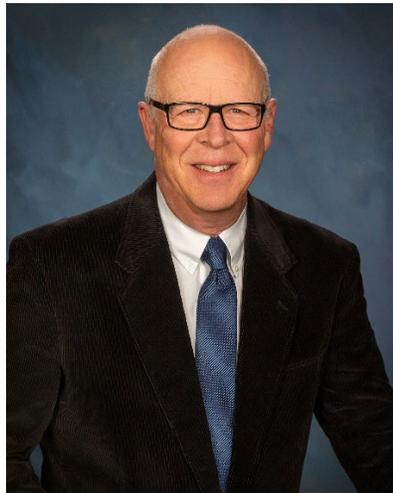




## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

### Board of Directors Meeting



**August 14, 2025**

In loving memory of Vice President David Lindberg



---

**BOARD OF DIRECTORS**  
**Humboldt Bay Municipal Water District**  
**Agenda for Regular Session Meeting of the Board of Directors**  
828 7<sup>th</sup> Street, Eureka, CA 95501

---

**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.*

**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](mailto: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.

**Document Availability:** Materials related to an item on this agenda that have been submitted to the HBMWD Board of Directors within 72-hours prior to this meeting, are available for public inspection in the HBMWD's Office at 828 7<sup>th</sup> Street, Eureka, California, during normal business hours, and can be viewed on our website at [www.hbmwd.com](http://www.hbmwd.com).

**Disability Notice:** In compliance with the Americans with Disability Act, if you require a disability-related modification or accommodation to participate in this public meeting, please call (707) 443-5018. Notification 48-hours prior to the meeting will enable the District to make reasonable arrangements to ensure accessibility to this meeting.

---



**BOARD OF DIRECTORS**  
**Humboldt Bay Municipal Water District**  
**Agenda for Regular Session Meeting of the Board of Directors**  
*828 7<sup>th</sup> Street, Eureka, CA 95501*

---

**NO CLOSED SESSION MEETING for August 14, 2025**

**AGENDA**  
**REGULAR BUSINESS MEETING**

Thursday, August 14, 2025

9:00 a.m.

828 7<sup>th</sup> Street  
Eureka, CA 95501

**1. Call to Order:**

- 1.1. Roll Call
- 1.2. Pledge of Allegiance
- 1.3. Accept Agenda

**2. 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. The Public may also request an item appearing on the Consent Calendar to be pulled and discussed separately. 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 which does not appear on the agenda. The Board of Directors is limited by State law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.*

**3. Consent Calendar:** *These matters are routine in nature and are usually approved by a combined single motion unless an item is pulled for discussion. Single motion and vote approving 3 recommendation(s).*

- 3.1. Approve the Draft Minutes of the Regular Board Meeting of July 10, 2025
- 3.2. Approve the Project Budget Reallocation from the FY2024/25 fiscal year
- 3.3. Approve funding to attend the ACWA Region 1 event for Director Rupp

**4. Presentations:**

- 4.1. None
-



## 5. Discussion and Action:

- 5.1. Discuss and Consider Approval of Resolution Honoring Board Vice-President David Lindberg
- 5.2. Discuss and Consider Approval of Notice of Vacancy
- 5.3. Discuss and Consider Approval of Officer Assignments
- 5.4. Discuss and Consider for Approval of Ordinance 26 – Second Reading and Adoption - Amending and Restating Ordinance 19 Regarding the Registration and Inspection Program for all Watercraft at Ruth Lake
- 5.5. Informational Memo Concerning the Former McNamara and Peepe Mill Site
- 5.6. Discuss and Consider Approval of Junior/Assistant/Associate Engineer Job Description
- 5.7. Discuss and Consider Approval of July 2025 Financial Statement & Vendor Detail Report
- 5.8. Discuss and Consider Approval of Items pulled from Consent Calendar

## 6. Reports

- 6.1. Staff Reports
    - 6.1.a. Engineering Report
    - 6.1.b. Business Report – NONE
    - 6.1.c. Operations Report
    - 6.1.d. Management Report
  
  - 6.2. Active Committee Reports
    - 6.2.a. Mad River (Baduwa't) Headwaters
  
  - 6.3. Director Reports
    - 6.3.a. General Director Comments
      - Director Woo
      - Director Wheeler
      - Secretary/Treasurer Rupp
      - President Fuller
  
    - 6.3.b. Organizations on which HBMWD Serves
      - Association of CA Water Agencies (ACWA)
      - Association of CA Water Agencies/Joint Powers Insurance Authority (ACWA-JPIA)
        - Report out on California Water Insurance Fund Meeting
      - Redwood Coast Energy Authority (RCEA)
-



- Redwood Region Economic Development Commission (RREDC)

6.4. Discussion of Future Agenda Items

- Information Management System
- Cyber Security Policy
- Artificial Intelligence Policy

**7. Adjournment:**

The next Regular Meeting of the Board of Directors will be held at 9:00 am on Thursday, September 11, 2025.

---



---

**BOARD OF DIRECTORS**  
Humboldt Bay Municipal Water District  
August 14, 2025

---

ITEM NO. 3.1

ITEM: Consider Approval of Draft Minutes of Regular Meeting of the Board of Directors on July 10, 2025

PRESENTED BY: Contessa Dickson, Board Secretary

TYPE of ITEM: ACTION

TYPE of ACTION: General Vote – Consent Calendar

**Recommendation**

---

Staff recommend the Board consider approval of the Draft Minutes of the Board of Directors for the July 10, 2025 Regular Meeting.

**Discussion**

---

The Draft Minutes of the July 10, 2025 Regular meeting are attached. A reminder that the Minutes are approved by the legislative body that is the Board of Directors, not individual members of the Board who were present at the Meeting.

**Alternatives**

---

Take no action.

**Fiscal Analysis**

---

Not Applicable

**Environmental Requirements**

---

Not Applicable

**Exhibits/Attachments**

---

Attachment 1 – Draft Minutes from July 10, 2025 Regular Meeting

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



**Minutes of the Regular Meeting of the Board of  
Directors  
July 10, 2025  
9:00 a.m.**

---

---

**1.1 ROLL CALL**

Vice President Lindberg called the meeting to order at 9:00 a.m. Director Rupp conducted the roll call. Directors Lindberg, Rupp, Wheeler, and Woo were present. General Manager Michiko Mares, Water Operations Supervisor Mario Palmero, Accounting Specialist Darcey Quinn, and Board Secretary Contessa Dickson were also present. District Engineer Nate Stevens was present for a portion of the meeting. President Fuller was absent.

**1.2 PLEDGE OF ALLEGIANCE**

Vice President Lindberg led the flag salute.

**1.3 ACCEPT AGENDA**

**ACTION: Motion #25001 to accept Agenda**

**Maker:** Director Woo

**Second:** Director Wheeler

**Vote:** 4-0 to approve

**2. PUBLIC COMMENT**

No public comment.

**3. CONSENT CALENDAR**

**ACTION: Motion #25002 to approve Consent Calendar**

**Maker:** Director Rupp

**Second:** Director Wheeler

**Vote:** 4-0 to approve

3.1 Draft Minutes of the Regular Board Meeting of June 10, 2025

3.2 Consider Amendment to General Manager Employment Agreement

**4. PRESENTATIONS**

**4.1 Overview of Permits for Maintenance Activities in the Mad River**

Lauren Dusek and Dennis Halligan of Stillwater Sciences were present for this item.

They provided an overview of the permits related to maintenance activities in the Mad River, including Section 401 Water Quality Certification from the North Coast Regional Water Quality Control Board (NCRWQCB) for activities at Ruth Lake and Essex, and Section 404 Permit under the Clean Water Act from the U.S. Army Corps of Engineers (USACOE) for the discharge of dredged or fill material. They discussed the status of these permits, work completed to date, and the next steps in the permitting process. The Board asked several clarifying questions, followed by an in-depth discussion.

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



**Minutes of the Regular Meeting of the Board of  
Directors  
July 10, 2025  
9:00 a.m.**

---

---

**5. DISCUSSION AND ACTION:**

**5.1 Informational Memo 9/26/25 Joint Board Meeting with Ruth Lake Community Services District (RLCSD)**

**Non-action Item**

As Ms. Mares has not previously attended a joint meeting with RLCSD, Director Lindberg provided an overview of past joint meeting activities for her context. Director Rupp expressed appreciation for the Ruth Lake community, including local fire and sheriff personnel and the Lease Holder Association. Directors Rupp, Woo, Wheeler, and Lindberg confirmed they will be attending the joint Board meeting.

**5.2 First Reading of Revised Ordinance 26 – Amending and Restating Ordinance 19 Regarding the Registration and Inspection Program for all Watercraft at Ruth Lake**

**Action: Motion #25003 to approve first reading of Ordinance 26**

**Maker:** Director Rupp

**Second:** Director Wheeler

**Vote:** 4-0 by roll call vote – Ayes: Rupp, Wheeler, Woo and Lindberg

Staff recommended approval of the first reading of Ordinance 26, which amends and restates Ordinance 19 to enhance enforcement mechanisms, inspection protocols, and penalties related to the watercraft registration and inspection program at Ruth Lake. These revisions aim to further protect Ruth Lake and HBMWD’s critical water supply infrastructure from the imminent threat of aquatic invasive species. Ms. Mares proposed a few minor edits, including amending the title to reflect Aquatic Invasive Species Prevention and correcting the approval date to August 14, 2025 rather than July 10, 2025.

**5.3 Discuss and Consider Approval of Out of Class Pay**

**ACTION: Motion #25004 to approve out of class pay with edits**

**Maker:** Director Rupp

**Second:** Director Woo

**Vote:** 4-0 to approve

The Board reviewed the policy outlining eligibility for out-of-class pay when a supervisor or manager is absent and another employee assumes their responsibilities. The policy includes a requirement that out-of-class pay be authorized in writing with a 25% premium pay. Originally, the policy specified a minimum of 5 working days and a maximum of 15 working days for eligibility. After discussion, the Board agreed to lower the minimum requirement to 2 working days and/or at the General Manager’s discretion.

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



**Minutes of the Regular Meeting of the Board of  
Directors  
July 10, 2025  
9:00 a.m.**

---

---

5.4 Discuss & Consider Approval of June 2025 Financial Statement & Vendor Detail Report

**ACTION: Motion #25005 to approve June 2025 Financial Statement & Vendor Detail Report in the amount of \$1,526,351.12.**

**Maker:** Director Rupp

**Second:** Director Wheeler

**Vote:** 4-0 to approve

Ms. Quinn presented the June financial statement & vendor detail report. The General Account balance is \$ 1.9 million. The various investments balance is \$3.9 million. The advanced charges are \$4.2 million with a general reserve of \$ 7.5 million.

5.5 Items Pulled from Consent Calendar

None.

**Reports:**

6.1 Staff Reports:

a. Engineering Report

**Non-action Item**

Mr. Stevens provided his monthly update on the status of ongoing District projects. He reported that the new project update table, introduced at last month's meeting, is still under development and will be presented again at the August meeting. Current projects discussed included:

- Turbidity Reduction Facility Generator Project
- Reservoirs Seismic Retrofit Project
- Collector Mainline Redundancy Project
- Matthews Dam Advance Assistance Seismic Stability Project
- Matthews Dam Part 12D Comprehensive Assessment

b. Business Report

**Non-action Item**

No report.

c. Operations Report

**Non-action Item**

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



**Minutes of the Regular Meeting of the Board of  
Directors  
July 10, 2025  
9:00 a.m.**

---

---

Mr. Palmero presented the June Operations Report, stating that it was a routine month with no significant changes to report. He noted that Mr. Davidsen participated in the 5-year dive inspection of the slide gate structure and plunge pool on June 13<sup>th</sup> at Ruth Lake. Additionally, Mr. Palmero led the District's transition to Microsoft 360, for which Ms. Mares expressed appreciation, thanking him for his efforts on the project.

d. Management Report

**Non-action Item**

General Manager Mares provided an update on the progress of the District's projects, grants, and key initiatives. Highlights staff participated in an EcoNews interview with California Department of Fish and Wildlife (CDFW) staff on June 12 to discuss the threat of Golden Mussels. Staff also met with the Harbor District on July 2 to discuss future development water demands and with the Peninsula Community Services District (PCSD) regarding their intent to co-develop a transition plan with the District to assume operations of the Fairhaven distribution system. Additionally, Ms. Mares gave a presentation on Golden Mussels to the Redwood Region Economic Development Commission (RREDC) on June 23.

6.2 Active Committee Reports

a. Unnaming the Mad River

The committee met on July 3, 2025. Director Wheeler reported that the discussion focused on efforts to move forward with restoring the Baduwa't name in a meaningful and respectful manner. Emphasis was placed on the importance of engaging with local tribes throughout the process. Staff compiled a list of tribes within the District's watershed and will draft a letter on the topic to be distributed to those tribes.

b. Board Policy and Evaluations

The committee met on July 7, during which staff presented drafts of the first two policy sections 1000 and 4000, based on templates from the California Special Districts Association (CSDA) and Association of Ca Water Agencies (ACWA), for the committee's review. The committee will continue to meet regularly to review and revise policies until all policies have been completed. Completed policies will be presented to the Board for approval as they are completed.

c. Mad River (Baduwa't) Headwaters

This committee will meet in August.

6.3 Director Reports

General Director Comments.

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



**Minutes of the Regular Meeting of the Board of  
Directors  
July 10, 2025  
9:00 a.m.**

---

---

a. Director Woo:

No comment.

b. Director Wheeler:

Director Wheeler commented on the Trump administration's recent announcement to rescind the 2001 Roadless Area Conservation Rule, which protects certain U.S. Forest Service lands from development. He noted that this action could impact the District's watershed, as increased development in these previously protected areas may raise concerns related to water quality, erosion, and land use.

c. Secretary/Treasurer Director Rupp:

No comment.

d. Vice-President Director Lindberg:

No Comment.

e. President Fuller:

President Fuller was absent.

6.4 Organizations on which HBMWD Serves

a. Association of CA Water Agencies (ACWA)

**Non-action Item**

Director Rupp reported that the ACWA Elections Committee met on July 1, which he attended. The committee reviewed potential candidates for the upcoming 2026–2027 ACWA Board elections and is recommending Ernesto "Ernie" Avila, of Contra Costa Water District, for President, and Carol Lee Gonzales-Brady, of Rancho California Water District, for Vice President.

b. Association of CA Water Agencies/Joint Powers Insurance Authority (ACWA-JPIA)

**Non-action Item**

The ACWA-JPIA met during Director Rupp's attendance. Melody Henriques-McDonald from San Bernardino Valley Water Conservation District was re-elected as President, and Director Rupp was re-elected as Vice President.

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



**Minutes of the Regular Meeting of the Board of  
Directors  
July 10, 2025  
9:00 a.m.**

---

c. Redwood Coast Energy Authority (RCEA)

**Non-action Item**

Director Woo reported on the June RCEA Board meeting, highlighting the recognition of Dana Boudreau's retirement, a review of financials through April 2025, and approval of budget amendments and contracts. The Board approved governance updates, including revised Operating Guidelines (Resolution 2025-3) and a policy to achieve 100% renewable electricity by 2030 (Resolution 2025-4). Staff also announced an upcoming cost-of-service rate study.

d. Redwood Region Economic Development Commission (RREDC)

**Non-action Item**

Director Lindberg provided a report on the June 23 RREDC Board meeting, which included regional updates. Ms. Mares also presented on Golden Mussels. Highlights included: HCSD approved a staff COLA and reviewed a major development; McKinleyville CSD progressed to phase two of its water tank inspection; Manila CSD approved a rate increase; the Harbor District completed park fencing, plans restroom additions, and continues offshore wind development; Arcata opened a new dog park and expanded its bike share program, while addressing soil toxin concerns; Fortuna is managing staffing changes, shifted to a four-day workweek, and is planning a public pool and water safety program.

7. Discussion of Future Agenda Items

7.1 Information Management System

**Non-action Item**

No update.

7.2 Cyber Security Policy

**Non-action Item**

This item will be brought forward to the September Board meeting for further discussion.

7.3 Artificial Intelligence Policy

**Non-action Item**

No update.

**CLOSED SESSION:**

1. **Roll Call**

2. **Public Comment**

No public comment was received.

3. **Announcement of Closed Session Agenda:**

3.1 Public Employee Performance Evaluation for General Manager pursuant to Section 54957(b)(1)

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



**Minutes of the Regular Meeting of the Board of  
Directors  
July 10, 2025  
9:00 a.m.**

---

---

The Board entered closed session at 1:38 p.m. and returned to open session at 2:18 p.m. No reportable action was taken.

**ADJOURNMENT**

The meeting adjourned at 2:19 p.m.

Attest:

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

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



---

BOARD OF DIRECTORS  
Humboldt Bay Municipal Water District  
August 14, 2025

---

ITEM NO. 3.2

ITEM: Consider Approval of FY2024/25 Project Budget Reallocation

PRESENTED BY: Chris Harris, Business Manager

TYPE of ITEM: ACTION

TYPE of ACTION: General Vote – Consent Calendar

### Recommendation

---

Staff recommend the Board consider approval of any allocated and unspent funds determined available in the Project Budget Reallocation from the FY2024/25 fiscal year to be first reallocated to authorized and unbudgeted projects, and the net remainder to be reallocated to Advance Charges as defined under Ordinance 16 for the major grant projects.

### Background

---

As the Board is aware, to minimize the impact on the District’s municipal customers in any one fiscal year, staff uses a combination of funding mechanisms including grants, loans, and Advance Charges. The **Project Budget Reallocation** is a means to supplement the Advanced Charges, using funds already collected from the Municipal Customers.

Each year as part of the final budget process, staff complete a thorough analysis of the status of funds as related to the Project Budget. Once staff have identified the status of all projects, unspent funds are then available to be *reallocated* as Advanced Charges to other large capital projects – thus the term “*Project Budget Reallocation*.”

- **Approved Budget:** The individual project’s original budget approved in the Project Budget for FY24/25.
- **Revised Budget:** The requested adjustment to the individual project’s budget based on project activity (increase or decrease based on project circumstances).
- **Encumbered:** Funds related to projects that are currently in process.

Staff has communicated the concept and process of the Project Budget Reallocation to the Municipal Customers, and they have agreed to the process as a means of enhancing the Advance Charges funding mechanism for larger projects. This minimizes potential large fluctuations in the Municipal Customer charges and the upward pressure on retail rates.

## Discussion

Currently, the District has **four** FEMA grant supported projects in various stages of the construction process (TRF Generator, 3x Tank Seismic Retrofit, Collector Mainline Redundancy, and Advanced Assistance for Dam & Spillway Seismic Analysis). All these grants require a District match of 25%. Staff created a tentative timeline to spread the projects over the next 2-3 years and to allow funding of the required matches.

Large Construction Projects			
FEMA Grant Projects	Tentative Timeline	Total Project	District Funding
3x Tank Seismic Retrofit	FY24/25-FY25/26	\$7,918,000	\$3,611,819 <sup>1</sup>
Collector Mainline Redundancy	Scope Revision @ FEMA	Unknown	Unknown
TRF Emergency Generator	FY24/25-FY25/26	\$1,925,000	\$481,250
Advanced Assistance – Seismic Spillway Grant	FY25/26 – FY26/27	\$4,738,325	\$3,205,362 <sup>2</sup>
<b>TOTALS</b>		<b>\$14,581,325</b>	<b>\$7,298,431</b>

District Funding Status				
FEMA Grant Project	District Funding	Adv. Charges Collected	Adv. Charges (Project Budget FY25/26, Reallocation)	Remaining District Match
3x Tank Seismic Retrofit	\$3,611,819	\$2,197,865 <sup>3</sup>	\$314,839	<\$1,099,115>
Collector Mainline Redundancy	Unknown	\$395,280	\$0	Unknown
TRF Emergency Generator	\$481,250	\$687,860	\$0	+\$206,610
Adv. Assistance – Seismic Spillway Grant	\$3,205,362	\$386,157	\$200,991	<\$2,618,214>
<b>TOTALS</b>	<b>\$7,298,431</b>	<b>\$3,667,162</b>	<b>\$515,830</b>	<b>&lt;\$3,115,439&gt;</b>

<sup>1</sup> \$1,435,000 Original Match + \$2,176,819 Additional FEMA funding requested

<sup>2</sup> \$510,988 Original Match + \$2,600,000 Additional FEMA funding requested

<sup>3</sup> Includes \$598,000 Industrial Tank match funds from ReMat

## **Alternatives**

---

Return unspent funds to the Municipalities via Price-Factor 2 credit, then charge the Municipalities for the needed funds in the FY2025/26 budget. Due to financial constraints of what can reasonably be changed to the municipalities, this option will eliminate some new projects/funding from the FY26 budget.

## **Fiscal Analysis**

---

The FY2024/25 Project Budget Reallocation resulted in \$199,971 in reallocated funds to Advanced Charges and \$1,543,180 in encumbered funds (\$697,774 in dam/spillway activity) for on-going projects.

This process stabilizes the financial impacts to the Municipal customers by using funds collected to complete scheduled projects and eliminates large swings in Municipal charges.

## **Environmental Requirements**

---

N/A

## **Exhibits/Attachments**

---

FY24/25 Project Budget Reallocation Report

## FY24/25 Project Budget Reallocation

Budgeted Project		Approved Budget	Revised Budget	Increase (Decrease)
		(Rounded)	(Rounded)	(Rounded)
<b><u>Budget Increase &amp; New Projects</u></b>				
Shatz Energy Research - Tesla Battery/Generator	INCREASED	\$ 23,280	37,576	14,296
Samoa Peninsula Coastal Development Permit (Change of Scope)	INCREASED	\$ 405,480	445,775	40,295
GEI - Dam Safety Engineer	INCREASED			
<i>Task 1 - DSSMR (add'l funding)</i>		\$ 5,000	11,518	6,518
<i>Task 2 - Part 12D, PFMA Review</i>		\$ -	15,674	15,674
<i>Task 3 - General Dam Safety Engineer (add'l funding)</i>		\$ 12,000	16,804	4,804
<b>Total Budget Increase &amp; New Projects</b>		<b>\$ 445,760</b>	<b>\$ 527,347</b>	<b>\$ 81,587</b>

### **Prior Encumbered Funds From FY24/25, Unencumbered for FY25/26**

Ruth Automated Tiltmeters		\$ 50,000	\$ 23,070	(26,930)
FY24 Main Line Meter Flow Calibration		\$ 3,500	\$ -	(3,500)
Collector 1 Conductor Replacement		\$ 89,750	\$ 84,250	(5,500)
Ruth Hydro Synchronizer Testing		\$ 23,500	\$ 15,443	(8,057)
Water Quality Monitoring Plan Update		\$ 20,000	\$ 998	(19,002)
Engineering Study-Replace 15-inch Peninsula Pipe		\$ 25,000	\$ 4,701	(20,299)
Above Ground 10,000 Gallon Fuel Tank Testing		\$ 5,400	\$ -	(5,400)
Lease Lots Surveys		\$ 22,618	\$ -	(22,618)
GIS Project at Ruth Lake (USFS)		\$ 7,500	\$ -	(7,500)
<b>Total Previously Encumbered Funds Reallocated</b>		<b>\$ 247,268</b>	<b>\$ 128,462</b>	<b>(118,806)</b>

### **Professional Services**

FY25 Mad River Regulatory Compliance Assistance		\$ 50,000	\$ 6,087	(43,913)
Domestic Water System Cathodic Protection Upgrades		\$ 80,000	\$ 6,161	(73,839)
Water Model Update & Samoa Peninsula Domestic Capacity		\$ 30,000	\$ -	(30,000)
Woodward Governor Replacement - Phase 1 (Planning)		\$ 15,000	\$ -	(15,000)
<b>Total Reallocated Funds in Professional Services</b>		<b>175,000</b>	<b>12,248</b>	<b>(162,752)</b>

## FY24/25 Budget Reallocation -Summary-

Budgeted Project	Approved Budget (Rounded)	Revised Budget (Rounded)	Increase (Decrease) (Rounded)
Budget Increase & New Projects	445,760	527,347	81,587
Previously Encumbered Funds; Reallocated	247,268	128,462	(118,806)
Total Professional Services Reallocated	175,000	12,248	(162,752)
<b>Total Funds Available for Reallocation</b>	<b>868,028</b>	<b>668,057</b>	<b>(199,971)</b>

### Reallocation of Funds

#### Reallocation of Funds - Advanced Charges

<i>Grant - 3x Tank Seismic Retrofit - Construction Management (Albat \$347,920 - 25%)</i>	86,980
Grant - Advanced Assistance-Dam and Spillway Seismic Analysis (Add'l Borings; Add'l Left Abutment Analysis)	112,991

<b>Total Reallocations</b>	<b>199,971</b>
----------------------------	----------------

## 2024/25 Encumbered Funds (for FY2025/26)

### Encumbered Funds - Project Budget

Mainline Valve Replacement Program (FY24)	Capital Projects	\$ 55,173
Retaining Wall for Valve Access (FY23)	Capital Projects	\$ 70,000
Replace Pump 2-2 (Pre-Approved 04/2024)	Capital Projects	\$ 26,713
Peninsula Communications Options	Capital Projects	\$ 42,000
Mainline Valve Replacement Program	Capital Projects	\$ 50,000
Purchase Collector 4 Transformer	Capital Projects	\$ 48,325
Purchase Switchboard for Collector 4	Capital Projects	\$ 41,589
Resize Chemical Feed System	Capital Projects	\$ 6,304
Storage Barn at Headquarters (Advanced Charges)	Capital Projects	\$ 218,108
FY25 Replace ESSEX Administrative Computers	Equip. & Fixed Assets	\$ 2,978
Telemetry Radio and Antenna Replacement	Equip. & Fixed Assets	\$ 14,000
District Lighting Upgrades	Equip. & Fixed Assets	\$ 11,950
Construction Tooling	Equip. & Fixed Assets	\$ 1,473
TRF Filter Gallery Heaters and Air Circulation	Equip. & Fixed Assets	\$ 9,000
Air Actuated Chemical Pump	Equip. & Fixed Assets	\$ 2,000
FY25 Replace EUREKA Administrative Computers	Equip. & Fixed Assets	\$ 5,086
FY25 Maintenance Emergency Repairs	Maintenance Proj.	\$ 5,000
FY25 Main Line Meter Flow Calibration	Maintenance Proj.	\$ 15,900
FY25 Technical Support and Software Updates	Maintenance Proj.	\$ 6,442
FY25 Hazard & Diseased Tree Removal	Maintenance Proj.	\$ 8,000

FY25 Fleet Paint Repairs	Maintenance Proj.	\$ 5,000
TRF Valve Network Upgrade (Phase 2)	Maintenance Proj.	\$ 51,500
FY25 Howell Bunger Valve Inspection	Maintenance Proj.	\$ 1,500
Replace Hydro Plant PLC's	Maintenance Proj.	\$ 88,750
Caselle A/R Module	Prof. & Consulting	\$ 5,000
CIP 10-yr Financial Revision and Project Review	Prof. & Consulting	\$ 22,960
Retail Rate Study - Bartle Wells	Prof. & Consulting	\$ 12,000
404 Permit Assistance	Prof. & Consulting	\$ 9,131
FY25 Cyber Security Maintenance	Prof. & Consulting	\$ 5,250
Microsoft 360 Email	Prof. & Consulting	\$ 7,274
Prof. Consulting Services for FERC C.A.	Prof. & Consulting	\$ 504,865
Technical Dam/Spillway Support*	Prof. & Consulting	\$ 189,909

\*This line comprised of projects #25-51-0110, 25-58-0111, 25-51-0112, 25-58-0114, 24-51-0110, 24-51-0112, 24-51-0114, 24-51-011723-51-0033, 23-58-0115, 23-58-0116, 23-56-0122, 23-58-9123, 22-58-0121

---

**Total Encumbered Funds**

**1,543,180**

---



---

**BOARD OF DIRECTORS**  
Humboldt Bay Municipal Water District  
August 14, 2025

---

ITEM NO. 3.3

ITEM: Consider Approval of costs for Board Representative travel to the Association of California Water Agencies (ACWA) Region 1 Event

PRESENTED BY: Contessa Dickson, Board Secretary

TYPE of ITEM: ACTION

TYPE of ACTION: General Vote – Consent Calendar

**Recommendation**

---

Staff recommend the Board consider approval of District funding and attendance of the District representative to attend the ACWA Region 1 event September 12, 2025, in Windsor California.

**Discussion**

---

Director Rupp has requested authorization to attend this event as a representative of the District. His proposed travel itinerary includes departing on September 11, attending the event on September 12, with overnight stays on both September 11 and 12, and returning on September 13.

**Alternatives**

---

Not approve attendance and funding for Director Rupp to attend the event.

**Fiscal Analysis**

---

The costs associated with participation include travel, lodging, and per diem expenses, which are eligible for District funding under current travel and meeting policies. Estimated total cost is within the approved budget for conferences and committee-related travel.

**Environmental Requirements**

---

Not Applicable

**Exhibits/Attachments**

---

Not Applicable

4. PRESENTATIONS  
No Presentations This Month



---

**BOARD OF DIRECTORS**  
**Humboldt Bay Municipal Water District**  
**August 14, 2025**

---

**ITEM NO. 5.1**

ITEM: Resolution 2025-10 – Memorializing the Life and Service of Director David Lindberg

PRESENTED BY: Michiko Mares, General Manager

TYPE of ITEM: ACTION

TYPE of ACTION: Roll Call Vote

**Recommendation**

---

Staff recommend the Board of Directors approve Resolution 2025-10 Memorializing the Life and Service of Director David Lindberg.

**Exhibits/Attachments**

---

Attachment 1- Resolution 2025-10 A Resolution of the Board of Directors of the Humboldt Bay Municipal Water District Memorializing the Life and Service of Director David Lindberg

**RESOLUTION NO. 2025-10****A RESOLUTION OF THE BOARD OF DIRECTORS OF THE HUMBOLDT BAY MUNICIPAL WATER DISTRICT MEMORIALIZING THE LIFE & SERVICE OF DIRECTOR DAVID LINDBERG**

WHEREAS, David Lindberg faithfully served as the Division 3 representative on the Board of Directors of the Humboldt Bay Municipal Water District; and

WHEREAS, Director Lindberg brought over four decades of professional geological expertise to his service on the Board, having graduated from CalPoly Humboldt in 1981 and working locally for more than 30 years; and

WHEREAS, Director Lindberg's deep knowledge of the Mad River basin, from its headwaters to the coast, provided invaluable insight into the District's stewardship of the District's water rights for future generations; and

WHEREAS, Director Lindberg demonstrated unwavering commitment to public service through his participation and leadership of numerous service and community organizations; and

WHEREAS, Director Lindberg tragically lost his life on July 31, 2025, in a motorcycle accident while traveling on Highway 36, cutting short a life dedicated to public service and community betterment; and

WHEREAS, the Board of Directors and staff of the Humboldt Bay Municipal Water District wish to honor and memorialize Director Lindberg's dedicated service and lasting contributions to environmental stewardship;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Humboldt Bay Municipal Water District that:

Section 1. The Board hereby expresses its profound sorrow at the untimely passing of Director David Lindberg and extends its deepest condolences to his family, friends, and colleagues.

Section 2. The Board recognizes and honors Director Lindberg's distinguished service and dedication to the District and his unwavering commitment to protecting and preserving the Mad River water resource for current and future generations.

Section 3. The Board remembers Director Lindberg not only as a dedicated public servant and professional, but also as a loving husband, father, and family member whose personal joys included tending a beautiful garden of flowers, skiing at Whistler, and training his border collies for agility competitions.

Section 4. The Board directs that a copy of this resolution be transmitted to Director Lindberg's family as a token of the District's appreciation for his service and as an expression of sympathy for their loss.

Section 5. This resolution shall be spread upon the minutes of the District and a copy shall be permanently maintained in the District's records.

PASSED AND ADOPTED by the Board of Directors of the Humboldt Bay Municipal Water District

this 14 day of August 2025, by the following roll call vote:

AYES: 3, NOES: 0, ABSENT: 1, ABSTAIN: 0

ATTEST:

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

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



---

**BOARD OF DIRECTORS**  
**Humboldt Bay Municipal Water District**  
**August 14, 2025**

---

**ITEM NO. 5.2**

ITEM: Consider Approval of the Notice of Vacancy for Division 3 to fill the vacancy by appointment.

PRESENTED BY: Ryan Plotz, General Counsel

TYPE of ITEM: ACTION

TYPE of ACTION: General Vote

### **Recommendation**

---

Staff recommend the Board discuss and consider approval to post the Notice of Vacancy for Division 3 of the Humboldt Bay Municipal Water District to fill the vacancy by appointment. Staff also recommend setting a date for a special meeting to interview selected applicants after the September 11, 2025, Board meeting.

### **Discussion**

---

The Board was notified on Friday, August 1, 2025, of Vice-President David Lindberg's passing on Thursday, July 31, 2025. Mr. Lindberg represented Division 3 of the District. The District notified the Humboldt County Office of Elections of the Board Vacancy on Tuesday, August 5, 2025, effective Friday, August 1, 2025, which was within the required 15-day notification period.

Under Government Code section 1780, the District Board has two options to fill the vacancy.

*First*, the Board may fill the vacancy by appointing a qualified individual. The appointment must be made on or before September 30, 2025, to meet the legal requirement that the appointment be made within 60 days of notification of the vacancy.

*Second*, the District Board may call a special election to fill the vacancy. The District Board must call for the election within the same 60-day period and the election would be held on March 4, 2026.

(Note: If the District Board does not make an appointment or call for a special election on or before September 30, 2025, the County Board of Supervisors is responsible for making the appointment or calling for an election.)

Pursuant to Government Code section 1780(d)(1), the person appointed (or elected) will serve until November 2026.

Staff recommends that the District Board fill the vacant seat by making an appointment, as opposed to a special election, for two reasons: first, the appointment process allows the seat to

be filled sooner because a special election could not be held until March 2026; and second, the appointment process avoids the significant cost of conducting a special election, a cost which is estimated to be in excess of \$15,000.

Assuming the District Board decides to fill the vacancy by appointment, District staff proposes the following schedule:

- Post the attached Notice of Vacancy in at least three conspicuous locations within the District and on the District's website.
- Accept applications until 5:00 PM on Thursday, September 4, 2025.
- Confirm residency qualifications with the Humboldt County Elections Office following receipt of applications.
- Conduct initial review of applications during the Regular Meeting on September 11, 2025.
- Schedule a Special Meeting to conduct applicant interviews in open session.
- Appoint a qualified individual no later than September 30, 2025, and administer the oath of office.
- Notify the County elections official within 15 days of the appointment and return the required Assuming Office documents, including Form 700. The County elections official must be notified no later than 15 days after the appointment is made. The County elections official will provide an oath of office and notice of appointment form to be signed and returned along with an Assuming Office Form 700.

### **Alternatives**

---

Staff has identified two alternatives to an appointment, as follows:

- Call a Special Election. The District Board may call for a special election to fill the vacated seat. If so called, the election would be held in March 2026.
- Defer to the County Board of Supervisors. The Board could take no action within the 60-day period and thereby allow the Board of Supervisors to make the appointment or call an election.

### **Fiscal Analysis**

---

Not Applicable

### **Environmental Requirements**

---

Not Applicable

### **Exhibits/Attachments**

---

Attachment 1- Humboldt County Office of Elections actions required by the Governing Board to fill vacancies on Special District Boards

Attachment 2- Notice of Vacancy for Division 3

## **VACANCIES ON SPECIAL DISTRICT BOARDS**

### **Action Required by the Governing Board**

The district shall notify the County Elections Office (445-7481) of the vacancy no later than 15 days following either the date on which the district board is notified of the vacancy or the effective date of the vacancy, whichever is later.

The remaining district board members have 60 days immediately subsequent to either the date on which the district board is notified of the vacancy or the effective date of the vacancy whichever is later, to fill the vacancy

1. by appointment or
2. by calling a special election

### **Appointments to Fill Vacancies**

If the district board decides to appoint someone to fill the vacancy, the board must first post a notice of the vacancy in at least three conspicuous locations in the district at least 15 days before the appointment is made.

The County Elections Office encourages district boards preparing to make appointments to provide the names and residential addresses of potential appointees so that it can be substantiated that they live in the district to whose board they may be appointed.

The board must notify the County Elections Office of the appointment no later than 15 days after the appointment is made.

The person appointed shall hold office until the next general district election that is scheduled 130 or more days after the date the district board is notified of the vacancy, and thereafter until the person elected at that election to fill the vacancy has been qualified. The person elected to fill the vacancy shall fill the balance of the unexpired term. If the term of office is due to expire following the next general district election and that election is scheduled 130 or more days after the date the County Elections Office is notified of the vacancy, the person appointed to the vacancy shall fill the balance of the unexpired term of his or her predecessor.

Government code §1780 (a)

### **Elections to Fill Vacancies**

In lieu of making an appointment the remaining members of the board may within 60 days of the date the district board is notified of the vacancy or the effective date of the vacancy, whichever is later, call an election to fill the vacancy.

The election shall be held on the next established date that is 130 or more days after the date the district board calls an election.

Government code §1780 (a)

### **If the District Board Fails to Act**

If the vacancy is not filled by the district board by either making an appointment or calling a special election within 60 days of the date the district is notified of the vacancy or the effective date of the vacancy, whichever is later, the following shall occur.

Within the next 30 days, the City Council of the city in which the district is wholly located, or if the district is not wholly located within a city, the Board of Supervisors of the county representing the larger portion of the district area in which the election to fill the vacancy will be held, may fill the vacancy by appointment or may order the district to call an election to fill the vacancy.

The election shall be held on the next established election date that is 130 or more days after the date the city council or board of supervisors calls the election.

Government code §1780 (b)

### **If the District Board Lacks a Quorum to Act Within 60 Days**

If the number of remaining members of the district board falls below a quorum, at the request of the district secretary, or a remaining board member, the Board of Supervisors or the City Council, may waive the 60-day period during which time the district board is allowed to take action, but can't because there is no quorum, move directly to the 30-day period where the Board of Supervisors may take action.

Again, the board may either appoint immediately to fill the vacancy or may call an election to fill the vacancy.

The election shall be held on the next established election date that is 130 or more days after the date the district calls the election.

Government code §1780 (c) 2

### **If the Board of Supervisors Fails to Act**

If within 90 days of the date the district board is notified of the vacancy or the effective date of the vacancy, whichever is later, no action has been taken by any governing body to fill the vacancy by appointment or by calling for a special election, the district must call an election to fill the vacancy.

The election shall be held on the next established election date that is 130 days or more days after the date the district board calls the election.

Government code §1780 (c)

### **Term of Office**

A person appointed to fill a vacancy shall hold office only until the next general district election that is scheduled 130 or more days after the date the county elections official is

notified of the vacancy and thereafter until the person elected at that election to fill the vacancy has been qualified to fill the vacancy for the remainder of the unexpired term.

A person elected at an election to fill the vacancy shall hold the office for the remainder of the unexpired term.

A person elected at a regular board member election or appointed in-lieu of election takes office at noon on the first Friday in December following his or her election in November.



## NOTICE OF VACANCY BOARD OF DIRECTORS – DIVISION 3 HUMBOLDT BAY MUNICIPAL WATER DISTRICT

Interested people are hereby notified that pursuant to Government Code §1780, the Humboldt Bay Municipal Water District (HBMWD) has a vacancy in the membership of the Governing Board, effective August 1, 2025, for its Division 3 Director. The person appointed to fill this vacancy will serve from September 2025 until December 2026. The seat will go to election on November 3, 2026 and the person elected will take office at noon on December 2026 for the remainder of the 4-year term set to expire in 2028.

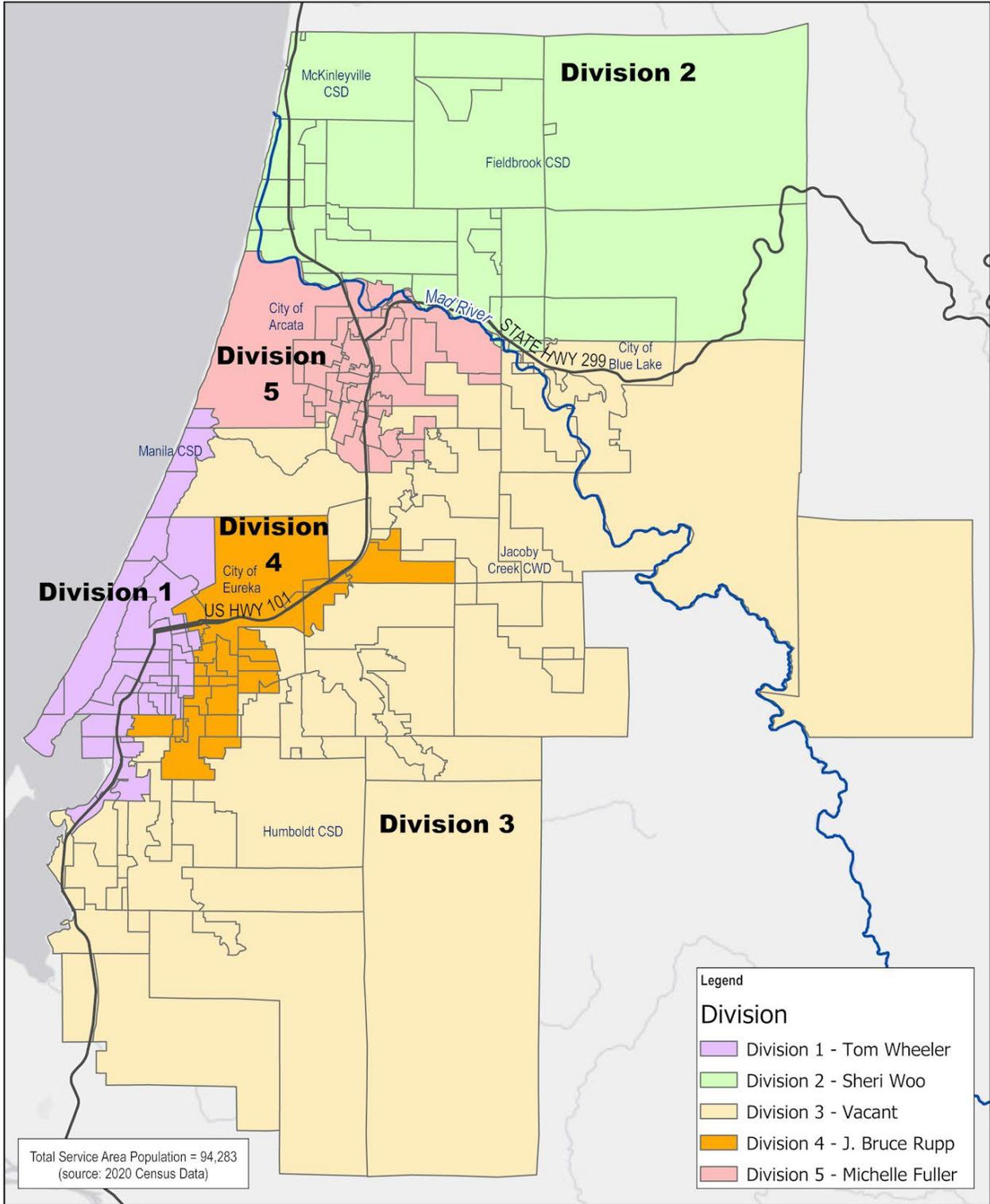
Anyone interested in being considered to fill the vacancy must reside within the boundaries of Division 3, which is comprised of the areas which surround the City of Eureka and Arcata, including the City of Blue Lake, Cutten, and Freshwater. Contact the Humboldt County Office of Elections (445-7481) to confirm residency within HBMWD's Division 3. Residency will be verified prior to selection.

If you are interested in applying for this position, please submit a letter of interest and resume to the District, to be received no later than the close of business (5 p.m.) on Thursday, September 4, 2025. Include your full name, address where you live, phone number and email. You may provide the required information by:

- Mail to PO Box 95, Eureka 95502-0095;
- Hand deliver to 828 7<sup>th</sup> Street, Eureka; or
- Email to: [office@hbmwd.com](mailto:office@hbmwd.com).

An overview of the District and summary of Director responsibilities are available at the District's office or its website ([www.hbmwd.com](http://www.hbmwd.com)). For any additional information about the Director position, call (707) 443-5018.

Please keep posted until September 4, 2025



Total Service Area Population = 94,283  
(source: 2020 Census Data)

**Legend**

**Division**

- Division 1 - Tom Wheeler
- Division 2 - Sheri Woo
- Division 3 - Vacant
- Division 4 - J. Bruce Rupp
- Division 5 - Michelle Fuller



Humboldt Bay Municipal Water District  
Division Boundary Redistricting

Project No. 12572230  
Revision No. -  
Date May 2022

Map Projection: Mercator Auxiliary Sphere  
Horizontal Datum: WGS 1984  
Grid: WGS 1984 Web Mercator Auxiliary Sphere

**2020 Divisions Map**

**FIGURE 1**

\\ghdnet\ghd\GIS\Eureka\Projects\56112572230\GIS\Maps\Deliverables\12572230\_HBMWD\_Redistricting.aprx - 12572230\_001\_HBMWD\_Division\_2020  
Print date: 03 May 2022 - 08:13

Data source: HBMWD, Humboldt County GIS, World Topographic Map, California State Parks, Esri, HERE, Garmin, SafeGraph, METANASA, USGS, Bureau of Land Management, EPA, NPS, USDA, World\_Light\_Gray\_Base, Bureau of Land Management, Esri, HERE, Garmin, USGS, EPA, NPS. Created by: djones3



---

**BOARD OF DIRECTORS**  
**Humboldt Bay Municipal Water District**  
**August 14, 2025**

---

**ITEM NO. 5.3**

ITEM: Consider Approval of Appointment of Officers

PRESENTED BY: Michiko Mares, General Manager

TYPE of ITEM: ACTION

TYPE of ACTION: General Vote

**Recommendation**

---

Staff recommend the Board discuss and consider approval of the Vice-President of the District and the District assigned Redwood Region Economic Development Commission (RREDC) Board Member.

