.





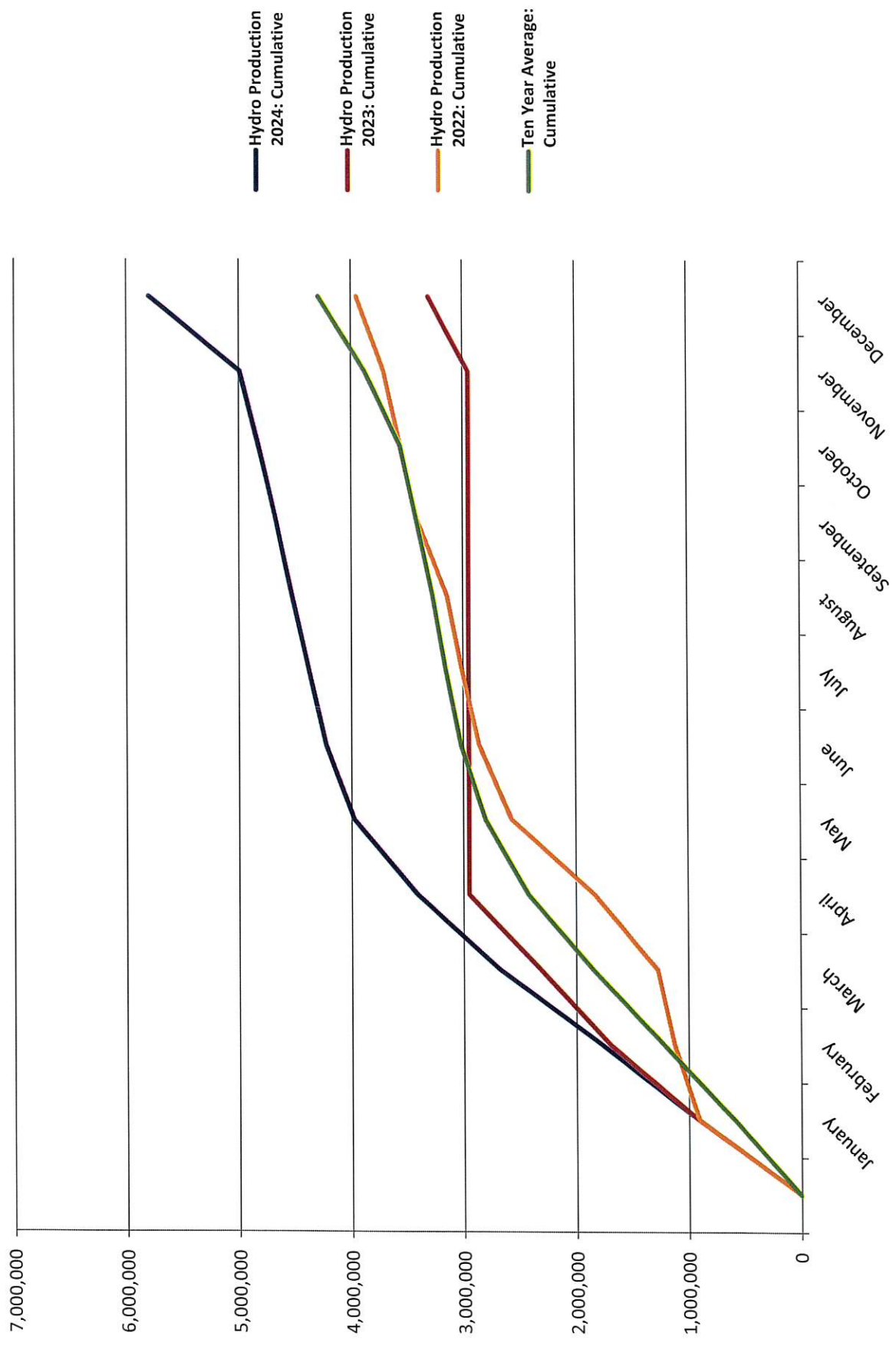
Ruth Rainfall - Water Year 2023-2024







### Ruth Hydro Production: Cumulative kWh



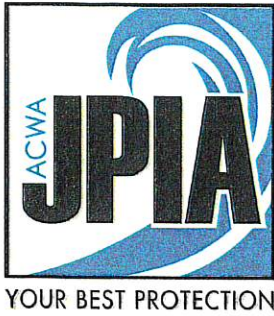
Memo to: Board of Directors  
From: Dale Davidsen, Superintendent  
Date: January 2, 2025  
Subject: Surplus equipment request

The District is in the process of replacing the following equipment. We would like to declare this item as surplus.

2022 Suzuki 90 Hp boat motor.



**ACWA/JPIA**



12/2/2024

**ACWA JPIA**

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Roseville, CA  
95661-9082

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**Core Values**

- People
- Service
- Integrity
- Innovation

Humboldt Bay Municipal Water District (H002)  
828 7th Street  
Eureka, CA 95501

General Manager:

Each year at Fall Conference, the JPIA recognizes members that have a Loss Ratio of 20% or less in either of the Liability, Property or Workers' Compensation programs (loss ratio = total losses / total premiums).