**Discussion**

---

The governing board of the District may elect a Vice-President at any meeting. If the President of the Board is absent or unable to act, the Vice-President would exercise the powers of the President. The Board may appoint other officers at any time.

The tragic passing of Director Lindberg has created a vacancy for the Vice-President of the Board and the District assigned RREDC Board member. RREDC meets the fourth Monday of the month at 6:30 pm in the Eureka City Hall.

**Alternatives**

---

Not Applicable

**Fiscal Analysis**

---

Not Applicable

**Environmental Requirements**

---

Not Applicable

**Exhibits/Attachments**

---

Attachment 1- Appendix E – HBMWD Officer and Committee Assignments last updated March 13, 2025

## 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)
<b>Vice President</b>	<b>David Lindberg</b>	<b>Until new appointment by Board</b>
Secretary-Treasurer	J. Bruce Rupp	Until new appointment by Board
Assistant Secretary Treasurer	Tom Wheeler	Until new appointment by Board
General Manager	Michiko Mares	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) 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
<b>RREDC Board Member</b>	<b>David Lindberg (regular) Michelle Fuller (alternate)</b>	<b>Until new appointment by Board</b>
RCEA Board Member	Sheri Woo (regular) Tom Wheeler (alternate)	Until new appointment by Board
Countywide RDA Oversight Board Member	J. Bruce Rupp	Until Next Election Cycle



---

**BOARD OF DIRECTORS**  
**Humboldt Bay Municipal Water District**  
**August 14, 2025**

---

**ITEM NO. 5.4**

ITEM: Second Reading of Revised Ordinance 26 – Amending and Restating Ordinance 19 Regarding the Registration and Inspection Program for all Watercraft at Ruth Lake

PRESENTED BY: Michiko Mares

TYPE of ITEM: ACTION

TYPE of ACTION: Roll Call Vote

**Recommendation**

---

Staff recommend that the Board of Directors conduct the second reading and possible adoption of Revised Ordinance 26, amending and restating Ordinance 19 regarding the registration and inspection program for all watercraft at Ruth Lake.

**Discussion**

---

Staff presents for second reading and possible adoption of Revised Ordinance 26, which amends and restates Ordinance 19 to strengthen the District’s watercraft registration and inspection program at Ruth Lake. The revisions incorporate recent scientific findings, updated regulatory standards, and the jointly adopted “Prevention Plan for Quagga and Zebra Mussels at Ruth Lake.” In response to the confirmed presence of invasive Golden Mussels in the Sacramento–San Joaquin Delta and the continued spread of Quagga Mussels statewide, the revised ordinance enhances enforcement mechanisms, inspection protocols, and penalties to mitigate the imminent threat to Ruth Lake and HBMWD’s critical water supply infrastructure.

**Alternatives**

---

N/A

**Fiscal Analysis**

---

N/A

**Environmental Requirements**

---

N/A

**Exhibits/Attachments**

---

Attachment 1 – Ordinance 26 – Amending and Restating Ordinance 19 Regarding the Registration and Inspection Program for all Watercraft at Ruth Lake.

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

ORDINANCE NO. 26

AN ORDINANCE OF THE BOARD OF DIRECTORS OF HUMBOLDT BAY MUNICIPAL WATER DISTRICT AMENDING AND RESTATING ORDINANCE 19 REGARDING THE REGISTRATION AND INSPECTION PROGRAM FOR ALL WATERCRAFT AT RUTH LAKE

RECITALS

Whereas, pursuant to Ordinance 19, the Humboldt Bay Municipal Water District (“District” or “HBMWD”) adopted and maintains a watercraft registration and inspection program for its water system;

Whereas, by way of this Ordinance, the District desires to amend and restate Ordinance 19 as set forth below.

NOW, THEREFORE, be it ordained by the Board of Directors of Humboldt Bay Municipal Water District as follows:

**SECTION I. Findings:**

Whereas, the District owns and operates a regional water system, including Ruth Lake, the primary function of which is to provide water to municipal and industrial users in Humboldt County; and

Whereas, Ruth Lake represents a continuing, important recreational feature of Trinity County; and

Whereas, maintaining and preserving the water quality in Ruth Lake is of critical importance for HBMWD’s water supply; and

Whereas, the ability of HBMWD to fulfill its primary function and responsibility is threatened by the real potential of the introduction of aquatic invasive species, including mussel species that are not native to the United States, California, or to Ruth Lake and the Mad River; and

Whereas, HBMWD’s responsibility requires that it take action to prevent the introduction of aquatic invasive species, including but not limited to Dreissenid mussels (Quagga Mussels and Zebra Mussels), and Golden Mussels (*Limnoperna fortunei*); and

Whereas, the presence of aquatic invasive mussel species, particularly Quagga Mussels and Golden Mussels, has been confirmed in multiple California waterways, posing a significant and escalating threat to public water infrastructure, aquatic ecosystems, and water quality statewide; and

Whereas, Quagga Mussels have been identified in over 45 water bodies in California, including but not limited to Castaic Lake and Lagoon (Los Angeles County), Pyramid Lake (Los Angeles County), the Freeman Diversion Facility (Ventura County), and throughout portions of the Santa Clara River system; and

Whereas, Quagga Mussels continue to spread across Southern and Central California, establishing dense colonies that obstruct water conveyance systems, reduce hydraulic efficiency, increase maintenance costs, and impair ecosystem health; and

Whereas, in October 2024, Golden Mussels were detected for the first time in North America, with confirmed presence in the Sacramento–San Joaquin Delta near the Port of Stockton (San Joaquin County), and suspected presence in O’Neill Forebay (Merced County), with genetic verification pending; and

Whereas, Golden Mussels, native to Southeast Asia and previously established in South America, are capable of rapid reproduction and attachment to submerged surfaces, threatening to clog water intake structures, damage municipal and industrial water systems, and outcompete native aquatic species; and

Whereas, the proximity of these infestations to interconnected water systems and major transportation corridors in California creates an imminent risk of further spread to uninfested water bodies, including Ruth Lake and the Mad River watershed; and

Whereas scientific and technical evidence has shown that once a water body is infested with aquatic invasive mussels such as Dressenid or Golden Mussels, there are few possibilities for eradicating said species, and attempts to eradicate these species are both problematic and expensive; and

Whereas, scientific and technical evidence has shown that one of the most common means of transportation of these mussel species from one water body, lake or reservoir to another is by the species being attached to, or included with, watercraft, boat trailers, hulls, anchors, vegetation caught on vehicles or outboard motors, and by the species being carried in water found in wet wells,

built-in or removable bait tanks, associated plumbing, engine cooling systems, pumps and bilges; and

Whereas, infestation by aquatic invasive mussels could result in conditions that would reduce Ruth Lake leaseholder and private property values; and

Whereas, aquatic invasive mussels could adversely affect fishery and sport values at Ruth Lake and Mad River; and

Whereas, these mussels may attach themselves to almost all hard surfaces, causing extreme maintenance problems for the water delivery system, including intake structures, pipes, pump stations and other infrastructure, and can result in drastic impacts to lake water quality and the aquatic environment; and

Whereas, the HBMWD, based on its research, consultation and communication with other Federal, State and local agencies is aware of the critical and imminent situation facing the District due to the proximity of actual or potential aquatic invasive species infestations at water bodies throughout California, and the fact that potentially infected and unquarantined water bodies are within a reasonable driving distance to Ruth Lake; and

Whereas this Ordinance is authorized by numerous authorities, including but not limited to, Water Code Section 71590, Water Code Section 71660, Health & Safety Code Section 117105 and the general police powers of the District; and

Whereas, the Master Lease between the County of Trinity and HBMWD dated December 31, 1964 and assigned by the County of Trinity to the Ruth Lake Community Services District on July 20, 1966 provides that the lessee thereof:

[S]hall not nor shall any of them in any way interfere with Lessor's lake and dam, the water therein, or the beneficial enjoyment and use thereof or the quantity thereof. The parties hereto recognize that the waters impounded in said lake are intended for both human and industrial consumption and that every effort must be taken and maintained in order to preserve the purity and quantity thereof; and

Whereas, the Sublease entered into between the Ruth Lake Community Services District ("RLCSD") and its sublessees provides that:

Subleasee acknowledges that Ruth Lake is an artificial impoundment of water created primarily for municipal and industrial purposes and that any recreational use of the water is subordinate to such uses;

Whereas, in compliance with Fish & Game Code Section 2302 (AB 2065), the HBMWD and RLCSD jointly formulated a “Aquatic Invasive Species Prevention Plan at Ruth Lake” (“Prevention Plan”). The Prevention Plan was approved by the RLCSD on June 10, 2025 and by the HBMWD on June 10, 2025; and

Whereas, the HBMWD hereby restates and incorporates by reference the entire Prevention Plan as though stated in full herein, and as it may be amended from time to time.

## **SECTION II. Definitions.**

For purposes of this Ordinance, the following words and phrases shall have the following meanings:

A. “All other watercraft” means the same as Category 2 Watercraft as defined in the Prevention Plan.

B. “Inspection Procedures” means the program of registration and inspection required by this Ordinance to ensure that all Watercraft launching onto Ruth Lake are in compliance with this Ordinance and the Prevention Plan.

C. “Inspector” means an individual who has received the necessary training approved by the State Department of Fish and Game or other agency to conduct inspections of Watercraft for the purpose of determining whether said vessels are in compliance with this Ordinance and the Prevention Plan.

D. “Launch Site” or “Launch Sites” shall be those locations approved for the Launch of Watercraft in this Ordinance or the Prevention Plan.

E. “Live bait” means any fish, or other organisms used in conjunction with fishing.

F. “Registration Sticker” means the sticker issued by an Inspector evidencing the fact that the vessel to which the sticker is affixed has satisfied the Inspection Procedures.

G. “Sworn Affidavit” or “Affidavit” means any document submitted by any person signed under penalty of perjury attesting to the truth of the statements contained therein.

H. “Watercraft” means any boat, trailer, kayak, raft, jet ski, float plane, or other device capable of being launched onto Ruth Lake. “Watercraft” includes all motorized and non-

motorized Watercraft.

I. “Watercraft Resident to Ruth Lake” means the same as Category 1 Watercraft as defined in the Prevention Plan.

### **SECTION III. Applicability.**

This Ordinance shall be applicable to any Watercraft intending to launch onto Ruth Lake.

### **SECTION IV. Registration Stickers.**

A. Each Watercraft must be affixed with a Registration Sticker issued by an Inspector showing compliance with the Inspection Procedures prior to launching that Watercraft onto Ruth Lake.

B. Each Registration Sticker shall be valid for the time period and conditions as set forth in the Prevention Plan.

### **SECTION V. Inspection and Registration.**

A. Inspection Procedures are required on all Watercraft to be launched onto Ruth Lake, except for:

1. Watercraft approved in Category 1 which have been issued a Yellow Inspection Sticker for the current year, and
2. Watercraft in Category 2 which previously passed Inspection Procedures and have been issued a Red Inspection Sticker for the current year and have either (i) an intact tamper-proof band issued by an Inspector which ties the Watercraft to the trailer, or (ii) a valid duration pass issued by an Inspector.

B. Owners of Watercraft Resident to Ruth Lake (Category 1) as defined in the Prevention Plan shall register their Watercraft and submit a sworn affidavit in a form to be provided by the Inspector. Only Category 1 Watercraft that exhibit a valid Registration Sticker shall be allowed to launch onto Ruth Lake. In the event of an occurrence necessitating Inspection Procedures as set forth in the Prevention Plan, that Watercraft then shall be subject to the Inspection Procedures as set forth in the Prevention Plan.

C. Owners of all Other Watercraft (Category 2) shall submit a sworn affidavit in a form to be provided by the Inspector and their Watercraft shall undergo an inspection by the Inspector. Only Watercraft that pass the Inspection Procedures and exhibit a valid Registration Sticker shall

be allowed to launch onto Ruth Lake.

D. Any Watercraft owner/operator who desires to participate in the electronic card key entry system shall submit an additional sworn affidavit and pay the fee to be set by RLCSD.

E. A Watercraft owner or operator may refuse to consent to the Inspection Procedures. If the Watercraft owner or operator refuses to consent to Inspection Procedures, or refuses to comply with a request of an Inspector, that Watercraft shall not be allowed to launch onto Ruth Lake and shall be in violation of this Ordinance if they should nonetheless attempt to do so.

F. Said Inspection Procedures shall consist of, among other items, a verification by the Inspector that the Watercraft is clean, drained and dry and a thorough search of the exterior and interior of the Watercraft, including but not limited to bilge pumps, motors, live wells, bait wells, ballast tanks, bladders and all areas are free of standing water.

G. If for any reason in the judgment of the Inspector, the Watercraft does not pass Inspection Procedures, that Watercraft shall not be allowed on the waters of Ruth Lake. The Watercraft will be ordered into quarantine by the Inspector for the period of time specified in the Prevention Plan.

H. If, in the judgment of the Inspector, a Watercraft passes Inspection Procedures, the Inspector shall affix a Registration Sticker on the Watercraft which signifies that the Watercraft may be launched onto Ruth Lake in accordance with the provisions of this Ordinance and the Prevention Plan.

I. In the event a Watercraft with a Yellow Registration Sticker or a Red Registration Sticker wishes to leave the Ruth Lake area it shall be reinspected upon arrival unless it has an intact tamperproof exit band connecting the Watercraft to the trailer.

## **SECTION VI. Launch Sites.**

A. Motorized Watercraft shall not be permitted to launch at Hobart Creek Campground and Hetton Cove, or at any other location at Ruth Lake, except as set forth below.

B. Motorized Watercraft displaying valid Registration Stickers shall be allowed to launch only at three approved locations. These locations are:

1. Old Ruth Day-Use Area (Category 1 only, with a valid Yellow Registration Sticker).
2. Ruth Rec Campground (All valid stickers, with a card key).

3. RLCSD Marina (All valid stickers, with a card key).

C. Launch of motorized Watercraft at any other location shall be unlawful and a violation of this Ordinance and the Prevention Plan.

D. Non-motorized Watercraft may launch at any location if displaying a valid Registration Sticker, and if required by the Prevention Plan, a duration pass.

#### **SECTION VII. Fees.**

Fees for all official activities covered by this Ordinance and the Prevention Plan shall be as established from time to time by RLCSD.

#### **SECTION VIII. Live Bait.**

Disposing of Live Bait into Ruth Lake is prohibited. It shall be unlawful to dispose of any live bait and/or any liquid containing live bait or any liquid which previously contained live bait into Ruth Lake.

#### **SECTION IX. Penalties.**

A. Any person violating any provision of this Ordinance shall be guilty of an infraction or misdemeanor as hereinafter specified. Such individuals shall be deemed guilty of a separate offense for each launch in a water body into Ruth Lake.

B. Except as otherwise provided in this section, any individual convicted of a violation of this Ordinance shall be:

1. Guilty of an infraction and punished by a fine for the first offense the amount provided in Section 71600 of the Water Code, as amended from time to time;
2. Guilty of an infraction and punished by a fine for the second offense in the amount provided in Section 71600 of the Water Code, as amended from time to time;
3. The third and subsequent offenses shall constitute a misdemeanor and shall be punishable by a fine of not less than one thousand dollars (\$1,000.00) and/or up to six months in the county jail or both.

C. Notwithstanding subparagraphs 1 and 2 above, any person who, with the intent to

avoid inspection or reinspection for mussels, violates this Ordinance may be charged and prosecuted as misdemeanor, punishable by a fine, imprisonment, or both.

D. Notwithstanding subparagraphs 1 and 2 above, the following offenses are considered to be egregious and may be punished as a misdemeanor and/or separately subject the offender to permanently losing the privilege of coming onto HBMWD property at Ruth Lake upon the first offense:

1. Giving out any combination or key to any unauthorized person at Old Ruth Day-Use area.
2. Moving or breaching any barrier without authorization.
3. Giving out any card key/duration pass to any unauthorized person.
4. Avoiding Inspection Procedures by, among other things, launching after hours when no Inspector is present.
5. Submitting a false, incomplete or misleading statement on an Affidavit.
6. Making a false, incomplete or misleading statement to any Inspector.
7. Failing to leave the property of HBMWD when ordered to do so by an Inspector or law enforcement officer.

E Any person may be denied access to Ruth Lake for such time and under such conditions as determined by the General Manager of HBMWD. Any such person may appeal this determination by appeal to the Board of Directors of HBMWD at the next available regularly scheduled public Board meeting.

F. A Watercraft unlawfully launched into Ruth Lake may be subject to impound if, pursuant to a misdemeanor arrest for violation of this Ordinance, an Inspector or law enforcement officer determines that circumstances necessitate law enforcement custody of the Watercraft.

G. Payment of any fine or penalty herein shall not relieve any individual from the responsibility of correcting the violations as found by the Inspector or law enforcement officer.

H. Any person found not in compliance with this Ordinance is subject to citation, immediately shall be ordered off the property of the HBMWD, and shall be subject to any other legal action as deemed necessary by the HBMWD.

I. All remedies provided by this ordinance, whether civil, criminal, or administrative, are cumulative and not exclusive of any other remedy provided by law. The District may pursue

any combination of remedies simultaneously or consecutively. The election of one remedy shall not bar the pursuit of other available remedies. Nothing in this ordinance shall be construed to limit or preclude any other lawful action that may be taken to enforce compliance with this ordinance or to abate violations thereof.

#### **SECTION X. Public Nuisance Declaration.**

Any violation of this Ordinance is hereby declared to be unlawful and a public nuisance and may be abated by any law enforcement personnel or Inspector or any other person authorized by the Humboldt Bay Municipal Water District, irrespective of any other remedy provided in this Ordinance.

#### **SECTION XI. California Environmental Quality Act Compliance.**

A. This Ordinance is not a “project” because the California Environmental Quality Act (CEQA) defines a project as “an activity which may cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment” (California Public Resources Code Section 21065); and

B. Even if this Ordinance is determined to be a “project” this Ordinance would be categorically exempt from CEQA under CEQA Guidelines Section 15307 as a Class 7 Categorical Exemption which “consists of actions taken by regulatory agencies as authorized by State law or local ordinance to assure the maintenance, restoration or enhancement of a natural resource where the regulatory process involves procedures for protection of the environment,” and a Class 8 Categorical Exemption, CEQA Guidelines Section 15308, which exempts “actions taken by regulatory agencies, as authorized by State or local ordinance, to assure the maintenance, restoration, enhancement or protection of the environment where the regulatory process involves procedures for protection of the environment.”

#### **SECTION XII: URGENCY FINDINGS**

The Board of Directors hereby finds and declares that this Ordinance is necessary as an urgency measure for the immediate preservation of the public health, safety, and welfare, and must take effect immediately upon adoption for the following reasons:

- A. Imminent and Escalating Threat.
  - 1. Recent Detection of Golden Mussels. In October 2024, Golden Mussels were detected for the first time in North America in the Sacramento-San Joaquin Delta near the Port of Stockton, with suspected presence in O'Neill Forebay, creating an unprecedented and immediate threat to California's water infrastructure.
  - 2. Rapid Expansion of Quagga Mussel Infestations. Quagga Mussels have been identified in over 45 water bodies in California and continue to spread across Southern and Central California at an alarming rate, establishing dense colonies that threaten water conveyance systems.
  - 3. Critical Proximity to Ruth Lake. The proximity of these confirmed infestations to interconnected water systems and major transportation corridors creates an imminent risk of spread to Ruth Lake and the Mad River watershed.
- B. Irreversible Consequences of Delay
  - 1. No Effective Eradication Methods. Scientific evidence demonstrates that once a water body is infested with aquatic invasive mussels, there are few possibilities for eradication, and attempts are both problematic and extremely expensive.
  - 2. Exponential Spread Pattern. These invasive species are capable of rapid reproduction and can quickly establish self-sustaining populations that are virtually impossible to eliminate.
  - 3. Critical Infrastructure Damage. Infestation would result in severe damage to Ruth Lake's water intake structures, pipes, pump stations, and other infrastructure, potentially compromising the District's ability to provide safe drinking water to municipal and industrial users.
- C. Seasonal Urgency - Watercraft Activity Window
  - 1. Peak Recreation Season Approaching. The upcoming recreational boating season will bring increased watercraft traffic from potentially infected water bodies throughout California to Ruth Lake.

2. Primary Vector of Transmission. Scientific evidence confirms that watercraft, boat trailers, and associated equipment are the most common means of transporting invasive mussels between water bodies.
3. Limited Prevention Window. Immediate implementation is essential before the peak boating season begins, as any delay significantly increases the risk of introduction during periods of high watercraft activity.

D. Economic and Public Health Necessity

1. Protection of Water Supply: Ruth Lake serves as the primary water source for municipal and industrial users in Humboldt County, making protection of this resource critical to public health and safety.
2. Substantial Economic Impact: Infestation would reduce property values for Ruth Lake leaseholders, adversely affect fishery and sport values, and impose catastrophic maintenance costs on the water delivery system.
3. Regional Economic Consequences: Any compromise to the District's water supply would have devastating economic impacts throughout Humboldt County.

E. Inadequacy of Normal Adoption Procedures

1. Time-Sensitive Nature. The normal 30-day waiting period for ordinance effectiveness would coincide with the beginning of the peak boating season, creating an unacceptable window of vulnerability.
2. Established Prevention Framework. The District and RLCSD have already developed and approved a comprehensive Prevention Plan that requires immediate regulatory implementation to be effective.
3. Coordination with Existing Programs. Delay would undermine the coordinated prevention efforts already established between the District and Ruth Lake Community Services District.

F. Public Interest and Welfare. The immediate implementation of this comprehensive watercraft inspection and registration program is essential to:

1. Prevent irreversible contamination of Ruth Lake
2. Protect the region's primary water supply

3. Preserve recreational and economic values of Ruth Lake
4. Avoid potentially catastrophic infrastructure damage and associated costs
5. Maintain the District's ability to fulfill its primary function of providing safe water

G. Conclusion. Based on these findings, the Board determines that the public health, safety, and welfare require that this Ordinance take effect immediately upon adoption without the usual 30-day waiting period. Any delay in implementation would create an unacceptable risk of aquatic invasive species introduction that could result in irreversible environmental and economic damage to the District's water supply system and the broader community it serves.

**SECTION VIII: Effective Date:**

This Ordinance shall take effect immediately upon adoption as an urgency measure necessary for the immediate preservation of the public health and safety.

**SECTION XIV: Severability**

If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is for any reason held to be invalid, unconstitutional, or unenforceable by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The Board of Directors hereby declares that it would have adopted this Ordinance and each section, subsection, sentence, clause, phrase, and portion thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases, or portions thereof may be declared invalid, unconstitutional, or unenforceable. To this end, the provisions of this Ordinance are severable.

PASSED AND ADOPTED THIS 14 day of August, 2025, by the following vote:

Ayes:

Nays:

Abstain:

Absent:

ATTEST:

---

Michelle Fuller, President

---

Bruce Rupp, Secretary Treasurer



---

**BOARD OF DIRECTORS**  
**Humboldt Bay Municipal Water District**  
**August 14, 2025**

---

**ITEM NO. 5.5**

ITEM: Status Update regarding Former McNamara and Peepe Mill Site Cleanup with the Department of Toxic Substances Control (DTSC) [[Case #12240115](#)] as Lead Agency and North Coast Regional Water Quality Control Board (NCRWQCB) [[Case #1NHU527](#)]

PRESENTED BY: Michiko Mares, General Manager

TYPE of ITEM: Informational

TYPE of ACTION: None

### **Recommendation**

---

Staff recommend continued efforts to elevate this threat to public health, safety and the environment.

### **Discussion**

---

Actions during this calendar month:

- Staff received the following from DTSC and are attached for reference:
  - Monthly Summary Report for June 2025 was distributed on July 8, 2025
  - Monthly Summary Report for July 2025 was distributed on August 1, 2025
  - [Response to District letter dated February 24, 2025, on July 21, 2025, regarding the Soil and Groundwater Management Plan for Royal Gold](#)
  - [Response to District letter dated May 23, 2025, on July 23, 2025, regarding the First Half 2024 Groundwater Monitoring Report](#)
  - [The Second Half of 2024 Groundwater Monitoring Report](#), dated February 2025 and distributed on August 1, 2025
  - [The DTSC Approval letter for the Second Half 2024 Groundwater Monitoring Report](#), August 2025
  - DRAFT data for the Data Gap Soil Analytical Results, August 2024
  - DRAFT data for the Stormwater Analytical Results, March 2025
  - The draft data for the First Half of 2025 Groundwater Monitoring Report were included in the Response to District letter dated July 23, 2025
- Staff met with staff from the State Offices of Assemblymember Chris Rogers and Senate President Pro Tempore Mike McGuire to discuss status of the site on August 4, 2025.
- Staff met with Michael Sullivan and Heidi Bauer of the State Waterboard Cleanup Unit in the Point Source Control and Groundwater Protection Division on August 4, 2025 to better understand the Waterboard's role.

Planned activities for the next month and beyond:

- Prepare roadmap of next steps

### **Alternatives**

---

Not Applicable

### **Fiscal Analysis**

---

Not Applicable

### **Environmental Requirements**

---

Not Applicable

### **Exhibits/Attachments**

---

Attachment 1- Department of Toxic Substances Control (DTSC) Monthly Summary Report for June, 2025

Attachment 2- Department of Toxic Substances Control (DTSC) Monthly Summary Report for July, 2025

Attachment 3- DTSC Response to District letter dated February 24, 2025 on July 21, 2025 regarding the Soil and Groundwater Management Plan for Royal Gold

Attachment 4- DTSC Response to District letter dated May 23, 2025 on July 23, 2025 regarding the First Half 2024 Groundwater Monitoring Report

Attachment 5- Second Half 2024 Groundwater Monitoring Report, February 2025

Attachment 6- DTSC Approval letter for the Second Half 2024 Groundwater Monitoring Report, August 2025

Attachment 7- DRAFT Data Gap Soil Analytical Results, August 2024

Attachment 8- DRAFT Stormwater Analytical Results, March 2025

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

**June 2025**

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 (June).

- 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. A revised report was submitted by SHN and is being reviewed by DTSC.
- Data Gap Investigation Report of Findings. A summary of activities and results for fieldwork completed in August was submitted by SHN in March 2025 and is being reviewed by DTSC.
- Humboldt Bay Municipal Water District (HBMWD) Comment Letter. DTSC is preparing a response to comments submitted by the HBMWD dated May 23, 2025.

b. Planned activities for the next month (July 2025) and beyond.

- 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.
- Virtual Quarterly Update Meeting. A virtual quarterly update meeting with DTSC, EPA, HBMWD, and Humboldt Waterkeeper will be held on July 30, 2025 at 1:00 PM. An agenda will be sent out closer to the meeting date.

c. Funding Updates

- Funding in future years will come from the Site Remediation Account (SRA), which was the funding source before the Cleanup in Vulnerable Communities Initiative (CVCII).
- Next SRA funding cycle available to this project will begin in July 2026.

d. Royal Gold.

- Soil and Groundwater Management Plan (SGMP). DTSC received a letter from the Humboldt Bay Municipal Water District regarding the SGMP. DTSC is currently working on a response to the comments provided in the letter dated February 24, 2025.

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

**July 2025**

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 (July).

- 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. DTSC approved the report on August 1, 2025, and the approval letter can be found on [Envirostor](#).
- Humboldt Bay Municipal Water District (HBMWD) Comment Letters. DTSC responded to comments submitted by the HBMWD dated May 23, 2025. Both the original comment letters and their responses can be found on [Envirostor](#).
- Data Gap Investigation Report of Findings. A summary of activities and results for fieldwork completed in August was submitted by SHN in March 2025 and is being reviewed by DTSC.
- First Semi-Annual 2025 Groundwater Sampling Report. A summary of activities and results for the first semi-annual groundwater sampling event was submitted by SHN in July 2025 and is being reviewed by DTSC.
- March 2025 Stormwater Sampling Report. The March 2025 stormwater sampling report was submitted by SHN in July 2025 and is being reviewed by DTSC.
- Site Housekeeping. Site housekeeping activities were conducted on July 15 and 16, 2025. The activities included surface cleaning in the area of the former planer chain by powerwashing, collecting wastewater and debris, and containerizing the waste.
- Meeting with Assemblymember Rogers District Office. A meeting was held on July 17, 2025, with the office of Assemblymember Chris Rogers to discuss project details.
- Virtual Quarterly Update Meeting. A virtual quarterly update meeting with DTSC, EPA, HBMWD, and Humboldt Waterkeeper was held on July 30, 2025.

- b. Planned activities for the next month (August 2025) and beyond.
- 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.
  - Site Housekeeping Technical Memo: SHN will submit a technical memorandum discussing completed housekeeping activities conducted on July 15 and 16, 2025.
  - Virtual Quarterly Update Meeting. A virtual quarterly update meeting with DTSC, EPA, HBMWD, and Humboldt Waterkeeper will be held on October 29, 2025 at 1:00 PM. An agenda will be sent out closer to the meeting date.
- c. Funding Updates
- Funding in future years will come from the Site Remediation Account (SRA), which was the funding source before the Cleanup in Vulnerable Communities Initiative (CVCI).
  - Next SRA funding cycle available to this project will begin in July 2026.
- d. Royal Gold.
- Soil and Groundwater Management Plan (SGMP). DTSC received a letter dated February 24, 2025, from the Humboldt Bay Municipal Water District regarding the SGMP. DTSC responded to comments submitted by the HBMWD and both the comment letter and DTSC's response can be found on [Envirostor](#).



**Yana Garcia**  
Secretary for  
Environmental Protection



**Department of Toxic Substances Control**

Katherine M. Butler, MPH, Director  
700 Heinz Avenue  
Berkeley, California 94710-2721



**Gavin Newsom**  
Governor

July 21, 2025

**SENT VIA ELECTRONIC MAIL**

Machiko M. Mares  
Humboldt Bay Municipal Water District  
828 Seventh Street  
PO Box 95 Eureka, California 95502  
[gm@hbmwd.com](mailto:gm@hbmwd.com)

Dear Ms. Mares,

Thank you for your letter, dated February 24, 2025, regarding the Soil and Groundwater Management Plan (SGMP), dated November 2024, prepared for Royal Gold, LLC., (Royal Gold) by SHN Consulting Engineers & Geologists (SHN). Royal Gold is a composting facility operating at the former McNamara and Peepe Lumber Mill (Site). We value the input received from the Humboldt Bay Municipal Water District (HBMWD).

Regarding HBMWD's concerns on the enforcement of land use restrictions in the [Land Use Covenant](#) (LUC), the LUC, recorded on February 4, 1998, prohibits future use of the contaminated area for a residence(s), hospital, day care facility or school for people under 21. To DTSC's knowledge, none of the operations currently at the Site violate the LUC. Further, none of the activities proposed in the SGMP are in violation of LUC. Additionally, specific workplans will be submitted by Royal Gold and will be reviewed by the Department of Toxic Substances Control (DTSC) before implementation of the SGMP, as stated on page 2 of the SGMP.

Please find DTSC's responses to HBMWD's specific comments on the following pages. The original comments from HBMWD are included below for reference.

1. The proposed calculation method for polychlorinated dioxins, dibenzofurans, and biphenyls is the 2005 World Health Organization (WHO) Toxic

Equivalency Factors (TEFs) for calculating a single toxicity equivalent (TEQ) value for the various congeners of dioxins and furans.

- a. We strongly recommend the use of the 2022 WHO TEFs to be consistent with US EPA calculation methods for dredge-related sampling in Humboldt Bay.
- b. Reference the March 2024 WHO press release which explains the changes which are included in this special issue of the journal Regulatory Toxicology and Pharmacology: The 2022 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Polychlorinated Dioxins, Dibenzofurans and Biphenyls.

DTSC Response: At this time, to maintain consistency with existing data, DTSC will continue using the 2005 WHO TEFs, especially for any proposed work under this SGMP. In the future, DTSC will evaluate changing to or possibly adding the 2022 WHO TEFs calculations to site documents.

2. Page 1, 3rd paragraph, 2nd sentence:
  - a. The stated objective of the submitted Soil and Groundwater Management Plan ... "is to ensure that the proposed construction activities do not exacerbate any unknown contamination emanating from the former lumber mill site. Implementation of the SGMP is intended to identify the presence of contaminants before Royal Gold commences the proposed construction activities and prevent any significant impacts to onsite and nearby sensitive receptors, aquatic species, and water resources."
  - b. Common knowledge of past practice at industrial sites from this era included disposal of industrial byproducts, i.e. motor oil, fuel, antifreeze, cleaning agents, etc. These hazardous substances may not have been previously identified at the areas to be disturbed because "there is limited soil and groundwater data available for the northern, eastern, and some areas of the central portion of the Royal Gold soil operation" (page 6, 2nd paragraph, 1st sentence).
  - c. Soil and groundwater testing should NOT be limited to hazardous substances previously identified at the Green Chain and Former Sawmill Areas. Testing should include all contaminants which are regulated drinking water contaminants under Title 22 of the California Code of Regulations and Title 40 of the Code of Federal Regulations which could potentially impact the nearby water resources, that have not been previously identified and sampled in areas to be disturbed as part of this proposed development.

- d. In addition to the proposed hazardous substances identified to test, we request the regulated drinking water contaminants to be tested in water and soil samples taken which include inorganic chemicals, volatile organic chemicals, and synthetic organic chemicals included in the State Water Board's Regulated Drinking Water Contaminants to prevent any significant impacts to the nearby water resources (Attachment 2):

DTSC Response: The analysis of samples for chemicals other than the chemicals of concern (COCs) previously detected in site samples is not warranted. During future site development activities, if unexpected conditions (e.g., staining, odors, subsurface features, buried tanks) are identified, additional sampling and analysis may be warranted, but these unexpected conditions are covered in Section 6.3 of the SGMP.

3. Page 2, last paragraph:
  - a. Define “qualified” personnel. What qualifications are required?

DTSC Response: “Qualified personnel” refers to staff with appropriate Hazardous Waste Operations and Emergency Response (HAZWOPER) training and additional training related to the site activities (e.g., excavation, sampling). As stated in the text, the work will be completed under the direction of a licensed engineer or geologist.

4. Page 2, Fueling Station paragraph:
  - a. “The specific location of the fueling station has not been finalized...”
  - b. Comments provided in June 20, 2022 letter stated: “The exact location for the fueling station must be identified so that the SGMP can evaluate the potential impacts to existing site contamination related to the ground disturbance activities for digging footings and any other underground utilities or piping associated with the fueling station.”
  - c. This previous comment has been ignored and unaddressed.

DTSC Response: Discussions with Royal Gold indicated that the location of the proposed fueling station had not yet been selected. Additionally, as specific areas are proposed for development, Royal Gold will submit a work plan that will include a sampling plan for the proposed work. DTSC considers this comment resolved at this time.

5. Page 2, last paragraph, last sentence:

Recommend the “specific sampling plan” to be revised to include “specific sampling and analysis plan”. To complete this work, a “stockpile management

plan” should also be required in conjunction with the specific sampling and analysis plan.

DTSC Response: Thank you for the comment regarding the request for the change in language. At this time, no change in naming convention is considered necessary.

Regarding the comment on a stockpile management plan, stockpile management is addressed in Section 5.2 of the SGMP and relevant California Stormwater Quality Association (CASQA) best management practices (BMP) factsheets are included in Appendix 4 of the SGMP. Royal Gold will identify phase specific construction pollutants in a stormwater pollution prevention plan (SWPPP) or Erosion and Sediment Control Plan (ESCP).

6. Page 5, 1st and 2nd paragraphs:
  - a. Grab samples in 2005 reported PCP concentrations up to 16,000 micrograms per liter and TCP concentrations up to 1,500 micrograms per liter.
  - b. Groundwater monitoring sample data from 2014 to 2019 reported the highest detection of PCP at 1,200 micrograms per liter at MW-1 in August 2019 and no reportable TCP.
  - c. It is concerning that the PCP/TCP concentrations in the groundwater have decreased significantly within a 14-year period without active removal. This decrease may be indicative of the contaminated groundwater plume migrating offsite and towards the nearby drinking water resource.
  - d. Provide narrative explaining why the PCP and TCP concentrations in the Cap Restricted Area have decreased through time.

DTSC Response: Thank you for the comment, but groundwater analytical data are more appropriately discussed in the groundwater monitoring reports. However, it is important to recognize the difference in groundwater samples that were collected. In 2005, grab groundwater samples were collected, which often indicate higher concentrations due to the presence of soil particles in the sample. These data are often unreproducible. Reproducible groundwater analytical results are typically collected from permanent monitoring wells; the 2014 to 2019 data were collected from site monitoring wells. Further, off-site groundwater data do not indicate significant concentrations of PCP or TCP migrating off-site.

7. Page 6, 3rd paragraph, 1st sentence:

- a. Test pits to be installed using a backhoe should require a stockpile management plan to prevent contamination between stockpiles.

DTSC Response: Stockpile management is addressed in Section 5.2 of the SGMP and CASQA BMP factsheets are included in Appendix 4.

8. Page 8, Section 4.4:

- a. "The data from the pre-construction characterization soil and groundwater samples ... shall be submitted to DTSC for review."
- b. Comments provided in June 20, 2022 letter stated: "Soil and Groundwater Management Plan does not include provisions for submittal of data to DTSC or to the public for review. ... The IS/MND should be revised to include mitigation measure that will ensure data-sharing with DTSC and the public.

DTSC Response: Revision of the Initial Study/Mitigated Negative Declaration (IS/MND) would be handled by Royal Gold and by Humboldt County Planning & Building Department, as the lead agency. However, data sharing with DTSC is established in the SGMP in Section 4.4. As data are received, DTSC will share the data with the public.

9. Page 8, Section 5.0:

- a. Recommend incorporating BMPs as included in the CASQA BMP Handbook for Contaminated Soil Management WM-7.
- b. For example:
  1. Avoid temporary stockpiling of contaminated soils or hazardous materials.
  2. Install a berm around stockpile to prevent runoff from leaving the area.
  3. Do not stockpile in or near water courses.
  4. Collect water from decontamination procedures and treat or dispose of it at an appropriate disposal site.
  5. Excavate, transport, and dispose of contaminated material and hazardous material in accordance with the rules and regulations of the following agencies:
    - a. USDOT, USEPA, CAL-EPA, CAL-OSHA, local agencies
  6. All necessary precautions and preventive measure should be taken to prevent the flow of water, including groundwater from mixing with hazardous substances. Preventative measures may include berms, cofferdams, etc.
  7. If water does enter an excavation and becomes contaminated, such

water, when necessary to proceed with the work, should be discharged to clean, closed top, watertight transportable holding tanks, treated and disposed of in accordance with federal, state, and local laws.

DTSC Response: As stated in Section 5.2, relevant CASQA BMPs are included in Appendix 4 of the SGMP. Additionally, Royal Gold will submit a SWPPP or ESCP to Humboldt County.

10. Page 9, Section 5.2, 1st paragraph:

- a. The first sentence states "... the California Construction General Permit shall be developed for different phases of the project and submitted to the RWQCB. For phases of the project that are not proposed to disturb 1 acre or more, an erosion and sediment control plan (ECSP) shall be developed and submitted to the Humboldt County Building Department."
- b. A single California Construction General Permit is required if the entire planned project disturbance is greater than 1-acre per the California State Water Resources Control Board National Pollutant Discharge Elimination (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit), Order WQ 2022-0057-DWQ, NPDES No. CAS000002, Section IIA Scope of General Permit Coverage, Traditional Construction Activities Subject to this General Permit (Attachment 3):
  1. "This General Permit covers construction projects that include construction or land disturbance activities that result in a disturbance of one or more acres, or less than one acre but are part of a larger common plan of development or sale that totals one or more acres of land disturbance..."
- c. Comments provided in June 20, 2022 letter stated "because construction of the Project will entail the ground disturbance of more than 1-acre, the preparation of a SWPPP to comply with requirement of the California Construction General Permit is necessary. The California Construction General Permit SWPPP should be included in a revised IS/MND. The California Construction General Permit SWPPP prepared for inclusion in a revised IS/MND should include specific BMPs to manage runoff that may contain dioxins among other contaminants and should include monitoring provisions that would include sampling stormwater runoff for dioxins."
- d. This previous comment has been ignored and the current SGMP states the project will be phased and therefore the California Construction General Permit will not apply to all phases of the project which is a flawed approach

which seems to conflict with California General Permit requirements.

DTSC Response: The proposed work at Royal Gold will be phased and the schedule has not been established. Work may take place over several years.

11. Page 9, Section 5.2, 2nd and 2nd paragraph:

- a. Section states “Standard construction best management practice (BMPs) shall be implemented during project activities to control stormwater runoff and to manage fugitive dust and dispersion of material.”
- b. The BMPs listed do not include berms to control stormwater runoff. Suggest including berms as stated on page 10, 3rd paragraph, 1st sentence and page 11, 1st paragraph, 2nd sentence for consistency.

DTSC Response: Thank you for the comment. Additional BMPs may be included in the future SWPPP or ESCP.

12. Table 3, page 10, Source column:

- a. References DTSC Health and Human Risk Assessment (HHRA) for regulatory screening levels; however, the DTSC HHRA has not been published on Envirostor for public review.
  1. Provide the referenced DTSC HHRA document as part of this review.

DTSC Response: The documents referenced in Table 3 are all publicly available documents. As HBMWD is aware, a recent human health risk assessment (HHRA) has not been completed for the Site. The table references HHRA Note 3 prepared by DTSC’s Human and Ecological Risk Office (HERO), which is available at: <https://dtsc.ca.gov/wp-content/uploads/sites/31/2025/04/HHRA-Note-3-Revised-April-2025.pdf>, although the SGMP references a previous version.

Additionally, a technical memorandum prepared by HERO’s Ecological Risk Assessment Section (ERAS) regarding the SGMP is referenced and is available at the following link:

[https://www.envirostor.dtsc.ca.gov/public/view\\_document?docurl=/public/deliverable\\_documents/5401051163/MPLM%2DRG%5FSGMP%5FERAS%2Dmemo%5F7%2DFebruary%2D2023%2Epdf](https://www.envirostor.dtsc.ca.gov/public/view_document?docurl=/public/deliverable_documents/5401051163/MPLM%2DRG%5FSGMP%5FERAS%2Dmemo%5F7%2DFebruary%2D2023%2Epdf) .

13. Page 11, 1st and 2nd paragraphs:

- a. A Stockpile Management Plan should be developed to adequately describe the methods of segregating, stockpiling, labeling, controlling, etc.

Ms. Mares  
July 21, 2025  
Page 8 of 9

DTSC Response: As indicated earlier, stockpile management is addressed in Section 5.2 of the SGMP.

14. Page 12, Section 6.3:

- a. Suggest providing clarity that a sampling and analysis plan is required if an inadvertent discovery of contaminated material is encountered. It is unclear what constituents will be sampled and analyzed. Recommend sampling constituents be the regulated drinking water contaminants under Title 22 of the California Code of Regulations and Title 40 of the Code of Federal Regulations which could potentially impact the nearby drinking water resources be sampled and analyzed.

DTSC Response: In the event that pre-construction characterization sampling reveals contaminant concentrations exceeding applicable screening levels, DTSC will determine the appropriate actions based on the data and site conditions. Potential next steps are outside the scope the SGMP.

Please note that no changes to the SGMP are currently recommended by DTSC. If proposed plans or conditions change, edits or updates to the SGMP may be warranted.

If you have any questions, you can reach Vanessa Davis, the Project Manager, by phone at (510) 540-3946 or via email at [Vanessa.Davis@dtsc.ca.gov](mailto:Vanessa.Davis@dtsc.ca.gov) or me by phone at (510) 540-3926 or via email at [Marikka.Hughes@dtsc.ca.gov](mailto:Marikka.Hughes@dtsc.ca.gov).

Sincerely,



Marikka Hughes, PG  
Branch Chief  
Site Mitigation and Restoration Program – Berkeley Office  
Department of Toxic Substances Control

cc: list on next page

Ms. Mares  
July 21, 2025  
Page 9 of 9

cc: (via email)

Jennifer Kalt  
Humboldt Waterkeeper  
[jkalt@humboldtwaterkeeper.org](mailto:jkalt@humboldtwaterkeeper.org)

Clinton Betts  
Royal Gold  
[clint@royalgoldcoco.com](mailto:clint@royalgoldcoco.com)

Vanessa Davis, PG  
Site Mitigation and Restoration Program – Berkeley Office  
Department of Toxic Substances Control  
[Vanessa.Davis@dtsc.ca.gov](mailto:Vanessa.Davis@dtsc.ca.gov)



**Yana Garcia**  
Secretary for  
Environmental Protection



**Department of Toxic Substances Control**

---

Katherine M. Butler, MPH, Director  
700 Heinz Avenue  
Berkeley, California 94710-2721



**Gavin Newsom**  
Governor

July 23, 2025

**SENT VIA ELECTRONIC MAIL**

Machiko M. Mares  
Humboldt Bay Municipal Water District  
828 Seventh Street  
PO Box 95  
Eureka, California 95502  
[gm@hbmwd.com](mailto:gm@hbmwd.com)

Dear Ms. Mares:

Thank you for your comments on the First Half 2024 Groundwater Monitoring Report (GMR) for the Former McNamara and Peepe Lumber Mill, dated July 2024. Below, please find the California Department of Toxic Substances Control's (DTSC) responses to the Humboldt Bay Municipal Water District's (HBMWD) comments. The comments from HBMWD have been included for reference.

1. The first half of 2024 groundwater monitoring was performed on February 27 and 28, 2024; however, the groundwater monitoring report was not submitted until July 16, 2024 and the DTSC approval letter was dated March 28, 2025.
  - a. The untimeliness of the sampling, analysis, reporting, and approval is concerning to the District.
  - b. It is unacceptable that it has taken over a year to provide the District with the First Half of 2024 Groundwater Monitoring Report.

DTSC Response to Comments 1a and 1b: HBMWD points out that the lack of timeliness in providing data and the GMR are of concern. DTSC is aware of the concern and apologizes for the delays. Due to chronic understaffing at DTSC and specifically the Berkeley office's Site Mitigation and Restoration Program (SMRP), delays have affected many sites including the Former McNamara and Peepe

Lumber Mill. We have been working internally to find solutions to shorten our response times and to provide better service to the communities we serve.

- c. It is even more concerning that the first half of 2024 groundwater monitoring samples taken did not comply with the allowable sample holding times, exceeded recommended turbidity levels, samples were field-filtered contrary to regulatory guidance, dioxins were not included as a contaminant of concern in the sampling and analysis plan, and the incorrect calculation method was used.

DTSC Response to Comment 1c: DTSC is equally concerned that the groundwater samples for dioxin/furan analysis were not analyzed within their recommended hold time. DTSC's contractor, SHN, spoke with the laboratory regarding this when it was discovered to identify what caused this analysis delay and what could be done to prevent this in the future. The primary issue appeared to be an equipment issue at the laboratory. However, it should be noted that dioxins and furans are typically very stable compounds in water samples. While the samples were analyzed 50 days after sample extraction by the lab, the recommended hold time is 45 days after sample extraction, which would not typically be long enough for these compounds to significantly degrade.

Additionally, DTSC is also concerned about the elevated turbidity values measured in the wells, which is why we commented on the issue and are continuing to evaluate possible solutions. This issue was discussed with DTSC's contractor immediately after DTSC received the data and field sampling logs.

Dioxins are included for analysis in the Groundwater Monitoring Work Plan, dated July 31, 2019. The list of chemicals of concern (COCs) may be updated after the human health risk assessment is completed.

It is unclear what is meant by the HBMWD's comment that the "incorrect calculation method was used." As has been the case with the previous groundwater monitoring reports prepared for the site, the 2005 World Health Organization's (WHO) Toxic Equivalency Factors (TEFs) for Dioxins was used. DTSC is evaluating HBMWD's request that the data be compared to the 2022 WHO TEFs.

- d. The District assumes the second half of 2024 groundwater monitoring was likely performed in August 2024 and perhaps the first half of 2025 groundwater monitoring may have been performed already. These samples will likely be unresponsive to the concerns and comments provided in this letter for sampling

performed in February of 2024 which means the samples may continue to be inadequate and unreliable.

DTSC Response to Comment 1d: While DTSC experienced delays in approving the First Half 2024 GMR and making it available to the public, DTSC was able to identify the concerns discussed above and work to resolve sampling issues prior to the groundwater monitoring events that occurred in August 2024 and April 2025. The turbidity issues continue to be evaluated.

- e. The District cannot fully participate in protecting our drinking water source from the known contaminants if we are not informed on a timely basis.
- f. DTSC's lack of timeliness obfuscates the facts as well as the known and uncontrolled threats to public health, public safety, and the environment.

DTSC Response to Comments 1e and 1f: DTSC continues to try to manage our timeliness and we apologize that factors outside of our control impact our ability to approve documents in a more timely manner. However, it is important to note that DTSC meets with HBMWD quarterly to discuss site progress and HBMWD's concerns. As part of these meetings, DTSC provides draft data and figures to HBMWD for their review when available.

DTSC remains committed to protecting human health and the environment. The site's groundwater monitoring data to date do not indicate an "uncontrolled" threat to human health or the environment.

- 2. DTSC noted in their approval letter that the samples were analyzed for dioxins and furans outside of the required holding time.
  - a. Analyzing a sample outside of its required holding time may lead to inaccurate or unreliable results which may potentially invalidate the data.

DTSC Response to Comment 2: As stated in the response to Comment 1c, DTSC is equally concerned about analysis occurring outside of recommended holding times.

- 3. DTSC noted in their approval letter that six of the wells sampled showed high turbidity readings greater than 10 NTUs.
  - a. The USEPA recommends that the turbidity be stabilized at a value below 10 NTU prior to sampling for contaminants which may be biased by the presence of turbidity.
  - b. DTSC groundwater sampling guidance recommends that filtering samples should not be used as a fix for poor sampling practices.

- c. Instead of allowing the turbidity to stabilize, the consultant field-filtered the samples which is inappropriate because the contaminants of concern, particularly dioxins and PCP, sorb strongly to soil particles.
- d. It is likely that field-filtering of the samples has affected the reliability of the sample results for monitoring wells -10, -12, -13, -14, and -15.

DTSC Response to Comment 3: Thank you for your comments. DTSC will continue to evaluate the turbidity levels and how best to address the issue.

- 4. High turbidity in the wells may reflect poor well construction or design.
  - a. An evaluation of the well construction is necessary to ensure the monitoring wells are producing water samples which are representative of ambient contaminant concentrations.

DTSC Response to Comment 4: Well construction is evaluated on an ongoing basis as part of the semiannual groundwater monitoring events. DTSC will continue to assess the wells and groundwater conditions.

- 5. The most recent sampling and analysis plan (SAP) was completed in July 2019 and states that field filtration is for the analysis of dissolved constituents. Dioxins are not dissolved and are instead sorbed to soil particles. The most recent SAP does not identify dioxins as a contaminant of concern.
  - a. The sampling and analysis plan must be updated to include dioxins as a contaminant of concern and to not allow field filtration when sampling for dioxins.

DTSC Response to Comment 4a: A sampling and analysis plan is not the appropriate document to identify a new COC. This would be more appropriately done in a future remedial action plan (RAP) amendment. Currently, the 2019 Groundwater Monitoring Work Plan includes analysis for dioxins, so their presence is being monitored while DTSC works towards a RAP amendment. Further, DTSC is evaluating the field filtration concerns.

- b. The current SAP is performed twice a year. It is more common for sampling and analysis to be performed quarterly.

DTSC Response to Comment 4b: Monitoring frequencies typically vary based on the status of the groundwater plume and the monitoring wells. Groundwater concentrations at the site are not variable enough to warrant a quarterly monitoring frequency. In addition, funding available to the site is limited, so each additional activity is evaluated to see if the data generated would be beneficial to our understanding of the site. Groundwater monitoring will continue on a semiannual

basis based on the current trends and concentrations of pentachlorophenol (PCP) and dioxins detected at the site. However, due to lack of funding, one of the semiannual monitoring events in 2025 will be skipped.

6. The calculation method used for polychlorinated dioxins, dibenzofurans, and biphenyls is the 2005 World Health Organization (WHO) Toxic Equivalency Factors (TEFs) for calculating a single toxicity equivalent (TEQ) value for the various congeners of dioxins and furans.
  - a. We strongly recommend the use of the 2022 WHO TEFs to be consistent with US EPA calculation methods for dredge-related sampling in Humboldt Bay.
  - b. Reference the March 2024 WHO press release which explains the changes which are included in this special issue of the journal Regulatory Toxicology and Pharmacology: The 2022 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Polychlorinated Dioxins, Dibenzofurans and Biphenyls.
  - c. The District has previously provided this comment with no response from DTSC regarding the continued use of an outdated and likely inaccurate calculation method.

DTSC Response to Comment 6: At this time, to maintain consistency with existing data, DTSC will continue recommending the use of the 2005 WHO TEFs. In the future, DTSC will evaluate changing to or possibly adding the 2022 WHO TEFs calculations to site documents.

In addition to the above comments, the HBMWD requested the following within 60 days of their May 23, 2025 letter. DTSC's responses to these requests are below.

- A. A response to comments raised in this letter from the District dated May 23, 2025;

DTSC Response: This letter meets this request.

- B. The Second Half of 2024 Groundwater Monitoring Report;

DTSC Response: DTSC is still working with our contractor on this report to resolve some outstanding questions. When this document is available for public review, DTSC will post it on Envirostor.

- C. The First Half of 2025 Groundwater Monitoring Report;

DTSC Response: The requested report was received by DTSC in draft form in July 2025 and as such is not ready for release to the public. However, the draft data

tables included in this report are attached. These tables may be updated based on DTSC's review. As soon as the final report is completed and approved, it will be uploaded to Envirostor.

- D. The Human Health and Risk Assessment (HHRA) as prepared for DTSC and previously referenced in the Soil and Groundwater Management Plan for Royal Gold and to date, not provided;

DTSC Response: As noted in the response to the HBMWD's comments on the Soil and Groundwater Management Plan (SGMP) for Royal Gold, a recent human health risk assessment (HHRA) has not been completed for the site. DTSC and its contractor are currently preparing a new HHRA for the site. The documents referenced in the SGMP include DTSC's Human and Ecological Risk Office (HERO)'s Human Health Risk Assessment (HHRA) Note Number 3, DTSC-modified Screening Levels (DTSC-SLs) (<https://dtsc.ca.gov/wp-content/uploads/sites/31/2025/04/HHRA-Note-3-Revised-April-2025.pdf>) and a technical memorandum by HERO's Ecological Risk Assessment Section regarding the SGMP ([https://www.envirostor.dtsc.ca.gov/public/view\\_document?docurl=/public/deliverable\\_documents/5401051163/MPLM%2DRG%5FSGMP%5FERAS%2Dmemo%5F7%2DFebruary%2D2023%2Epdf](https://www.envirostor.dtsc.ca.gov/public/view_document?docurl=/public/deliverable_documents/5401051163/MPLM%2DRG%5FSGMP%5FERAS%2Dmemo%5F7%2DFebruary%2D2023%2Epdf)).

- E. A response to comments provided by the District on February 24, 2025 regarding the Soil and Groundwater Management Plan for Royal Gold;

DTSC Response: The response to comments was sent on July 21, 2025.

- F. An updated Sampling and Analysis Plan with increased frequency of sampling, all known contaminants of concern, correct sampling methods and correct calculation methods;

DTSC Response: The existing Groundwater Monitoring Work Plan, dated July 31, 2019, includes the relevant analyses and sampling methods for groundwater monitoring at the site. DTSC will evaluate the need to prepare an addendum when additional funding has been designated for the site. The list of chemicals of concern (COCs) will be updated based on the results of the human health risk assessment currently being prepared for the site.

- G. An evaluation of the well construction to determine whether the wells are adequate; and

DTSC Response: The wells at the site are routinely evaluated during sampling events and data reviews to determine their adequacy and confirm their effectiveness. This sort of review led to the repairs to the surface completion on monitoring well MW-1.

H. A timeline and summary of steps to be completed to prepare a Remediation Action Plan (RAP) and to complete remediation of the contaminated site.

DTSC Response: At this time, DTSC cannot provide a timeline for the preparation of a Remedial Action Plan (RAP) Amendment to the 1994 Final Remedial Action Plan and its implementation due to State of California funding resources. The DTSC project team plans on requesting the necessary funding to prepare a feasibility study of potential remedies, an ecological risk assessment, and possibly a draft RAP amendment during the next funding cycle beginning in March 2026.

The necessary steps (outside of funding requests and contracting) to implement a final remedy that addresses groundwater contamination include:

1. Feasibility study and possible bench-scale or pilot tests
2. Ecological risk assessment
3. RAP Amendment
  - a. Public comment period (at least 30 days) and public meeting
  - b. California Environmental Quality Act analysis
4. Remedy implementation and possible bench-scale or pilot tests

If you have any questions, you can reach Vanessa Davis, the Project Manager, by phone at (510) 540-3946 or via email at [Vanessa.Davis@dtsc.ca.gov](mailto:Vanessa.Davis@dtsc.ca.gov) or me by phone at (510) 540-3926 or via email at [Marikka.Hughes@dtsc.ca.gov](mailto:Marikka.Hughes@dtsc.ca.gov).

Sincerely,



Marikka Hughes, PG  
Branch Chief  
Site Mitigation and Restoration Program – Berkeley Office  
Department of Toxic Substances Control

Enclosure: April 2025 Analytical Data Tables and Figures

Ms. Mares  
July 23, 2025  
Page 8 of 9

cc: (via email)

Jennifer Kalt  
Humboldt Waterkeeper  
[jkalt@humboldtwaterkeeper.org](mailto:jkalt@humboldtwaterkeeper.org)

Matt Hagemann, PG, CHg  
SWAPE  
[mhagemann@swape.com](mailto:mhagemann@swape.com)

Heidi McHugh  
Assemblymember Chris Rogers's Office  
[Heidi.McHugh@asm.ca.gov](mailto:Heidi.McHugh@asm.ca.gov)

James Barba  
State Senator Mike McGuire's Office  
[James.Barba@sen.ca.gov](mailto:James.Barba@sen.ca.gov)

Nora Mounce  
State Senator Mike McGuire's Office  
[Nora.Mounce@sen.ca.gov](mailto:Nora.Mounce@sen.ca.gov)

Heidi Bauer, PG  
North Coast Regional Water Quality Control Board  
[Heidi.M.Bauer@Waterboards.ca.gov](mailto:Heidi.M.Bauer@Waterboards.ca.gov)

Michael Sullivan, PG  
North Coast Regional Water Quality Control Board  
[Michael.Sullivan@Waterboards.ca.gov](mailto:Michael.Sullivan@Waterboards.ca.gov)

John Driscoll  
U.S. Congressman Jared Huffman's Office  
[John.Driscoll@mail.house.gov](mailto:John.Driscoll@mail.house.gov)

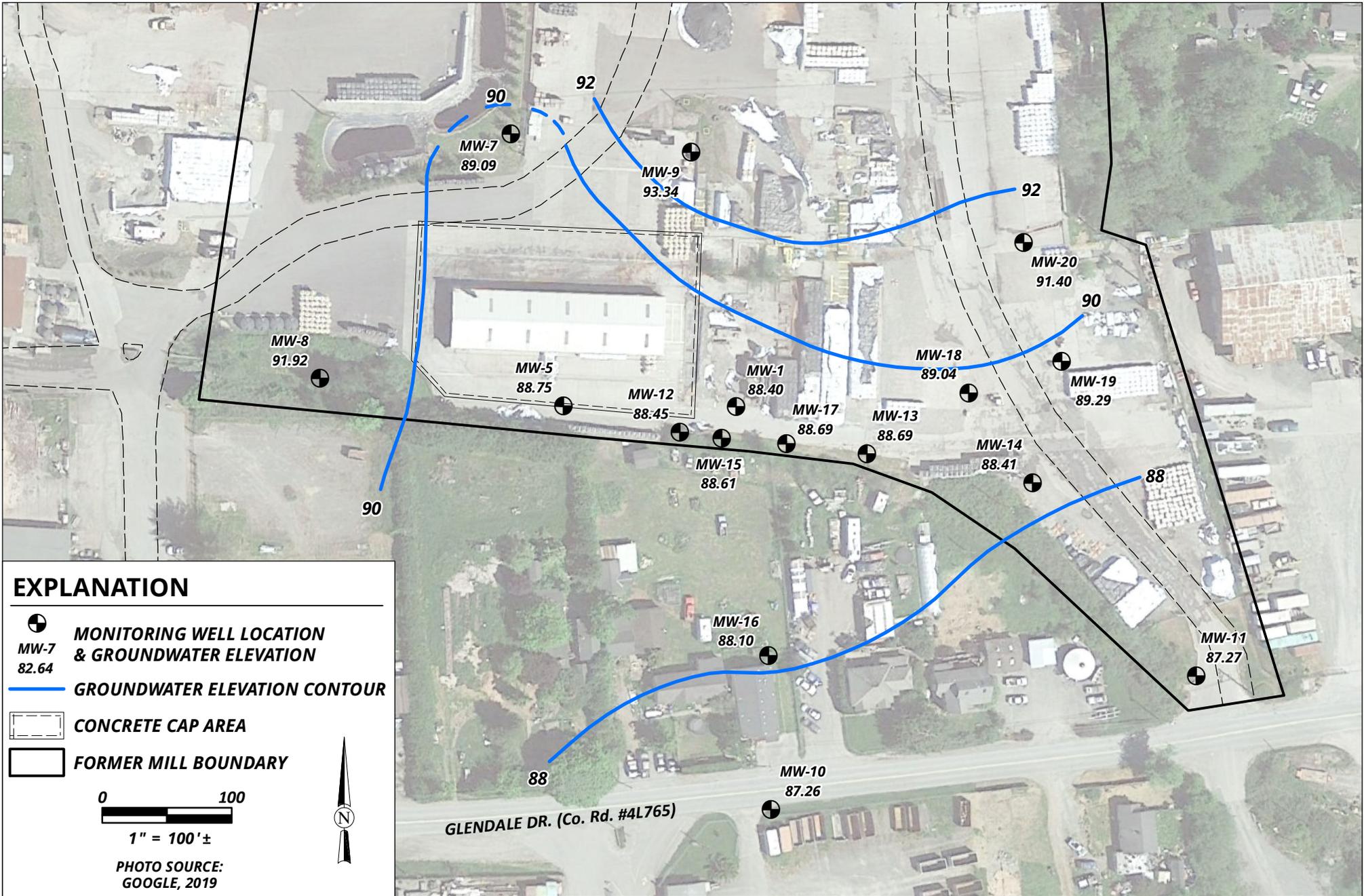
Vanessa Davis, PG  
DTSC, Site Mitigation and Restoration Program  
[Vanessa.Davis@dtsc.ca.gov](mailto:Vanessa.Davis@dtsc.ca.gov)

Ms. Mares  
July 23, 2025  
Page 9 of 9

Ashley Blesio  
DTSC, Office of Environmental Equity  
[Ashley.Blesio@dtsc.ca.gov](mailto:Ashley.Blesio@dtsc.ca.gov)

Eddie Moreno  
DTSC, Office of Legislation and Regulatory Review  
[Eddie.Moreno@dtsc.ca.gov](mailto:Eddie.Moreno@dtsc.ca.gov)

Ellia La  
DTSC, Office of Legislation and Regulatory Review  
[Ellia.La@dtsc.ca.gov](mailto:Ellia.La@dtsc.ca.gov)



### EXPLANATION

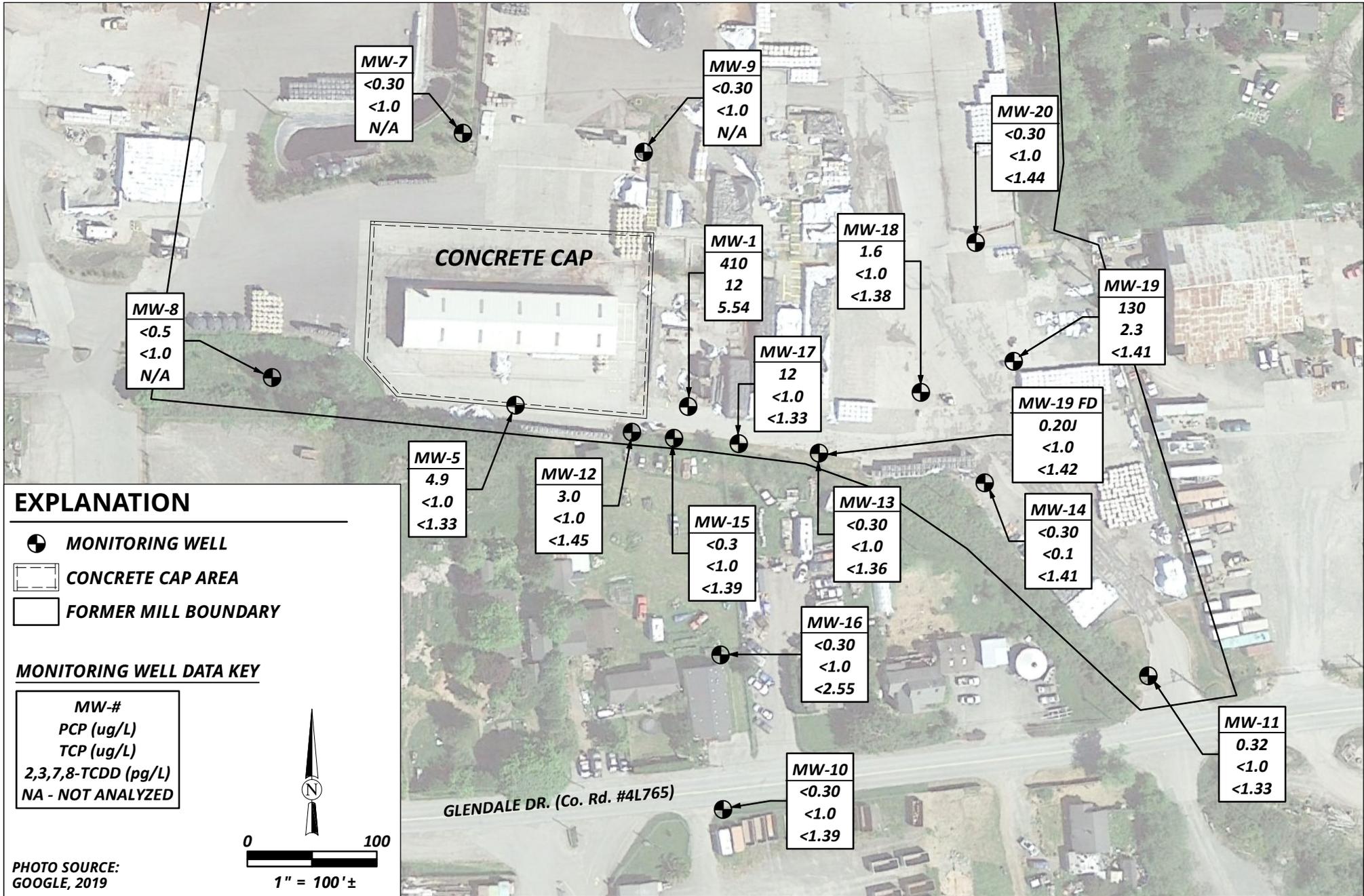
-  **MONITORING WELL LOCATION & GROUNDWATER ELEVATION**
  -  **GROUNDWATER ELEVATION CONTOUR**
  -  **CONCRETE CAP AREA**
  -  **FORMER MILL BOUNDARY**
- 0  100  
1" = 100'±
- PHOTO SOURCE:  
GOOGLE, 2019
- 



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

**Groundwater Elevation Contours**  
**April 8, 2025**  
July 2025 - 020189.030

**Figure**  
**3**



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

Select Groundwater Concentrations  
April 8 & 9, 2025  
July 2025 - 020189.030

Figure  
**4**

**Table 1. Water Level Data, April 8, 2025  
Former McNamara and Peepe Lumber Mill, Arcata, California**

<b>Sample Location</b>	<b>Top of Casing Elevation<sup>a</sup> (feet)</b>	<b>Depth-to-Groundwater (feet BTOC)<sup>b</sup></b>	<b>Groundwater Elevation<sup>a</sup> (feet)</b>	<b>Well Screen Interval (feet BGS)<sup>c</sup></b>
MW-1	94.82	6.42	88.40	19–23
MW-5	93.50	4.60	88.75	18–23
MW-7	98.41	9.32	89.09	22–37
MW-8	97.03	5.11	91.92	7–24
MW-9	99.68	6.34	93.34	21–25
MW-10	95.79	8.52	87.27	9–24
MW-11	91.20	3.93	87.27	9.5–24.5
MW-12	91.74	3.29	88.45	10–20
MW-13	90.78	2.09	88.69	10–20
MW-14	91.05	2.64	88.41	10–20
MW-15	93.59	4.98	88.61	6–16
MW-16	95.81	7.71	88.10	10–20
MW-17	90.72	2.34	88.34	9–24
MW-18	91.73	2.69	89.04	10–20
MW-19	91.25	1.96	89.29	10–20
MW-20	92.10	0.70	91.40	10–20

<sup>a</sup> Relative to North American vertical datum, 1988 (NAVD88)

<sup>b</sup> BTOC: below top of casing

<sup>c</sup> BGS: below ground surface

**Table 2. Groundwater Analytical Results, April 8 and 9, 2025  
Former McNamara and Peepe Lumber Mill, Arcata, California**

Sample Location	2,3,7,8-TCDD <sup>a,b</sup> (pg/L) <sup>c</sup>	TEQ <sup>d</sup> (pg/L)	PCP <sup>e</sup> (µg/L) <sup>f</sup>	TCP <sup>e</sup> (µg/L)
MW-1	<b>5.54<sup>g</sup></b>	90.19	<b>410</b>	<b>12</b>
MW-5	<1.33 <sup>h</sup>	0.451	<b>4.9</b>	<1.0
MW-7	NA <sup>i</sup>	NA	<0.30	<1.0
MW-8	NA	NA	<b>0.5</b>	<1.0
MW-9	NA	NA	<0.30	<1.0
MW-10	<1.38	0.02292	<0.30	<1.0
MW-11	<1.33	0.01008	<b>0.32</b>	<1.0
MW-12	<1.45	0.02247	<b>3.0</b>	<1.0
MW-13	<1.36	0	<0.30	<1.0
MW-14	<1.41	0.02952	<0.30	<1.0
MW-15	<1.39	0.0276	<0.30	<1.0
MW-16	<2.55	0	<0.30	<1.0
MW-17	<1.33	0.262	<b>12</b>	<1.0
MW-18	<1.38	0	<b>1.6</b>	<1.0
MW-19	<1.41	0.259	<b>130</b>	<b>2.3</b>
MW-20	<1.44	0	<0.30	<1.0
Duplicate (MW-13)	<1.42	0	<b>0.20<sup>j</sup></b>	<1.0
MCL <sup>k</sup>	30	NR <sup>l</sup>	1.0	NR
PHGs <sup>m</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> Samples were analyzed out of hold time, due to laboratory instrument malfunction.

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

<sup>d</sup> TEQ: Toxic Equivalency

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

<sup>g</sup> **Bold** values indicate an exceedance of the maximum contaminant level (MCL) or California public health goals (PHGs).

<sup>h</sup> <: "less than" the method detection limit

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

<sup>j</sup> J: Result is less than the reporting limit but greater than or equal to the method detection limit. The reported concentration is an estimated value.

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

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

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

**Table 3. Field Measured Parameters, April 8 and 9, 2025  
Former McNamara and Peepe Lumber Mill, Arcata, California**

Sample Location	DCO <sub>2</sub> <sup>a</sup> (mg/L) <sup>b</sup>	DO <sup>a</sup> (mg/L)	ORP <sup>a</sup> (mV) <sup>c</sup>	EC <sup>a</sup> (umhos/cm) <sup>d</sup>	pH <sup>a</sup> (standard units)	Turbidity <sup>a</sup> (NTU) <sup>e</sup>	Field Filtered
MW-1	--	0.4	150	319.1	5.57	1.49	
MW-5	--	0.4	131	390.2	5.55	4.25	
MW-7	--	2.0	183	109.5	5.39	0.85	
MW-8	--	0.5	-87	879	6.35	1.75	
MW-9	--	0.8	236	290.4	5.74	1.17	
MW-10	--	3.2	208	39.1	5.40	>1000	X
MW-11	--	0.8	191	121.6	4.81	1.26	
MW-12	--	1.0	201	240.9	5.31	23.5	X
MW-13	--	0.6	28	395.4	5.97	>1000	X
MW-14	--	0.8	200	327.4	5.37	639	X
MW-15	--	0.5	105	222.4	5.43	220	X
MW-16	--	3.5	249	156.7	4.84	139	X
MW-17	--	0.4	167	253.0	5.73	111	X
MW-18	--	0.9	181	429.0	5.86	152	X
MW-19	--	0.4	189	240.1	5.64	2.20	
MW-20	--	0.3	260	204.9	5.77	111	X

<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

**Table 2-1  
Well Construction Details**

<b>Well ID</b>	<b>Date Installed</b>	<b>Top of Casing Elevation<sup>a</sup> (feet NAVD)</b>	<b>Screened Interval (feet BGS)</b>	<b>Casing Diameter (inches)</b>	<b>Sounded Well Depth (feet BGS)</b>
MW-1	1988	94.82	19-23	4	23.36
MW-5	1988	93.35	18-23	4	24.08 <sup>b</sup>
MW-7	1997	98.41	22-37	4	39.95
MW-8	1997	97.03	7-24	4	25.29
MW-9	unknown	99.68	21-25	4	26.37 <sup>b</sup>
MW-10	6/7/2010	95.79	9-24	2	22.64
MW-11	10/18/2010	91.2	9.5-24.5	2	25
MW-12	11/1/2011	91.74	10-20	2	19.91
MW-13	2/1/2022	90.78	10-20	2	20
MW-14	2/3/2022	91.05	10-20	2	20.16
MW-15	6/21/2023	93.59	6-16	2	19.83
MW-16	8/18/2023	95.81	10-20	2	21.14
MW-17	8/6/2024	90.72	9-24	2	24.00
MW-18	8/6/2024	91.73	10-20	2	19.45
MW-19	8/7/2024	91.25	10-20	2	19.04
MW-20	8/7/2024	92.10	12-22	2	19.72



**Table 2-2  
Historical Groundwater Elevations**

<b>Well Name</b>	<b>Date</b>	<b>Groundwater Elevation (ft msl)</b>
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	
2/27/2024	87.34	
8/21/2024	81.65	
4/8/2025	88.40	
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



**Table 2-2  
Historical Groundwater Elevations**

<b>Well Name</b>	<b>Date</b>	<b>Groundwater Elevation (ft msl)</b>
MW-5 cont'd	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
	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
	2/27/2024	87.84
8/21/2024	82.05	
4/8/2025	88.75	
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	



<b>Table 2-2 Historical Groundwater Elevations</b>		
<b>Well Name</b>	<b>Date</b>	<b>Groundwater Elevation (ft msl)</b>
MW-7 cont'd	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
	2/27/2024	88.18
	8/21/2024	82.64
	4/8/2025	89.09
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
	2/27/2024	91.02
8/21/2024	84.13	
4/8/2025	91.92	



**Table 2-2  
Historical Groundwater Elevations**

<b>Well Name</b>	<b>Date</b>	<b>Groundwater Elevation (ft msl)</b>
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
	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	
2/27/2024	92.59	
8/21/2024	88.08	
4/8/2025	93.34	
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	



<b>Table 2-2 Historical Groundwater Elevations</b>		
<b>Well Name</b>	<b>Date</b>	<b>Groundwater Elevation (ft msl)</b>
MW-10 cont'd	2/22/2022	83.02
	8/23/2022	79.80
	2/22/2023	89.15
	8/22/2023	79.69
	2/27/2024	86.23
	8/21/2024	80.89
	4/9/2025	87.26
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
	2/27/2024	86.27
8/21/2024	81.45	
4/8/2025	87.27	
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
	2/27/2024	87.42
8/21/2024	81.64	
4/8/2025	88.45	
MW-13	2/22/2022	84.44
	8/23/2022	84.31
	2/22/2023	86.29
	8/22/2023	81.03



<b>Table 2-2 Historical Groundwater Elevations</b>		
<b>Well Name</b>	<b>Date</b>	<b>Groundwater Elevation (ft msl)</b>
MW-13 cont'd	2/27/2024	87.73
	8/21/2024	81.98
	4/8/2025	88.69
MW-14	2/22/2022	84.66
	8/23/2022	81.39
	2/22/2023	86.34
	8/22/2023	81.05
	2/27/2024	87.45
	8/21/2024	82.04
	4/8/2025	88.41
MW-15	8/22/2023	80.40
	8/22/2023	81.05
	2/27/2024	87.57
	8/21/2024	81.76
	4/8/2025	88.61
MW-16	8/22/2023	80.02
	2/27/2024	86.93
	8/21/2024	81.26
	4/8/2025	88.10
MW-17	8/21/2024	81.63
	4/8/2025	88.34
MW-18	8/21/2024	82.77
	4/8/2025	89.04
MW-19	8/21/2024	83.22
	4/8/2025	89.29
MW-20	8/21/2024	86.40
	4/8/2025	91.40



**Table 2-3  
Groundwater Analytical Results  
McNamara and Peepe Lumber Mill**

Well Name	Date	PCP	TCP	Chromium	Hexavalent Chromium	Nitrate	Total Iron	Ferrous Iron	Arsenic	Sulfate	Chloride	TPHD	VOCs (DIPE)
	Units	µg/L				mg/L	µg/L			mg/L		µg/L	
MW-1	5/13/2015	690 <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 AJ	1.7
	3/5/2021	460 <sup>a</sup>	5.6	--	--	--	--	--	--	--	--	--	--
	2/22/2022	920 <sup>a</sup>	9.7	--	--	--	--	--	--	--	--	--	--
	8/23/2022	1300 <sup>a</sup>	<1,000 B9	--	--	--	--	--	--	--	--	--	--
	2/22/2023	0.34 <sup>a</sup>	<1.0	--	--	--	--	--	--	--	--	--	--
	8/23/2023	400	12	--	--	--	--	--	--	--	--	--	--
	2/28/2024	600	8.4	--	--	--	--	--	--	--	--	--	--
8/22/2024	94	2.4	--	--	--	--	--	--	--	--	--	--	
4/8/2025	410	12	--	--	--	--	--	--	--	--	--	--	
MW-5	5/13/2015	35 <sup>a</sup>	4.3	--	--	--	--	--	--	--	--	--	--
	11/11/2015	65 <sup>a</sup>	3.3	--	--	--	--	--	--	--	--	--	--
	5/23/2016	56 <sup>a</sup>	1.6	--	--	--	--	--	--	--	--	--	--
	12/14/2016	39 <sup>a</sup>	2.3	<5.0	<5.0	<0.10	330	600	<10	12	45	--	--
	5/8/2017	46 <sup>a</sup>	2.3	--	--	--	--	--	--	--	--	--	--
	8/21/2019	--	--	--	--	--	--	--	--	--	--	--	--
	3/5/2021	18	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2022	19	1.1	--	--	--	--	--	--	--	--	--	--
	8/23/2022	0.63	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2023	9.5 <sup>a</sup>	0.65 J	--	--	--	--	--	--	--	--	--	--
	8/22/2023	4.6	0.62 J	--	--	--	--	--	--	--	--	--	--
	2/27/2024	8.5	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
	4/8/2025	4.9	<1.0	--	--	--	--	--	--	--	--	--	--
MW-7	5/13/2015	0.39	<1.0	--	--	--	--	--	--	--	--	--	--
	11/11/2015	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	5/23/2016	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	12/14/2016	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	5/8/2017	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	8/21/2019	<0.3	<1.0	--	<1.0	--	--	--	--	--	--	<50	<0.5
	3/5/2021	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2022	0.26 J	<1.0	--	--	--	--	--	--	--	--	--	--
	8/23/2022	0.12 J	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2023	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2023	0.17 J	<1.0	--	--	--	--	--	--	--	--	--	--
	2/27/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
	8/21/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
	4/8/2025	<1.0	<0.30	--	--	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--	--	--	



**Table 2-3  
Groundwater Analytical Results  
McNamara and Peepe Lumber Mill**

Well Name	Date	PCP	TCP	Chromium	Hexavalent Chromium	Nitrate	Total Iron	Ferrous Iron	Arsenic	Sulfate	Chloride	TPHD	VOCs (DIPE)
MW-8 cont'd	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	--	--	--	--	--	--	--	--	--	--
	2/27/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
	4/9/2025	<b>0.50</b>	<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	--	--	--	--	--	--	--	--	--	--
	2/27/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
	8/21/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
	4/8/2025	<0.30	<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 AJ	<0.5
	8/21/2019 (FD)	<0.3	<1.0	--	<1.0	--	--	--	--	--	--	210 AJ	<0.5
	3/5/2021	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	3/5/2021 (FD)	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2022	0.12 J	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2022 (FD)	0.26 J	<1.0	--	--	--	--	--	--	--	--	--	--
	8/23/2022	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	8/23/2022 (FD)	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2023	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2023 (FD)	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2023	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/27/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
	2/27/2024 (FD)	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
	4/9/2025	<0.30	<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	<b>1.9<sup>a</sup></b>	<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	--	--	--	--	--	--	--	--	--	--
	2/27/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
	4/8/2025	<b>0.32</b>	<1.0	--	--	--	--	--	--	--	--	--	--



**Table 2-3  
Groundwater Analytical Results  
McNamara and Peepe Lumber Mill**

Well Name	Date	PCP	TCP	Chromium	Hexavalent Chromium	Nitrate	Total Iron	Ferrous Iron	Arsenic	Sulfate	Chloride	TPHD	VOCs (DIPE)
MW-12	5/13/2015	<b>52<sup>a</sup></b>	<1.0	--	--	--	--	--	--	--	--	--	--
	11/11/2015	<b>51<sup>a</sup></b>	<1.0	--	--	--	--	--	--	--	--	--	--
	5/23/2016	<b>120<sup>a</sup></b>	<1.0	--	--	--	--	--	--	--	--	--	--
	12/14/2016	<b>46<sup>a</sup></b>	<1.0	<5.0	<5.0	0.13	<15	<100	<10	5.4	28	--	--
	5/8/2017	<b>81<sup>a</sup></b>	<1.0	--	--	--	--	--	--	--	--	--	--
	8/21/2019	<b>110<sup>a</sup></b>	1.7	--	--	--	--	--	--	--	--	--	--
	3/5/2021	<b>120<sup>a</sup></b>	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2022	<b>120<sup>a</sup></b>	0.49 J	--	--	--	--	--	--	--	--	--	--
	8/23/2022	<b>130<sup>a</sup></b>	<100 B9	--	--	--	--	--	--	--	--	--	--
	2/22/2023	<b>9.4<sup>a</sup></b>	<b>0.61 J</b>	--	--	--	--	--	--	--	--	--	--
	8/22/2023	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/27/2024	<b>14</b>	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2024	<b>16</b>	<1.0	--	--	--	--	--	--	--	--	--	--
4/9/2025	<b>3.0</b>	<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	--	--	--	--	--	--	--	--	--	--
	2/27/2024	<b>1.6</b>	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2024	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	4/9/2025	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
4/9/25(FD)	0.20 J	<1.0	--	--	--	--	--	--	--	--	--	--	
MW-14	2/22/2022	<b>85<sup>a</sup></b>	<b>1.7</b>	--	--	--	--	--	--	--	--	--	--
	8/23/2022	<b>84<sup>a</sup></b>	<10	--	--	--	--	--	--	--	--	--	--
	2/22/2023	<b>48<sup>a</sup></b>	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2023	<b>57<sup>a</sup></b>	<b>1.3</b>	--	--	--	--	--	--	--	--	--	--
	2/28/2024	<b>60</b>	<b>1.6</b>	--	--	--	--	--	--	--	--	--	--
	8/22/2024	<b>1.6</b>	<b>0.69 J</b>	--	--	--	--	--	--	--	--	--	--
4/9/2025	<3.0	<1.0	--	--	--	--	--	--	--	--	--	--	
MW-15	8/22/2023	<b>8.7<sup>a</sup></b>	<b>0.54 J</b>	--	--	--	--	--	--	--	--	--	--
	2/27/2024	0.37	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2024	0.92	<1.0	--	--	--	--	--	--	--	--	--	--
	4/8/2025	<3.0	<1.0	--	--	--	--	--	--	--	--	--	--
MW-16	8/22/2023	<b>5.2<sup>a</sup></b>	<1.0	--	--	--	--	--	--	--	--	--	--
	2/28/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
	4/9/2025	<3.0	<1.0	--	--	--	--	--	--	--	--	--	--
MW-17	8/22/2024	<b>4.9</b>	<b>2.1</b>	--	--	--	--	--	--	--	--	--	--
	4/9/2025	<b>12</b>	<1.0	--	--	--	--	--	--	--	--	--	--
MW-18	8/21/2024	<b>1.6</b>	<1.0	--	--	--	--	--	--	--	--	--	--
	4/9/2025	<b>1.6</b>	<1.0	--	--	--	--	--	--	--	--	--	--
MW-19	8/21/2024	<b>34</b>	<b>0.29 J</b>	--	--	--	--	--	--	--	--	--	--
	8/21/2024 (FD)	<b>28</b>	<1.0	--	--	--	--	--	--	--	--	--	--
	4/9/2025	<b>130</b>	<b>2.3</b>	--	--	--	--	--	--	--	--	--	--
MW-20	8/21/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
	4/8/2025	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--