The members with this distinction receive the "**President's Special Recognition Award**" certificate for each Program that they qualify in.

The JPIA is extremely pleased to present Humboldt Bay Municipal Water District (H002) with this special recognition and commends the District on the hard work in reducing claims.

Congratulations to you, your staff, Board, and District. Keep up the good work!

The JPIA wishes you the best in 2025.

Sincerely,

Melody McDonald  
President

Enclosure: President's Special Recognition Award(s)

# President's Special Recognition Award

The President of the

**ACWA JPIA**

hereby gives Special Recognition to

## Humboldt Bay Municipal Water District

for achieving a low ratio of "Paid Claims and Case Reserves" to "Deposit Premiums"  
in the Liability Program for the period 10/01/2020 - 09/30/2023  
announced at the Board of Directors' Meeting in Palm Desert.



December 02, 2024

Melody McDonald, President

**RCEA/RREDC**



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## **BOARD OF DIRECTORS REVISED SPECIAL MEETING** **AGENDA**

**Wharfinger Building, downstairs Bay Room**  
**1 Marina Way, Eureka, CA 95501**

**December 17, 2024**  
**Tuesday, 3:30 p.m.**

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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.

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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).

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NOTE: Speakers wishing to distribute materials to the Board at the meeting, please provide 13 copies to the Board Clerk.

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### **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.

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**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."

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## **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 November 20, 2024, Board Meeting.
- 4.2 Approve Disbursements Report.
- 4.3 Accept Financial Reports.
- 4.4 Adopt Resolution 2024-14 Adopting Updates to the Energy Risk Management Policy.
- 4.5 Accept RCEA Racial Justice Plan Progress Report.
- 4.6 Authorize RCEA Executive Director to Execute the Department of Energy Grid Resilience Innovation Partnership (GRIP) Program Funds for Tribal Energy Resilience and Sovereignty Project GD-0000967 Conditional Award Once Finalized and Reviewed by Special Counsel.\*

### **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 – None.**

### **7. NEW CCE BUSINESS**

#### **7.1. Local Distributed Energy Storage Request for Offers**

1. Authorize staff to issue the Request for Offers for Local Distributed Energy Storage Resources.

\* This agenda item was added on 12/14/24 at 12 p.m.



2. Establish an ad hoc Board offer review committee and authorize it to take the following actions provided they are consistent with the RFO: (i) approve shortlisted offers, (ii) replace offers on the shortlist as needed, and (iii) approve continued negotiations with a shortlisted respondent in the event their offer materially changes.
3. Authorize staff to engage with the shortlisted respondents, including execution of exclusivity agreements, collection of shortlist deposits, and negotiation of contract terms, prior to full Board review and approval of resulting contracts.

**7.2. Ocean Wave Energy Grant Proposal Letter of Intent**

Authorize staff to develop and provide a letter of intent in support of CorPower Ocean's proposal to the U.S. Department of Energy's "Oceans of Opportunity: U.S. Wave Energy Open Water Testing" funding opportunity.

**END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS**

**8. OLD BUSINESS**

**8.1 Regional Resilience Grant Program (Rural Fire Station Solar + Battery)  
Design/Build Solicitation Pathway Approval**

Authorize RCEA's Executive Director to utilize the design-build process to procure design and construction of the solar plus battery storage systems for the RRGP Energy-Resilient Fire Services in High-Threat Communities project; and initiate the first step by developing and issuing a RFQ.

Create a RRGP Ad Hoc Committee comprised of five or fewer RCEA Board members.

Delegate authority to the RRGP Ad Hoc Committee to: 1) approve the short list of qualified design build contractors, and 2) authorize the Executive Director to issue a RFP for construction of the solar plus battery storage systems.

**9. NEW BUSINESS**

**9.1 Financial Audit for Fiscal Years Ending June 30, 2021 and 2020**

Accept and Approve Redwood Coast Energy Authority Financial Statements June 30, 2021, and 2020 and Associated Independent Auditors' Report by Baker Tilly US, LLP.

**9.2 Rural Regional Energy Network North Pre-Launch Professional Services  
Agreements with Partners and FY 2024-25 Budget Adjustments**

Approve budget adjustment to RCEA Fiscal Year 24-25 Budget.

## **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**

Thursday, January 23, 2025, 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**

**December 23, 2024 at 6:30 pm**

**AGENDA**

This meeting has been cancelled due to lack of quorum.

*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 accommodations.*



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Community Services Districts Humboldt · Manila · McKinleyville · Orick · Orleans · Redway · Willow Creek  
Humboldt Bay Harbor, Recreation and Conservation District · Humboldt Bay Municipal Water District  
County of Humboldt · Hoopa Valley Tribe · Redwoods Community College District