**Table 2-4  
Dioxin Analytical Results  
McNamara and Peepe Lumber Mill**

Well Name	Date	2,3,7,8-TCDD	1,2,3,4,6,7,8-HpCDD	Total HpCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	Total HpCDF	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	Total HxCDD	1,2,3,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	2,3,4,6,7,8-HxCDF	Total HxCDF	OCDD	OCDF	1,2,3,7,8-PeCDD	Total PeCDD	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	Total PeCDF	2,3,7,8-TCDF	Total TCDF	TEQ
	CA MCL	30 pg/L														N/A									
	CA PHG	0.05 pg/L														N/A									
MW-1	10/18/2010	0	180	330	44 J		200								32	1700	--								2.8
	11/3/2011	<10	110 J	200	27 J		130								32	1100 J	--								4.67 J
	11/3/2011 (FD)	<10	110 J	200	28 J		130								37	1000 J	--								4.38 J
	8/21/2019	0	520	970	100	6 J	550	2.2 J	22 J	ND	75	ND			73	5500*	340								<b>31</b>
	3/5/2021	<0.941	3760	7010	975	63.8	4350	8.11 J	166	12.3 J	623	103	5.82 J	17.4 J	4310 D,M	39,300	2910	<1.52	122	14.8 J	<1.20	474 D,M	<0.690	103 D,M	<b>93.6</b>
	2/22/2022	<0.727	1,690	3,200	339	339	1,710	4.25 J	70	5.91 J	260	<2.11	<2.90	<2.06	2,060 D,M	17,000	1,150	<1.35	44	8.84 J	<1.48	246 D,M	<0.717	69.9 D,M	<b>34.2</b>
	8/23/2022	<0.937	1,630	3,110	341	25.1 J	1,730	5.14 J	64.3	5.01 J	254	<2.03	<2.53	9.55 J	2,030 D,M	17,400	1,230	<1.40	23.6 J	<2.01	<1.96	275 D,M	<0.919	73.6 D,M	<b>34</b>
	2/23/2023	<0.767	9,790	18,600	1,770	<5.08	10,500	<3.98	289	26.9	1,070	<6.00	<5.72	8.63 J	1,570	135,000 D	7,660	<3.33	56.4	<4.77	3.98 J	60.0	<0.908	6.91	<b>194</b>
	8/23/2023	<5.11	1,920	3,460	199	47.0	6340 M	<25.5	53.1	16.5 J	499 M	147	<25.5	9.40 J	4340 M	17,800	940	<25.5	180 M	32.3	<25.5	826 M	<5.11	502 M	<b>48.3</b>
	2/28/2024*	3.44 J	846	2,220 M	<23.9	<23.9	3,070	<23.9	31.2	<23.9	381 M	<23.9	<23.9	1,360	2,030	10,800	371	<23.9	90.1 M	<23.9	<23.8	335 M	<4.78	258	<b>154 J</b>
8/22/2024	<1.92	60.5	116	<6.42	<5.75	51.3	<4.50	3.20 J	<4.80	3.20	<6.80	<5.74	<6.25	<8.44	687	47.1 J	<6.06	<1.15	<5.40	<5.38	<0.808	<1.92	<0.901	<b>1.15</b>	
4/8/2025	<b>5.54</b>	<b>919</b>	<b>1950M</b>	<b>644</b>	<7.46	<b>1,240</b>	<9.49	<b>22.8J</b>	<9.7	<b>250M</b>	<6.72	<9.49	<b>603</b>	<b>883</b>	<b>21,300</b>	<b>169</b>	<6.5	<b>87.6M</b>	<6.82	<8.32	<b>186</b>	<2.24	<b>206M</b>	<b>90.1907</b>	
MW-5	10/18/2010	0	0	0	0		0								0	180	--								0.054
	10/18/2010 (FD)	0	0	0	0		0								0	160	--								0.048
	11/3/2011	<9.9	<3.4 UJ	<8.0 U	<1.2 UJ		<2.6 U								<3.1 U	37 J	--								0.573 U
	3/5/2021	<0.622	3.04 J	5.56 J	<1.34	<1.91	<1.91	<1.19	<1.27	<1.21	<1.27	<1.10	<1.51	<1.12	<1.51	19.1 J	<2.57	<0.935	<0.935	<0.852	<0.817	<0.852	<0.600	<0.600	0.0361
	2/22/2022	<0.696	2.75 J	6.52 J	<1.64	<2.09	<2.09	<1.49	<1.60	<1.42	<1.60	<1.19	<1.65	<1.17	<1.65	19.5 J	<2.20	<1.69	<1.69	<1.36	<1.17	<1.37	<0.770	<0.770	0.0334
	8/23/2022	<0.789	<5.03	<5.03	<1.30	<1.85	<1.85	<1.24	<1.30	<1.19	<1.30	<0.971	<1.38	<0.946	<1.38	34.6 J	<3.11	<0.930	<0.930	<0.590	<0.622	<0.622	<0.547	1.37 J	0.0104
	2/22/2023	<0.433	<2.35	<2.35	<3.77	<3.81	<3.81	<1.22	<1.43	<1.45	<1.45	<0.688	<1.03	<0.796	<1.03	<15.6	<1.41	<0.726	<0.726	<0.511	<0.452	<0.511	<0.293	<0.202	0.00
	8/22/2023	<5.20	14.1 J,M	22.2 J,M	<26.0	<26.0	13.1 J,M	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	48.9 J	<52.0	<26.0	<26.0	<26.0	<26.0	<26.0	<5.20	<5.20	0.00
	2/27/2024*	<4.76	19.8 J	83.2 M	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	52.2	<23.8	52	143	<47.6	<23.8	<23.8	<23.8	<23.8	<23.8	<4.76	<4.76	5.46 J
	8/22/2024	<1.93	<5.25	<2.39	<6.46	<5.79	<2.40	<4.53	<3.81	<4.84	<2.09	<6.84	<5.78	<6.29	<9.88	<17.8	<12.3	<6.11	<0.842	<5.43	<5.41	<0.901	<1.93	<0.901	0
4/8/2025	<1.33	<b>41.7</b>	<b>52.8</b>	<9.03	<7.19	<9.03	<9.14	<8.01	<9.34	<9.34	<6.47	<9.14	<9.24	<9.24	<b>112</b>	<14.4	<6.26	<b>12.7JM</b>	<6.57	<8.01	<8.01	<2.16	<2.16	<b>0.4506</b>	
MW-10	10/18/2010	0	0	0	0		0								0	0	--								0
	8/21/2019	0	4.6 J	4.6 J	<52	<52	<52	<52				ND		35 J*	<52	<100	<100								0.1
	8/21/2019 (FD)	0	11 J*	19 J*	3.6 J*	8.1 J	18 J*	2.4 J*	0.92 J*	0.85 J*	6.8 J*	1.3 J*	13 J*	64 J*	<55	<110	<110	0.64 J*	2.4 J*	0.53 J*	6.6 J*	0.45 J*	0.43 J*	0.43 J*	3.7
	3/5/2021	<0.539	3.86 J	7.26 J	<1.39	<1.72	<1.72	<1.11	<1.15	<1.11	<1.15	<1.24	<1.56	<1.26	<1.56	17.3 J	<2.61	<0.824	<0.824	<0.976	<0.951	<0.976	<0.731	<0.731	0.0438
	2/22/2022	<0.652	50.8	92.3	12.5 J	<1.37	33.1	<1.64	3.42 J	2.64 J	18.2 J	<1.25	<1.75	<1.23	27.1 D,M	347	38.7 J	<1.20	<1.20	<0.989	<0.961	10.9 J	<0.652	4.28 J	1.35
	2/22/2022 (FD)	<0.658	30.4	55.0	8.11 J	<1.18	20.7 J	<1.94	<1.32	<1.73	7.70 J	<1.47	<1.99	<1.42	16.9 D,J,M	221	24.7 J	<1.35	<1.35	<0.898	<0.873	5.86 J	<0.743	3.01 J	0.459
	8/23/2022	<0.920	73.7	134	19.8 J	<2.07	54.1	4.00 J	4.45 J	4.48 J	30.3	<1.09	<1.47	<1.31	39.7 D,M	520	62.4	<2.07	<2.07	<0.968	<0.949	18.7 D,J,M	0.883	10.1 D,M	2.40
	8/23/2022 (FD)	<0.956	59.5	108.0	18.0 J	<1.75	44.2	4.15 J	4.08 J	3.79 J	26.0 J	<1.36	<1.75	<1.49	38.9 D,J,M	398	49.5 J	<1.89	<1.89	<0.926	<0.920	16.3 D,J,M	<0.883	12.5 D,M	2.11
	2/22/2023	<0.619	82.9	147	17.8 J	<5.76	50.6	2.3	4.23	3.77	15.9	<1.57	<2.27	<1.77	18.5	592	62.2	<5.37	<1.30	<0.914	<0.805	5.31	<0.500	<0.500	2.23
	2/22/2023 (FD)	<0.660	92.1	165.0	21.8 J	<5.07	21.8	2.47 J	4.82 J	5.67 J	34.5	<1.37	<1.92	<1.58	10.9	729	69.5	1.35 J	1.35	<0.840	<0.743	<8.82	<0.529	<0.665	4.02
	8/22/2023	<5.20	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	24.9 J	<52.0	<26.0	<26.0	<26.0	<26.0	<26.0	<5.20	<5.20	0
	8/23/2023 (FD)	<4.84	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	18.6 J	<48.4	<24.2	<24.2	<24.2	<24.2	<24.2	<4.84	<4.84	0
	2/27/2024*	<4.74	7.77 J	13.5 J	<23.7	<23.7	<23.7	<23.7	<23.7	<23.7	<23.7	<23.7	<23.7	<23.7	<23.7	65.8	<47.4	<23.7	<23.7	<23.7	<23.7	<23.7	<4.74	<4.74	0.0974 J
	2/27/2024*	<4.69	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	59	<46.9	<23.5	<23.5	<23.5	<23.5	<23.5	<4.69	<4.69	0.0177
	8/22/2024	<1.99	5.67 J	10.3 J	1.63 J	<5.98	1.63 J	<4.68	<3.93	<4.99	<4.35	<7.07	<5.97	<6.49	<1.35	26.5 J	<12.7	<6.30	<1.31	<5.61	<5.59	<0.993	<1.99	<0.986	0.081
4/9/2025	<1.38	<8.51	<8.51	<9.36	<7.45	<9.36	<9.47	<8.3	<9.68	<9.68	<6.7	<9.47	<9.57	<9.57	<b>76.4</b>	<14.9	<6.49	<6.49	<6.81	<8.3	<8.3	<2.23	<2.23	<b>0.02292</b>	
MW-11	10/18/2010	0	0	0	0		0								0	0	--								0
	2/22/2022	0.983	7.05 J	13.5 J	<1.85	<2.24	<2.24	<1.96	<1.94	<1.79	<1.96	<1.27	<1.78	<1.27	3.97 J	33.2 J	3.15	<1.77	<1.77	<1.53	<1.52	4.81 J	<0.946	5.17	0.0805
	8/23/2022	<0.773	5.92 J	11.8 J	<0.942	<1.39	11.6 J	<2.09	<2.19	<2.00	<2.19	<1.06	<1.34	<1.13	3.66 D,J,M	25.5 J	<3.85	<1.17	<1.17	<0.601	<0.622	3.50 D,J,M	<0.755	8.46 D,M	0.0669
	2/22/2023	<0.621	2.28 J	3.96	<0.969	<0.989																			

**Table 2-4  
Dioxin Analytical Results  
McNamara and Peepe Lumber Mill**

Well Name	Date	2,3,7,8-TCDD	1,2,3,4,6,7,8-HpCDD	Total HpCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	Total HpCDF	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	Total HxCDD	1,2,3,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	2,3,4,6,7,8-HxCDF	Total HxCDF	OCDD	OCDF	1,2,3,7,8-PeCDD	Total PeCDD	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	Total PeCDF	2,3,7,8-TCDF	Total TCDF	TEQ
MW-12	3/5/2021	<0.542	2.37 J	6.27 J	<1.63	<2.15	<2.15	<1.52	<1.55	<1.51	<1.55	<1.39	<1.89	<1.39	<1.89	15.5 J	<2.42	<0.976	<0.976	<0.882	<0.828	<0.882	<0.717	<0.717	<0.0284
	2/22/2022	<0.656	2.78 J	6.36 J	<1.31	<1.70	<1.70	<2.07	<2.19	<1.96	<2.19	<0.859	<1.21	<0.857	1.99 J	19.8 J	<2.82	<1.24	<1.24	<1.33	<1.32	<1.33	<0.675	<0.675	0.0337
	8/23/2022	<0.820	<2.69	<2.69	<0.851	<1.23	<1.23	<1.56	<1.55	<1.46	<1.56	<1.20	<1.62	<1.18	<1.62	17.1 J	<2.05	<0.969	<0.969	<0.718	<0.761	<0.761	<0.818	<0.818	0.00513
	2/22/2023	<0.448	3.12 J	3.12	<1.92	<1.99	<1.99	<1.48	<1.65	<1.73	<1.73	<1.47	<2.14	<1.63	<2.14	<15.6	<3.63	<0.860	<0.860	<0.527	<0.451	<0.527	<0.278	<0.278	0.0312
	8/23/2023	<4.82	<24.1	<24.1	<24.1	<24.1	<24.1	<24.1	<24.1	<24.1	<24.1	<24.1	<24.1	<24.1	<24.1	136	<48.2	<24.1	<24.1	<24.1	<24.1	<24.1	<4.82	<4.82	0.0408
	2/27/2024*	<4.78	<23.9	<23.9	<23.9	<23.9	<23.9	<23.9	<23.9	<23.9	<23.9	<23.9	<23.9	<23.9	<23.9	41.5 J,M	<47.8	<23.9	<23.9	<23.9	<23.9	<23.9	<4.78	6.51	0.0125 J
	8/22/2024	<1.97	<5.36	<0.942	<6.60	<5.92	<1.64	<4.63	<3.89	<4.94	<2.11	<6.99	<5.91	<6.43	<1.28	<18.2	<12.5	<6.24	<6.42	<5.55	<5.53	<0.925	<1.97	<1.00	0
4/9/2025	<1.45	<8.95	<8.95	<9.84	<7.83	<9.84	<9.96	<8.72	<10.2	<10.2	<7.05	<9.96	<10.1	<10.1	<b>74.9</b>	<15.7	<6.82	<6.82	<7.16	<8.72	<8.72	<2.35	<b>4.03J</b>	<b>0.02247</b>	
MW-13	2/22/2022	<0.677	<1.83	<1.83	<1.23	<1.69	<1.69	<1.38	<1.45	<1.40	<1.45	<0.855	<1.19	<0.850	<1.19	13.3 J	<1.90	<0.928	<0.928	<0.866	<0.822	<0.866	<0.767	<0.767	0.00399
	8/23/2022	<0.837	<2.83	<2.83	<0.919	<1.22	<1.22	<2.14	<2.21	<2.04	<2.21	<0.776	<1.06	<0.782	<1.06	13.6 J	<1.96	<1.02	<1.02	<0.661	<0.712	<0.712	<0.667	3.19 J,M	0.00408
	2/22/2023	<0.638	<2.59	<2.59	<2.28	<2.35	<2.35	<1.18	<1.45	<1.47	<1.47	<0.737	<1.05	<0.899	<1.05	14.5 J	<10.7	<0.897	<0.897	<0.493	<0.432	<0.493	<0.363	<0.477	0.00435
	8/22/2023	<4.71	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	48.8	<47.1	<23.5	<23.5	<23.5	<23.5	<23.5	4.71	<4.71	0.0146
	2/27/2024*	<4.76	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	34.5	<23.8	34.5	<47.6	<47.6	<23.8	<23.8	<23.8	<23.8	<23.8	<4.76	<4.76	3.45
	8/22/2024	<1.97	<5.36	<2.60	<6.60	<5.91	<2.94	<4.63	<3.89	<4.94	<10.8	<6.99	<5.90	<6.42	<10.8	<18.2	<12.5	<6.23	<1.24	<5.55	<5.52	<2.01	<1.97	<1.05	0
	4/9/2025 (FD)	<1.42	<8.76	<8.76	<9.64	<7.67	<9.64	<9.75	<8.54	<9.97	<9.97	<6.9	<9.75	<9.86	<9.86	<27.4	<15.3	<6.68	<b>11.0JM</b>	<7.01	<8.54	<8.54	<2.3	<2.3	0
4/9/2025	<1.36	<8.37	<8.37	<9.21	<7.32	<9.21	<9.31	<8.16	<9.52	<9.52	<6.59	<9.31	<9.41	<9.41	<26.2	<14.6	<6.38	<6.38	<6.69	<8.16	<8.16	<2.2	<2.2	0	
MW-14	8/23/2022	<0.897	17.8 J	41.9	3.85 J	<1.04	17.3 J	3.51 J	<1.17	<1.07	3.51 J	<0.625	<0.834	<0.658	5.22 D,J,M	330	16.4 J	<1.05	<1.05	<0.766	<0.758	<1.26	<0.560	0.927 J	0.671
	2/22/2023	<0.530	<4.62	<0.996	<0.858	<0.969	<0.969	<1.15	<1.25	<1.25	<1.25	<0.510	<0.748	<0.594	<0.748	26.7 J	<10.8	<1.42	<1.42	<0.402	<0.352	<0.402	<0.372	<0.322	0.00801
	8/22/2023	<4.84	11.0 J	11.0 J	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	133	<48.4	<24.2	<24.2	<24.2	<24.2	<24.2	<4.84	3.29 J,M	0.0399
	2/28/2024*	<4.76	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	94.9	<47.6	<23.8	<23.8	<23.8	<23.8	<23.8	<4.76	<4.76	0.0285
	8/22/2024	<1.74	<4.74	<2.28	<5.83	<5.22	<1.07	<4.09	<3.43	<4.36	<2.08	<6.17	<5.21	<5.67	<1.22	<16.0	<11.1	<5.51	<0.752	<4.90	<4.88	<0.665	<1.74	<0.686	0
4/9/2025	<1.41	<8.69	<8.69	<9.55	<7.6	<9.55	<9.66	<8.47	<9.88	<9.88	<6.84	<9.66	<9.77	<9.77	<b>98.4</b>	<15.2	<6.62	<6.62	<6.95	<8.47	<8.47	<2.28	<b>3.91J</b>	<b>0.02952</b>	
MW-15	8/22/2023	<4.89	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	85.6	<48.9	<24.4	<24.4	<24.4	<24.4	<24.4	<4.89	4.89 J,M	0.0257
	2/27/2024*	<4.76	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	19.6 J	<23.8	19.6 J	24.8 J	<47.6	<23.8	<23.8	<23.8	<23.8	<23.8	<4.76	3.43 J	1.97 J
	8/22/2024	<1.90	<5.17	<2.56	<6.36	<5.70	<2.02	<4.46	<3.75	<4.76	<2.74	<6.74	<5.69	<6.19	<12.7	8.61 J	<12.1	<6.01	<0.969	<1.25	<5.33	<1.25	<1.90	<0.934	0.00258
	4/8/2025	<1.39	<8.54	<8.54	<9.39	<7.47	<9.39	<9.50	<8.32	<9.71	<9.71	<6.72	<9.5	<9.61	<9.61	<b>92.0</b>	<14.9	<6.51	<6.51	<6.83	<8.32	<8.32	<2.24	<b>2.77J</b>	<b>0.0276</b>
MW-16	8/22/2023	<5.09	<25.5	<25.5	<25.5	<25.5	<25.5	<25.5	<25.5	<25.5	<25.5	<25.5	<25.5	<25.5	<25.5	58.2	<50.9	<25.5	<25.5	<25.5	<25.5	<25.5	<5.09	<5.09	0.0175
	2/28/2024*	<4.76	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<47.6	<47.6	<23.8	<23.8	<23.8	<23.8	<23.8	<4.76	<4.76	0
	8/22/2024	<1.86	<5.07	<3.09	<6.24	<5.59	<1.70	<4.38	<3.67	<4.67	<1.91	<6.61	<5.58	<6.07	<15.3	<17.2	<11.8	<5.89	<1.18	<5.24	<5.22	<0.942	<1.86	<0.923	0
4/9/2025	<2.55	<15.7	<15.7	<17.3	<13.8	<17.3	<17.50	<15.3	<17.9	<17.9	<12.4	<17.5	<17.7	<17.7	<49.1	<27.5	<12.00	<12	<12.6	<15.3	<15.3	<4.13	<4.13	0	
MW-17	8/22/2023	<1.92	3.67 J	3.67 J	<6.42	<5.75	<3.11	<4.50	<3.78	<4.81	<2.45	<6.80	<5.74	<6.25	<2.43	<17.7	<12.2	<6.07	<1.55	<5.40	<5.38	<1.19	<1.92	<1.00	0.0367
	4/9/2025	<1.33	<b>13.7J</b>	<b>25.5</b>	<8.98	<7.14	<8.98	<9.08	<7.96	<9.29	<9.29	<6.43	<9.08	<9.18	<9.18	<b>416</b>	<14.3	<6.22	<6.22	<6.53	<7.96	<7.96	<2.14	<b>8.57</b>	<b>0.2618</b>
MW-18	8/21/2024	<2.02	<5.48	<2.10	<6.75	<6.05	<1.28	<4.74	<3.98	<5.05	<1.71	<7.15	<6.04	<6.57	<1.06	<18.6	<12.8	<6.38	<1.21	<5.68	<5.65	<0.644	<2.02	<0.705	0
	4/9/2025	<1.38	<8.51	<8.51	<9.36	<7.45	<9.36	<9.47	<8.3	<9.68	<9.68	<6.7	<9.47	<9.57	<9.57	<26.6	<14.9	<6.49	<6.49	<6.81	<8.3	<8.3	<2.23	<2.23	0
MW-19	8/21/2024	<1.90	<5.17	<2.16	<6.37	<5.70	<1.39	<4.46	<3.75	<4.76	<3.15	<6.74	<5.69	<6.19	<1.37	<17.5	<12.1	<6.01	<0.926	<5.35	<5.33	<0.788	<1.90	<0.757	0
	8/21/2024 (FD)	<1.86	<5.06	<1.57	<6.23	<5.58	<1.24	<4.37	<3.67	<4.66	<1.84	<6.59	<5.57	<6.06	<1.23	<17.1	<11.8	<5.88	<1.08	<5.24	<5.21	<0.775	<1.86	<0.849	0
	4/9/2025	<1.41	<b>12.5J</b>	<b>12.5J</b>	<9.51	<7.57	<9.51	<9.62	<8.43	<9.84	<9.84	<6.81	<9.62	<9.73	<9.73	<b>446</b>	<15.1	<6.59	<6.59	<6.92	<8.43	<8.43	<2.27	<b>9.73M</b>	<b>0.2588</b>
MW-20	8/21/2024	<1.86	<5.05	<1.49	<6.22	<5.57	<1.25	<4.36	<3.66	<4.65	<2.04	<6.58	<5.56	<6.05	<6.28	<17.1	<11.8	<5.87	<0.879	<5.23	<5.20	<1.05	<1.86</		

# Second Half 2024 Groundwater Monitoring Report

Former McNamara and Peepe Lumber Mill  
1619 Glendale Drive, Arcata, California



**Prepared for:**  
Department of Toxic Substances  
Control

**February 2025**  
**020189.030**



**Phone:** (707) 441-8855 **Email:** [info@shn-engr.com](mailto:info@shn-engr.com)  
**Web:** [shn-engr.com](http://shn-engr.com) • 812 W. Wabash Avenue, Eureka, CA 95501-2138



Phone: (707) 441-8855 Email: info@shn-engr.com Web: shn-engr.com  
812 W. Wabash Avenue, Eureka, CA 95501-2138

Reference: 020189.030

February 24, 2025

Vanessa Davis, P.G.  
California Environmental Protection Agency  
Department of Toxic Substances Control  
700 Heinz Avenue  
Berkeley, CA 94710

**Subject: Second Half 2024 Groundwater Monitoring Report, Former  
McNamara and Peepe Lumber Mill, 1619 Glendale Drive, Arcata,  
California**

Dear Vanessa Davis:

Provided herein is the second half 2024 groundwater monitoring report for the former McNamara and Peepe Lumber Mill located in Arcata, California. SHN performed groundwater monitoring at the site on August 21 and 22, 2024, to assess impacts to groundwater from historical site operations. This report contains a description of field activities and a summary of results for groundwater monitoring. SHN performed this work on behalf of the California Department of Toxic Substances Control.

Please call me at (707) 441-8855 if you have questions or comments regarding this groundwater monitoring report.

Sincerely,

**SHN**

A handwritten signature in blue ink, appearing to read 'Erik J. Nielsen'.

Erik J. Nielsen, P.G., C.H.G.  
Senior Environmental Hydrogeologist

EJN:ame

Enclosure: Report

P:\Eureka\2020\020189-M-P-Mill\030-GW-Reporting\PUBS\rpts\20250224-2SA24-GWM-Rpt.docx



# Second Half 2024 Groundwater Monitoring Report

Former McNamara and Peepe Lumber Mill, 1619  
Glendale Drive, Arcata, California

Prepared for:

**California Department of Toxic Substances Control**

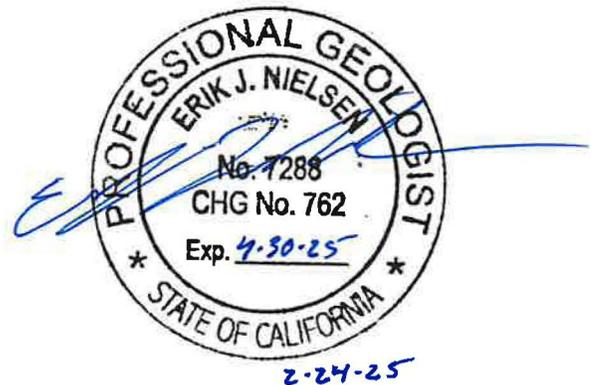
Prepared by:



812 W. Wabash Ave.  
Eureka, CA 95501-2138  
(707) 441-8855

February 24, 2025

QA/QC: E.J.N. *[Signature]*  
Reference: 020189.030



# Table of Contents

	<b>Page</b>
Abbreviations and Acronyms .....	ii
1.0 Introduction .....	1
2.0 Site History .....	1
3.0 Field Activities.....	1
3.1 Monitoring Well Sampling .....	1
3.2 Laboratory Analysis .....	2
3.3 Equipment Decontamination Procedures and Waste Handling.....	2
4.0 Groundwater Monitoring Results .....	3
4.1 Hydrology .....	3
4.2 Groundwater Analytical Results .....	3
4.3 Field Measured Parameters .....	5
5.0 Summary of Results .....	5
6.0 References Cited .....	6

## Appendices

1. Field Notes
2. Historical Data
3. Laboratory Analytical Reports

# List of Illustrations

<b>Figures</b>	<b>Follows Page</b>
1. Project Location Map.....	1
2. Site Plan.....	1
3. Groundwater Elevation Contours, August 21, 2024, .....	3
4. Select Groundwater Concentrations, August 21 and 22, 2024 .....	3

<b>Tables</b>	<b>Page</b>
1. Water Level Data, August 21, 2024.....	3
2. Groundwater Analytical Results, August 21 and 22, 2024 .....	4
3. Field Measured Parameters, August 21 and 22, 2024 .....	5



# Abbreviations and Acronyms

## Units of Measure

<b>Term</b>	<b>Definition</b>
<	"less than" the stated laboratory reporting limit
mg/L	milligrams per liter
mV	millivolts
NTU	Nephelometric turbidity unit
pg/L	picograms per liter
ug/L	micrograms per liter
umhos/cm	micromhos per centimeter

## Additional Terms

<b>Term</b>	<b>Definition</b>
BTOC	below top of casing
DCO <sub>2</sub>	dissolved carbon dioxide
DO	dissolved oxygen
DTSC	California Department of Toxic Substances Control
EC	specific conductance
EPA	U.S. Environmental Protection Agency
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.
M&P	McNamara and Peepe Lumber Mill
MCL	maximum contaminant level
MDL	method detection limit
MW-#	monitoring well-number
NA	not analyzed
NAVD88	North American vertical datum, 1988
NR	no reference
ORP	oxidation-reduction potential
PCP	Pentachlorophenol
PHG	California public health goal
RL	reporting limit
TCDD	2,3,7,8-tetrachlorodibenzeno-p-dioxin
TCP	tetrachlorophenol
TEQ	toxic equivalency factor
WHO	World Health Organization



# 1.0 Introduction

This second half 2024 groundwater monitoring report has been prepared for the former McNamara and Peepe Lumber Mill (M&P), located at 1619 Glendale Drive in Arcata, California (Figure 1). SHN personnel conducted groundwater monitoring at the site on August 21 and 22, 2024. The intent of this monitoring program is to assess groundwater conditions associated with historical operations and contaminant-impacted soils placed beneath a constructed cap. This report contains a description of field activities, laboratory analytical results, and a summary of findings. SHN performed this work on behalf of the California Department of Toxic Substances Control (DTSC).

# 2.0 Site History

From 1967 to 1984, the use of a chemical fungicide containing pentachlorophenol (PCP) and tetrachlorophenol (TCP) occurred at the site to treat lumber. Spillage and drippings from the “green chain” fungicide application area are believed to have caused PCP and TCP contamination to soil and groundwater. In 1998, soils in the green chain area were consolidated and capped with an impervious layer (concrete) to prevent PCP- and TCP-impacted soil from coming into contact with groundwater and surface water. The location of the concrete cap and site groundwater monitoring wells are shown in the former McNamara and Peepe Lumber Mill site plan on Figure 2.

In April 2002, mill operations ceased and use of a water production well at the site was discontinued. This action resulted in higher groundwater elevations across the site (approximately 10 feet) that were previously being artificially suppressed through the extraction of groundwater for mill operations. Testing results from site monitoring wells in December 2003 showed a significant increase in PCP concentrations in groundwater. An investigation conducted in 2005 to evaluate the source of elevated PCP in groundwater determined that dissolution from soil due to a rise in groundwater elevation was the cause (Weiss, 2006).

Numerous investigations have been conducted since 2005 (2010, 2011, 2012, and 2016), and a field investigation completed in August 2022 facilitated a bench-scale study for PCP remediation options at the cap area. The installation of two additional monitoring wells at the site was completed during the 2022 field effort (MW-13 and MW-14) and two more monitoring wells downgradient of the cap in 2023 (MW-15 and MW-16). In August 2024, the installation of four new monitoring wells was completed east of the cap and near the former planer mill (MW-17, MW-18, MW-19 and MW-20). All new wells have been incorporated into the current site monitoring program.

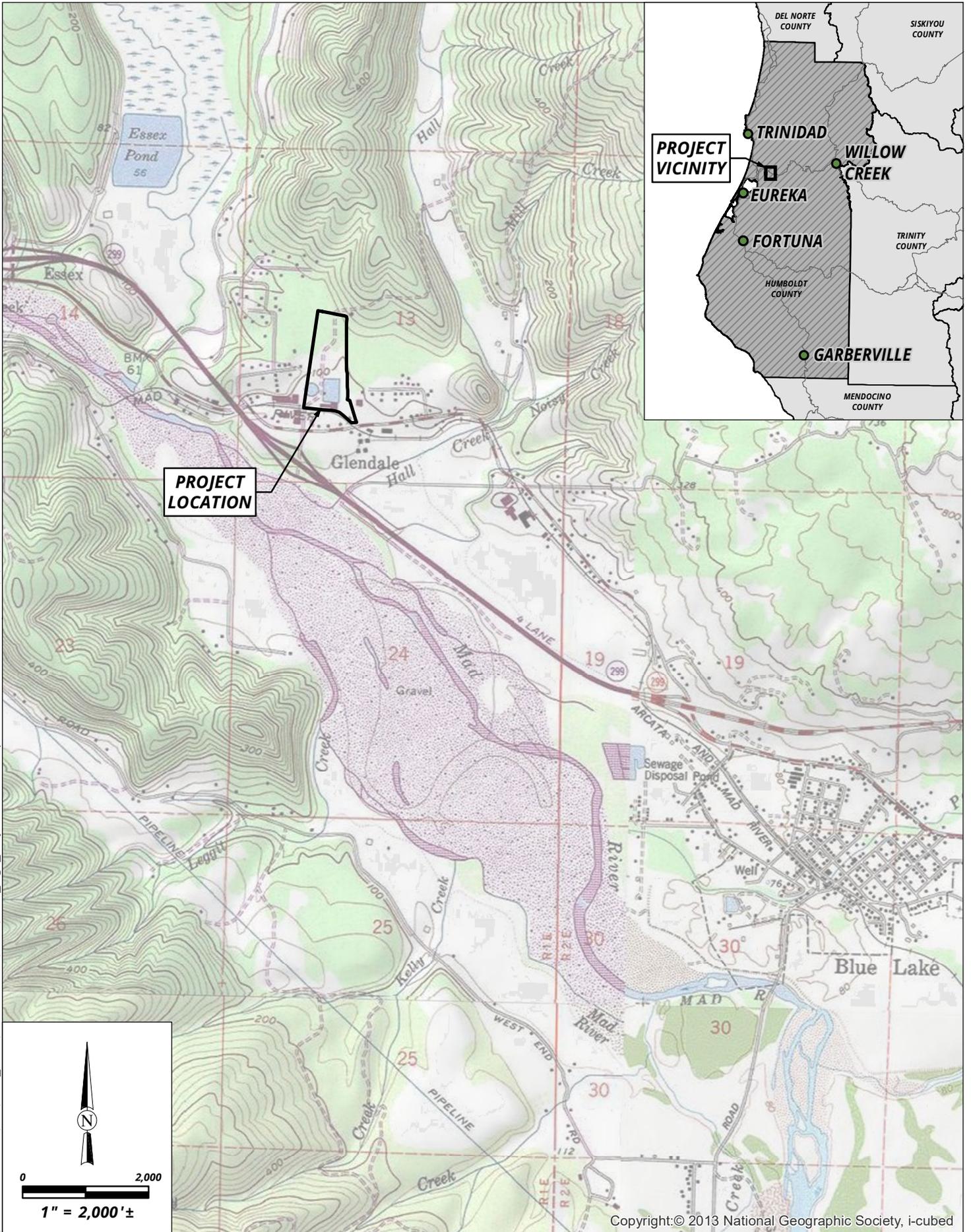
# 3.0 Field Activities

## 3.1 Monitoring Well Sampling

SHN conducted groundwater monitoring of the former McNamara and Peepe Lumber Mill site on August 21 and 22, 2024. Groundwater samples were collected from site monitoring wells MW-1, MW-5, and MW-7 through MW-20. A field duplicate sample was collected from MW-19 during this sampling event. All noted monitoring wells were measured for depth-to-water before being purged and sampled. Site well construction details are summarized in Appendix 2, Table 2-1.



P:\Eureka\2020\020189-M-P-Mill\GIS\PROJ\_MXD\Groundwater\2024\GWC\_Fig\_1\_ProjectLocationMap.mxd USER: mrose DATE: 4/5/24, 11:57AM



Copyright:© 2013 National Geographic Society, i-cubed



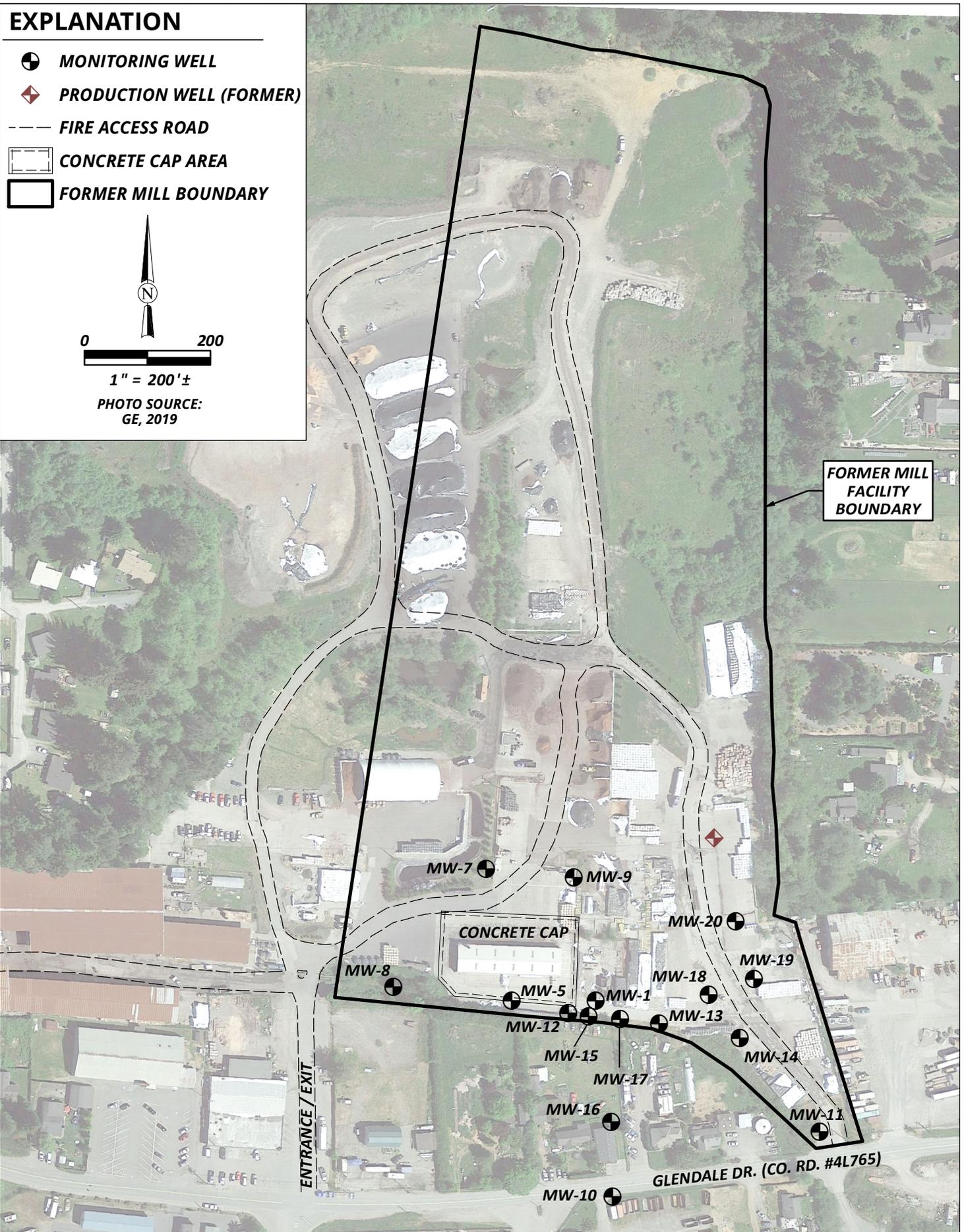
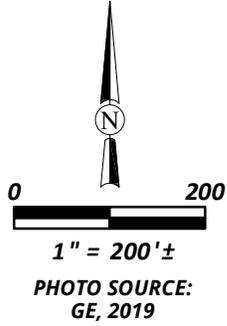
Former McNamara & Peepe Lumber Mill  
 Groundwater Monitoring  
 1619 Glendale Drive, Arcata, California

**Project Location Map**  
 April 2024 - 020189.060

**Figure**  
**1**

# EXPLANATION

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



P:\Eureka\2020\020189-M-P-Mill\GIS\PROJ\_MXD\Groundwater\2024\GWC\_Fig2\_SitePlan20240821.mxd USER: pix4d DATE: 12/11/24, 12:25PM



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

December 2024 - 020189.030

Site Plan **Figure**  
**2**

Prior to sampling, each well was purged by low-flow methodology using a peristaltic pump with new polyethylene tubing. Specific conductance (EC), pH, turbidity, and temperature were monitored periodically during purging activities using calibrated portable instrumentation. Groundwater from each well was also measured for dissolved carbon dioxide (DCO<sub>2</sub>), dissolved oxygen (DO), and oxidation-reduction potential (ORP). Using the depth-to-water meter and low-flow rates to maintain minimal drawdown, a groundwater sample was collected from each purged well after groundwater parameters had stabilized.

The collected water samples were field filtered using a 0.45-micron filter due to elevated turbidity readings before being put into new laboratory-supplied containers. All samples were immediately placed into an ice-filled cooler and submitted to the laboratory for analyses under appropriate chain-of-custody documentation. Field notes for the August 2024 monitoring event are included in Appendix 1.

### **3.2 Laboratory Analysis**

Groundwater samples collected during the sampling event were analyzed for the following constituents:

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

PCP and TCP analysis were completed by Microbac Laboratories, a California-state certified analytical laboratory located in Arcata, California. The reporting limit (RL) and method detection limit (MDL) for each constituent are as follows:

- PCP: RL ranged from 0.30 to 30 micrograms per liter (ug/L); MDL ranged from 0.15 to 15 ug/L
- TCP: RL = 1.0 ug/L; MDL = 0.28 ug/L

Dioxin and furan analysis was completed by Enthalpy Analytical, Inc. a California-state certified analytical laboratory located in Orange, California. The MDL for 2,3,7,8-tetrachlorodibenzeno-p-dioxin (2,3,7,8-TCDD) ranged from 1.86 picograms per liter (pg/L) to 2.02 pg/L.

### **3.3 Equipment Decontamination Procedures and Waste Handling**

All monitoring and sampling equipment was cleaned prior to being transported to the site. All smaller equipment was cleaned using the triple wash system. The equipment was initially washed in a water solution containing Liquinox® cleaner, followed by two distilled water rinses.

All wastewater generated during decontamination of field-sampling equipment and well purge water was stored onsite in 55-gallon drums. The drums are sealed, labeled, and stored onsite pending analysis. Once the water has been characterized, the drums will be properly disposed of at an appropriate disposal facility.



## 4.0 Groundwater Monitoring Results

This section summarizes the data collected at the site during the groundwater monitoring event.

### 4.1 Hydrology

SHN measured depth-to-groundwater in the monitoring wells during the groundwater monitoring event (Table 1).

**Table 1. Water Level Data, August 21, 2024  
Former McNamara and Peepe Lumber Mill, Arcata, California**

Sample Location	Top of Casing Elevation <sup>a</sup> (feet)	Depth-to-Groundwater (feet BTOC) <sup>b</sup>	Groundwater Elevation <sup>a</sup> (feet)	Well Screen Interval (feet BGS) <sup>c</sup>
MW-1	94.82	13.17	81.65	19–23
MW-5	93.50	11.45	82.05	18–23
MW-7	98.41	15.77	82.64	22–37
MW-8	97.03	12.90	84.13	7–24
MW-9	99.68	11.60	88.08	21–25
MW-10	95.79	14.89	80.90	9–24
MW-11	91.20	9.75	81.45	9.5–24.5
MW-12	91.74	10.10	81.64	10–20
MW-13	90.78	8.80	81.98	10–20
MW-14	91.05	9.01	82.04	10–20
MW-15	93.59	11.83	81.76	6–16
MW-16	95.81	14.55	81.26	10–20
MW-17	90.72	9.09	81.63	9–24
MW-18	91.73	8.96	82.77	10–20
MW-19	91.25	8.03	83.22	10–20
MW-20	92.10	5.70	86.40	12–22

<sup>a</sup> Relative to North American vertical datum, 1988 (NAVD88)

<sup>b</sup> BTOC: below top of casing

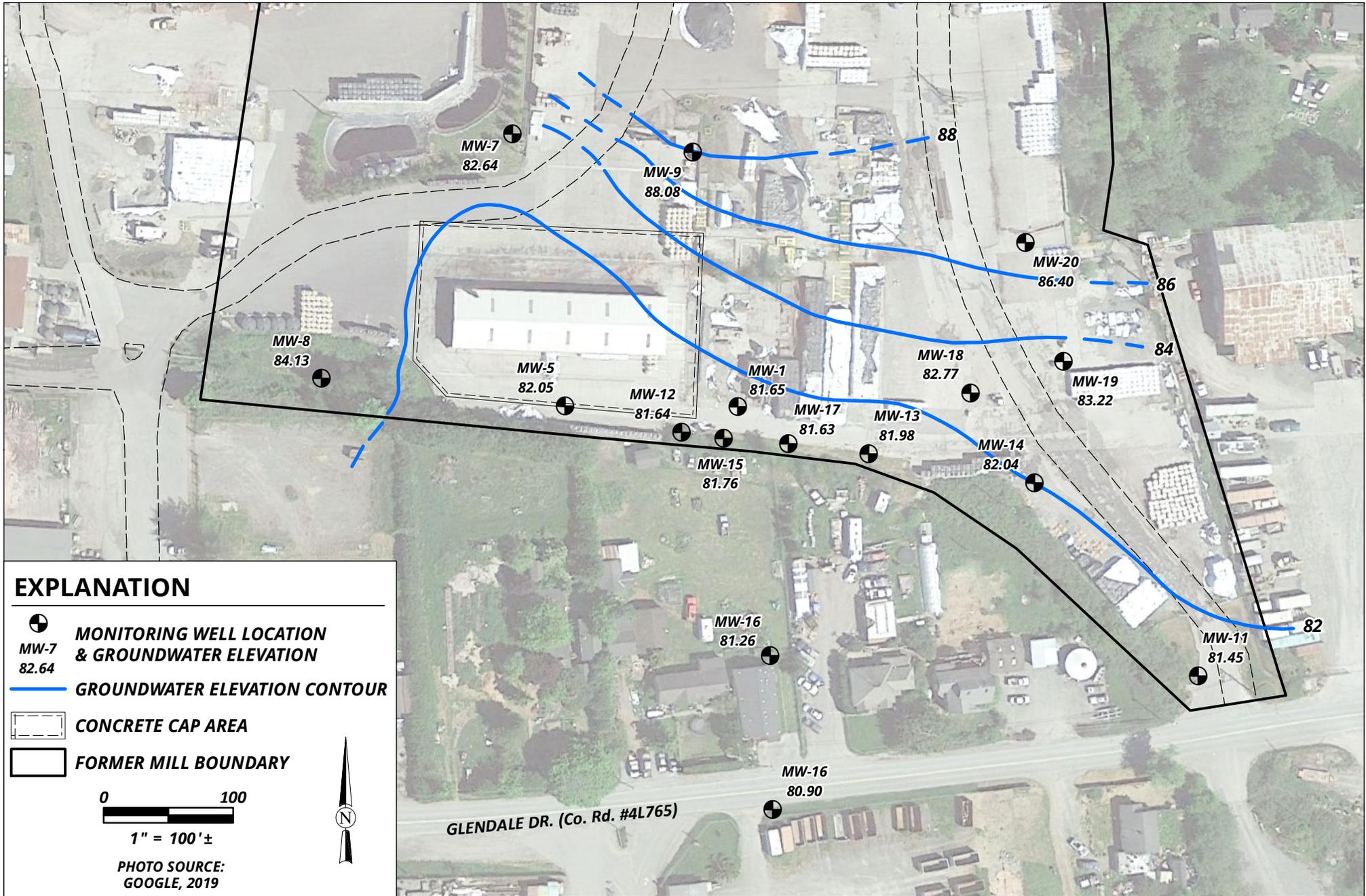
<sup>c</sup> BGS: below ground surface

Based on groundwater elevation data from wells around the cap, groundwater flow direction was to the southwest with a gradient of approximately 0.04 feet per foot. A groundwater contour map for the August 2024 monitoring event is presented as Figure 3. Historical groundwater elevation data is included in Appendix 2, Table 2-2.

### 4.2 Groundwater Analytical Results

Table 2 summarizes groundwater analytical results from the August 2024 sampling event and are shown in Figure 4. Historical groundwater data is included in Appendix 2, Tables 2-3 and 2-4.

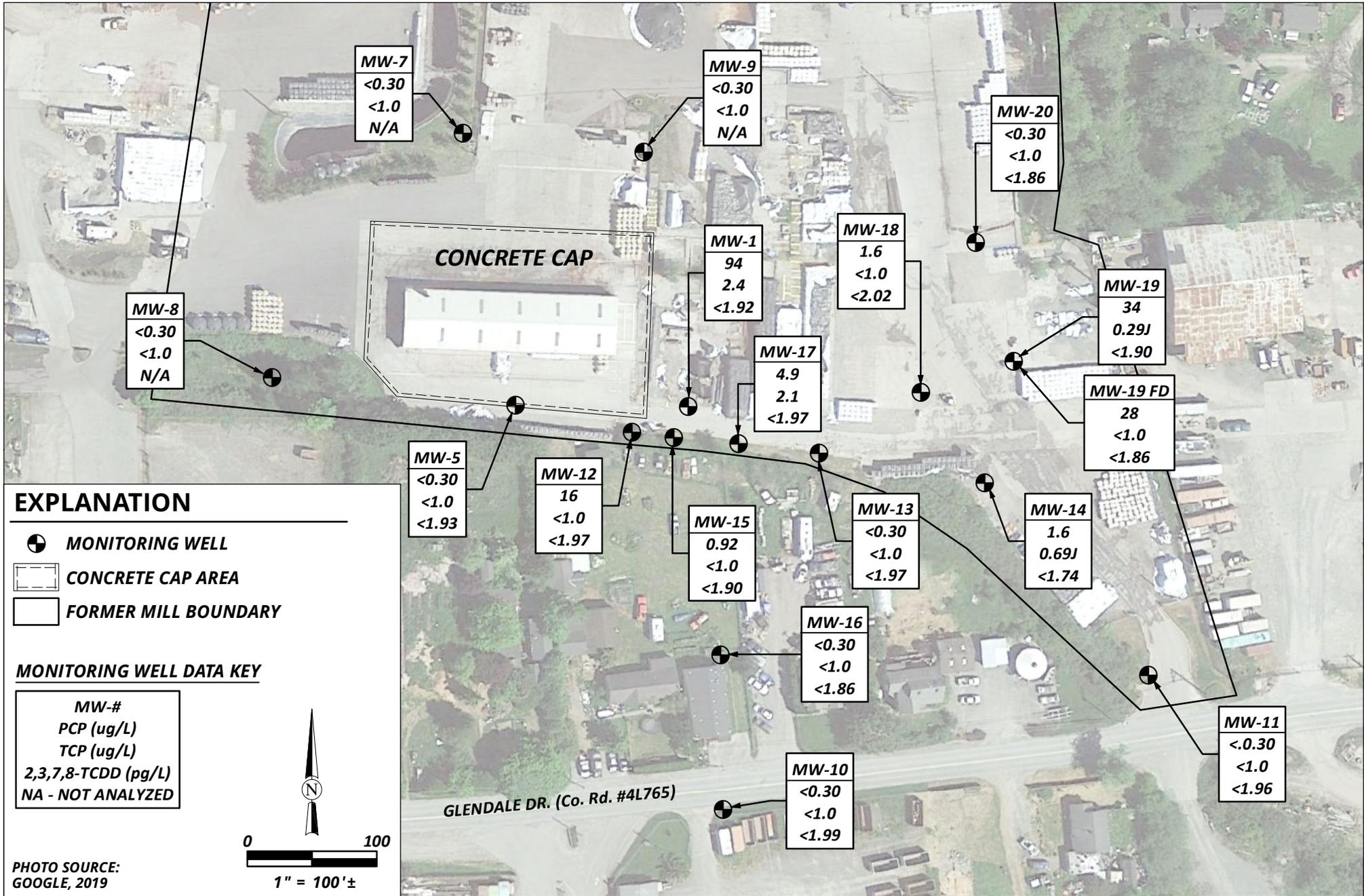




Former McNamara & Peepe Lumber Mill  
Groundwater Monitoring  
1619 Glendale Drive, Arcata, California

**Groundwater Elevation Contours**  
**August 21, 2024**  
October 2024 - 020189.030

**Figure**  
**3**



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

Select Groundwater Concentrations  
August 21, 2024  
020189.030

Figure  
**4**

**Table 2. Groundwater Analytical Results, August 21 and 22, 2024  
Former McNamara and Peepe Lumber Mill, Arcata, California**

Sample Location	2,3,7,8-TCDD <sup>a, b</sup> (pg/L) <sup>c</sup>	2005 WHO TEQ <sup>d</sup> (pg/L)	PCP <sup>e</sup> (µg/L) <sup>f</sup>	TCP <sup>e</sup> (µg/L)
MW-1	<1.92 <sup>g</sup>	1.15	<b>94<sup>h</sup></b>	<b>2.4</b>
MW-5	<1.93	0.00	<0.30	<1.0
MW-7	NA <sup>j</sup>	NA	<0.30	<1.0
MW-8	NA	NA	<0.30	<1.0
MW-9	NA	NA	<0.30	<1.0
MW-10	<1.99	0.0810	<0.30	<1.0
MW-11	<1.96	0.00	<0.30	<1.0
MW-12	<1.97	0.00	<b>16</b>	<1.0
MW-13	<1.97	0.00	<0.30	<1.0
MW-14	<1.74	0.00	<b>1.6</b>	0.69 J
MW-15	<1.90	0.00258	<b>0.92</b>	<1.0
MW-16	<1.86	0.00	<0.30	<1.0
MW-17	<1.92	0.0367	<b>4.9</b>	<b>2.1</b>
MW-18	<2.02	0.00	<b>1.6</b>	<1.0
MW-19	<1.90	0.00	<b>34</b>	0.29 J
MW-20	<1.86	0.00	<0.30	<1.0
Duplicate (MW-19)	<1.86	0.00	<b>28</b>	<1.0
MCL <sup>k</sup>	30	NR <sup>l</sup>	1.0	NR
PHGs <sup>m</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> Samples were analyzed out of hold time, due to laboratory instrument malfunction.

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

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

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

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

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

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

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

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

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

<sup>m</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 2024 sampling event are included in Table 3.

**Table 3. Field Measured Parameters, August 21 and 22, 2024  
Former McNamara and Peepe Lumber Mill, Arcata, California**

Sample Location	DCO <sub>2</sub> <sup>a</sup> (mg/L) <sup>b</sup>	DO <sup>a</sup> (mg/L)	ORP <sup>a</sup> (mV) <sup>c</sup>	EC <sup>a</sup> (umhos/cm) <sup>d</sup>	pH <sup>a</sup> (standard units)	Turbidity <sup>a</sup> (NTU) <sup>e</sup>
MW-1	125	0.5	161	330.5	5.93	7.02
MW-5	185	0.4	122	345.3	5.78	3.13
MW-7	121	2.7	259	108.9	5.77	5.60
MW-8	325	1.2	57	561	6.32	2.80
MW-9	195	1.1	278	250.6	5.97	0.69
MW-10	-75	0.5	160	85.0	5.75	118
MW-11	125	3.3	254	181.6	5.14	9.92
MW-12	250	1.2	167	247.8	5.45	1.89
MW-13	235	0.5	112	423.8	6.24	7.72
MW-14	--	1.4	167	355.1	5.78	42.5
MW-15	--	0.3	139	288.7	6.03	80.1
MW-16	100	0.6	195	190.7	5.09	13.7
MW-17	165	0.4	136	298.1	6.11	29.3
MW-18	250	1.5	323	431.3	6.08	5.48
MW-19	160	1.9	311	337.1	6.20	6.36
MW-20	100	3.0	228	217.7	6.07	36.2

<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 2024 groundwater monitoring event at the former McNamara and Peepe Mill are summarized below.

- World Health Organization (WHO) 2005 toxic equivalent (TEQ) calculated using dioxin/furan TEF concentrations were highest in monitoring well MW-1 at 1.15 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 in any monitoring wells sampled during the event.
- Chlorinated phenols:
  - PCP was detected at concentrations exceeding the state maximum contaminant level (MCL) of 1 ug/L in wells MW-1, MW-12, MW-14, MW-17, MW-18 and MW-19.



- The highest concentration of PCP detected in groundwater was in monitoring well MW-1 at a concentration of 94 ug/L, located in the former sawmill footprint southeast of the cap.
- Chlorinated phenols were identified in newly installed site monitoring wells MW-17, MW-18, and MW-19 located south of the former sawmill, at the former conical burner and the former planer mill.
- TCP was detected at concentrations greater than 1 ug/L in wells MW-1 and MW-17 at 2.4 ug/L and 2.1 ug/L, respectively.
- No phenols were detected in downgradient or offsite wells MW-10, MW-11, and MW-16.

The August 2024 monitoring event continued to show the highest PCP concentrations in groundwater are in well MW-1. Levels show a decrease within a short distance at well MW-15 and MW-17, approximately 25 feet and 40 feet downgradient. PCP was not detected in the groundwater sample collected from well MW-16 located on private property downgradient the cap.

Testing results obtained from wells MW-18, MW-19, and MW-20 are considered initial to assess groundwater contamination around the former conical burner and planer mill. PCP was detected in monitoring well MW-18 located in the former conical burner footprint (1.6 ug/L) and MW-19 located immediately downgradient of the former planer (34 ug/L). Future monitoring events will help further define the extent of contamination in this area.

## 6.0 References Cited

- Google Earth. (April 30, 2019). Aerial Photo of Arcata, California, 40°54'7.24"N and 124° 1'6.39"W. Accessed June 2021. NR:Google Earth.
- National Geographic Society. (2013). Topographic map Arcata, California. Accessed through ESRI i-cubed January 15, 2021. NR:National Geographic Society.
- Office of Environmental Health Hazard Assessment. (March 13, 2019). "California Public Health Goals." Accessed at: <https://oehha.ca.gov/water/public-health-goals-phgs>
- SHN. (2022). "Site Investigation Report of Findings, Former McNamara and Peepe Lumber Mill, 1619 Glendale Drive, Arcata, California." Eureka, CA:SHN.
- State Water Resources Control Board. (March 13, 2019). "Maximum Contaminant Levels," in Title 22 of the California Code of Regulations. Accessed at: [https://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/Chemicalcontaminants.html](https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Chemicalcontaminants.html)
- . (November 5, 2021). "Remediation Evaluation and Bench Scale Study Work Plan, Former McNamara and Peepe Lumber Mill, 1619 Glendale Drive, Arcata, California; EnviroStor ID: 12240115." Eureka, CA:SHN.
- Weiss Associates. (March 2006). *Field Investigation and Sampling Report for Former McNamara and Peepe Lumber Mill, Glendale, California*. NR:Weiss.
- World Health Organization. (October 2006). "The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds," Toxicol. Sci. Oxford OX2 6DP, UK:Oxford University Press.



# Field Notes

1



Daily Field Report		Job No. 020189.010	
		Page 1 of 1	
Project Name m et P mill		Client/Owner DTSC	
General Location of Work McKinleyville, CA		Project Engineer	
Type of Work Groundwater Sample		Supervisor Eric Nielsen	
		Weather 68°F Clear	
		Date 8/21/24	Day of Week Wednesday,
		Technician R. Klankkern	
09:30	on site.		
	- check in with Royal Gold Personnel.		
	All monitoring wells will be opened and allowed to equilibrate before		
	Depth to water will be measured at each monitoring well.		
	After DTW measurements have been taken and recorded, the monitoring		
	wells will be Purged following ASTM D6771-21 low-flow Purging and		
	Sampling.		
09:45	Start opening All monitoring wells.		
11:45	The Depth to water has been measured and recorded for each monitoring		
	wells.		
	- The four new monitoring wells have not yet been surveyed.		
	- starting at the up-gradient wells.		
16:50	Royal Gold have locked their gates.		
	- leaving m et P mill.		
	The samples collected today will be put into a refrigerator until		
	the sample can be delivered to the laboratories.		
<i>R. Klankkern</i>			
		Copy given to:	Reported By: R. Klankkern



Daily Field Report		Job No. 020189.010	
		Page 1 of	
Project Name M&P Mill		Client/Owner DTSC	
General Location of Work McKinleyville, CA		Project Engineer	
Type of Work Groundwater Monitoring		Supervisor Erik Nielsen	
		Weather 60° F cloudy	
		Date 8/22/24	Day of Week Thurs
		Technician R. Klakken	
08:00	Arrive at the former M and P mill, - Checked in with Royal Gold, - Safety tail gate.		
08:45	Set up at mw-11, located within the exit from the site, - will resume the purging and sampling of the monitoring wells.		
14:30	Starting to rain. Purging mw-12		
16:30	all monitoring wells have been purged and sampled, - Leaving M and P mill.		
<i>Royal Klakken</i>			
<p><b>Note:</b> All purge and decon water was stored on-site in waste drums and will be disposed of properly after characterization.</p>			
		Copy given to:	Reported By: R. Klakken





Water Sampling Data Sheet

Project Name: M & P Mill Date/Time: 8/22/24 15:20  
 Project No.: 020189.010 Sampler Name: R. Klakken  
 Location: Mckinleyville Screen Interval: 19-23  
 Monitoring Well: MW-1 Weather: 62° F - Rain

Total Well Depth (feet)

[ ]

- Pumping water level: ±0.1ft
- Turbidity: ±10% of reading or ±1 NTU whichever is greater
- Temperature: ±3% of reading
- D.O: ±10% of reading or ±0.2 mg/L whichever is greater
- ORP: ±10% of reading or ±10mV whichever is greater
- Specific Conductance: ±3% of reading
- pH: ±0.2%

Time	DO (mg/L)	ORP (mV)	Spec Cond (µS/cm)	Temp (°C)	pH	Turbidity (NTU)	DTW (feet)	Purged (L)	Comments
15:29	0.5	152	328.8	17.3	5.91	6.73	13.25	0.5	
15:32	0.4	156	329.8	17.3	5.92	7.00	13.25	1.5	
15:35	0.3	160	330.1	17.4	5.92	7.02	13.25	2.5	
15:38	0.3	161	330.5	17.4	5.93	7.02	13.25	3.5	

Pump used: \_\_\_\_\_ Volume Removed: 1.0 (gal)

Laboratory Information

Sample ID	No. & Type of Containers	Preservative	Laboratory	Analyses
MW-1				

Well Condition/Remarks: CO2 -125

Sample Time: 15:45

Sample criteria per ASTM D6771-21\_Low-Flow Purging and Sampling



Water Sampling Data Sheet

Project Name: M & P Mill Date/Time: 8/22/24 11:45  
 Project No.: 020189.010 Sampler Name: R. Klakken  
 Location: McKinleyville Screen Interval: 18-23  
 Monitoring Well: MW-5 Weather: 66°F cloudy

Total Well Depth (feet)

- Pumping water level: ±0.1ft
- Turbidity: ±10% of reading or ±1 NTU whichever is greater
- Temperature: ±3% of reading
- D.O: ±10% of reading or ±0.2 mg/L whichever is greater
- ORP: ±10% of reading or ±10mV whichever is greater
- Specific Conductance: ±3% of reading
- pH: ±0.2%

Time	DO (mg/L)	ORP (mV)	Spec Cond (µS/cm)	Temp (°C)	pH	Turbidity (NTU)	DTW (feet)	Purged (L)	Comments
11:50	0.4	85	275.5	16.6	5.75	-	12.18	0	
11:53	0.3	94	322.7	16.3	5.75	3.54	12.18	1	
11:56	0.3	106	339.8	16.1	5.78	4.11	12.18	2	
11:59	0.2	116	344.4	16.1	5.79	4.43	12.18	3	
12:02	0.3	122	345.3	16.1	5.78	3.13	12.18	4	

Pump used: \_\_\_\_\_ Volume Removed: 1 1/4 (gal)

Laboratory Information

Sample ID	No. & Type of Containers	Preservative	Laboratory	Analyses

Well Condition/Remarks: CO2 - 185

Sample Time: 12:05



Water Sampling Data Sheet

Project Name: M&P Mill Date/Time: 8/21/24
Project No.: 020189.010 Sampler Name: R. Klakken
Location: McKameyville Screen Interval: 22-37
Monitoring Well: mw-7 Weather: 70°F Clear

Total Well Depth (feet) [ ]
Pumping water level: ±0.1ft
Turbidity: ±10% of reading or ±1 NTU whichever is greater
Temperature: ±3% of reading
D.O: ±10% of reading or ±0.2 mg/L whichever is greater
ORP: ±10% of reading or ±10mV whichever is greater
Specific Conductance: ±3% of reading
pH: ±0.2%

Table with 10 columns: Time, DO (mg/L), ORP (mV), Spec Cond (µS/cm), Temp (°C), pH, Turbidity (NTU), DTW (feet), Purged (L), Comments. Contains 5 rows of data.

Pump used: Volume Removed: 1 1/2 (gal)

Laboratory Information

Table with 5 columns: Sample ID, No. & Type of Containers, Preservative, Laboratory, Analyses. Includes handwritten 'Pct/TCp' in the Analyses column.

Well Condition/Remarks: CO2 - 12/

Sample Time: 14:00



Water Sampling Data Sheet

Project Name: MGP Mill Date/Time: 8/22/24 11:10
Project No.: 020189.010 Sampler Name: R. Klakken
Location: McKinleyville Screen Interval: 7-24
Monitoring Well: MW-8 Weather: 62°F

Total Well Depth (feet) [ ]
• Pumping water level: ±0.1ft
• Turbidity: ±10% of reading or ±1 NTU whichever is greater
• Temperature: ±3% of reading
• D.O: ±10% of reading or ±0.2 mg/L whichever is greater
• ORP: ±10% of reading or ±10mV whichever is greater
• Specific Conductance: ±3% of reading
• pH: ±0.2%

Table with 10 columns: Time, DO (mg/L), ORP (mV), Spec Cond (µS/cm), Temp (°C), pH, Turbidity (NTU), DTW (feet), Purged (L), Comments. Contains 6 rows of handwritten data.

Pump used: \_\_\_\_\_ Volume Removed: 3/4 (gal)

Laboratory Information

Table with 5 columns: Sample ID, No. & Type of Containers, Preservative, Laboratory, Analyses. Contains 3 empty rows.

Well Condition/Remarks: CO2 - 375

Sample Time: 11:35



Water Sampling Data Sheet

Project Name: Mat P Date/Time: 8/21/24 13:00
Project No.: 020189.010 Sampler Name: R. Klunkken
Location: McKinleyville Screen Interval: 21-25
Monitoring Well: MW-9 Weather: 70°F Clear

Total Well Depth (feet)

[Empty box for Total Well Depth]

- Pumping water level: ±0.1ft
Turbidity: ±10% of reading or ±1 NTU whichever is greater
Temperature: ±3% of reading

- D.O: ±10% of reading or ±0.2 mg/L whichever is greater
ORP: ±10% of reading or ±10mV whichever is greater
Specific Conductance: ±3% of reading
pH: ±0.2%

Table with 10 columns: Time, DO (mg/L), ORP (mV), Spec Cond (µS/cm), Temp (°C), pH, Turbidity (NTU), DTW (feet), Purged (L), Comments. Contains 6 rows of data.

Pump used: Volume Removed: 1.75 (gal)

Laboratory Information

Table with 5 columns: Sample ID, No. & Type of Containers, Preservative, Laboratory, Analyses. Includes handwritten entry 'PCP/TCP'.

Well Condition/Remarks: COE -195

Sample Time: 13:30



Water Sampling Data Sheet

Project Name: Mex P Date/Time: 8/22/24 09:50
Project No.: 020189.010 Sampler Name: R. Klakken
Location: McKinleyville Screen Interval: 9-24
Monitoring Well: MW-10 Weather: 60°F

Total Well Depth (feet) [ ]
• Pumping water level: ±0.1ft
• Turbidity: ±10% of reading or ±1 NTU whichever is greater
• Temperature: ±3% of reading
• D.O: ±10% of reading or ±0.2 mg/L whichever is greater
• ORP: ±10% of reading or ±10mV whichever is greater
• Specific Conductance: ±3% of reading
• pH: ±0.2%

Table with 10 columns: Time, DO (mg/L), ORP (mV), Spec Cond (µS/cm), Temp (°C), pH, Turbidity (NTU), DTW (feet), Purged (L), Comments. Contains 6 rows of data.

Pump used: \_\_\_\_\_ Volume Removed: 1.75 (gal)

Laboratory Information

Table with 5 columns: Sample ID, No. & Type of Containers, Preservative, Laboratory, Analyses. Contains 3 empty rows.

Well Condition/Remarks: CO2 -75

Sample Time: 10:10



### Water Sampling Data Sheet

Project Name: M & P Date/Time: 8/22/24 08:55  
 Project No.: 020189.010 Sampler Name: R. Klakken  
 Location: Mckinleyville Screen Interval: 9.5 - 24.5  
 Monitoring Well: MW-11 Weather: 60°F cloudy

**Total Well Depth (feet)**

- Pumping water level: ±0.1ft
- Turbidity: ±10% of reading or ±1 NTU whichever is greater
- Temperature: ±3% of reading
- D.O: ±10% of reading or ±0.2 mg/L whichever is greater
- ORP: ±10% of reading or ±10mV whichever is greater
- Specific Conductance: ±3% of reading
- pH: ±0.2%

Time	DO (mg/L)	ORP (mV)	Spec Cond (µS/cm)	Temp (°C)	pH	Turbidity (NTU)	DTW (feet)	Purged (L)	Comments
09:11	3.3	223	199.8	17.3	5.17	1.66	9.95	1	
09:14	2.0	229	195.6	17.3	5.15	2.06	9.95	2	
09:17	1.5	235	194.5	17.4	5.14	1.97	9.95	3	
09:20	1.3	238	194.8	17.4	5.14	1.60	9.95	4	
09:23	1.2	246	187.3	17.5	5.15	1.14	9.95	5	
09:26	1.6	254	181.6	17.5	5.14	1.24	9.95	6	

Pump used: \_\_\_\_\_ Volume Removed: 1 1/4 (gal)

Laboratory Information				
Sample ID	No. & Type of Containers	Preservative	Laboratory	Analyses

Well Condition/Remarks: CO<sub>2</sub> - 125

Sample Time: 0930



Water Sampling Data Sheet

Project Name: Met P Mill Date/Time: 8/22/24 14:20  
 Project No.: 020189.010 Sampler Name: R. Klakken  
 Location: McKinleyville Screen Interval: 10-20  
 Monitoring Well: mw-12 Weather: 65°F - Drizzle

Total Well Depth (feet)

- Pumping water level: ±0.1ft
- Turbidity: ±10% of reading or ±1 NTU whichever is greater
- Temperature: ±3% of reading

- D.O: ±10% of reading or ±0.2 mg/L whichever is greater
- ORP: ±10% of reading or ±10mV whichever is greater
- Specific Conductance: ±3% of reading
- pH: ±0.2%

Time	DO (mg/L)	ORP (mV)	Spec Cond (µS/cm)	Temp (°C)	pH	Turbidity (NTU)	DTW (feet)	Purged (L)	Comments
14:25	1.2	167	248.4	15.4	5.71	6.39	10.35	1.5	
14:28	0.7	167	239.9	15.4	5.70	2.80	10.35	2.5	
14:31	0.5	167	241.7	15.3	5.67	2.62	10.35	3.5	
14:34	0.4	167	245.5	15.3	5.66	1.89	10.35	4.5	
14:37	0.4	167	247.8	15.2	5.65	-	10.35	6.5	

Pump used: \_\_\_\_\_ Volume Removed: 1.2 (gal)

Laboratory Information

Sample ID	No. & Type of Containers	Preservative	Laboratory	Analyses

Well Condition/Remarks:

CO<sub>2</sub> - 250

Sample Time: 14:40



Water Sampling Data Sheet

Project Name: MEX Date/Time: 8/22/24 12:57
Project No.: 020189.010 Sampler Name: R. Klakken
Location: McKinleyville Screen Interval: 10-20
Monitoring Well: MW-13 Weather: 65°F cloudy

Total Well Depth (feet) [ ]
• Pumping water level: ±0.1ft
• Turbidity: ±10% of reading or ±1 NTU whichever is greater
• Temperature: ±3% of reading
• D.O: ±10% of reading or ±0.2 mg/L whichever is greater
• ORP: ±10% of reading or ±10mV whichever is greater
• Specific Conductance: ±3% of reading
• pH: ±0.2%

Table with 10 columns: Time, DO (mg/L), ORP (mV), Spec Cond (µS/cm), Temp (°C), pH, Turbidity (NTU), DTW (feet), Purged (L), Comments. Contains 6 rows of data.

Pump used: \_\_\_\_\_ Volume Removed: 2 1/2 (gal)

Laboratory Information

Table with 5 columns: Sample ID, No. & Type of Containers, Preservative, Laboratory, Analyses. Contains 3 empty rows.

Well Condition/Remarks: CO2 - 235

Sample Time: 13:25



Water Sampling Data Sheet

Project Name: M & P Mill Date/Time: 8/22/24 12:18  
 Project No.: 020189.010 Sampler Name: R. Klakken  
 Location: Mckinelyville Screen Interval: 10-20  
 Monitoring Well: mw-14 Weather: 66°F Cloudy

**Total Well Depth (feet)**

- Pumping water level: ±0.1ft
- Turbidity: ±10% of reading or ±1 NTU whichever is greater
- Temperature: ±3% of reading
- D.O: ±10% of reading or ±0.2 mg/L whichever is greater
- ORP: ±10% of reading or ±10mV whichever is greater
- Specific Conductance: ±3% of reading
- pH: ±0.2%

Time	DO (mg/L)	ORP (mV)	Spec Cond (µS/cm)	Temp (°C)	pH	Turbidity (NTU)	DTW (feet)	Purged (L)	Comments
12:25	1.4	144	399.3	17.4	5.72	50.3	9.22	1	
12:28	0.5	149	402.3	17.4	5.72	13.4	9.22	2	
12:31	0.4	155	399.7	17.4	5.73	39.8	9.22	3	
12:34	0.3	163	377.1	17.4	5.76	51.4	9.22	4	
12:37	0.3	167	355.1	17.4	5.76	42.5	9.22	5.5	

Pump used: \_\_\_\_\_ Volume Removed: 2 (gal)

Laboratory Information				
Sample ID	No. & Type of Containers	Preservative	Laboratory	Analyses

Well Condition/Remarks: no CO2

Sample Time: 12:40

Sample criteria per ASTM D6771-21\_Low-Flow Purging and Sampling



Water Sampling Data Sheet

Project Name: Mct A mill Date/Time: 8/22/24 14:50  
 Project No.: 020189.010 Sampler Name: R. Klanken  
 Location: Mckinleyville Screen Interval: 6-16  
 Monitoring Well: MW-15 Weather: 65° - Rain

Total Well Depth (feet)

- Pumping water level: ±0.1ft
- Turbidity: ±10% of reading or ±1 NTU whichever is greater
- Temperature: ±3% of reading
- D.O: ±10% of reading or ±0.2 mg/L whichever is greater
- ORP: ±10% of reading or ±10mV whichever is greater
- Specific Conductance: ±3% of reading
- pH: ±0.2%

Time	DO (mg/L)	ORP (mV)	Spec Cond (µS/cm)	Temp (°C)	pH	Turbidity (NTU)	DTW (feet)	Purged (L)	Comments
14:55	0.3	148	299.6	15.5	6.05	0.1	13.04	3	
14:58	0.3	144	297.2	15.5	6.05	76	13.04	4	
15:01	0.4	138	290.1	15.5	6.04	115	13:04	5	
15:04	0.5	138	287.7	15.5	6.03	121	13:04	6	
15:07	0.5	139	288.7	15.5	6.03	80.1	13:04	7	

Pump used: \_\_\_\_\_ Volume Removed: 1.75 (gal)

Laboratory Information

Sample ID	No. & Type of Containers	Preservative	Laboratory	Analyses

Well Condition/Remarks: NO CO2

Sample Time: 15:10



### Water Sampling Data Sheet

Project Name: M&P Mill Date/Time: 8/22/24 10:25  
 Project No.: 020189.010 Sampler Name: R. Klakken  
 Location: McKinleyville Screen Interval: 10-20  
 Monitoring Well: MW-16 Weather: 62° F cloudy

**Total Well Depth (feet)**

- Pumping water level: ±0.1ft
- Turbidity: ±10% of reading or ±1 NTU whichever is greater
- Temperature: ±3% of reading
- D.O: ±10% of reading or ±0.2 mg/L whichever is greater
- ORP: ±10% of reading or ±10mV whichever is greater
- Specific Conductance: ±3% of reading
- pH: ±0.2%

Time	DO (mg/L)	ORP (mV)	Spec Cond (µS/cm)	Temp (°C)	pH	Turbidity (NTU)	DTW (feet)	Purged (L)	Comments
10:30	0.6	170	193.4	15.4	5.19	224	14.60	—	
10:33	0.4	179	192.2	14.7	5.19	136	14.60	1	
10:36	0.3	183	191.5	14.7	5.19	104	14.60	2	
10:39	0.3	190	190.9	14.6	5.12	55.8	14.60	3	
10:42	0.3	195	190.7	14.6	5.09	13.7	14.60	4	

Pump used: \_\_\_\_\_ Volume Removed: 1 1/2 (gal)

**Laboratory Information**

Sample ID	No. & Type of Containers	Preservative	Laboratory	Analyses

Well Condition/Remarks: CO2 - 100

Sample Time: 10:50

Sample criteria per ASTM D6771-21\_Low-Flow Purging and Sampling



Water Sampling Data Sheet

Project Name: M et P Mill Date/Time: 8/22/24 13:34  
 Project No.: 020189,010 Sampler Name: R. Klakken  
 Location: McKinleyville Screen Interval: \_\_\_\_\_  
 Monitoring Well: MW-17 Weather: 65° F Cloudy

Total Well Depth (feet)

24.00

- Pumping water level: ±0.1ft
- Turbidity: ±10% of reading or ±1 NTU whichever is greater
- Temperature: ±3% of reading

- D.O: ±10% of reading or ±0.2 mg/L whichever is greater
- ORP: ±10% of reading or ±10mV whichever is greater
- Specific Conductance: ±3% of reading
- pH: ±0.2%

Time	DO (mg/L)	ORP (mV)	Spec Cond (µS/cm)	Temp (°C)	pH	Turbidity (NTU)	DTW (feet)	Purged (L)	Comments
13:45	0.4	109	294.8	17.9	6.15	894	9.10	1	
13:48	0.3	114	293.8	17.8	6.15	805	9.10	2.5	
13:51	0.2	120	295.1	17.8	6.13	306	9.10	3.5	
13:54	0.2	128	296.4	17.7	6.11	107	9.10	4.5	
13:57	0.2	131	297.5	17.7	6.11	52.4	9.10	5.5	
14:00	0.2	136	298.1	17.7	6.11	29.3	9.10	6.5	

Pump used: \_\_\_\_\_

Volume Removed: 0.25 (gal)

Laboratory Information

Sample ID	No. & Type of Containers	Preservative	Laboratory	Analyses

Well Condition/Remarks:

CO2 - 165

Sample Time: 14:05



Water Sampling Data Sheet

Project Name: M et P Date/Time: 8/21/24 14:45  
 Project No.: 020189,010 Sampler Name: R. Klakken  
 Location: Mckinleyville Screen Interval: 19.45 - 9.45  
 Monitoring Well: MW-18 Weather: 69° F Sunny

Total Well Depth (feet)

19.45

- Pumping water level: ±0.1ft
- Turbidity: ±10% of reading or ±1 NTU whichever is greater
- Temperature: ±3% of reading
- D.O: ±10% of reading or ±0.2 mg/L whichever is greater
- ORP: ±10% of reading or ±10mV whichever is greater
- Specific Conductance: ±3% of reading
- pH: ±0.2%

Time	DO (mg/L)	ORP (mV)	Spec Cond (µS/cm)	Temp (°C)	pH	Turbidity (NTU)	DTW (feet)	Purged (L)	Comments
14:53	1.5	230	465	20.5	6.09	90.6	9.04	—	
14:56	1.1	245	450.9	20.2	6.11	73.7	9.04	2	
15:00	0.9	277	437.2	19.7	6.11	36.1	9.04	3	
15:03	0.8	—	432.6	19.6	6.10	17.1	9.04	4	
15:06	0.7	303	429.4	19.6	6.09	10.1	9.04	5	
15:09	0.7	315	432.7	19.6	6.09	8.11	9.04	6	
15:12	0.7	323	431.3	19.5	6.08	5.48	9.04	7	

Pump used: \_\_\_\_\_ Volume Removed: 2.0 (gal)

Laboratory Information

Sample ID	No. & Type of Containers	Preservative	Laboratory	Analyses
				Dioxin PCB/TCDF

Well Condition/Remarks: CO<sub>2</sub> - 250

Sample Time: 15:15



Water Sampling Data Sheet

Project Name: Met A Mill Date/Time: 8/21/24 15:30
Project No.: 020189.010 Sampler Name: R. Klakken
Location: McKinleyville Screen Interval: 19.04 - 9.04
Monitoring Well: MW-19 Weather:

Total Well Depth (feet)

19.04

- Pumping water level: ±0.1ft
Turbidity: ±10% of reading or ±1 NTU whichever is greater
Temperature: ±3% of reading
D.O: ±10% of reading or ±0.2 mg/L whichever is greater
ORP: ±10% of reading or ±10mV whichever is greater
Specific Conductance: ±3% of reading
pH: ±0.2%

Table with 10 columns: Time, DO (mg/L), ORP (mV), Spec Cond (µS/cm), Temp (°C), pH, Turbidity (NTU), DTW (feet), Purged (L), Comments. Contains 8 rows of data.

Pump used: Volume Removed: (gal)

Laboratory Information

Table with 5 columns: Sample ID, No. & Type of Containers, Preservative, Laboratory, Analyses. Includes handwritten entry: Dioxin - PCP/TCP

Well Condition/Remarks: CO2 - 160

Sample Time: 16:10 Dup - sample



Water Sampling Data Sheet

Project Name: M&P Mill Date/Time: 8/21/24 11:55
Project No.: 020189.010 Sampler Name: R. Klalcken
Location: McKinleyville Screen Interval: 19.7 - 9.7
Monitoring Well: mw-20 Weather: 68° F clear

Total Well Depth (feet)

19.70

- Pumping water level: ±0.1ft
Turbidity: ±10% of reading or ±1 NTU whichever is greater
D.O: ±10% of reading or ±0.2 mg/L whichever is greater
ORP: ±10% of reading or ±10mV whichever is greater
Specific Conductance: ±3% of reading
Temperature: ±3% of reading
pH: ±0.2%

Table with 10 columns: Time, DO (mg/L), ORP (mV), Spec Cond (µS/cm), Temp (°C), pH, Turbidity (NTU), DTW (feet), Purged (L), Comments. Contains 5 rows of data.

Pump used: Volume Removed: 1.75 (gal)

Laboratory Information

Table with 5 columns: Sample ID, No. & Type of Containers, Preservative, Laboratory, Analyses. Includes handwritten entry: Dioxin, PCP/TCF

Well Condition/Remarks: Good

Sample Time: 12:30

CO2 - 100



# Equipment Calibration Sheet

Name: R. Klakken

Project Name: McNamara & Peepe Mill Site

Reference No.: 020189.010

Date: 8/21/24

Equipment:  pH & EC       PID       GTCO<sub>2</sub>       GTLEL  
 Turbidity       Other D.O.

### Description of Calibration Procedure and Results:

pH & EC meter calibrated using a 3-buffer method with pH 4.01, 7.00, and 10.00. Meter was set at 4.01, 7.00, and 10.01. ✓

Dissolved Oxygen meter is self-calibrated with the altimeter set at 20.

Turbidity calibrated using 800, 100, 20.0, and 0.02 NTU standard solutions. ✓

ORP calibrated using standard solution. ✓

R. Klakken





**Historical Data**

**2**

**Appendix 2  
Glossary and Explanations  
McNamara and Peepe Lumber Mill**

**Glossary**

<b>Term</b>	<b>Definition</b>
--	not applicable
<	indicates value is below the noted laboratory reporting limit
<52	non-detect for analyte with reporting limit of 52 pg/L
AJ	heavier hydrocarbon than diesel
BGS	below ground surface
CA MCL	California Maximum Contaminant Level
CA PHG	Public Health Goals
FD	Field duplicate
ft msl	feet above mean sea level
HpCDD	heptachlorodibenzo-p-dioxin
HpCDF	heptachlorodibenzofuran
HxCDD	hexachlorodibenzo-p-dioxin
HxCDF	hexachlorodibenzofuran
J	Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
NAVD	North American vertical datum, 1988
OCDD	Octachlorodibenzodioxin
PCP	pentachlorophenol
pg/L	picograms per liter
TCP	2,3,4,6-tetrachlorophenol
U	U = flagged "U" revised reporting limit

**Explanations**

**For Table 2-1:**

- a. Wells surveyed August 30, 2023
- b. Data from 11/3/2011

**For Table 2-3:**

- a. Bolded values: Analyte concentration exceeds CA MCL of 1 µg/L
- B9. The sample was diluted due to the level of target analytes present in the sample. The method reporting limit was raised to reflect the required dilution.

**For Table 2-4:**

- a. "J" flagged results were originally flagged "B" by the laboratory because the result had unacceptable ion abundance ratios. A URS Senior chemist flagged these results "J" estimated
- M: Estimated maximum possible concentration
- D: Dilution
- \*: Due to laboratory equipment malfunction, samples were analyzed out of hold time.



**Table 2-1  
Well Construction Details**

<b>Well ID</b>	<b>Date Installed</b>	<b>Top of Casing Elevation<sup>a</sup> (feet NAVD)</b>	<b>Screened Interval (feet BGS)</b>	<b>Casing Diameter (inches)</b>	<b>Sounded Well Depth (feet BGS)</b>
MW-1	1988	94.82	19-23	4	23.36
MW-5	1988	93.35	18-23	4	24.08 <sup>b</sup>
MW-7	1997	98.41	22-37	4	39.95
MW-8	1997	97.03	7-24	4	25.29
MW-9	unknown	99.68	21-25	4	26.37 <sup>b</sup>
MW-10	6/7/2010	95.79	9-24	2	22.64
MW-11	10/18/2010	91.2	9.5-24.5	2	25
MW-12	11/1/2011	91.74	10-20	2	19.91
MW-13	2/1/2022	90.78	10-20	2	20
MW-14	2/3/2022	91.05	10-20	2	20.16
MW-15	6/21/2023	93.59	6-16	2	19.83
MW-16	8/18/2023	95.81	10-20	2	21.14
MW-17	8/6/2024	90.72	9-24	2	24.00
MW-18	8/6/2024	91.73	10-20	2	19.45
MW-19	8/7/2024	91.25	10-20	2	19.04
MW-20	8/7/2024	92.10	10-20	2	19.72



**Table 2-2  
Historical Groundwater Elevations**

<b>Well Name</b>	<b>Date</b>	<b>Groundwater Elevation (ft msl)</b>
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	
2/27/2024	87.34	
8/21/2024	81.65	
MW-5	1/12/1998	84.44
	4/8/1998	80.33
	7/8/1998	72.59
	1/26/1999	80.20
	7/14/1999	73.68
	4/13/2000	77.71
	10/19/2000	69.12
	6/7/2001	71.12
	12/26/2002	84.18
	12/12/2003	82.31
	1/28/2005	85.66
	8/3/2005	83.68
	1/11/2006	88.34
	1/24/2007	85.36

**Table 2-2  
Historical Groundwater Elevations**

<b>Well Name</b>	<b>Date</b>	<b>Groundwater Elevation (ft msl)</b>
MW-5 cont'd	6/7/2010	86.05
	10/18/2010	80.60
	11/3/2011	82.26
	4/11/2012	88.04
	5/13/2015	83.85
	11/10/2015	81.10
	5/23/2016	84.35
	12/14/2016	88.05
	5/8/2017	86.50
	3/5/2021	86.12
	2/22/2022	83.97
	8/23/2022	80.94
	2/22/2023	85.68
	8/22/2023	80.50
	2/27/2024	87.84
8/21/2024	82.05	
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	
2/27/2024	88.18	
8/21/2024	82.64	

**Table 2-2  
Historical Groundwater Elevations**

<b>Well Name</b>	<b>Date</b>	<b>Groundwater Elevation (ft msl)</b>
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	
2/27/2024	91.02	
8/21/2024	84.13	
MW-9	1/12/1998	86.88
	4/8/1998	83.50
	7/8/1998	81.21
	1/26/1999	82.48
	7/14/1999	81.14
	4/13/2000	82.19
	10/19/2000	78.90
	6/7/2001	79.70
	12/26/2002	86.30
	12/12/2003	85.68
	1/28/2005	89.26
	8/3/2005	87.85
	1/11/2006	90.89
	1/24/2007	89.04
	6/7/2010	92.55
	10/18/2010	89.70
	11/3/2011	88.52
4/11/2012	93.38	
5/13/2015	87.56	
11/10/2015	84.64	
5/23/2016	88.68	

**Table 2-2  
Historical Groundwater Elevations**

<b>Well Name</b>	<b>Date</b>	<b>Groundwater Elevation (ft msl)</b>
MW-9 cont'd	12/14/2016	91.56
	5/8/2017	90.66
	8/21/2019	83.81
	3/5/2021	90.93
	2/22/2022	89.37
	8/23/2022	86.84
	2/22/2023	90.61
	8/22/2023	86.99
	2/27/2024	92.59
	8/21/2024	88.08
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
2/27/2024	86.23	
8/21/2024	80.89	
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
	2/27/2024	86.27
8/21/2024	81.45	
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
	2/27/2024	87.42
8/21/2024	81.64	



**Table 2-2  
Historical Groundwater Elevations**

<b>Well Name</b>	<b>Date</b>	<b>Groundwater Elevation (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
	2/27/2024	87.73
	8/21/2024	81.98
MW-14	2/22/2022	84.66
	8/23/2022	81.39
	2/22/2023	86.34
	8/22/2023	81.05
	2/27/2024	87.45
	8/21/2024	82.04
MW-15	8/22/2023	80.40
	8/22/2023	81.05
	2/27/2024	87.57
	8/21/2024	81.76
MW-16	8/22/2023	80.02
	2/27/2024	86.93
	8/21/2024	81.26
MW-17	8/21/2024	81.63
MW-18	8/21/2024	82.77
MW-19	8/21/2024	83.22
MW-20	8/21/2024	86.40

**Table 2-3  
Groundwater Analytical Results  
McNamara and Peepe Lumber Mill**

Well Name	Date	PCP	TCP	Chromium	Hexavalent Chromium	Nitrate	Total Iron	Ferrous Iron	Arsenic	Sulfate	Chloride	TPHD	VOCs (DIPE)
	Units	µg/L				mg/L	µg/L			mg/L		µg/L	
MW-1	5/13/2015	690 <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 AJ	1.7
	3/5/2021	460 <sup>a</sup>	5.6	--	--	--	--	--	--	--	--	--	--
	2/22/2022	920 <sup>a</sup>	9.7	--	--	--	--	--	--	--	--	--	--
	8/23/2022	1300 <sup>a</sup>	<1,000 B9	--	--	--	--	--	--	--	--	--	--
	2/22/2023	0.34 <sup>a</sup>	<1.0	--	--	--	--	--	--	--	--	--	--
	8/23/2023	400	12	--	--	--	--	--	--	--	--	--	--
2/28/2024	600	8.4	--	--	--	--	--	--	--	--	--	--	
8/22/2024	94	2.4	--	--	--	--	--	--	--	--	--	--	
MW-5	5/13/2015	35 <sup>a</sup>	4.3	--	--	--	--	--	--	--	--	--	--
	11/11/2015	65 <sup>a</sup>	3.3	--	--	--	--	--	--	--	--	--	--
	5/23/2016	56 <sup>a</sup>	1.6	--	--	--	--	--	--	--	--	--	--
	12/14/2016	39 <sup>a</sup>	2.3	<5.0	<5.0	<0.10	330	600	<10	12	45	--	--
	5/8/2017	46 <sup>a</sup>	2.3	--	--	--	--	--	--	--	--	--	--
	8/21/2019	--	--	--	--	--	--	--	--	--	--	--	--
	3/5/2021	18	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2022	19	1.1	--	--	--	--	--	--	--	--	--	--
	8/23/2022	0.63	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2023	9.5 <sup>a</sup>	0.65 J	--	--	--	--	--	--	--	--	--	--
	8/22/2023	4.6	0.62 J	--	--	--	--	--	--	--	--	--	--
	2/27/2024	8.5	<1.0	--	--	--	--	--	--	--	--	--	--
8/22/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--	
MW-7	5/13/2015	0.39	<1.0	--	--	--	--	--	--	--	--	--	--
	11/11/2015	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	5/23/2016	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	12/14/2016	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	5/8/2017	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	8/21/2019	<0.3	<1.0	--	<1.0	--	--	--	--	--	--	<50	<0.5
	3/5/2021	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2022	0.26 J	<1.0	--	--	--	--	--	--	--	--	--	--
	8/23/2022	0.12 J	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2023	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2023	0.17 J	<1.0	--	--	--	--	--	--	--	--	--	--
	2/27/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
8/21/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--	



**Table 2-3  
Groundwater Analytical Results  
McNamara and Peepe Lumber Mill**

Well Name	Date	PCP	TCP	Chromium	Hexavalent Chromium	Nitrate	Total Iron	Ferrous Iron	Arsenic	Sulfate	Chloride	TPHD	VOCs (DIPE)
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	--	--	--	--	--	--	--	--	--	--
2/27/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--	
8/22/2024	<0.30	<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	--	--	--	--	--	--	--	--	--	--
2/27/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--	
8/21/2024	<0.30	<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 AJ	<0.5
	8/21/2019 (FD)	<0.3	<1.0	--	<1.0	--	--	--	--	--	--	210 AJ	<0.5
	3/5/2021	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	3/5/2021 (FD)	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2022	0.12 J	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2022 (FD)	0.26 J	<1.0	--	--	--	--	--	--	--	--	--	--
	8/23/2022	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	8/23/2022 (FD)	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2023	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2023 (FD)	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
8/22/2023	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--	
2/27/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--	
2/27/2024 (FD)	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--	
8/22/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--	



**Table 2-3  
Groundwater Analytical Results  
McNamara and Peepe Lumber Mill**

Well Name	Date	PCP	TCP	Chromium	Hexavalent Chromium	Nitrate	Total Iron	Ferrous Iron	Arsenic	Sulfate	Chloride	TPHD	VOCs (DIPE)
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	<b>1.9<sup>a</sup></b>	<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	--	--	--	--	--	--	--	--	--	--
	2/27/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
8/22/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--	
MW-12	5/13/2015	<b>52<sup>a</sup></b>	<1.0	--	--	--	--	--	--	--	--	--	--
	11/11/2015	<b>51<sup>a</sup></b>	<1.0	--	--	--	--	--	--	--	--	--	--
	5/23/2016	<b>120<sup>a</sup></b>	<1.0	--	--	--	--	--	--	--	--	--	--
	12/14/2016	<b>46<sup>a</sup></b>	<1.0	<5.0	<5.0	0.13	<15	<100	<10	5.4	28	--	--
	5/8/2017	<b>81<sup>a</sup></b>	<1.0	--	--	--	--	--	--	--	--	--	--
	8/21/2019	<b>110<sup>a</sup></b>	1.7	--	--	--	--	--	--	--	--	--	--
	3/5/2021	<b>120<sup>a</sup></b>	<1.0	--	--	--	--	--	--	--	--	--	--
	2/22/2022	<b>120<sup>a</sup></b>	0.49 J	--	--	--	--	--	--	--	--	--	--
	8/23/2022	<b>130<sup>a</sup></b>	<100 B9	--	--	--	--	--	--	--	--	--	--
	2/22/2023	<b>9.4<sup>a</sup></b>	<b>0.61 J</b>	--	--	--	--	--	--	--	--	--	--
	8/22/2023	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
	2/27/2024	<b>14</b>	<1.0	--	--	--	--	--	--	--	--	--	--
8/22/2024	<b>16</b>	<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	--	--	--	--	--	--	--	--	--	--
	2/27/2024	<b>1.6</b>	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2024	<0.3	<1.0	--	--	--	--	--	--	--	--	--	--
MW-14	2/22/2022	<b>85<sup>a</sup></b>	<b>1.7</b>	--	--	--	--	--	--	--	--	--	--
	8/23/2022	<b>84<sup>a</sup></b>	<10	--	--	--	--	--	--	--	--	--	--
	2/22/2023	<b>48<sup>a</sup></b>	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2023	<b>57<sup>a</sup></b>	<b>1.3</b>	--	--	--	--	--	--	--	--	--	--
	2/28/2024	<b>60</b>	<b>1.6</b>	--	--	--	--	--	--	--	--	--	--
	8/22/2024	<b>1.6</b>	<b>0.69 J</b>	--	--	--	--	--	--	--	--	--	--
MW-15	8/22/2023	<b>8.7<sup>a</sup></b>	<b>0.54 J</b>	--	--	--	--	--	--	--	--	--	--
	2/27/2024	0.37	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2024	0.92	<1.0	--	--	--	--	--	--	--	--	--	--
MW-16	8/22/2023	<b>5.2<sup>a</sup></b>	<1.0	--	--	--	--	--	--	--	--	--	--
	2/28/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
	8/22/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--
MW-17	8/22/2024	<b>4.9</b>	<b>2.1</b>	--	--	--	--	--	--	--	--	--	
MW-18	8/21/2024	<b>1.6</b>	<1.0	--	--	--	--	--	--	--	--	--	
MW-19	8/21/2024	<b>34</b>	<b>0.29 J</b>	--	--	--	--	--	--	--	--	--	--
	8/21/2024 (FD)	<b>28</b>	<1.0	--	--	--	--	--	--	--	--	--	--
MW-20	8/21/2024	<0.30	<1.0	--	--	--	--	--	--	--	--	--	--



**Table 2-4  
Dioxin Analytical Results  
McNamara and Peepe Lumber Mill**

Well Name	Date	2,3,7,8-TCDD	1,2,3,4,6,7,8-HpCDD	Total HpCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	Total HpCDF	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	Total HxCDD	1,2,3,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	2,3,4,6,7,8-HxCDF	Total HxCDF	OCDD	OCDF	1,2,3,7,8-PeCDD	Total PeCDD	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	Total PeCDF	2,3,7,8-TCDF	Total TCDF	TEQ	
	CA MCL	30 pg/L																								
	CA PHG	0.05 pg/L																								
MW-1	10/18/2010	0	180	330	44 J		200								32	1700	--							2.8		
	11/3/2011	<10	110 J	200	27 J		130								32	1100 J	--							4.67 J		
	11/3/2011 (FD)	<10	110 J	200	28 J		130								37	1000 J	--							4.38 J		
	8/21/2019	0	520	970	100	6 J	550	2.2 J	22 J	ND	75	ND			73	5500*	340							<b>31</b>		
	3/5/2021	<0.941	3760	7010	975	63.8	4350	8.11 J	166	12.3 J	623	103	5.82 J	17.4 J	4310 D,M	39,300	2910	<1.52	122	14.8 J	<1.20	474 D,M	<0.690	103 D,M	<b>93.6</b>	
	2/22/2022	<0.727	1,690	3,200	339	339	1,710	4.25 J	70	5.91 J	260	<2.11	<2.90	<2.06	2,060 D,M	17,000	1,150	<1.35	44	8.84 J	<1.48	246 D,M	<0.717	69.9 D,M	<b>34.2</b>	
	8/23/2022	<0.937	1,630	3,110	341	25.1 J	1,730	5.14 J	64.3	5.01 J	254	<2.03	<2.53	9.55 J	2,030 D,M	17,400	1,230	<1.40	23.6 J	<2.01	<1.96	275 D,M	<0.919	73.6 D,M	<b>34</b>	
	2/23/2023	<0.767	9,790	18,600	1,770	<5.08	10,500	<3.98	289	26.9	1,070	<6.00	<5.72	8.63 J	1,570	135,000 D	7,660	<3.33	56.4	<4.77	3.98 J	60.0	<0.908	6.91	<b>194</b>	
	8/23/2023	<5.11	1,920	3,460	199	47.0	6340 M	<25.5	53.1	16.5 J	499 M	147	<25.5	9.40 J	4340 M	17,800	940	<25.5	180 M	32.3	<25.5	826 M	<5.11	502 M	<b>48.3</b>	
	2/28/2024*	3.44 J	846	2,220 M	<23.9	<23.9	3,070	<23.9	31.2	<23.9	381 M	<23.9	<23.9	1,360	2,030	10,800	371	<23.9	90.1 M	<23.9	<23.8	335 M	<4.78	258	<b>154 J</b>	
8/22/2024	<1.92	60.5	116	<6.42	<5.75	51.3	<4.50	3.20 J	<4.80	3.20	<6.80	<5.74	<6.25	<8.44	687	47.1 J	<6.06	<1.15	<5.40	<5.38	<0.808	<1.92	<0.901	<b>1.15</b>		
MW-5	10/18/2010	0	0	0	0		0								0	180	--							0.054		
	10/18/2010 (FD)	0	0	0	0		0								0	160	--							0.048		
	11/3/2011	<9.9	<3.4 UJ	<8.0 U	<1.2 UJ		<2.6 U								<3.1 U	37 J	--							0.573 U		
	3/5/2021	<0.622	3.04 J	5.56 J	<1.34	<1.91	<1.91	<1.19	<1.27	<1.21	<1.27	<1.10	<1.51	<1.12	<1.51	19.1 J	<2.57	<0.935	<0.935	<0.852	<0.817	<0.852	<0.600	<0.600	0.0361	
	2/22/2022	<0.696	2.75 J	6.52 J	<1.64	<2.09	<2.09	<1.49	<1.60	<1.42	<1.60	<1.19	<1.65	<1.17	<1.65	19.5 J	<2.20	<1.69	<1.69	<1.36	<1.17	<1.37	<0.770	<0.770	0.0334	
	8/23/2022	<0.789	<5.03	<5.03	<1.30	<1.85	<1.85	<1.24	<1.30	<1.19	<1.30	<0.971	<1.38	<0.946	<1.38	34.6 J	<3.11	<0.930	<0.930	<0.590	<0.622	<0.622	<0.547	1.37 J	0.0104	
	2/22/2023	<0.433	<2.35	<2.35	<3.77	<3.81	<3.81	<1.22	<1.43	<1.45	<1.45	<0.688	<1.03	<0.796	<1.03	<15.6	<1.41	<0.726	<0.726	<0.511	<0.452	<0.511	<0.293	<0.202	0.00	
	8/22/2023	<5.20	14.1 J,M	22.2 J,M	<26.0	<26.0	13.1 J,M	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	48.9 J	<52.0	<26.0	<26.0	<26.0	<26.0	<26.0	<5.20	<5.20	0.00	
	2/27/2024*	<4.76	19.8 J	83.2 M	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	52.2	<23.8	52	143	<47.6	<23.8	<23.8	<23.8	<23.8	<23.8	<4.76	<4.76	5.46 J
	8/22/2024	<1.93	<5.25	<2.39	<6.46	<5.79	<2.40	<4.53	<3.81	<4.84	<2.09	<6.84	<5.78	<6.29	<9.88	<17.8	<12.3	<6.11	<0.842	<5.43	<5.41	<0.901	<1.93	<0.901	0	
MW-10	10/18/2010	0	0	0	0		0								0	0	--							0		
	8/21/2019	0	4.6 J	4.6 J	<52	<52	<52	<52				ND		35 J*	<52	<100	<100							0.1		
	8/21/2019 (FD)	0	11 J*	19 J*	3.6 J*	8.1 J	18 J*	2.4 J*	0.92 J*	0.85 J*	6.8 J*	1.3 J*	13 J*	64 J*	<55	<110	<110	0.64 J*	2.4 J*	0.53 J*	6.6 J*	0.45 J*	0.43 J*	0.43 J*	3.7	
	3/5/2021	<0.539	3.86 J	7.26 J	<1.39	<1.72	<1.72	<1.11	<1.15	<1.11	<1.15	<1.24	<1.56	<1.26	<1.56	17.3 J	<2.61	<0.824	<0.824	<0.976	<0.951	<0.976	<0.731	<0.731	0.0438	
	2/22/2022	<0.652	50.8	92.3	12.5 J	<1.37	33.1	<1.64	3.42 J	2.64 J	18.2 J	<1.25	<1.75	<1.23	27.1 D,M	347	38.7 J	<1.20	<1.20	<0.989	<0.961	10.9 J	<0.652	4.28 J	1.35	
	2/22/2022 (FD)	<0.658	30.4	55.0	8.11 J	<1.18	20.7 J	<1.94	<1.32	<1.73	7.70 J	<1.47	<1.99	<1.42	16.9 D,J,M	221	24.7 J	<1.35	<1.35	<0.898	<0.873	5.86 J	<0.743	3.01 J	0.459	
	8/23/2022	<0.920	73.7	134	19.8 J	<2.07	54.1	4.00 J	4.45 J	4.48 J	30.3	<1.09	<1.47	<1.31	39.7 D,M	520	62.4	<2.07	<2.07	<0.968	<0.949	18.7 D,J,M	0.883	10.1 D,M	2.40	
	8/23/2022 (FD)	<0.956	59.5	108.0	18.0 J	<1.75	44.2	4.15 J	4.08 J	3.79 J	26.0 J	<1.36	<1.75	<1.49	38.9 D,J,M	398	49.5 J	<1.89	<1.89	<0.926	<0.920	16.3 D,J,M	<0.883	12.5 D,M	2.11	
	2/22/2023	<0.619	82.9	147	17.8 J	<5.76	50.6	2.3	4.23	3.77	15.9	<1.57	<2.27	<1.77	18.5	592	62.2	<5.37	<1.30	<0.914	<0.805	5.31	<0.500	<0.500	2.23	
	2/22/2023 (FD)	<0.660	92.1	165.0	21.8 J	<5.07	21.8	2.47 J	4.82 J	5.67 J	34.5	<1.37	<1.92	<1.58	10.9	729	69.5	1.35 J	1.35	<0.840	<0.743	<8.82	<0.529	<0.665	4.02	
	8/22/2023	<5.20	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	24.9 J	<52.0	<26.0	<26.0	<26.0	<26.0	<26.0	<5.20	<5.20	0	
	8/23/2023 (FD)	<4.84	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	18.6 J	<48.4	<24.2	<24.2	<24.2	<24.2	<24.2	<4.84	<4.84	0	
	2/27/2024*	<4.74	7.77 J	13.5 J	<23.7	<23.7	<23.7	<23.7	<23.7	<23.7	<23.7	<23.7	<23.7	<23.7	<23.7	65.8	<47.4	<23.7	<23.7	<23.7	<23.7	<23.7	<23.7	<4.74	<4.74	0.0974 J
2/27/2024*	<4.69	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	59	<46.9	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<4.69	<4.69	0.0177	
8/22/2024	<1.99	5.67 J	10.3 J	1.63 J	<5.98	1.63 J	<4.68	<3.93	<4.99	<4.35	<7.07	<5.97	<6.49	<1.35	26.5 J	<12.7	<6.30	<1.31	<5.61	<5.59	<0.993	<1.99	<0.986	0.081		
MW-11	10/18/2010	0	0	0	0		0								0	0	--							0		
	2/22/2022	0.983	7.05 J	13.5 J	<1.85	<2.24	<2.24	<1.96	<1.94	<1.79	<1.96	<1.27	<1.78	<1.27	3.97 J	33.2 J	3.15	<1.77	<1.77	<1.53	<1.52	4.81 J	<0.946	5.17	0.0805	
	8/23/2022	<0.773	5.92 J	11.8 J	<0.942	<1.39	11.6 J	<2.09	<2.19	<2.00	<2.19	<1.06	<1.34	<1.13	3.66 D,J,M	25.5 J	<3.85	<1.17	<1.17	<0.601	<0.622	3.50 D,J,M	<0.755	8.46 D,M	0.0669	
	2/22/2023	<0.621	2.28 J	3.96	<0.969	<0.989	<0.989	<1.07	<1.33	<1.29	<1.33	<0.691	<0.964	<0.806	<0.964	19.3 J	<10.8	<0.840	<0.840	<0.636	<0.549	<0.636	<0.451	<0.451	0.0286	
	8/22/2023	<5.39	<27.0	<27.0	<27.0	<27.0	<27.0	<27.0	<27.0	<27.0	<27.0	<27.0	<27.0	<27.0	<27.0	100	<53.9	<27.0	<27.0	<27.0	<27.0	<27.0	<5.39	<5.39	0.0300	
	2/27/2024*	<4.76	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	24.2 J	<47.6	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<4.76	<4.76	0.00726 J
8/22/2024	<1.96	<5.32	<6.49	<6.55	<5.87	<1.36	<4.59	<3.86	&																	

**Table 2-4  
Dioxin Analytical Results  
McNamara and Peepe Lumber Mill**

Well Name	Date	2,3,7,8-TCDD	1,2,3,4,6,7,8-HpCDD	Total HpCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	Total HpCDF	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	Total HxCDD	1,2,3,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	2,3,4,6,7,8-HxCDF	Total HxCDF	OCDD	OCDF	1,2,3,7,8-PeCDD	Total PeCDD	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	Total PeCDF	2,3,7,8-TCDF	Total TCDF	TEQ	
MW-13	2/22/2022	<0.677	<1.83	<1.83	<1.23	<1.69	<1.69	<1.38	<1.45	<1.40	<1.45	<0.855	<1.19	<0.850	<1.19	13.3 J	<1.90	<0.928	<0.928	<0.866	<0.822	<0.866	<0.767	<0.767	0.00399	
	8/23/2022	<0.837	<2.83	<2.83	<0.919	<1.22	<1.22	<2.14	<2.21	<2.04	<2.21	<0.776	<1.06	<0.782	<1.06	13.6 J	<1.96	<1.02	<1.02	<0.661	<0.712	<0.712	<0.667	3.19 J,M	0.00408	
	2/22/2023	<0.638	<2.59	<2.59	<2.28	<2.35	<2.35	<2.35	<1.18	<1.45	<1.47	<1.47	<0.737	<1.05	<0.899	<1.05	14.5 J	<10.7	<0.897	<0.897	<0.493	<0.432	<0.493	<0.363	<0.477	0.00435
	8/22/2023	<4.71	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	48.8	<47.1	<23.5	<23.5	<23.5	<23.5	<23.5	4.71	<4.71	0.0146
	2/27/2024*	<4.76	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	34.5	<23.8	34.5	<47.6	<47.6	<23.8	<23.8	<23.8	<23.8	<23.8	<4.76	<4.76	3.45
	8/22/2024	<1.97	<5.36	<2.60	<6.60	<5.91	<2.94	<4.63	<3.89	<4.94	<10.8	<6.99	<5.90	<6.42	<10.8	<18.2	<12.5	<6.23	<1.24	<5.55	<5.52	<2.01	<1.97	<1.05	0	
MW-14	8/23/2022	<0.897	17.8 J	41.9	3.85 J	<1.04	17.3 J	3.51 J	<1.17	<1.07	3.51 J	<0.625	<0.834	<0.658	5.22 D,J,M	330	16.4 J	<1.05	<1.05	<0.766	<0.758	<1.26	<0.560	0.927 J	0.671	
	2/22/2023	<0.530	<4.62	<0.996	<0.858	<0.969	<0.969	<1.15	<1.25	<1.25	<1.25	<0.510	<0.748	<0.594	<0.748	26.7 J	<10.8	<1.42	<1.42	<0.402	<0.352	<0.402	<0.372	<0.322	0.00801	
	8/22/2023	<4.84	11.0 J	11.0 J	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	<24.2	133	<48.4	<24.2	<24.2	<24.2	<24.2	<24.2	<4.84	3.29 J,M	0.0399	
	2/28/2024*	<4.76	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	94.9	<47.6	<23.8	<23.8	<23.8	<23.8	<23.8	<4.76	<4.76	0.0285	
	8/22/2024	<1.74	<4.74	<2.28	<5.83	<5.22	<1.07	<4.09	<3.43	<4.36	<2.08	<6.17	<5.21	<5.67	<1.22	<16.0	<11.1	<5.51	<0.752	<4.90	<4.88	<0.665	<1.74	<0.686	0	
MW-15	8/22/2023	<4.89	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	85.6	<48.9	<24.4	<24.4	<24.4	<24.4	<24.4	<4.89	4.89 J,M	0.0257	
	2/27/2024*	<4.76	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	19.6 J	<23.8	19.6 J	24.8 J	<47.6	<23.8	<23.8	<23.8	<23.8	<23.8	<4.76	3.43 J	1.97 J	
	8/22/2024	<1.90	<5.17	<2.56	<6.36	<5.70	<2.02	<4.46	<3.75	<4.76	<2.74	<6.74	<5.69	<6.19	<12.7	8.61 J	<12.1	<6.01	<0.969	<1.25	<5.33	<1.25	<1.90	<0.934	0.00258	
MW-16	8/22/2023	<5.09	<25.5	<25.5	<25.5	<25.5	<25.5	<25.5	<25.5	<25.5	<25.5	<25.5	<25.5	<25.5	<25.5	58.2	<50.9	<25.5	<25.5	<25.5	<25.5	<25.5	<5.09	<5.09	0.0175	
	2/28/2024*	<4.76	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<23.8	<47.6	<47.6	<23.8	<23.8	<23.8	<23.8	<23.8	<4.76	<4.76	0	
	8/22/2024	<1.86	<5.07	<3.09	<6.24	<5.59	<1.70	<4.38	<3.67	<4.67	<1.91	<6.61	<5.58	<6.07	<15.3	<17.2	<11.8	<5.89	<1.18	<5.24	<5.22	<0.942	<1.86	<0.923	0	
MW-17	8/22/2023	<1.92	3.67 J	3.67 J	<6.42	<5.75	<3.11	<4.50	<3.78	<4.81	<2.45	<6.80	<5.74	<6.25	<2.43	<17.7	<12.2	<6.07	<1.55	<5.40	<5.38	<1.19	<1.92	<1.00	0.0367	
MW-18	8/21/2024	<2.02	<5.48	<2.10	<6.75	<6.05	<1.28	<4.74	<3.98	<5.05	<1.71	<7.15	<6.04	<6.57	<1.06	<18.6	<12.8	<6.38	<1.21	<5.68	<5.65	<0.644	<2.02	<0.705	0	
MW-19	8/21/2024	<1.90	<5.17	<2.16	<6.37	<5.70	<1.39	<4.46	<3.75	<4.76	<3.15	<6.74	<5.69	<6.19	<1.37	<17.5	<12.1	<6.01	<0.926	<5.35	<5.33	<0.788	<1.90	<0.757	0	
	8/21/2024 (FD)	<1.86	<5.06	<1.57	<6.23	<5.58	<1.24	<4.37	<3.67	<4.66	<1.84	<6.59	<5.57	<6.06	<1.23	<17.1	<11.8	<5.88	<1.08	<5.24	<5.21	<0.775	<1.86	<0.849	0	
MW-20	8/21/2024	<1.86	<5.05	<1.49	<6.22	<5.57	<1.25	<4.36	<3.66	<4.65	<2.04	<6.58	<5.56	<6.05	<6.28	<17.1	<11.8	<5.87	<0.879	<5.23	<5.20	<1.05	<1.86	<0.709	0	

**Laboratory  
Analytical Reports**

**3**



September 13, 2024

SHN Consulting Engineers and Geologists  
812 West Wabash Avenue  
Eureka, CA 95501

Attn: Diana Ward

Order No. 2408409  
Invoice No. 178233  
PO No.  
ELAP No. 1247  
ELAP Exp. July 2026

RE: 020189.010 M&P Mill

**SAMPLE IDENTIFICATION**

Fraction	Client Sample Description
01A	MW-1
02A	MW-5
03A	MW-7
04A	MW-8
05A	MW-9
06A	MW-10
07A	MW-11
08A	MW-12
09A	MW-13
10A	MW-14
11A	MW-15
12A	MW-16
13A	MW-17
14A	MW-18
15A	MW-19
16A	MW-20
17A	DUP

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

Flag = Explanation in Case Narrative

All solid results are expressed on a wet-weight basis unless otherwise noted.

**Approved for release by:**

A handwritten signature in blue ink, appearing to be "Ashley Williams", written over a horizontal line.

Ashley Williams, Project Manager

**Date:** 13-Sep-2024

**WorkOrder:** 2408409

## CASE NARRATIVE

---

### J Flags:

Test results that fall below the reporting limit and above the method detection limit are considered approximate values.

### Penta- and Tetrachlorophenol:

The method used is not accredited by CA ELAP. Therefore, the following analytes are beyond the scope of the laboratory's accreditation: 2,3,4,6-tetrachlorophenol and pentachlorophenol.

The pentachlorophenol recoveries for the matrix spike (MS) of samples MW-17 and DUP were not quantified (NQ) due to the high level of analyte present in the sample.

Date: 13-Sep-2024

WorkOrder: 2408409

**ANALYTICAL REPORT****Client Sample ID:** MW-1**Received:** 08/23/2024**Lab ID:** 2408409-01A **Matrix:** Groundwater**Collected** 08/22/2024 15:45**Test Name:** Chlorinated Phenols**Analyst:** JLS**Reference:** Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
2,3,4,6-Tetrachlorophenol	2.4			1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 09:59
Pentachlorophenol	94			30	15	µg/L	100	09/04/2024	09/09/2024 23:50
Surrogate: 2,4,6-Tribromophenol	91.7			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 09:59

**Client Sample ID:** MW-5**Received:** 08/23/2024**Lab ID:** 2408409-02A **Matrix:** Groundwater**Collected** 08/22/2024 12:05**Test Name:** Chlorinated Phenols**Analyst:** JLS**Reference:** Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
2,3,4,6-Tetrachlorophenol	ND			1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 00:16
Pentachlorophenol	ND			0.30	0.15	µg/L	1.0	09/04/2024	09/10/2024 00:16
Surrogate: 2,4,6-Tribromophenol	95.4			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 00:16

**Client Sample ID:** MW-7**Received:** 08/23/2024**Lab ID:** 2408409-03A **Matrix:** Groundwater**Collected** 08/21/2024 14:00**Test Name:** Chlorinated Phenols**Analyst:** JLS**Reference:** Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
2,3,4,6-Tetrachlorophenol	ND			1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 00:43
Pentachlorophenol	ND			0.30	0.15	µg/L	1.0	09/04/2024	09/10/2024 00:43
Surrogate: 2,4,6-Tribromophenol	89.8			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 00:43

**Client Sample ID:** MW-8**Received:** 08/23/2024**Lab ID:** 2408409-04A **Matrix:** Groundwater**Collected** 08/22/2024 11:35**Test Name:** Chlorinated Phenols**Analyst:** JLS**Reference:** Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
2,3,4,6-Tetrachlorophenol	ND			1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 01:09
Pentachlorophenol	ND			0.30	0.15	µg/L	1.0	09/04/2024	09/10/2024 01:09
Surrogate: 2,4,6-Tribromophenol	85.8			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 01:09

Date: 13-Sep-2024

WorkOrder: 2408409

**ANALYTICAL REPORT****Client Sample ID:** MW-9**Received:** 08/23/2024**Lab ID:** 2408409-05A **Matrix:** Groundwater**Collected** 08/21/2024 13:30**Test Name:** Chlorinated Phenols**Analyst:** JLS**Reference:** Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
2,3,4,6-Tetrachlorophenol	ND			1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 01:36
Pentachlorophenol	ND			0.30	0.15	µg/L	1.0	09/04/2024	09/10/2024 01:36
Surrogate: 2,4,6-Tribromophenol	88.5			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 01:36

**Client Sample ID:** MW-10**Received:** 08/23/2024**Lab ID:** 2408409-06A **Matrix:** Groundwater**Collected** 08/22/2024 10:10**Test Name:** Chlorinated Phenols**Analyst:** JLS**Reference:** Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
2,3,4,6-Tetrachlorophenol	ND			1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 02:02
Pentachlorophenol	ND			0.30	0.15	µg/L	1.0	09/04/2024	09/10/2024 02:02
Surrogate: 2,4,6-Tribromophenol	89.6			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 02:02

**Client Sample ID:** MW-11**Received:** 08/23/2024**Lab ID:** 2408409-07A **Matrix:** Groundwater**Collected** 08/22/2024 09:30**Test Name:** Chlorinated Phenols**Analyst:** JLS**Reference:** Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
2,3,4,6-Tetrachlorophenol	ND			1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 02:29
Pentachlorophenol	ND			0.30	0.15	µg/L	1.0	09/04/2024	09/10/2024 02:29
Surrogate: 2,4,6-Tribromophenol	95.0			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 02:29

**Client Sample ID:** MW-12**Received:** 08/23/2024**Lab ID:** 2408409-08A **Matrix:** Groundwater**Collected** 08/22/2024 14:40**Test Name:** Chlorinated Phenols**Analyst:** JLS**Reference:** Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
2,3,4,6-Tetrachlorophenol	ND			1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 10:25
<b>Pentachlorophenol</b>	<b>16</b>			3.0	1.5	µg/L	10	09/04/2024	09/10/2024 03:48
Surrogate: 2,4,6-Tribromophenol	110			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 10:25

Date: 13-Sep-2024

WorkOrder: 2408409

**ANALYTICAL REPORT**

Client Sample ID: MW-13

Received: 08/23/2024

Lab ID: 2408409-09A Matrix: Groundwater

Collected 08/22/2024 13:25

Test Name: Chlorinated Phenols

Analyst: JLS

Reference: Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
2,3,4,6-Tetrachlorophenol	ND			1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 04:15
Pentachlorophenol	ND			0.30	0.15	µg/L	1.0	09/04/2024	09/10/2024 04:15
Surrogate: 2,4,6-Tribromophenol	100			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 04:15

Client Sample ID: MW-14

Received: 08/23/2024

Lab ID: 2408409-10A Matrix: Groundwater

Collected 08/22/2024 12:40

Test Name: Chlorinated Phenols

Analyst: JLS

Reference: Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
<i>2,3,4,6-Tetrachlorophenol</i>	<i>0.69</i>	J		1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 04:41
<i>Pentachlorophenol</i>	<i>1.6</i>			0.30	0.15	µg/L	1.0	09/04/2024	09/10/2024 04:41
Surrogate: 2,4,6-Tribromophenol	104			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 04:41

Client Sample ID: MW-15

Received: 08/23/2024

Lab ID: 2408409-11A Matrix: Groundwater

Collected 08/22/2024 15:10

Test Name: Chlorinated Phenols

Analyst: JLS

Reference: Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
2,3,4,6-Tetrachlorophenol	ND			1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 05:08
<i>Pentachlorophenol</i>	<i>0.92</i>			0.30	0.15	µg/L	1.0	09/04/2024	09/10/2024 05:08
Surrogate: 2,4,6-Tribromophenol	85.8			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 05:08

Client Sample ID: MW-16

Received: 08/23/2024

Lab ID: 2408409-12A Matrix: Groundwater

Collected 08/22/2024 10:50

Test Name: Chlorinated Phenols

Analyst: JLS

Reference: Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
2,3,4,6-Tetrachlorophenol	ND			1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 05:34
Pentachlorophenol	ND			0.30	0.15	µg/L	1.0	09/04/2024	09/10/2024 05:34
Surrogate: 2,4,6-Tribromophenol	96.6			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 05:34

Date: 13-Sep-2024

WorkOrder: 2408409

**ANALYTICAL REPORT**

Client Sample ID: MW-17

Received: 08/23/2024

Lab ID: 2408409-13A Matrix: Groundwater

Collected 08/22/2024 14:05

Test Name: Chlorinated Phenols

Analyst: JLS

Reference: Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
<i>2,3,4,6-Tetrachlorophenol</i>	<b>2.1</b>			1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 10:52
<i>Pentachlorophenol</i>	<b>4.9</b>			3.0	1.5	µg/L	10	09/04/2024	09/10/2024 06:00
Surrogate: 2,4,6-Tribromophenol	119			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 10:52

Client Sample ID: MW-18

Received: 08/23/2024

Lab ID: 2408409-14A Matrix: Groundwater

Collected 08/21/2024 15:15

Test Name: Chlorinated Phenols

Analyst: JLS

Reference: Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
2,3,4,6-Tetrachlorophenol	ND			1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 06:27
<i>Pentachlorophenol</i>	<b>1.6</b>			0.30	0.15	µg/L	1.0	09/04/2024	09/10/2024 06:27
Surrogate: 2,4,6-Tribromophenol	111			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 06:27

Client Sample ID: MW-19

Received: 08/23/2024

Lab ID: 2408409-15A Matrix: Groundwater

Collected 08/21/2024 16:10

Test Name: Chlorinated Phenols

Analyst: JLS

Reference: Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
<i>2,3,4,6-Tetrachlorophenol</i>	<b>0.29</b>	J		1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 11:18
<i>Pentachlorophenol</i>	<b>34</b>			3.0	1.5	µg/L	10	09/04/2024	09/10/2024 13:10
Surrogate: 2,4,6-Tribromophenol	105			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 11:18

Client Sample ID: MW-20

Received: 08/23/2024

Lab ID: 2408409-16A Matrix: Groundwater

Collected 08/21/2024 12:30

Test Name: Chlorinated Phenols

Analyst: JLS

Reference: Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
2,3,4,6-Tetrachlorophenol	ND			1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 07:20
Pentachlorophenol	ND			0.30	0.15	µg/L	1.0	09/04/2024	09/10/2024 07:20
Surrogate: 2,4,6-Tribromophenol	109			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 07:20

Date: 13-Sep-2024

WorkOrder: 2408409

**ANALYTICAL REPORT**

Client Sample ID: DUP

Received: 08/23/2024

Lab ID: 2408409-17A

Matrix: Groundwater

Collected

Test Name: Chlorinated Phenols

Analyst: JLS

Reference: Canadian Pulp Report/NCASI 86.07

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Flag</u>	<u>Limit</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
2,3,4,6-Tetrachlorophenol	ND			1.0	0.28	µg/L	1.0	09/04/2024	09/10/2024 11:45
<b><i>Pentachlorophenol</i></b>	<b>28</b>			3.0	1.5	µg/L	10	09/04/2024	09/10/2024 13:36
Surrogate: 2,4,6-Tribromophenol	97.3			67.7-130	N/A	% Rec	1.0	09/04/2024	09/10/2024 11:45

Microbac Laboratories, Inc. - Arcata

Date: 09/13/2024

**CLIENT:** SHN Consulting Engineers and Geologists  
**Work Order:** 2408409  
**Project:** 020189.010 M&P Mill

**QC SUMMARY REPORT**  
 Method Blank

Sample ID: <b>MB-44979</b>	Batch ID: <b>44979</b>	Test Code: <b>PCPTW</b>	Units: <b>µg/L</b>	Analysis Date: <b>09/09/2024 22:04</b>	Prep Date: <b>09/04/2024</b>						
Client ID:	Run ID: <b>ORGC18_240910A</b>	SeqNo: <b>1716029</b>									
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,3,4,6-Tetrachlorophenol	ND	1.0									
Pentachlorophenol	ND	0.30									
Surrogate: 2,4,6-Tribromophenol	4.40	0.10	5.00	0	88.1%	68	130	0			

**Qualifiers:** ND - Not Detected at the Reporting Limit      S - Spike Recovery outside accepted recovery limits      B - Analyte detected in the associated Method Blank  
 J - Analyte detected below quantitation limits      R - RPD outside accepted recovery limits

Microbac Laboratories, Inc. - Arcata

Date: 09/13/2024

**CLIENT:** SHN Consulting Engineers and Geologists  
**Work Order:** 2408409  
**Project:** 020189.010 M&P Mill

**QC SUMMARY REPORT**  
 Sample Matrix Spike

Sample ID: **2408409-13AMS** Batch ID: **44979** Test Code: **PCPTW** Units: **µg/L** Analysis Date **09/10/2024 09:06** Prep Date: **09/04/2024**  
 Client ID: **MW-17** Run ID: **ORGC18\_240910A** SeqNo: **1716052**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,3,4,6-Tetrachlorophenol	5.795	1.0	5.00	0	116%	77	128	0			
Pentachlorophenol	NQ	0.30	1.50	4.88	NQ	61	135	0			S
Surrogate: 2,4,6-Tribromophenol	5.47	0.10	5.00	0	109%	68	130	0			

Sample ID: **2408409-17AMS** Batch ID: **44979** Test Code: **PCPTW** Units: **µg/L** Analysis Date **09/10/2024 09:32** Prep Date: **09/04/2024**  
 Client ID: **DUP** Run ID: **ORGC18\_240910A** SeqNo: **1716053**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,3,4,6-Tetrachlorophenol	5.648	1.0	5.00	0	113%	77	128	0			
Pentachlorophenol	NQ	0.30	1.50	0	NQ	61	135	0			S
Surrogate: 2,4,6-Tribromophenol	4.40	0.10	5.00	0	88.1%	68	130	0			

**Qualifiers:** ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank  
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

## Microbac Laboratories, Inc. - Arcata

Date: 09/13/2024

**CLIENT:** SHN Consulting Engineers and Geologists  
**Work Order:** 2408409  
**Project:** 020189.010 M&P Mill

**QC SUMMARY REPORT**  
 Laboratory Control Spike

Sample ID:	Batch ID:	Test Code:	Units:	Analysis Date:	Prep Date:						
LCS-44979	44979	PCPTW	µg/L	09/09/2024 22:30	09/04/2024						
Client ID:	Run ID:	SeqNo: 1716030									
ORG18_240910A											
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,3,4,6-Tetrachlorophenol	4.622	1.0	5.00	0	92.4%	77	128	0			
Pentachlorophenol	1.364	0.30	1.50	0	91%	61	135	0			
Surrogate: 2,4,6-Tribromophenol	4.82	0.10	5.00	0	96.3%	68	130	0			

Sample ID:	Batch ID:	Test Code:	Units:	Analysis Date:	Prep Date:						
LCSD-44979	44979	PCPTW	µg/L	09/09/2024 22:57	09/04/2024						
Client ID:	Run ID:	SeqNo: 1716031									
ORG18_240910A											
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,3,4,6-Tetrachlorophenol	4.409	1.0	5.00	0	88.2%	77	128	4.62	4.7%	30	
Pentachlorophenol	1.301	0.30	1.50	0	86.7%	61	135	1.36	4.7%	30	
Surrogate: 2,4,6-Tribromophenol	4.53	0.10	5.00	0	90.6%	68	130	4.82	6.1%	30	

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

SAMPLE RECEIPT AND LOGIN CHECKLIST

**Sample Receipt**

- Is the Chain of Custody (COC) present, and all entries permanent and legible? Yes No
- Is the COC filled out with all pertinent information? (including system & source #s) Yes No
- Is the COC signed and dated? Yes No
- Are sample temperature(s) recorded? Yes No NA
- Are sample temperature(s) between 0 °C and 6 °C? If "No", notify the client. Yes No NA
- Are samples preserved and/or checked? Yes No NA
- Are sample labels legible and consistent with the COC? If "No", notify the client. Yes No
- Are appropriate sample containers used? Yes No
- For zero headspace samples (volatiles), are there bubbles pea-sized or larger (~1/4")? If "Yes", notify the client. Yes No NA
- Is there sufficient sample volume for all requested analyses, including MS/MSDs? Yes No NA
- Have the scientists been notified of any expiring or RUSH samples? Yes No NA

Client Services Representative (Initial): amw Date: 8/23/24

Sample Preservation (only fill out if performed)						
Test:	COD	Tot PO <sub>4</sub>	Amm	TKN	TOC	
	O&G	Metals	531	608	Other:	
Pres:	H <sub>2</sub> SO <sub>4</sub>	H <sub>3</sub> PO <sub>4</sub>	HCl	HNO <sub>3</sub>		
	MCAA	NaOH	Na <sub>2</sub> S <sub>2</sub> O	Other:		
Final pH:	< 2	< 3	< 4	≥ 5 & ≤ 9	> 12	Other:
Residual Chlorine:						
EPA 608: If the pH is ≥ 5 and ≤ 9, the holding time is 7 days.						
If the pH is not ≥ 5 and ≤ 9, <u>and</u> samples will not be extracted within 72 hours, adjust the pH to ≥ 5 and ≤ 9.						
If the sample is chlorinated <u>and</u> Aldrin is to be determined, dechlorinate the sample with sodium thiosulfate.						
Client Services Representative (Initial):			Date/Time:			

**Sample Login / Client Services**

- Are the Reporting addresses correct? Yes No
- Is the date received correct? Yes No
- Is the due date correct? Yes No
- Is the Report To line correct? Yes No NA
- Is the Order Name correct? Yes No NA
- Is the Purchase Order Number (PO#) entered? Yes No NA
- Do sample IDs match the COC? Yes No
- Do sample collection dates and times match the COC? Yes No NA
- Are the correct tests and analytes logged in? Yes No
- If the sample temperature was > 6 °C, was "Temp" case narrative added? Yes No NA
- If short HT tests have expired, was the appropriate case narrative added? Yes No NA
- Does the pricing match the quote or contract or routine prices? Yes No NA
- Are subcontract chains present? Yes No NA
- Are the deliverables marked correctly on the folder? (SF, EDD, etc.) Yes No NA

Client Services Representative (Initial): r Date: 8/27/24







**ENTHALPY**  
ANALYTICAL

Enthalpy Analytical  
931 West Barkley Ave  
Orange, CA 92868  
(714) 771-6900

enthalpy.com

Lab Job Number : 514835  
Report Level : II  
Report Date : 09/23/2024

**Analytical Report** *prepared for:*

Erik Nielsen  
SHN Engineering - Eureka  
812 W Wabash Ave  
Eureka, CA 95501

Location: M&P Mill #20189.010

*Authorized for release by:*

Zach Barker, Project Manager  
[zach.barker@enthalpy.com](mailto:zach.barker@enthalpy.com)

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

## Sample Summary

Erik Nielsen  
SHN Engineering -  
Eureka  
812 W Wabash Ave  
Eureka, CA 95501

Lab Job #: 514835  
Location: M&P Mill #20189.010  
Date Received: 08/27/24

Sample ID	Lab ID	Collected	Matrix
MW-1	514835-001	08/26/24 15:45	Water
MW-5	514835-002	08/26/24 12:05	Water
MW-10	514835-003	08/26/24 10:10	Water
MW-11	514835-004	08/26/24 09:30	Water
MW-12	514835-005	08/26/24 14:40	Water
MW-13	514835-006	08/26/24 13:25	Water
MW-14	514835-007	08/26/24 12:40	Water
MW-15	514835-008	08/26/24 15:10	Water
MW-16	514835-009	08/26/24 10:50	Water
MW-17	514835-010	08/26/24 14:05	Water
MW-18	514835-011	08/26/24 15:15	Water
MW-19	514835-012	08/26/24 16:10	Water
MW-20	514835-013	08/26/24 12:30	Water
DUP	514835-014	08/26/24 00:00	Water

## Case Narrative

---

SHN Engineering - Eureka  
812 W Wabash Ave  
Eureka, CA 95501  
Erik Nielsen

Lab Job 514835  
Number:  
Location: M&P Mill  
#20189.010

Date Received: 08/27/24

---

This data package contains sample and QC results for fourteen water samples, requested for the above referenced project on 08/27/24. The samples were received cold and intact.

**Dioxins & Furans (EPA 8290):**

Enthalpy - El Dorado Hills in El Dorado Hills, CA performed the analysis (see sublab report section for certifications). Please see the Enthalpy - El Dorado Hills case narrative.



<<< Select a Laboratory >>>  
 #N/A  
 #N/A

Chain of Custody Record  
 Lab No: 514835  
 Page: 1 of 2

Turn Around Time (rush by advanced notice only)  
 Standard: X  
 3 Day:  
 5 Day:  
 1 Day:  
 Custom TAT:

Matrix: A = Air S = Soil/Solid  
 W = Water DW = Drinking Water SD = Sediment  
 PP = Pure Product SEA = Sea Water  
 SW = Swab T = Tissue WP = Wipe O = Other  
 (lab use only)

Preservatives:  
 1 = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> 2 = HCl 3 = HNO<sub>3</sub>  
 4 = H<sub>2</sub>SO<sub>4</sub> 5 = NaOH 6 = Other

Sample Receipt Temp:

CUSTOMER INFORMATION		PROJECT INFORMATION				Analysis Request		Test Instructions / Comments	
Company:	SHN	Name:	M&P Mill	Matrix					
Report To:	Erik Nielsen	Number:	20189.010	Container No. / Size					
Email:	enielsen@shn-engr.com	P.O. #:		Sampling Time					
Address:	812 W. Wabash Ave	Address:	1619 Glendale Dr	Pres.					
	Eureka CA, 95501		McKinleyville CA						
Phone:	707-441-8855	Global ID:	12240115						
Fax:		Sampled By:	R. Klakken - R. Klakken						

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.
1 MW-1	08/22/24	15:45	GW	2, 1-liter	x
2 MW-5	08/22/24	12:05	GW	2, 1-liter	x
3 MW-10	08/22/24	10:10	GW	2, 1-liter	x
4 MW-11	08/22/24	9:30	GW	2, 1-liter	x
5 MW-12	08/22/24	14:40	GW	2, 1-liter	x
6 MW-13	08/22/24	13:25	GW	2, 1-liter	x
7 MW-14	08/22/24	12:40	GW	2, 1-liter	x
8 MW-15	08/22/24	15:10	GW	2, 1-liter	x
9 MW-16	08/22/24	10:50	GW	2, 1-liter	x
10 MW-17	08/22/24	14:05	GW	2, 1-liter	x

Signature	Print Name	Company / Title	Date / Time
<i>Roy Klakken</i>	R. Klakken	SHN	8/26/2024 / 14:00
<i>Brandon Hamrick</i>	Brandon Hamrick	EA	8/27/24 0800
<i>JW</i>	SETH CO	ENTHALPY	8/26/24 13:14



<<< Select a Laboratory >>>  
 #N/A  
 #N/A

Chain of Custody Record  
 Lab No: 514895  
 Page: 2 of 2

Turn Around Time (rush by advanced notice only)  
 Standard: X  
 5 Day:  
 1 Day:  
 3 Day:  
 Custom TAT  
 Preservatives:  
 1 = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> 2 = HCl 3 = HNO<sub>3</sub>  
 4 = H<sub>2</sub>SO<sub>4</sub> 5 = NaOH 6 = Other  
 Sample Receipt Temp:  
 (lab use only)

Matrix: A = Air S = Soil/Solid  
 W = Water DW = Drinking Water SD = Sediment  
 PP = Pure Product SEA = Sea Water  
 SW = Swab T = Tissue WP = Wipe O = Other

CUSTOMER INFORMATION		PROJECT INFORMATION				Analysis Request		Test Instructions / Comments	
Company:	SHN	Name:	M&P Mill	Matrix					
Report To:	Erik Nielsen	Number:	20189.010	Container No. / Size					
Email:	enielsen@shn-engr.com	P.O. #:							
Address:	812 W. Wabash Ave	Address:	1619 Glendale Dr						
	Eureka CA, 95501		McKinleyville CA						
Phone:	707-441-8855	Global ID:	12240115						
Fax:		Sampled By:	R. Klakken - R. Klakken						

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Analysis Request	Test Instructions / Comments
1 MW-18	08/21/24	15:15	GW	1, 1-liter	x		
2 MW-19	08/21/24	16:10	GW	2, 1-liter	x		
3 MW-20	08/21/24	12:30	GW	2, 1-liter	x		
4 Dup			GW	2, 1-liter	x		
5							
6							
7							
8							
9							
10							

Signature	Print Name	Company / Title	Date / Time
<i>R. Klakken</i>	R. Klakken	SHN	8/26/2024 - 14:00
<i>Brenda Hamilton</i>	Brenda Hamilton	EA	8/27/24 09:30
<i>JM</i>	JM	ENTHALP X	8/28/24 13:14



800-322-5555  
www.gls-us.com

**Ship From**  
ENTHALPY ANALYTICAL  
SAMPLE RECEIVING  
4620 NORTHGATE BLVD  
SUITE 170  
ORANGE, CA 92868

**Tracking #: 561901112**

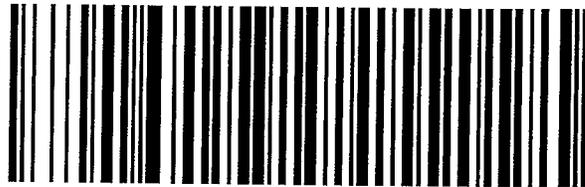
**NPS**



**Ship To**  
ENTHALPY ANALYTICAL  
SAMPLE RECEIVING  
931 W BARKLEY AVE  
SAMPLE RECEIVING  
ORANGE, CA 92868

**ORANGE**

**S10219D**



**COD:** \$0.00  
**Weight:** 0 lb(s)  
**Reference:**

14853409

**Delivery Instructions:**

**Signature Type:** STANDARD

**ORC CA927-RD0**

884  
4.0 1202  
4.2 +0.2

Print Date: 8/27/2024 9:43 AM

Package 1 of 20

**LABEL INSTRUCTIONS:**

**Do not copy or reprint this label for additional shipments - each package must have a unique barcode.**

Step 1: Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer.

Step 2: Fold this page in half.

Step 3: Securely attach this label to your package and do not cover the barcode.

**TERMS AND CONDITIONS:**

By giving us your shipment to deliver, you agree to all of the General Logistics Systems US, Inc. (GLS) service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at [www.gls-us.com](http://www.gls-us.com).



800-322-5555  
www.gls-us.com

**Ship From**  
ENTHALPY ANALYTICAL LABORATORIES  
SAMPLE RECEIVING  
4620 NORTHGATE BLVD  
SUITE 170  
SACRAMENTO, CA 95834

**Tracking #: 561876540**

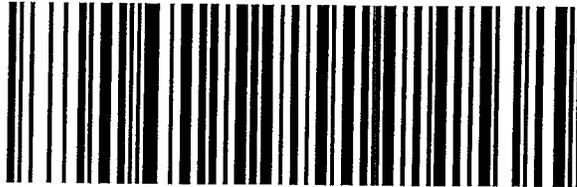
**NPS**



**Ship To**  
ENTHALPY ANALYTICAL  
SAMPLE RECEIVING  
931 WEST BARKLEY AVE  
SAMPLE RECEIVING  
ORANGE, CA 92868

**ORANGE**

**S10219D**



14541534

**COD: \$0.00**  
**Weight: 0 lb(s)**  
**Reference:**

**Delivery Instructions:**

**Signature Type: STANDARD**

**ORC CA927-RD0**

*892*

*3.7 1202*

*3.9 to.2*

Print Date: 8/21/2024 11:19 AM

Package 20 of 20

**LABEL INSTRUCTIONS:**

**Do not copy or reprint this label for additional shipments - each package must have a unique barcode.**

Step 1: Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer.

Step 2: Fold this page in half.

Step 3: Securely attach this label to your package and do not cover the barcode.

**TERMS AND CONDITIONS:**

By giving us your shipment to deliver, you agree to all of the General Logistics Systems US, Inc. (GLS) service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at [www.gls-us.com](http://www.gls-us.com).

**SAMPLE RECEIPT CHECKLIST**



**Section 1: General Info**

Date Received: 8/27/24 WO# 514835 Client: SHN

**Section 2: Shipping / Custody**

Are custody seals present?  Yes  No

Custody seals intact on arrival?  N/A  Yes  No  On cooler / box  On samples

Shipping Info: FEDEX

**Section 3a: Condition / Packaging**

Outside 0.0 - 6.0°C (0.0 - 10.0°C for microbiology) (PM notified)

Date Opened 8/27/24 By (initials) BH

Type of ice used:  Wet  Blue/Gel  None

Samples received on ice directly from the field; cooling process had begun. (if checked, skip temperatures)

Sample matrix doesn't require cooling (e.g. air, bulk PCB). (if checked, skip temperatures)

If no cooler: Observed/Adjusted Temp (°C): 1

Thermometer/IR Gun: IR09 CF: -0.3°C

Cooler Temp (°C) #1: 2.9°C #2: 2.6°C #3: 3.1°C #4: 2.8°C #5:      #6:     

**Section 3b: Microbiology Samples**

No microbiology samples submitted (skip 3b)

Within temp range 0.0 - 10.0°C or received on ice directly from field.

Adequate headspace for microbiology analysis.

**Section 3c: Air Samples**

No air samples submitted (skip 3c)

1.4L Canisters  6L Canisters  Tedlar Bags  MCE Cassettes  Sorbent Tubes  Other     

**Section 4: Containers / Labels / Samples**

	YES	NO	N/A
1) Were custody papers present, filled properly, and legible?	X		
2) Is the sampler's name present on the CoC?	X		
3) Were containers received in good condition (unbroken / unopened / uncompromised)?	X		
4) Were the samples bagged? (required for microbiology samples; recommended for soil samples)		X	
5) Were all of, and only, the correct samples received?	X		
6) Are sample labels present, legible, and in agreement with the CoC?	X		
7) Does the container count match the CoC?	X		
8) Was sufficient sample volume / mass received for the analyses requested?	X		
9) Were samples received in proper containers for the analyses requested?	X		
10) Were samples received with > 1/2 holding time remaining?	X		
11) Are samples properly preserved as indicated by CoC / labels?	X		
12) Unpreserved VOAs received - If necessary, was the hold time changed in LIMS?			X
13) Are VOA vials free from headspace/bubbles > 6mm?			X

**Section 5: Explanations / Comments**

PM notified

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Date Logged 8/27/24 By (print) Brenda Hamilton (sign) Brenda Hamilton  
 Date Labeled 8/27/24 By (print) Brenda Hamilton (sign) Brenda Hamilton

**Laboratory Job Number 514835**

**Subcontracted Products**

**Enthalpy - El Dorado Hills**



September 23, 2024

**Enthalpy Analytical - El Dorado Hills  
Work Order No. 2408183**

Mr. Zach Barker  
Enthalpy Analytical  
931 W. Barkley Avenue  
Orange, CA 92868

Dear Mr. Barker,

Enclosed are the results for the sample set received at Enthalpy Analytical - EDH on August 27, 2024 under your Project Name 'EO-514835'.

Enthalpy Analytical - EDH is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at [mark.rein@enthalpy.com](mailto:mark.rein@enthalpy.com).

Thank you for choosing Enthalpy Analytical - EDH as part of your analytical support team.

Sincerely,

Mark Rein  
Project Manager

*Enthalpy Analytical - EDH certifies that the report herein meets all the requirements set forth by NELAP for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Enthalpy Analytical - EDH.*

## **Enthalpy Analytical - EDH Work Order No. 2408183**

### **Case Narrative**

#### **Sample Condition on Receipt:**

Fourteen water samples were received and stored securely in accordance with Enthalpy Analytical - EDH standard operating procedures and EPA methodology. The samples were received in good condition and within the method temperature requirements.

#### **Analytical Notes:**

##### **EPA Method 8290A**

The samples were extracted and analyzed for tetra-through-octa chlorinated dioxins and furans by EPA Method 8290A using a ZB-DIOXIN GC column.

##### **Holding Times**

The method holding time criteria were met for these samples.

##### **Quality Control**

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected above the sample quantitation limits in the Method Blank. The OPR recoveries were within the method acceptance criteria.

Labeled standard recoveries for all QC and field samples were within method acceptance criteria.

## TABLE OF CONTENTS

Case Narrative.....	1
Table of Contents.....	3
Sample Inventory.....	4
Analytical Results.....	5
Qualifiers.....	22
Certifications.....	23
Sample Receipt.....	24

# Sample Inventory Report

Sample ID	Client Sample ID	Sampled	Received	Components/Containers
2408183-01	MW-1	26-Aug-24 15:45	27-Aug-24 12:24	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
2408183-02	MW-5	26-Aug-24 12:05	27-Aug-24 12:24	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
2408183-03	MW-10	26-Aug-24 10:10	27-Aug-24 12:24	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
2408183-04	MW-11	26-Aug-24 09:30	27-Aug-24 12:24	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
2408183-05	MW-12	26-Aug-24 14:40	27-Aug-24 12:24	Amber Glass WM Bottle, 1L Amber Glass WM Bottle, 1L
2408183-06	MW-13	26-Aug-24 13:25	27-Aug-24 12:24	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
2408183-07	MW-14	26-Aug-24 12:40	27-Aug-24 12:24	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
2408183-08	MW-15	26-Aug-24 15:10	27-Aug-24 12:24	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
2408183-09	MW-16	26-Aug-24 10:50	27-Aug-24 12:24	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
2408183-10	MW-17	26-Aug-24 14:05	27-Aug-24 12:24	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
2408183-11	MW-18	26-Aug-24 15:15	27-Aug-24 12:24	Amber Glass NM Bottle, 1L
2408183-12	MW-19	26-Aug-24 16:10	27-Aug-24 12:24	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
2408183-13	MW-20	26-Aug-24 12:30	27-Aug-24 12:24	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
2408183-14	DUP	26-Aug-24 00:00	27-Aug-24 12:24	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L

## **ANALYTICAL RESULTS**

**Sample ID: Method Blank**
**EPA Method 8290A**

Client Data		Laboratory Data			
Name:	Enthalpy Analytical	Lab Sample:	B24I056-BLK1	Date Extracted:	10-Sep-24
Project:	EO-514835	QC Batch:	B24I056	Column:	ZB-DIOXIN
Matrix:	Aqueous	Sample Size:	1.00 L		

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.583	1.78			13-Sep-24 13:14	1
1,2,3,7,8-PeCDD	ND	0.821	5.63			13-Sep-24 13:14	1
1,2,3,4,7,8-HxCDD	ND	2.88	4.18			13-Sep-24 13:14	1
1,2,3,6,7,8-HxCDD	ND	2.90	3.51			13-Sep-24 13:14	1
1,2,3,7,8,9-HxCDD	ND	2.42	4.46			13-Sep-24 13:14	1
1,2,3,4,6,7,8-HpCDD	ND	1.38	4.84			13-Sep-24 13:14	1
OCDD	ND	2.93	16.4			13-Sep-24 13:14	1
2,3,7,8-TCDF	ND	0.620	1.78			13-Sep-24 13:14	1
1,2,3,7,8-PeCDF	ND	0.633	5.01			13-Sep-24 13:14	1
2,3,4,7,8-PeCDF	ND	0.670	4.99			13-Sep-24 13:14	1
1,2,3,4,7,8-HxCDF	ND	0.738	6.87			13-Sep-24 13:14	1
1,2,3,6,7,8-HxCDF	ND	0.754	6.31			13-Sep-24 13:14	1
2,3,4,6,7,8-HxCDF	ND	0.906	5.80			13-Sep-24 13:14	1
1,2,3,7,8,9-HxCDF	ND	1.18	5.33			13-Sep-24 13:14	1
1,2,3,4,6,7,8-HpCDF	ND	0.987	5.96			13-Sep-24 13:14	1
1,2,3,4,7,8,9-HpCDF	ND	1.48	5.34			13-Sep-24 13:14	1
OCDF	ND	2.05	11.3			13-Sep-24 13:14	1

**Toxic Equivalent**

TEQMinWHO2005Dioxin	0.00
---------------------	------

**Totals**

Total TCDD	ND	0.583					
Total PeCDD	ND	0.821					
Total HxCDD	ND	2.90					
Total HpCDD	ND	1.38					
Total TCDF	ND	0.620					
Total PeCDF	ND	0.670					
Total HxCDF	ND	1.18					
Total HpCDF	ND	1.48					

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	103	40 - 135		13-Sep-24 13:14	1
13C-1,2,3,7,8-PeCDD	IS	105	40 - 135		13-Sep-24 13:14	1
13C-1,2,3,4,7,8-HxCDD	IS	81.6	40 - 135		13-Sep-24 13:14	1
13C-1,2,3,6,7,8-HxCDD	IS	76.8	40 - 135		13-Sep-24 13:14	1
13C-1,2,3,7,8,9-HxCDD	IS	93.2	40 - 135		13-Sep-24 13:14	1
13C-1,2,3,4,6,7,8-HpCDD	IS	85.6	40 - 135		13-Sep-24 13:14	1
13C-OCDD	IS	75.9	40 - 135		13-Sep-24 13:14	1
13C-2,3,7,8-TCDF	IS	99.1	40 - 135		13-Sep-24 13:14	1
13C-1,2,3,7,8-PeCDF	IS	104	40 - 135		13-Sep-24 13:14	1
13C-2,3,4,7,8-PeCDF	IS	98.3	40 - 135		13-Sep-24 13:14	1
13C-1,2,3,4,7,8-HxCDF	IS	97.1	40 - 135		13-Sep-24 13:14	1
13C-1,2,3,6,7,8-HxCDF	IS	93.7	40 - 135		13-Sep-24 13:14	1
13C-2,3,4,6,7,8-HxCDF	IS	90.1	40 - 135		13-Sep-24 13:14	1
13C-1,2,3,7,8,9-HxCDF	IS	94.3	40 - 135		13-Sep-24 13:14	1
13C-1,2,3,4,6,7,8-HpCDF	IS	91.8	40 - 135		13-Sep-24 13:14	1
13C-1,2,3,4,7,8,9-HpCDF	IS	89.2	40 - 135		13-Sep-24 13:14	1
13C-OCDF	IS	83.8	40 - 135		13-Sep-24 13:14	1
37Cl-2,3,7,8-TCDD	CRS	111	40 - 135		13-Sep-24 13:14	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

MDL - Method Detection Limit

**Sample ID: OPR**
**EPA Method 8290A**

Client Data		Laboratory Data			
Name:	Enthalpy Analytical	Lab Sample:	B24I056-BS1	Date Extracted:	10-Sep-24 07:43
Project:	EO-514835	QC Batch:	B24I056	Column:	ZB-DIOXIN
Matrix:	Aqueous	Sample Size:	1.00 L		

Analyte	Amt Found (pg/L)	Spike Amt	% Recovery	Limits	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	170	200	85.0	70-130		13-Sep-24 10:48	1
1,2,3,7,8-PeCDD	973	1000	97.3	70-130		13-Sep-24 10:48	1
1,2,3,4,7,8-HxCDD	1130	1000	113	70-130		13-Sep-24 10:48	1
1,2,3,6,7,8-HxCDD	1130	1000	113	70-130		13-Sep-24 10:48	1
1,2,3,7,8,9-HxCDD	1110	1000	111	70-130		13-Sep-24 10:48	1
1,2,3,4,6,7,8-HpCDD	1040	1000	104	70-130		13-Sep-24 10:48	1
OCDD	2330	2000	116	70-130		13-Sep-24 10:48	1
2,3,7,8-TCDF	198	200	98.9	70-130		13-Sep-24 10:48	1
1,2,3,7,8-PeCDF	1040	1000	104	70-130		13-Sep-24 10:48	1
2,3,4,7,8-PeCDF	1130	1000	113	70-130		13-Sep-24 10:48	1
1,2,3,4,7,8-HxCDF	1000	1000	100	70-130		13-Sep-24 10:48	1
1,2,3,6,7,8-HxCDF	999	1000	99.9	70-130		13-Sep-24 10:48	1
2,3,4,6,7,8-HxCDF	1020	1000	102	70-130		13-Sep-24 10:48	1
1,2,3,7,8,9-HxCDF	997	1000	99.7	70-130		13-Sep-24 10:48	1
1,2,3,4,6,7,8-HpCDF	1070	1000	107	70-130		13-Sep-24 10:48	1
1,2,3,4,7,8,9-HpCDF	1050	1000	105	70-130		13-Sep-24 10:48	1
OCDF	2020	2000	101	70-130		13-Sep-24 10:48	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	111	40-135		13-Sep-24 10:48	1
13C-1,2,3,7,8-PeCDD	IS	112	40-135		13-Sep-24 10:48	1
13C-1,2,3,4,7,8-HxCDD	IS	82.1	40-135		13-Sep-24 10:48	1
13C-1,2,3,6,7,8-HxCDD	IS	78.2	40-135		13-Sep-24 10:48	1
13C-1,2,3,7,8,9-HxCDD	IS	94.6	40-135		13-Sep-24 10:48	1
13C-1,2,3,4,6,7,8-HpCDD	IS	88.1	40-135		13-Sep-24 10:48	1
13C-OCDD	IS	77.5	40-135		13-Sep-24 10:48	1
13C-2,3,7,8-TCDF	IS	101	40-135		13-Sep-24 10:48	1
13C-1,2,3,7,8-PeCDF	IS	104	40-135		13-Sep-24 10:48	1
13C-2,3,4,7,8-PeCDF	IS	100	40-135		13-Sep-24 10:48	1
13C-1,2,3,4,7,8-HxCDF	IS	96.5	40-135		13-Sep-24 10:48	1
13C-1,2,3,6,7,8-HxCDF	IS	94.9	40-135		13-Sep-24 10:48	1
13C-2,3,4,6,7,8-HxCDF	IS	92.1	40-135		13-Sep-24 10:48	1
13C-1,2,3,7,8,9-HxCDF	IS	94.8	40-135		13-Sep-24 10:48	1
13C-1,2,3,4,6,7,8-HpCDF	IS	93.8	40-135		13-Sep-24 10:48	1
13C-1,2,3,4,7,8,9-HpCDF	IS	94.3	40-135		13-Sep-24 10:48	1
13C-OCDF	IS	88.1	40-135		13-Sep-24 10:48	1
37Cl-2,3,7,8-TCDD	CRS	110	40-135		13-Sep-24 10:48	1

**Sample ID: MW-1**

**EPA Method 8290A**

Client Data		Laboratory Data			
Name:	Enthalpy Analytical	Lab Sample:	2408183-01	Date Received:	27-Aug-24 12:24
Project:	EO-514835	QC Batch:	B24I056	Date Extracted:	10-Sep-24
Matrix:	Water	Sample Size:	0.928 L	Column:	ZB-DIOXIN
Date Collected:	26-Aug-24 15:45				

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.692	1.92			13-Sep-24 14:48	1
1,2,3,7,8-PeCDD	ND	1.15	6.06			13-Sep-24 14:48	1
1,2,3,4,7,8-HxCDD	ND	3.02	4.50			13-Sep-24 14:48	1
1,2,3,6,7,8-HxCDD	3.20		3.78		J	13-Sep-24 14:48	1
1,2,3,7,8,9-HxCDD	ND	2.65	4.80			13-Sep-24 14:48	1
1,2,3,4,6,7,8-HpCDD	60.5		5.21			13-Sep-24 14:48	1
OCDD	687		17.7			13-Sep-24 14:48	1
2,3,7,8-TCDF	ND	0.901	1.92			13-Sep-24 14:48	1
1,2,3,7,8-PeCDF	ND	0.808	5.40			13-Sep-24 14:48	1
2,3,4,7,8-PeCDF	ND	0.708	5.38			13-Sep-24 14:48	1
1,2,3,4,7,8-HxCDF	ND	1.31	7.40			13-Sep-24 14:48	1
1,2,3,6,7,8-HxCDF	ND	1.39	6.80			13-Sep-24 14:48	1
2,3,4,6,7,8-HxCDF	ND	1.60	6.25			13-Sep-24 14:48	1
1,2,3,7,8,9-HxCDF	ND	1.95	5.74			13-Sep-24 14:48	1
1,2,3,4,6,7,8-HpCDF	ND		6.42	12.1		13-Sep-24 14:48	1
1,2,3,4,7,8,9-HpCDF	ND	1.81	5.75			13-Sep-24 14:48	1
OCDF	47.1		12.2		J	13-Sep-24 14:48	1

Toxic Equivalent	
TEQMinWHO2005Dioxin	1.15

Totals	
Total TCDD	ND 0.692
Total PeCDD	ND 1.15
Total HxCDD	3.20 6.80 J
Total HpCDD	116
Total TCDF	ND 0.901
Total PeCDF	ND 0.808
Total HxCDF	ND 8.44
Total HpCDF	51.3 63.4

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	107	40 - 135		13-Sep-24 14:48	1
13C-1,2,3,7,8-PeCDD	IS	104	40 - 135		13-Sep-24 14:48	1
13C-1,2,3,4,7,8-HxCDD	IS	84.2	40 - 135		13-Sep-24 14:48	1
13C-1,2,3,6,7,8-HxCDD	IS	78.6	40 - 135		13-Sep-24 14:48	1
13C-1,2,3,7,8,9-HxCDD	IS	97.4	40 - 135		13-Sep-24 14:48	1
13C-1,2,3,4,6,7,8-HpCDD	IS	87.7	40 - 135		13-Sep-24 14:48	1
13C-OCDD	IS	80.0	40 - 135		13-Sep-24 14:48	1
13C-2,3,7,8-TCDF	IS	101	40 - 135		13-Sep-24 14:48	1
13C-1,2,3,7,8-PeCDF	IS	104	40 - 135		13-Sep-24 14:48	1
13C-2,3,4,7,8-PeCDF	IS	104	40 - 135		13-Sep-24 14:48	1
13C-1,2,3,4,7,8-HxCDF	IS	101	40 - 135		13-Sep-24 14:48	1
13C-1,2,3,6,7,8-HxCDF	IS	97.6	40 - 135		13-Sep-24 14:48	1
13C-2,3,4,6,7,8-HxCDF	IS	94.1	40 - 135		13-Sep-24 14:48	1
13C-1,2,3,7,8,9-HxCDF	IS	93.9	40 - 135		13-Sep-24 14:48	1
13C-1,2,3,4,6,7,8-HpCDF	IS	91.8	40 - 135		13-Sep-24 14:48	1
13C-1,2,3,4,7,8,9-HpCDF	IS	88.9	40 - 135		13-Sep-24 14:48	1
13C-OCDF	IS	94.5	40 - 135		13-Sep-24 14:48	1
37Cl-2,3,7,8-TCDD	CRS	103	40 - 135		13-Sep-24 14:48	1

EDL - Sample specific estimated detection limit  
 EMPC - Estimated maximum possible concentration  
 MDL - Method Detection Limit

**Sample ID: MW-5**
**EPA Method 8290A**

Client Data		Laboratory Data			
Name:	Enthalpy Analytical	Lab Sample:	2408183-02	Date Received:	27-Aug-24 12:24
Project:	EO-514835	QC Batch:	B24I056	Date Extracted:	10-Sep-24
Matrix:	Water	Sample Size:	0.922 L	Column:	ZB-DIOXIN
Date Collected:	26-Aug-24 12:05				

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.656	1.93			13-Sep-24 15:34	1
1,2,3,7,8-PeCDD	ND	0.842	6.11			13-Sep-24 15:34	1
1,2,3,4,7,8-HxCDD	ND	2.09	4.53			13-Sep-24 15:34	1
1,2,3,6,7,8-HxCDD	ND	2.08	3.81			13-Sep-24 15:34	1
1,2,3,7,8,9-HxCDD	ND	1.88	4.84			13-Sep-24 15:34	1
1,2,3,4,6,7,8-HpCDD	ND	2.39	5.25			13-Sep-24 15:34	1
OCDD	ND	3.45	17.8			13-Sep-24 15:34	1
2,3,7,8-TCDF	ND	0.901	1.93			13-Sep-24 15:34	1
1,2,3,7,8-PeCDF	ND	1.87	5.43			13-Sep-24 15:34	1
2,3,4,7,8-PeCDF	ND	1.93	5.41			13-Sep-24 15:34	1
1,2,3,4,7,8-HxCDF	ND	3.70	7.45			13-Sep-24 15:34	1
1,2,3,6,7,8-HxCDF	ND	4.02	6.84			13-Sep-24 15:34	1
2,3,4,6,7,8-HxCDF	ND	4.36	6.29			13-Sep-24 15:34	1
1,2,3,7,8,9-HxCDF	ND	5.82	5.78			13-Sep-24 15:34	1
1,2,3,4,6,7,8-HpCDF	ND	1.71	6.46			13-Sep-24 15:34	1
1,2,3,4,7,8,9-HpCDF	ND	2.40	5.79			13-Sep-24 15:34	1
OCDF	ND	2.35	12.3			13-Sep-24 15:34	1

**Toxic Equivalent**

TEQMinWHO2005Dioxin	0.00
---------------------	------

**Totals**

Total TCDD	ND	0.656
Total PeCDD	ND	0.842
Total HxCDD	ND	2.09
Total HpCDD	ND	2.39
Total TCDF	ND	0.901
Total PeCDF	ND	1.93
Total HxCDF	ND	9.88
Total HpCDF	ND	2.40

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	102	40 - 135		13-Sep-24 15:34	1
13C-1,2,3,7,8-PeCDD	IS	104	40 - 135		13-Sep-24 15:34	1
13C-1,2,3,4,7,8-HxCDD	IS	72.8	40 - 135		13-Sep-24 15:34	1
13C-1,2,3,6,7,8-HxCDD	IS	69.5	40 - 135		13-Sep-24 15:34	1
13C-1,2,3,7,8,9-HxCDD	IS	84.4	40 - 135		13-Sep-24 15:34	1
13C-1,2,3,4,6,7,8-HpCDD	IS	74.9	40 - 135		13-Sep-24 15:34	1
13C-OCDD	IS	68.5	40 - 135		13-Sep-24 15:34	1
13C-2,3,7,8-TCDF	IS	101	40 - 135		13-Sep-24 15:34	1
13C-1,2,3,7,8-PeCDF	IS	102	40 - 135		13-Sep-24 15:34	1
13C-2,3,4,7,8-PeCDF	IS	102	40 - 135		13-Sep-24 15:34	1
13C-1,2,3,4,7,8-HxCDF	IS	87.1	40 - 135		13-Sep-24 15:34	1
13C-1,2,3,6,7,8-HxCDF	IS	82.5	40 - 135		13-Sep-24 15:34	1
13C-2,3,4,6,7,8-HxCDF	IS	81.0	40 - 135		13-Sep-24 15:34	1
13C-1,2,3,7,8,9-HxCDF	IS	80.7	40 - 135		13-Sep-24 15:34	1
13C-1,2,3,4,6,7,8-HpCDF	IS	79.5	40 - 135		13-Sep-24 15:34	1
13C-1,2,3,4,7,8,9-HpCDF	IS	80.8	40 - 135		13-Sep-24 15:34	1
13C-OCDF	IS	78.7	40 - 135		13-Sep-24 15:34	1
37Cl-2,3,7,8-TCDD	CRS	106	40 - 135		13-Sep-24 15:34	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

MDL - Method Detection Limit

**Sample ID: MW-10**
**EPA Method 8290A**

Client Data		Laboratory Data			
Name:	Enthalpy Analytical	Lab Sample:	2408183-03	Date Received:	27-Aug-24 12:24
Project:	EO-514835	QC Batch:	B24I056	Date Extracted:	10-Sep-24
Matrix:	Water	Sample Size:	0.893 L	Column:	ZB-DIOXIN
Date Collected:	26-Aug-24 10:10				

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.846	1.99			13-Sep-24 16:21	1
1,2,3,7,8-PeCDD	ND	1.31	6.30			13-Sep-24 16:21	1
1,2,3,4,7,8-HxCDD	ND	2.92	4.68			13-Sep-24 16:21	1
1,2,3,6,7,8-HxCDD	ND	3.16	3.93			13-Sep-24 16:21	1
1,2,3,7,8,9-HxCDD	ND	2.69	4.99			13-Sep-24 16:21	1
1,2,3,4,6,7,8-HpCDD	5.67		5.42		J	13-Sep-24 16:21	1
OCDD	26.5		18.4		J	13-Sep-24 16:21	1
2,3,7,8-TCDF	ND	0.986	1.99			13-Sep-24 16:21	1
1,2,3,7,8-PeCDF	ND	0.992	5.61			13-Sep-24 16:21	1
2,3,4,7,8-PeCDF	ND	0.993	5.59			13-Sep-24 16:21	1
1,2,3,4,7,8-HxCDF	ND	1.29	7.69			13-Sep-24 16:21	1
1,2,3,6,7,8-HxCDF	ND	1.35	7.07			13-Sep-24 16:21	1
2,3,4,6,7,8-HxCDF	ND	1.51	6.49			13-Sep-24 16:21	1
1,2,3,7,8,9-HxCDF	ND	2.08	5.97			13-Sep-24 16:21	1
1,2,3,4,6,7,8-HpCDF	1.63		6.67		J	13-Sep-24 16:21	1
1,2,3,4,7,8,9-HpCDF	ND	1.92	5.98			13-Sep-24 16:21	1
OCDF	ND	4.13	12.7			13-Sep-24 16:21	1

**Toxic Equivalent**

TEQMinWHO2005Dioxin	0.0810
---------------------	--------

**Totals**

Total TCDD	ND	0.846					
Total PeCDD	ND	1.31					
Total HxCDD	ND			4.35			
Total HpCDD	10.3				J		
Total TCDF	ND	0.986					
Total PeCDF	ND	0.993					
Total HxCDF	ND			1.35			
Total HpCDF	1.63				J		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	101	40 - 135		13-Sep-24 16:21	1
13C-1,2,3,7,8-PeCDD	IS	96.8	40 - 135		13-Sep-24 16:21	1
13C-1,2,3,4,7,8-HxCDD	IS	73.1	40 - 135		13-Sep-24 16:21	1
13C-1,2,3,6,7,8-HxCDD	IS	70.3	40 - 135		13-Sep-24 16:21	1
13C-1,2,3,7,8,9-HxCDD	IS	83.9	40 - 135		13-Sep-24 16:21	1
13C-1,2,3,4,6,7,8-HpCDD	IS	74.1	40 - 135		13-Sep-24 16:21	1
13C-OCDD	IS	63.0	40 - 135		13-Sep-24 16:21	1
13C-2,3,7,8-TCDF	IS	98.9	40 - 135		13-Sep-24 16:21	1
13C-1,2,3,7,8-PeCDF	IS	94.0	40 - 135		13-Sep-24 16:21	1
13C-2,3,4,7,8-PeCDF	IS	95.0	40 - 135		13-Sep-24 16:21	1
13C-1,2,3,4,7,8-HxCDF	IS	92.4	40 - 135		13-Sep-24 16:21	1
13C-1,2,3,6,7,8-HxCDF	IS	88.1	40 - 135		13-Sep-24 16:21	1
13C-2,3,4,6,7,8-HxCDF	IS	84.5	40 - 135		13-Sep-24 16:21	1
13C-1,2,3,7,8,9-HxCDF	IS	84.5	40 - 135		13-Sep-24 16:21	1
13C-1,2,3,4,6,7,8-HpCDF	IS	74.7	40 - 135		13-Sep-24 16:21	1
13C-1,2,3,4,7,8,9-HpCDF	IS	76.3	40 - 135		13-Sep-24 16:21	1
13C-OCDF	IS	77.1	40 - 135		13-Sep-24 16:21	1
37Cl-2,3,7,8-TCDD	CRS	108	40 - 135		13-Sep-24 16:21	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

MDL - Method Detection Limit

**Sample ID: MW-11**
**EPA Method 8290A**

Client Data		Laboratory Data			
Name:	Enthalpy Analytical	Lab Sample:	2408183-04	Date Received:	27-Aug-24 12:24
Project:	EO-514835	QC Batch:	B24I056	Date Extracted:	10-Sep-24
Matrix:	Water	Sample Size:	0.910 L	Column:	ZB-DIOXIN
Date Collected:	26-Aug-24 09:30				

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.908	1.96			13-Sep-24 17:08	1
1,2,3,7,8-PeCDD	ND	1.15	6.19			13-Sep-24 17:08	1
1,2,3,4,7,8-HxCDD	ND	2.76	4.59			13-Sep-24 17:08	1
1,2,3,6,7,8-HxCDD	ND	2.76	3.86			13-Sep-24 17:08	1
1,2,3,7,8,9-HxCDD	ND	2.31	4.90			13-Sep-24 17:08	1
1,2,3,4,6,7,8-HpCDD	ND	6.49	5.32			13-Sep-24 17:08	1
OCDD	ND	4.80	18.0			13-Sep-24 17:08	1
2,3,7,8-TCDF	ND	0.774	1.96			13-Sep-24 17:08	1
1,2,3,7,8-PeCDF	ND	0.706	5.51			13-Sep-24 17:08	1
2,3,4,7,8-PeCDF	ND	0.667	5.48			13-Sep-24 17:08	1
1,2,3,4,7,8-HxCDF	ND	0.834	7.55			13-Sep-24 17:08	1
1,2,3,6,7,8-HxCDF	ND	0.848	6.93			13-Sep-24 17:08	1
2,3,4,6,7,8-HxCDF	ND	1.04	6.37			13-Sep-24 17:08	1
1,2,3,7,8,9-HxCDF	ND	1.27	5.86			13-Sep-24 17:08	1
1,2,3,4,6,7,8-HpCDF	ND	0.931	6.55			13-Sep-24 17:08	1
1,2,3,4,7,8,9-HpCDF	ND	1.36	5.87			13-Sep-24 17:08	1
OCDF	ND	2.51	12.4			13-Sep-24 17:08	1

**Toxic Equivalent**

TEQMinWHO2005Dioxin	0.00
---------------------	------

**Totals**

Total TCDD	ND	0.908					
Total PeCDD	ND	1.15					
Total HxCDD	2.41				J		
Total HpCDD	ND	6.49					
Total TCDF	ND	0.774					
Total PeCDF	ND	0.706					
Total HxCDF	ND	1.27					
Total HpCDF	ND	1.36					

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	96.9	40 - 135		13-Sep-24 17:08	1
13C-1,2,3,7,8-PeCDD	IS	93.3	40 - 135		13-Sep-24 17:08	1
13C-1,2,3,4,7,8-HxCDD	IS	78.1	40 - 135		13-Sep-24 17:08	1
13C-1,2,3,6,7,8-HxCDD	IS	73.3	40 - 135		13-Sep-24 17:08	1
13C-1,2,3,7,8,9-HxCDD	IS	92.2	40 - 135		13-Sep-24 17:08	1
13C-1,2,3,4,6,7,8-HpCDD	IS	80.3	40 - 135		13-Sep-24 17:08	1
13C-OCDD	IS	69.3	40 - 135		13-Sep-24 17:08	1
13C-2,3,7,8-TCDF	IS	94.5	40 - 135		13-Sep-24 17:08	1
13C-1,2,3,7,8-PeCDF	IS	95.6	40 - 135		13-Sep-24 17:08	1
13C-2,3,4,7,8-PeCDF	IS	96.5	40 - 135		13-Sep-24 17:08	1
13C-1,2,3,4,7,8-HxCDF	IS	92.3	40 - 135		13-Sep-24 17:08	1
13C-1,2,3,6,7,8-HxCDF	IS	88.3	40 - 135		13-Sep-24 17:08	1
13C-2,3,4,6,7,8-HxCDF	IS	87.4	40 - 135		13-Sep-24 17:08	1
13C-1,2,3,7,8,9-HxCDF	IS	86.5	40 - 135		13-Sep-24 17:08	1
13C-1,2,3,4,6,7,8-HpCDF	IS	81.5	40 - 135		13-Sep-24 17:08	1
13C-1,2,3,4,7,8,9-HpCDF	IS	81.7	40 - 135		13-Sep-24 17:08	1
13C-OCDF	IS	85.8	40 - 135		13-Sep-24 17:08	1
37Cl-2,3,7,8-TCDD	CRS	110	40 - 135		13-Sep-24 17:08	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

MDL - Method Detection Limit

**Sample ID: MW-12**

**EPA Method 8290A**

Client Data		Laboratory Data			
Name:	Enthalpy Analytical	Lab Sample:	2408183-05	Date Received:	27-Aug-24 12:24
Project:	EO-514835	QC Batch:	B24I056	Date Extracted:	10-Sep-24
Matrix:	Water	Sample Size:	0.903 L	Column:	ZB-DIOXIN
Date Collected:	26-Aug-24 14:40				

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.927	1.97			13-Sep-24 17:54	1
1,2,3,7,8-PeCDD	ND	1.22	6.24			13-Sep-24 17:54	1
1,2,3,4,7,8-HxCDD	ND	2.03	4.63			13-Sep-24 17:54	1
1,2,3,6,7,8-HxCDD	ND	2.11	3.89			13-Sep-24 17:54	1
1,2,3,7,8,9-HxCDD	ND	1.71	4.94			13-Sep-24 17:54	1
1,2,3,4,6,7,8-HpCDD	ND		5.36	0.942		13-Sep-24 17:54	1
OCDD	ND	5.02	18.2			13-Sep-24 17:54	1
2,3,7,8-TCDF	ND	1.00	1.97			13-Sep-24 17:54	1
1,2,3,7,8-PeCDF	ND	0.925	5.55			13-Sep-24 17:54	1
2,3,4,7,8-PeCDF	ND	0.912	5.53			13-Sep-24 17:54	1
1,2,3,4,7,8-HxCDF	ND	0.831	7.61			13-Sep-24 17:54	1
1,2,3,6,7,8-HxCDF	ND	0.853	6.99			13-Sep-24 17:54	1
2,3,4,6,7,8-HxCDF	ND	0.990	6.43			13-Sep-24 17:54	1
1,2,3,7,8,9-HxCDF	ND	1.28	5.91			13-Sep-24 17:54	1
1,2,3,4,6,7,8-HpCDF	ND	1.21	6.60			13-Sep-24 17:54	1
1,2,3,4,7,8,9-HpCDF	ND	1.64	5.92			13-Sep-24 17:54	1
OCDF	ND	3.07	12.5			13-Sep-24 17:54	1

**Toxic Equivalent**

TEQMinWHO2005Dioxin	0.00
---------------------	------

**Totals**

Total TCDD	ND	0.927					
Total PeCDD	ND	1.22					
Total HxCDD	ND	2.11					
Total HpCDD	ND			0.942			
Total TCDF	ND	1.00					
Total PeCDF	ND	0.925					
Total HxCDF	ND	1.28					
Total HpCDF	ND	1.64					

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	104	40 - 135		13-Sep-24 17:54	1
13C-1,2,3,7,8-PeCDD	IS	104	40 - 135		13-Sep-24 17:54	1
13C-1,2,3,4,7,8-HxCDD	IS	80.4	40 - 135		13-Sep-24 17:54	1
13C-1,2,3,6,7,8-HxCDD	IS	77.3	40 - 135		13-Sep-24 17:54	1
13C-1,2,3,7,8,9-HxCDD	IS	96.1	40 - 135		13-Sep-24 17:54	1
13C-1,2,3,4,6,7,8-HpCDD	IS	83.7	40 - 135		13-Sep-24 17:54	1
13C-OCDD	IS	76.2	40 - 135		13-Sep-24 17:54	1
13C-2,3,7,8-TCDF	IS	98.8	40 - 135		13-Sep-24 17:54	1
13C-1,2,3,7,8-PeCDF	IS	99.2	40 - 135		13-Sep-24 17:54	1
13C-2,3,4,7,8-PeCDF	IS	96.9	40 - 135		13-Sep-24 17:54	1
13C-1,2,3,4,7,8-HxCDF	IS	98.7	40 - 135		13-Sep-24 17:54	1
13C-1,2,3,6,7,8-HxCDF	IS	93.4	40 - 135		13-Sep-24 17:54	1
13C-2,3,4,6,7,8-HxCDF	IS	91.7	40 - 135		13-Sep-24 17:54	1
13C-1,2,3,7,8,9-HxCDF	IS	91.7	40 - 135		13-Sep-24 17:54	1
13C-1,2,3,4,6,7,8-HpCDF	IS	86.9	40 - 135		13-Sep-24 17:54	1
13C-1,2,3,4,7,8,9-HpCDF	IS	86.6	40 - 135		13-Sep-24 17:54	1
13C-OCDF	IS	87.7	40 - 135		13-Sep-24 17:54	1
37Cl-2,3,7,8-TCDD	CRS	110	40 - 135		13-Sep-24 17:54	1

EDL - Sample specific estimated detection limit  
 EMPC - Estimated maximum possible concentration  
 MDL - Method Detection Limit

**Sample ID: MW-13**

**EPA Method 8290A**

Client Data		Laboratory Data			
Name:	Enthalpy Analytical	Lab Sample:	2408183-06	Date Received:	27-Aug-24 12:24
Project:	EO-514835	QC Batch:	B24I056	Date Extracted:	10-Sep-24
Matrix:	Water	Sample Size:	0.903 L	Column:	ZB-DIOXIN
Date Collected:	26-Aug-24 13:25				

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.431	1.97			13-Sep-24 18:41	1
1,2,3,7,8-PeCDD	ND	1.24	6.23			13-Sep-24 18:41	1
1,2,3,4,7,8-HxCDD	ND	2.80	4.63			13-Sep-24 18:41	1
1,2,3,6,7,8-HxCDD	ND	2.99	3.89			13-Sep-24 18:41	1
1,2,3,7,8,9-HxCDD	ND	2.43	4.94			13-Sep-24 18:41	1
1,2,3,4,6,7,8-HpCDD	ND	2.60	5.36			13-Sep-24 18:41	1
OCDD	ND	3.43	18.2			13-Sep-24 18:41	1
2,3,7,8-TCDF	ND	1.05	1.97			13-Sep-24 18:41	1
1,2,3,7,8-PeCDF	ND	2.01	5.55			13-Sep-24 18:41	1
2,3,4,7,8-PeCDF	ND	1.96	5.52			13-Sep-24 18:41	1
1,2,3,4,7,8-HxCDF	ND	5.01	7.61			13-Sep-24 18:41	1
1,2,3,6,7,8-HxCDF	ND	5.02	6.99			13-Sep-24 18:41	1
2,3,4,6,7,8-HxCDF	ND	5.92	6.42			13-Sep-24 18:41	1
1,2,3,7,8,9-HxCDF	ND	7.54	5.90			13-Sep-24 18:41	1
1,2,3,4,6,7,8-HpCDF	ND	1.99	6.60			13-Sep-24 18:41	1
1,2,3,4,7,8,9-HpCDF	ND	2.94	5.91			13-Sep-24 18:41	1
OCDF	ND	3.04	12.5			13-Sep-24 18:41	1

Toxic Equivalent	
TEQMinWHO2005Dioxin	0.00

Totals	
Total TCDD	ND 0.431
Total PeCDD	ND 1.24
Total HxCDD	ND 2.99
Total HpCDD	ND 2.60
Total TCDF	ND 1.05
Total PeCDF	ND 2.01
Total HxCDF	ND 10.8
Total HpCDF	ND 2.94

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	110	40 - 135		13-Sep-24 18:41	1
13C-1,2,3,7,8-PeCDD	IS	111	40 - 135		13-Sep-24 18:41	1
13C-1,2,3,4,7,8-HxCDD	IS	76.6	40 - 135		13-Sep-24 18:41	1
13C-1,2,3,6,7,8-HxCDD	IS	71.1	40 - 135		13-Sep-24 18:41	1
13C-1,2,3,7,8,9-HxCDD	IS	89.9	40 - 135		13-Sep-24 18:41	1
13C-1,2,3,4,6,7,8-HpCDD	IS	77.4	40 - 135		13-Sep-24 18:41	1
13C-OCDD	IS	69.2	40 - 135		13-Sep-24 18:41	1
13C-2,3,7,8-TCDF	IS	106	40 - 135		13-Sep-24 18:41	1
13C-1,2,3,7,8-PeCDF	IS	106	40 - 135		13-Sep-24 18:41	1
13C-2,3,4,7,8-PeCDF	IS	104	40 - 135		13-Sep-24 18:41	1
13C-1,2,3,4,7,8-HxCDF	IS	90.0	40 - 135		13-Sep-24 18:41	1
13C-1,2,3,6,7,8-HxCDF	IS	86.0	40 - 135		13-Sep-24 18:41	1
13C-2,3,4,6,7,8-HxCDF	IS	86.0	40 - 135		13-Sep-24 18:41	1
13C-1,2,3,7,8,9-HxCDF	IS	84.6	40 - 135		13-Sep-24 18:41	1
13C-1,2,3,4,6,7,8-HpCDF	IS	80.8	40 - 135		13-Sep-24 18:41	1
13C-1,2,3,4,7,8,9-HpCDF	IS	79.2	40 - 135		13-Sep-24 18:41	1
13C-OCDF	IS	82.9	40 - 135		13-Sep-24 18:41	1
37Cl-2,3,7,8-TCDD	CRS	112	40 - 135		13-Sep-24 18:41	1

EDL - Sample specific estimated detection limit  
 EMPC - Estimated maximum possible concentration  
 MDL - Method Detection Limit

**Sample ID: MW-14**
**EPA Method 8290A**

Client Data		Laboratory Data			
Name:	Enthalpy Analytical	Lab Sample:	2408183-07	Date Received:	27-Aug-24 12:24
Project:	EO-514835	QC Batch:	B24I056	Date Extracted:	10-Sep-24
Matrix:	Water	Sample Size:	1.02 L	Column:	ZB-DIOXIN
Date Collected:	26-Aug-24 12:40				

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.632	1.74			13-Sep-24 19:27	1
1,2,3,7,8-PeCDD	ND	0.752	5.51			13-Sep-24 19:27	1
1,2,3,4,7,8-HxCDD	ND	2.01	4.09			13-Sep-24 19:27	1
1,2,3,6,7,8-HxCDD	ND	2.08	3.43			13-Sep-24 19:27	1
1,2,3,7,8,9-HxCDD	ND	1.64	4.36			13-Sep-24 19:27	1
1,2,3,4,6,7,8-HpCDD	ND	2.28	4.74			13-Sep-24 19:27	1
OCDD	ND	3.34	16.0			13-Sep-24 19:27	1
2,3,7,8-TCDF	ND	0.686	1.74			13-Sep-24 19:27	1
1,2,3,7,8-PeCDF	ND	0.665	4.90			13-Sep-24 19:27	1
2,3,4,7,8-PeCDF	ND	0.551	4.88			13-Sep-24 19:27	1
1,2,3,4,7,8-HxCDF	ND	0.759	6.72			13-Sep-24 19:27	1
1,2,3,6,7,8-HxCDF	ND	0.763	6.17			13-Sep-24 19:27	1
2,3,4,6,7,8-HxCDF	ND	0.974	5.67			13-Sep-24 19:27	1
1,2,3,7,8,9-HxCDF	ND	1.22	5.21			13-Sep-24 19:27	1
1,2,3,4,6,7,8-HpCDF	ND	0.713	5.83			13-Sep-24 19:27	1
1,2,3,4,7,8,9-HpCDF	ND	1.07	5.22			13-Sep-24 19:27	1
OCDF	ND	2.12	11.1			13-Sep-24 19:27	1

**Toxic Equivalent**

TEQMinWHO2005Dioxin	0.00
---------------------	------

**Totals**

Total TCDD	ND	0.632					
Total PeCDD	ND	0.752					
Total HxCDD	ND	2.08					
Total HpCDD	ND	2.28					
Total TCDF	ND	0.686					
Total PeCDF	ND	0.665					
Total HxCDF	ND	1.22					
Total HpCDF	ND	1.07					

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	108	40 - 135		13-Sep-24 19:27	1
13C-1,2,3,7,8-PeCDD	IS	106	40 - 135		13-Sep-24 19:27	1
13C-1,2,3,4,7,8-HxCDD	IS	84.3	40 - 135		13-Sep-24 19:27	1
13C-1,2,3,6,7,8-HxCDD	IS	78.2	40 - 135		13-Sep-24 19:27	1
13C-1,2,3,7,8,9-HxCDD	IS	100	40 - 135		13-Sep-24 19:27	1
13C-1,2,3,4,6,7,8-HpCDD	IS	89.5	40 - 135		13-Sep-24 19:27	1
13C-OCDD	IS	81.9	40 - 135		13-Sep-24 19:27	1
13C-2,3,7,8-TCDF	IS	102	40 - 135		13-Sep-24 19:27	1
13C-1,2,3,7,8-PeCDF	IS	101	40 - 135		13-Sep-24 19:27	1
13C-2,3,4,7,8-PeCDF	IS	102	40 - 135		13-Sep-24 19:27	1
13C-1,2,3,4,7,8-HxCDF	IS	102	40 - 135		13-Sep-24 19:27	1
13C-1,2,3,6,7,8-HxCDF	IS	97.0	40 - 135		13-Sep-24 19:27	1
13C-2,3,4,6,7,8-HxCDF	IS	94.5	40 - 135		13-Sep-24 19:27	1
13C-1,2,3,7,8,9-HxCDF	IS	97.5	40 - 135		13-Sep-24 19:27	1
13C-1,2,3,4,6,7,8-HpCDF	IS	96.2	40 - 135		13-Sep-24 19:27	1
13C-1,2,3,4,7,8,9-HpCDF	IS	95.5	40 - 135		13-Sep-24 19:27	1
13C-OCDF	IS	99.3	40 - 135		13-Sep-24 19:27	1
37Cl-2,3,7,8-TCDD	CRS	105	40 - 135		13-Sep-24 19:27	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

MDL - Method Detection Limit

**Sample ID: MW-15**

**EPA Method 8290A**

Client Data		Laboratory Data			
Name:	Enthalpy Analytical	Lab Sample:	2408183-08	Date Received:	27-Aug-24 12:24
Project:	EO-514835	QC Batch:	B24I056	Date Extracted:	10-Sep-24
Matrix:	Water	Sample Size:	0.937 L	Column:	ZB-DIOXIN
Date Collected:	26-Aug-24 15:10				

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.758	1.90			13-Sep-24 20:14	1
1,2,3,7,8-PeCDD	ND	0.969	6.01			13-Sep-24 20:14	1
1,2,3,4,7,8-HxCDD	ND	2.48	4.46			13-Sep-24 20:14	1
1,2,3,6,7,8-HxCDD	ND	2.74	3.75			13-Sep-24 20:14	1
1,2,3,7,8,9-HxCDD	ND	2.30	4.76			13-Sep-24 20:14	1
1,2,3,4,6,7,8-HpCDD	ND	2.56	5.17			13-Sep-24 20:14	1
OCDD	8.61		17.5		J	13-Sep-24 20:14	1
2,3,7,8-TCDF	ND	0.934	1.90			13-Sep-24 20:14	1
1,2,3,7,8-PeCDF	ND	1.25	5.35			13-Sep-24 20:14	1
2,3,4,7,8-PeCDF	ND	1.20	5.33			13-Sep-24 20:14	1
1,2,3,4,7,8-HxCDF	ND	2.75	7.33			13-Sep-24 20:14	1
1,2,3,6,7,8-HxCDF	ND	2.83	6.74			13-Sep-24 20:14	1
2,3,4,6,7,8-HxCDF	ND	3.49	6.19			13-Sep-24 20:14	1
1,2,3,7,8,9-HxCDF	ND	4.49	5.69			13-Sep-24 20:14	1
1,2,3,4,6,7,8-HpCDF	ND	1.31	6.36			13-Sep-24 20:14	1
1,2,3,4,7,8,9-HpCDF	ND	2.02	5.70			13-Sep-24 20:14	1
OCDF	ND	2.98	12.1			13-Sep-24 20:14	1

Toxic Equivalent	
TEQMinWHO2005Dioxin	0.00258

Totals	
Total TCDD	ND 0.758
Total PeCDD	ND 0.969
Total HxCDD	ND 2.74
Total HpCDD	ND 2.56
Total TCDF	ND 0.934
Total PeCDF	ND 1.25
Total HxCDF	ND 12.7
Total HpCDF	ND 2.02

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	105	40 - 135		13-Sep-24 20:14	1
13C-1,2,3,7,8-PeCDD	IS	102	40 - 135		13-Sep-24 20:14	1
13C-1,2,3,4,7,8-HxCDD	IS	78.5	40 - 135		13-Sep-24 20:14	1
13C-1,2,3,6,7,8-HxCDD	IS	75.1	40 - 135		13-Sep-24 20:14	1
13C-1,2,3,7,8,9-HxCDD	IS	91.7	40 - 135		13-Sep-24 20:14	1
13C-1,2,3,4,6,7,8-HpCDD	IS	78.2	40 - 135		13-Sep-24 20:14	1
13C-OCDD	IS	68.2	40 - 135		13-Sep-24 20:14	1
13C-2,3,7,8-TCDF	IS	106	40 - 135		13-Sep-24 20:14	1
13C-1,2,3,7,8-PeCDF	IS	102	40 - 135		13-Sep-24 20:14	1
13C-2,3,4,7,8-PeCDF	IS	101	40 - 135		13-Sep-24 20:14	1
13C-1,2,3,4,7,8-HxCDF	IS	96.7	40 - 135		13-Sep-24 20:14	1
13C-1,2,3,6,7,8-HxCDF	IS	93.1	40 - 135		13-Sep-24 20:14	1
13C-2,3,4,6,7,8-HxCDF	IS	88.1	40 - 135		13-Sep-24 20:14	1
13C-1,2,3,7,8,9-HxCDF	IS	87.7	40 - 135		13-Sep-24 20:14	1
13C-1,2,3,4,6,7,8-HpCDF	IS	81.4	40 - 135		13-Sep-24 20:14	1
13C-1,2,3,4,7,8,9-HpCDF	IS	82.0	40 - 135		13-Sep-24 20:14	1
13C-OCDF	IS	81.0	40 - 135		13-Sep-24 20:14	1
37Cl-2,3,7,8-TCDD	CRS	110	40 - 135		13-Sep-24 20:14	1

EDL - Sample specific estimated detection limit  
 EMPC - Estimated maximum possible concentration  
 MDL - Method Detection Limit

**Sample ID: MW-16**

**EPA Method 8290A**

Client Data		Laboratory Data			
Name:	Enthalpy Analytical	Lab Sample:	2408183-09	Date Received:	27-Aug-24 12:24
Project:	EO-514835	QC Batch:	B24I056	Date Extracted:	10-Sep-24
Matrix:	Water	Sample Size:	0.955 L	Column:	ZB-DIOXIN
Date Collected:	26-Aug-24 10:50				

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.766	1.86			13-Sep-24 21:01	1
1,2,3,7,8-PeCDD	ND	1.18	5.89			13-Sep-24 21:01	1
1,2,3,4,7,8-HxCDD	ND	3.00	4.38			13-Sep-24 21:01	1
1,2,3,6,7,8-HxCDD	ND	3.05	3.67			13-Sep-24 21:01	1
1,2,3,7,8,9-HxCDD	ND	2.81	4.67			13-Sep-24 21:01	1
1,2,3,4,6,7,8-HpCDD	ND	3.09	5.07			13-Sep-24 21:01	1
OCDD	ND	10.8	17.2			13-Sep-24 21:01	1
2,3,7,8-TCDF	ND	0.923	1.86			13-Sep-24 21:01	1
1,2,3,7,8-PeCDF	ND	0.942	5.24			13-Sep-24 21:01	1
2,3,4,7,8-PeCDF	ND	0.894	5.22			13-Sep-24 21:01	1
1,2,3,4,7,8-HxCDF	ND	2.52	7.19			13-Sep-24 21:01	1
1,2,3,6,7,8-HxCDF	ND	2.63	6.61			13-Sep-24 21:01	1
2,3,4,6,7,8-HxCDF	ND	3.18	6.07			13-Sep-24 21:01	1
1,2,3,7,8,9-HxCDF	ND	4.07	5.58			13-Sep-24 21:01	1
1,2,3,4,6,7,8-HpCDF	ND	1.24	6.24			13-Sep-24 21:01	1
1,2,3,4,7,8,9-HpCDF	ND	1.70	5.59			13-Sep-24 21:01	1
OCDF	ND	3.00	11.8			13-Sep-24 21:01	1

Toxic Equivalent	
TEQMinWHO2005Dioxin	0.00

Totals	
Total TCDD	ND 0.766
Total PeCDD	ND 1.18
Total HxCDD	ND 1.91
Total HpCDD	ND 3.09
Total TCDF	ND 0.923
Total PeCDF	ND 0.942
Total HxCDF	ND 15.3
Total HpCDF	ND 1.70

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	99.9	40 - 135		13-Sep-24 21:01	1
13C-1,2,3,7,8-PeCDD	IS	95.1	40 - 135		13-Sep-24 21:01	1
13C-1,2,3,4,7,8-HxCDD	IS	68.1	40 - 135		13-Sep-24 21:01	1
13C-1,2,3,6,7,8-HxCDD	IS	61.0	40 - 135		13-Sep-24 21:01	1
13C-1,2,3,7,8,9-HxCDD	IS	73.6	40 - 135		13-Sep-24 21:01	1
13C-1,2,3,4,6,7,8-HpCDD	IS	65.7	40 - 135		13-Sep-24 21:01	1
13C-OCDD	IS	59.3	40 - 135		13-Sep-24 21:01	1
13C-2,3,7,8-TCDF	IS	94.3	40 - 135		13-Sep-24 21:01	1
13C-1,2,3,7,8-PeCDF	IS	91.2	40 - 135		13-Sep-24 21:01	1
13C-2,3,4,7,8-PeCDF	IS	90.8	40 - 135		13-Sep-24 21:01	1
13C-1,2,3,4,7,8-HxCDF	IS	75.9	40 - 135		13-Sep-24 21:01	1
13C-1,2,3,6,7,8-HxCDF	IS	73.1	40 - 135		13-Sep-24 21:01	1
13C-2,3,4,6,7,8-HxCDF	IS	72.2	40 - 135		13-Sep-24 21:01	1
13C-1,2,3,7,8,9-HxCDF	IS	72.1	40 - 135		13-Sep-24 21:01	1
13C-1,2,3,4,6,7,8-HpCDF	IS	65.5	40 - 135		13-Sep-24 21:01	1
13C-1,2,3,4,7,8,9-HpCDF	IS	64.8	40 - 135		13-Sep-24 21:01	1
13C-OCDF	IS	67.8	40 - 135		13-Sep-24 21:01	1
37Cl-2,3,7,8-TCDD	CRS	113	40 - 135		13-Sep-24 21:01	1

EDL - Sample specific estimated detection limit  
 EMPC - Estimated maximum possible concentration  
 MDL - Method Detection Limit

**Sample ID: MW-17**
**EPA Method 8290A**

Client Data		Laboratory Data			
Name:	Enthalpy Analytical	Lab Sample:	2408183-10	Date Received:	27-Aug-24 12:24
Project:	EO-514835	QC Batch:	B24I056	Date Extracted:	10-Sep-24
Matrix:	Water	Sample Size:	0.928 L	Column:	ZB-DIOXIN
Date Collected:	26-Aug-24 14:05				

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	1.10	1.92			16-Sep-24 12:44	1
1,2,3,7,8-PeCDD	ND	1.62	6.07			16-Sep-24 12:44	1
1,2,3,4,7,8-HxCDD	ND	2.23	4.50			16-Sep-24 12:44	1
1,2,3,6,7,8-HxCDD	ND	2.45	3.78			16-Sep-24 12:44	1
1,2,3,7,8,9-HxCDD	ND	2.33	4.81			16-Sep-24 12:44	1
1,2,3,4,6,7,8-HpCDD	3.67		5.21		J	16-Sep-24 12:44	1
OCDD	ND		17.7	14.6		16-Sep-24 12:44	1
2,3,7,8-TCDF	ND	1.00	1.92			16-Sep-24 12:44	1
1,2,3,7,8-PeCDF	ND	1.19	5.40			16-Sep-24 12:44	1
2,3,4,7,8-PeCDF	ND	0.940	5.38			16-Sep-24 12:44	1
1,2,3,4,7,8-HxCDF	ND	1.66	7.40			16-Sep-24 12:44	1
1,2,3,6,7,8-HxCDF	ND	1.76	6.80			16-Sep-24 12:44	1
2,3,4,6,7,8-HxCDF	ND	1.98	6.25			16-Sep-24 12:44	1
1,2,3,7,8,9-HxCDF	ND	2.43	5.74			16-Sep-24 12:44	1
1,2,3,4,6,7,8-HpCDF	ND	2.15	6.42			16-Sep-24 12:44	1
1,2,3,4,7,8,9-HpCDF	ND	3.11	5.75			16-Sep-24 12:44	1
OCDF	ND	3.50	12.2			16-Sep-24 12:44	1

**Toxic Equivalent**

TEQMinWHO2005Dioxin	0.0367
---------------------	--------

**Totals**

Total TCDD	ND	1.10			
Total PeCDD	ND			1.55	
Total HxCDD	ND	2.45			
Total HpCDD	3.67				J
Total TCDF	ND	1.00			
Total PeCDF	ND	1.19			
Total HxCDF	ND	2.43			
Total HpCDF	ND	3.11			

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	102	40 - 135		16-Sep-24 12:44	1
13C-1,2,3,7,8-PeCDD	IS	107	40 - 135		16-Sep-24 12:44	1
13C-1,2,3,4,7,8-HxCDD	IS	79.0	40 - 135		16-Sep-24 12:44	1
13C-1,2,3,6,7,8-HxCDD	IS	73.4	40 - 135		16-Sep-24 12:44	1
13C-1,2,3,7,8,9-HxCDD	IS	84.0	40 - 135		16-Sep-24 12:44	1
13C-1,2,3,4,6,7,8-HpCDD	IS	81.9	40 - 135		16-Sep-24 12:44	1
13C-OCDD	IS	80.1	40 - 135		16-Sep-24 12:44	1
13C-2,3,7,8-TCDF	IS	102	40 - 135		16-Sep-24 12:44	1
13C-1,2,3,7,8-PeCDF	IS	104	40 - 135		16-Sep-24 12:44	1
13C-2,3,4,7,8-PeCDF	IS	109	40 - 135		16-Sep-24 12:44	1
13C-1,2,3,4,7,8-HxCDF	IS	98.1	40 - 135		16-Sep-24 12:44	1
13C-1,2,3,6,7,8-HxCDF	IS	92.4	40 - 135		16-Sep-24 12:44	1
13C-2,3,4,6,7,8-HxCDF	IS	91.8	40 - 135		16-Sep-24 12:44	1
13C-1,2,3,7,8,9-HxCDF	IS	91.0	40 - 135		16-Sep-24 12:44	1
13C-1,2,3,4,6,7,8-HpCDF	IS	92.4	40 - 135		16-Sep-24 12:44	1
13C-1,2,3,4,7,8,9-HpCDF	IS	92.7	40 - 135		16-Sep-24 12:44	1
13C-OCDF	IS	87.7	40 - 135		16-Sep-24 12:44	1
37Cl-2,3,7,8-TCDD	CRS	105	40 - 135		16-Sep-24 12:44	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

MDL - Method Detection Limit

**Sample ID: MW-18**

**EPA Method 8290A**

Client Data		Laboratory Data			
Name:	Enthalpy Analytical	Lab Sample:	2408183-11	Date Received:	27-Aug-24 12:24
Project:	EO-514835	QC Batch:	B24I056	Date Extracted:	10-Sep-24
Matrix:	Water	Sample Size:	0.882 L	Column:	ZB-DIOXIN
Date Collected:	26-Aug-24 15:15				

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.781	2.02			14-Sep-24 01:02	1
1,2,3,7,8-PeCDD	ND	1.21	6.38			14-Sep-24 01:02	1
1,2,3,4,7,8-HxCDD	ND	2.02	4.74			14-Sep-24 01:02	1
1,2,3,6,7,8-HxCDD	ND	2.07	3.98			14-Sep-24 01:02	1
1,2,3,7,8,9-HxCDD	ND	1.82	5.05			14-Sep-24 01:02	1
1,2,3,4,6,7,8-HpCDD	ND	2.10	5.48			14-Sep-24 01:02	1
OCDD	ND	3.05	18.6			14-Sep-24 01:02	1
2,3,7,8-TCDF	ND	0.705	2.02			14-Sep-24 01:02	1
1,2,3,7,8-PeCDF	ND	0.644	5.68			14-Sep-24 01:02	1
2,3,4,7,8-PeCDF	ND	0.631	5.65			14-Sep-24 01:02	1
1,2,3,4,7,8-HxCDF	ND	0.736	7.78			14-Sep-24 01:02	1
1,2,3,6,7,8-HxCDF	ND	0.736	7.15			14-Sep-24 01:02	1
2,3,4,6,7,8-HxCDF	ND	0.853	6.57			14-Sep-24 01:02	1
1,2,3,7,8,9-HxCDF	ND	1.06	6.04			14-Sep-24 01:02	1
1,2,3,4,6,7,8-HpCDF	ND	0.873	6.75			14-Sep-24 01:02	1
1,2,3,4,7,8,9-HpCDF	ND	1.28	6.05			14-Sep-24 01:02	1
OCDF	ND	2.05	12.8			14-Sep-24 01:02	1

**Toxic Equivalent**

TEQMinWHO2005Dioxin	0.00
---------------------	------

**Totals**

Total TCDD	ND	0.781		
Total PeCDD	ND	1.21		
Total HxCDD	ND		1.71	
Total HpCDD	ND	2.10		
Total TCDF	ND	0.705		
Total PeCDF	ND	0.644		
Total HxCDF	ND	1.06		
Total HpCDF	ND	1.28		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	103	40 - 135		14-Sep-24 01:02	1
13C-1,2,3,7,8-PeCDD	IS	107	40 - 135		14-Sep-24 01:02	1
13C-1,2,3,4,7,8-HxCDD	IS	86.6	40 - 135		14-Sep-24 01:02	1
13C-1,2,3,6,7,8-HxCDD	IS	80.8	40 - 135		14-Sep-24 01:02	1
13C-1,2,3,7,8,9-HxCDD	IS	97.1	40 - 135		14-Sep-24 01:02	1
13C-1,2,3,4,6,7,8-HpCDD	IS	91.9	40 - 135		14-Sep-24 01:02	1
13C-OCDD	IS	84.6	40 - 135		14-Sep-24 01:02	1
13C-2,3,7,8-TCDF	IS	107	40 - 135		14-Sep-24 01:02	1
13C-1,2,3,7,8-PeCDF	IS	103	40 - 135		14-Sep-24 01:02	1
13C-2,3,4,7,8-PeCDF	IS	107	40 - 135		14-Sep-24 01:02	1
13C-1,2,3,4,7,8-HxCDF	IS	102	40 - 135		14-Sep-24 01:02	1
13C-1,2,3,6,7,8-HxCDF	IS	97.2	40 - 135		14-Sep-24 01:02	1
13C-2,3,4,6,7,8-HxCDF	IS	96.4	40 - 135		14-Sep-24 01:02	1
13C-1,2,3,7,8,9-HxCDF	IS	97.2	40 - 135		14-Sep-24 01:02	1
13C-1,2,3,4,6,7,8-HpCDF	IS	94.4	40 - 135		14-Sep-24 01:02	1
13C-1,2,3,4,7,8,9-HpCDF	IS	95.0	40 - 135		14-Sep-24 01:02	1
13C-OCDF	IS	89.3	40 - 135		14-Sep-24 01:02	1
37Cl-2,3,7,8-TCDD	CRS	104	40 - 135		14-Sep-24 01:02	1

EDL - Sample specific estimated detection limit  
 EMPC - Estimated maximum possible concentration  
 MDL - Method Detection Limit

**Sample ID: MW-19**

**EPA Method 8290A**

Client Data		Laboratory Data			
Name:	Enthalpy Analytical	Lab Sample:	2408183-12	Date Received:	27-Aug-24 12:24
Project:	EO-514835	QC Batch:	B24I056	Date Extracted:	10-Sep-24
Matrix:	Water	Sample Size:	0.936 L	Column:	ZB-DIOXIN
Date Collected:	26-Aug-24 16:10				

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.649	1.90			14-Sep-24 01:49	1
1,2,3,7,8-PeCDD	ND	0.926	6.01			14-Sep-24 01:49	1
1,2,3,4,7,8-HxCDD	ND	2.90	4.46			14-Sep-24 01:49	1
1,2,3,6,7,8-HxCDD	ND	3.15	3.75			14-Sep-24 01:49	1
1,2,3,7,8,9-HxCDD	ND	2.69	4.76			14-Sep-24 01:49	1
1,2,3,4,6,7,8-HpCDD	ND	2.16	5.17			14-Sep-24 01:49	1
OCDD	ND	3.81	17.5			14-Sep-24 01:49	1
2,3,7,8-TCDF	ND	0.757	1.90			14-Sep-24 01:49	1
1,2,3,7,8-PeCDF	ND	0.788	5.35			14-Sep-24 01:49	1
2,3,4,7,8-PeCDF	ND	0.675	5.33			14-Sep-24 01:49	1
1,2,3,4,7,8-HxCDF	ND	0.932	7.34			14-Sep-24 01:49	1
1,2,3,6,7,8-HxCDF	ND	0.882	6.74			14-Sep-24 01:49	1
2,3,4,6,7,8-HxCDF	ND	1.05	6.19			14-Sep-24 01:49	1
1,2,3,7,8,9-HxCDF	ND	1.37	5.69			14-Sep-24 01:49	1
1,2,3,4,6,7,8-HpCDF	ND	0.880	6.37			14-Sep-24 01:49	1
1,2,3,4,7,8,9-HpCDF	ND	1.39	5.70			14-Sep-24 01:49	1
OCDF	ND	2.77	12.1			14-Sep-24 01:49	1

Toxic Equivalent	
TEQMinWHO2005Dioxin	0.00

Totals	
Total TCDD	ND 0.649
Total PeCDD	ND 0.926
Total HxCDD	ND 3.15
Total HpCDD	ND 2.16
Total TCDF	ND 0.757
Total PeCDF	ND 0.788
Total HxCDF	ND 1.37
Total HpCDF	ND 1.39

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	101	40 - 135		14-Sep-24 01:49	1
13C-1,2,3,7,8-PeCDD	IS	99.6	40 - 135		14-Sep-24 01:49	1
13C-1,2,3,4,7,8-HxCDD	IS	83.0	40 - 135		14-Sep-24 01:49	1
13C-1,2,3,6,7,8-HxCDD	IS	75.9	40 - 135		14-Sep-24 01:49	1
13C-1,2,3,7,8,9-HxCDD	IS	90.8	40 - 135		14-Sep-24 01:49	1
13C-1,2,3,4,6,7,8-HpCDD	IS	76.8	40 - 135		14-Sep-24 01:49	1
13C-OCDD	IS	60.3	40 - 135		14-Sep-24 01:49	1
13C-2,3,7,8-TCDF	IS	101	40 - 135		14-Sep-24 01:49	1
13C-1,2,3,7,8-PeCDF	IS	97.6	40 - 135		14-Sep-24 01:49	1
13C-2,3,4,7,8-PeCDF	IS	97.0	40 - 135		14-Sep-24 01:49	1
13C-1,2,3,4,7,8-HxCDF	IS	96.4	40 - 135		14-Sep-24 01:49	1
13C-1,2,3,6,7,8-HxCDF	IS	95.3	40 - 135		14-Sep-24 01:49	1
13C-2,3,4,6,7,8-HxCDF	IS	91.4	40 - 135		14-Sep-24 01:49	1
13C-1,2,3,7,8,9-HxCDF	IS	89.5	40 - 135		14-Sep-24 01:49	1
13C-1,2,3,4,6,7,8-HpCDF	IS	81.4	40 - 135		14-Sep-24 01:49	1
13C-1,2,3,4,7,8,9-HpCDF	IS	78.4	40 - 135		14-Sep-24 01:49	1
13C-OCDF	IS	78.5	40 - 135		14-Sep-24 01:49	1
37Cl-2,3,7,8-TCDD	CRS	101	40 - 135		14-Sep-24 01:49	1

EDL - Sample specific estimated detection limit  
 EMPC - Estimated maximum possible concentration  
 MDL - Method Detection Limit

**Sample ID: MW-20**
**EPA Method 8290A**

Client Data		Laboratory Data			
Name:	Enthalpy Analytical	Lab Sample:	2408183-13	Date Received:	27-Aug-24 12:24
Project:	EO-514835	QC Batch:	B24I056	Date Extracted:	10-Sep-24
Matrix:	Water	Sample Size:	0.959 L	Column:	ZB-DIOXIN
Date Collected:	26-Aug-24 12:30				

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.741	1.86			14-Sep-24 02:36	1
1,2,3,7,8-PeCDD	ND	0.879	5.87			14-Sep-24 02:36	1
1,2,3,4,7,8-HxCDD	ND	1.92	4.36			14-Sep-24 02:36	1
1,2,3,6,7,8-HxCDD	ND	2.04	3.66			14-Sep-24 02:36	1
1,2,3,7,8,9-HxCDD	ND	1.76	4.65			14-Sep-24 02:36	1
1,2,3,4,6,7,8-HpCDD	ND	1.49	5.05			14-Sep-24 02:36	1
OCDD	ND	3.89	17.1			14-Sep-24 02:36	1
2,3,7,8-TCDF	ND	0.709	1.86			14-Sep-24 02:36	1
1,2,3,7,8-PeCDF	ND	1.05	5.23			14-Sep-24 02:36	1
2,3,4,7,8-PeCDF	ND	0.994	5.20			14-Sep-24 02:36	1
1,2,3,4,7,8-HxCDF	ND	2.06	7.17			14-Sep-24 02:36	1
1,2,3,6,7,8-HxCDF	ND	2.11	6.58			14-Sep-24 02:36	1
2,3,4,6,7,8-HxCDF	ND	2.47	6.05			14-Sep-24 02:36	1
1,2,3,7,8,9-HxCDF	ND	3.18	5.56			14-Sep-24 02:36	1
1,2,3,4,6,7,8-HpCDF	ND	0.939	6.22			14-Sep-24 02:36	1
1,2,3,4,7,8,9-HpCDF	ND	1.25	5.57			14-Sep-24 02:36	1
OCDF	ND	2.13	11.8			14-Sep-24 02:36	1

**Toxic Equivalent**

TEQMinWHO2005Dioxin	0.00
---------------------	------

**Totals**

Total TCDD	ND	0.741					
Total PeCDD	ND	0.879					
Total HxCDD	ND	2.04					
Total HpCDD	ND	1.49					
Total TCDF	ND	0.709					
Total PeCDF	ND	1.05					
Total HxCDF	ND	6.28					
Total HpCDF	ND	1.25					

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	93.4	40 - 135		14-Sep-24 02:36	1
13C-1,2,3,7,8-PeCDD	IS	95.4	40 - 135		14-Sep-24 02:36	1
13C-1,2,3,4,7,8-HxCDD	IS	72.5	40 - 135		14-Sep-24 02:36	1
13C-1,2,3,6,7,8-HxCDD	IS	67.9	40 - 135		14-Sep-24 02:36	1
13C-1,2,3,7,8,9-HxCDD	IS	82.7	40 - 135		14-Sep-24 02:36	1
13C-1,2,3,4,6,7,8-HpCDD	IS	70.3	40 - 135		14-Sep-24 02:36	1
13C-OCDD	IS	55.1	40 - 135		14-Sep-24 02:36	1
13C-2,3,7,8-TCDF	IS	94.7	40 - 135		14-Sep-24 02:36	1
13C-1,2,3,7,8-PeCDF	IS	92.6	40 - 135		14-Sep-24 02:36	1
13C-2,3,4,7,8-PeCDF	IS	90.0	40 - 135		14-Sep-24 02:36	1
13C-1,2,3,4,7,8-HxCDF	IS	86.1	40 - 135		14-Sep-24 02:36	1
13C-1,2,3,6,7,8-HxCDF	IS	82.5	40 - 135		14-Sep-24 02:36	1
13C-2,3,4,6,7,8-HxCDF	IS	82.0	40 - 135		14-Sep-24 02:36	1
13C-1,2,3,7,8,9-HxCDF	IS	83.0	40 - 135		14-Sep-24 02:36	1
13C-1,2,3,4,6,7,8-HpCDF	IS	77.5	40 - 135		14-Sep-24 02:36	1
13C-1,2,3,4,7,8,9-HpCDF	IS	76.9	40 - 135		14-Sep-24 02:36	1
13C-OCDF	IS	73.1	40 - 135		14-Sep-24 02:36	1
37Cl-2,3,7,8-TCDD	CRS	102	40 - 135		14-Sep-24 02:36	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

MDL - Method Detection Limit

**Sample ID: DUP**
**EPA Method 8290A**

Client Data		Laboratory Data			
Name:	Enthalpy Analytical	Lab Sample:	2408183-14	Date Received:	27-Aug-24 12:24
Project:	EO-514835	QC Batch:	B24I056	Date Extracted:	10-Sep-24
Matrix:	Water	Sample Size:	0.957 L	Column:	ZB-DIOXIN
Date Collected:	26-Aug-24 00:00				

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.763	1.86			14-Sep-24 03:22	1
1,2,3,7,8-PeCDD	ND	1.08	5.88			14-Sep-24 03:22	1
1,2,3,4,7,8-HxCDD	ND	3.58	4.37			14-Sep-24 03:22	1
1,2,3,6,7,8-HxCDD	ND	3.59	3.67			14-Sep-24 03:22	1
1,2,3,7,8,9-HxCDD	ND	3.24	4.66			14-Sep-24 03:22	1
1,2,3,4,6,7,8-HpCDD	ND	1.57	5.06			14-Sep-24 03:22	1
OCDD	ND	3.06	17.1			14-Sep-24 03:22	1
2,3,7,8-TCDF	ND	0.849	1.86			14-Sep-24 03:22	1
1,2,3,7,8-PeCDF	ND	0.775	5.24			14-Sep-24 03:22	1
2,3,4,7,8-PeCDF	ND	0.736	5.21			14-Sep-24 03:22	1
1,2,3,4,7,8-HxCDF	ND	0.761	7.18			14-Sep-24 03:22	1
1,2,3,6,7,8-HxCDF	ND	0.722	6.59			14-Sep-24 03:22	1
2,3,4,6,7,8-HxCDF	ND	0.891	6.06			14-Sep-24 03:22	1
1,2,3,7,8,9-HxCDF	ND	1.23	5.57			14-Sep-24 03:22	1
1,2,3,4,6,7,8-HpCDF	ND	0.790	6.23			14-Sep-24 03:22	1
1,2,3,4,7,8,9-HpCDF	ND	1.24	5.58			14-Sep-24 03:22	1
OCDF	ND	2.16	11.8			14-Sep-24 03:22	1

**Toxic Equivalent**

TEQMinWHO2005Dioxin	0.00
---------------------	------

**Totals**

Total TCDD	ND	0.763		
Total PeCDD	ND	1.08		
Total HxCDD	ND		1.84	
Total HpCDD	ND	1.57		
Total TCDF	ND	0.849		
Total PeCDF	ND	0.775		
Total HxCDF	ND	1.23		
Total HpCDF	ND	1.24		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	104	40 - 135		14-Sep-24 03:22	1
13C-1,2,3,7,8-PeCDD	IS	105	40 - 135		14-Sep-24 03:22	1
13C-1,2,3,4,7,8-HxCDD	IS	84.3	40 - 135		14-Sep-24 03:22	1
13C-1,2,3,6,7,8-HxCDD	IS	81.1	40 - 135		14-Sep-24 03:22	1
13C-1,2,3,7,8,9-HxCDD	IS	96.5	40 - 135		14-Sep-24 03:22	1
13C-1,2,3,4,6,7,8-HpCDD	IS	86.2	40 - 135		14-Sep-24 03:22	1
13C-OCDD	IS	77.0	40 - 135		14-Sep-24 03:22	1
13C-2,3,7,8-TCDF	IS	100	40 - 135		14-Sep-24 03:22	1
13C-1,2,3,7,8-PeCDF	IS	97.6	40 - 135		14-Sep-24 03:22	1
13C-2,3,4,7,8-PeCDF	IS	100	40 - 135		14-Sep-24 03:22	1
13C-1,2,3,4,7,8-HxCDF	IS	102	40 - 135		14-Sep-24 03:22	1
13C-1,2,3,6,7,8-HxCDF	IS	99.0	40 - 135		14-Sep-24 03:22	1
13C-2,3,4,6,7,8-HxCDF	IS	94.3	40 - 135		14-Sep-24 03:22	1
13C-1,2,3,7,8,9-HxCDF	IS	94.5	40 - 135		14-Sep-24 03:22	1
13C-1,2,3,4,6,7,8-HpCDF	IS	89.6	40 - 135		14-Sep-24 03:22	1
13C-1,2,3,4,7,8,9-HpCDF	IS	86.5	40 - 135		14-Sep-24 03:22	1
13C-OCDF	IS	91.0	40 - 135		14-Sep-24 03:22	1
37Cl-2,3,7,8-TCDD	CRS	108	40 - 135		14-Sep-24 03:22	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

MDL - Method Detection Limit

## DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank
Conc.	Concentration
CRS	Cleanup Recovery Standard
D	Dilution
DL	Detection Limit
E	The associated compound concentration exceeded the calibration range of the instrument
H	Recovery and/or RPD was outside laboratory acceptance limits
I	Chemical Interference
IS	Internal Standard
J	The amount detected is below the Reporting Limit/LOQ
LOD	Limit of Detection
LOQ	Limit of Quantitation
M	Estimated Maximum Possible Concentration (CA Region 2 projects only)
MDL	Method Detection Limit
NA	Not applicable
ND	Not Detected
OPR	Ongoing Precision and Recovery sample
P	The reported concentration may include contribution from chlorinated diphenyl ether(s).
Q	The ion transition ratio is outside of the acceptance criteria.
RL	Reporting Limit
RL	For 537.1, the reported RLs are the MRLs.
TEQ	Toxic Equivalency, sum of the toxic equivalency factors (TEF) multiplied by the sample concentrations.
TEQMax	TEQ calculation that uses the detection limit as the concentration for non-detects
TEQMin	TEQ calculation that uses zero as the concentration for non-detects
TEQRisk	TEQ calculation that uses ½ the detection limit as the concentration for non-detects
U	Not Detected (specific projects only)
*	See Cover Letter

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

### Enthalpy Analytical - EDH Certifications

Accrediting Authority	Certificate Number
Alaska Department of Environmental Conservation	17-013
Arkansas Department of Environmental Quality	21-023-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025	3091.01
Florida Department of Health	E87777
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2020018
Michigan Department of Environmental Quality	9932
Minnesota Department of Health	2211390
Nevada Division of Environmental Protection	CA00413
New Hampshire Environmental Accreditation Program	207721
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Ohio Environmental Protection Agency	87778
Oregon Laboratory Accreditation Program	4042-021
Texas Commission on Environmental Quality	T104704189-22-13
Vermont Department of Health	VT-4042
Virginia Department of General Services	11276
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

*Current certificates and lists of licensed parameters can be found at [Enthalpy.com/Resources/Accreditations](http://Enthalpy.com/Resources/Accreditations).*



**Subcontract Laboratory:**

Enthalpy - El Dorado Hills  
1104 Windfield Way  
El Dorado Hills, CA 95762  
ATTN: Mark Rein  
PO #: Required, to be sent via email

**Enthalpy Order: EO-514835**

PM: Zach Barker  
Email: zach.barker@enthalpy.com  
CC: incomingreports@enthalpy.com  
Phone: (714) 771-6900

Results Due: Standard TAT

Report Level: II

Report To: RL

EDDs: BLDR:Enthalpy (the normal EDD you send to Orange)

2408183 2.8 C

**Notes:**

M&P Mill #20189.010

Sample ID	Collected	Lab ID	# Cont.	Matrix	Analysis Requested	Comment
MW-1	26-AUG-2024 15:45	514835-001	2	Water	EPA 8290 - Dioxins & Furans	
MW-5	26-AUG-2024 12:05	514835-002	2	Water	EPA 8290 - Dioxins & Furans	
MW-10	26-AUG-2024 10:10	514835-003	2	Water	EPA 8290 - Dioxins & Furans	
MW-11	26-AUG-2024 09:30	514835-004	2	Water	EPA 8290 - Dioxins & Furans	
MW-12	26-AUG-2024 14:40	514835-005	2	Water	EPA 8290 - Dioxins & Furans	
MW-13	26-AUG-2024 13:25	514835-006	2	Water	EPA 8290 - Dioxins & Furans	
MW-14	26-AUG-2024 12:40	514835-007	2	Water	EPA 8290 - Dioxins & Furans	
MW-15	26-AUG-2024 15:10	514835-008	2	Water	EPA 8290 - Dioxins & Furans	
MW-16	26-AUG-2024 10:50	514835-009	2	Water	EPA 8290 - Dioxins & Furans	
MW-17	26-AUG-2024 14:05	514835-010	2	Water	EPA 8290 - Dioxins & Furans	
MW-18	26-AUG-2024 15:15	514835-011	1	Water	EPA 8290 - Dioxins & Furans	
MW-19	26-AUG-2024 16:10	514835-012	2	Water	EPA 8290 - Dioxins & Furans	
MW-20	26-AUG-2024 12:30	514835-013	2	Water	EPA 8290 - Dioxins & Furans	
DUP	26-AUG-2024 00:00	514835-014	2	Water	EPA 8290 - Dioxins & Furans	

Notes:	Relinquished By:	Received By:
	Anthony Charles Jr	W Spamb
	Date: 8-27-24 12:24pm	Date: 08/27/24 12:23-12:24
	Date:	Date:
	Date:	Date:

# CoC/Label Reconciliation Report WO# 2408183

LabNumber	CoC Sample ID	SampleAlias	Sample Date/Time	Container	BaseMatrix	Sample Comments
2408183-01	A MW-1	514835-001	26-Aug-24 15:45	Amber Glass NM Bottle, 1L	Aqueous	
2408183-01	B MW-1	514835-001	26-Aug-24 15:45	Amber Glass NM Bottle, 1L	Aqueous	
2408183-02	A MW-5	514835-002	26-Aug-24 12:05	Amber Glass NM Bottle, 1L	Aqueous	
2408183-02	B MW-5	514835-002	26-Aug-24 12:05	Amber Glass NM Bottle, 1L	Aqueous	
2408183-03	A MW-10	514835-003	26-Aug-24 10:10	Amber Glass NM Bottle, 1L	Aqueous	
2408183-03	B MW-10	514835-003	26-Aug-24 10:10	Amber Glass NM Bottle, 1L	Aqueous	
2408183-04	A MW-11	514835-004	26-Aug-24 09:30	Amber Glass NM Bottle, 1L	Aqueous	
2408183-04	B MW-11	514835-004	26-Aug-24 09:30	Amber Glass NM Bottle, 1L	Aqueous	
2408183-05	A MW-12	514835-005	26-Aug-24 14:40	Amber Glass WM Bottle, 1L	Aqueous	
2408183-05	B MW-12	514835-005	26-Aug-24 14:40	Amber Glass WM Bottle, 1L	Aqueous	
2408183-06	A MW-13	514835-006	26-Aug-24 13:25	Amber Glass NM Bottle, 1L	Aqueous	
2408183-06	B MW-13	514835-006	26-Aug-24 13:25	Amber Glass NM Bottle, 1L	Aqueous	
2408183-07	A MW-14	514835-007	26-Aug-24 12:40	Amber Glass NM Bottle, 1L	Aqueous	
2408183-07	B MW-14	514835-007	26-Aug-24 12:40	Amber Glass NM Bottle, 1L	Aqueous	
2408183-08	A MW-15	514835-008	26-Aug-24 15:10	Amber Glass NM Bottle, 1L	Aqueous	
2408183-08	B MW-15	514835-008	26-Aug-24 15:10	Amber Glass NM Bottle, 1L	Aqueous	
2408183-09	A MW-16	514835-008	26-Aug-24 10:50	Amber Glass NM Bottle, 1L	Aqueous	
2408183-09	B MW-16	514835-008	26-Aug-24 10:50	Amber Glass NM Bottle, 1L	Aqueous	
2408183-10	A MW-17	514835-010	26-Aug-24 14:05	Amber Glass NM Bottle, 1L	Aqueous	
2408183-10	B MW-17	514835-010	26-Aug-24 14:05	Amber Glass NM Bottle, 1L	Aqueous	
2408183-11	A MW-18	514835-011	26-Aug-24 15:15	Amber Glass NM Bottle, 1L	Aqueous	
2408183-12	A MW-19	514835-012	26-Aug-24 16:10	Amber Glass NM Bottle, 1L	Aqueous	
2408183-12	B MW-19	514835-012	26-Aug-24 16:10	Amber Glass NM Bottle, 1L	Aqueous	
2408183-13	A MW-20	514835-013	26-Aug-24 12:30	Amber Glass NM Bottle, 1L	Aqueous	
2408183-13	B MW-20	514835-013	26-Aug-24 12:30	Amber Glass NM Bottle, 1L	Aqueous	
2408183-14	A DUP	514835-014	26-Aug-24 00:00	Amber Glass NM Bottle, 1L	Aqueous	
2408183-14	B DUP	514835-014	26-Aug-24 00:00	Amber Glass NM Bottle, 1L	Aqueous	

Handwritten annotations in blue ink on the left side of the table, including circled letters (C1, C2, C3, B, D) and arrows pointing to specific rows.

Checkmarks indicate that information on the COC reconciled with the sample label.  
Any discrepancies are noted in the following columns.

	Yes	No	NA
Sample Container Intact?	/		
Sample Custody Seals Intact?			/
Adequate Sample Volume?	/		
Container Type Appropriate for Analysis(es)	/		

Comments:

- (A) Reconciled using bottle cap.
- (B) NO Back-up volume.
- (C1) Cooler 1
- (C2) - Cooler 2
- (C3) - Cooler 3
- (D) Sample ~~time~~ <sup>date</sup> 22-Aug-24

Preservation Documented: Na2S2O3    Trizma    NH4CH3CO2    None    Other

Verified by/Date: XIAO 08/28/24  
WIS 08/28/24

Eureka, CA | Redding, CA | Willits, CA | Fort Bragg, CA | Coos Bay, OR | Klamath Falls, OR | Lakeview, OR





**Yana Garcia**  
Secretary for  
Environmental Protection



**Department of Toxic Substances Control**

---

Katherine M. Butler, MPH, Director  
700 Heinz Avenue  
Berkeley, California 94710-2721



**Gavin Newsom**  
Governor

August 1, 2025

**SENT VIA ELECTRONIC MAIL**

Erik Nielsen  
SHN Consulting Engineers & Geologists, Inc.  
812 West Wabash Avenue  
Eureka, CA 95501  
[enielsen@shn-engr.com](mailto:enielsen@shn-engr.com)

Dear Erik Nielsen:

The Department of Toxic Substances Control (DTSC) has completed its review of the Second Half 2024 Groundwater Monitoring Report (Report), dated February 24, 2025, for the Former McNamara and Peepe Lumber Mill in Arcata, California (Site). The Report presents the results of the groundwater sampling event which took place at the Site on August 21 and 22, 2024.

DTSC Site Mitigation and Restoration (SMRP) staff have reviewed the Report and hereby approves the Report with the following comments to be addressed in future groundwater monitoring reports:

- In Section 3.3, the second sentence reads: "All smaller equipment was cleaned using the triple wash system." DTSC believes that "smaller" should be "sampling." Please review this and correct in subsequent documents.

Erik Nielsen  
August 1, 2025  
Page 2

If you have any questions, you can reach me by phone at (510) 540-3946 or via email at [Vanessa.Davis@dtsc.ca.gov](mailto:Vanessa.Davis@dtsc.ca.gov).

Sincerely,



Vanessa Davis, PG  
Project Manager  
Site Mitigation and Restoration Program – Berkeley Office  
Department of Toxic Substances Control

cc: (via email)

Michiko Mares  
Humboldt Bay Municipal Water District  
[gm@hbmwd.com](mailto:gm@hbmwd.com)

Jennifer Kalt  
Humboldt Waterkeeper  
[jkalt@humboldtwaterkeeper.org](mailto:jkalt@humboldtwaterkeeper.org)

Marikka Hughes, PG  
Branch Chief  
Site Mitigation and Restoration Program – Berkeley Office  
Department of Toxic Substances Control  
[Marikka.Hughes@dtsc.ca.gov](mailto:Marikka.Hughes@dtsc.ca.gov)

**Table 1. Soil Analytical Results, August 2024**  
**Former McNamara and Peepe, Arcata, California**  
**Phenols (mg/kg)<sup>a</sup> and Dioxins (pg/g)<sup>b</sup>**

Boring Location	Sample Depth (feet BGS) <sup>c</sup>	PCP <sup>d</sup>	TCP <sup>e</sup>	2,3,7,8-TCDD <sup>f</sup>	2005 WHO TEQ
B-201	3.0	<1.0 <sup>g</sup>	<1.0	<0.170	<b>0.305</b>
B-201	11.0	<1.0	<1.0	--	--
B-201	15.5	<1.0	<1.0	--	--
B-201	22.0	<1.0	<1.0	--	--
B-202	2.0	<1.0	<1.0	<0.170	<b>5.44</b>
B-202	4.5	<1.0	<1.0	--	--
B-202	6.0	<1.0	<1.0	--	--
B-203	4.0	<1.0	<1.0	<0.170	<b>2.76</b>
B-203	7.0	<1.0	<1.0	--	--
B-203	17.5	<1.0	<1.0	--	--
B-204	3.0	<1.0	<1.0	--	--
B-204	5.5	<1.0	<1.0	--	--
B-204	17.5	<1.0	<1.0	<0.170	<b>0.0910</b>
B-204	19.5	<1.0	<1.0	<0.170	<b>0.122</b>
B-205	1.5	<1.0	<1.0	--	--
B-205	6.0	<1.0	<1.0	--	--
B-205	12.5	<1.0	<1.0	<0.170	<b>0.408</b>
B-206	7.0	<1.0	<1.0	--	--
B-206	16.5	<1.0	<1.0	<0.170	<b>0.183</b>
B-207	5.0	<1.0	<1.0	<b>0.960</b>	<b>74.4</b>
B-207	11.5	<b>1.3</b>	<1.0	--	--
B-207	17.5	<1.0	<1.0	<b>3.60 J</b>	<b>229</b>
B-208	6.5	<1.0	<1.0	--	--
B-208	21.0	<1.0	<1.0	--	--
MW-17	3.0	<1.0	<1.0	--	--
MW-17	15.0	<1.0	<1.0	--	--
MW-17	18.0	<1.0	<1.0	<0.170	<b>0.256</b>
MW-18	3.5	<1.0	<1.0	<b>9.60</b>	<b>570</b>
MW-18	7.0	<1.0	<1.0	--	--
MW-18	11.5	<1.0	<1.0	--	--
MW-18	18.0	<1.0	<1.0	--	--
MW-19	5.0	<1.0	<1.0	--	--
MW-19	14.5	<b>0.48 J<sup>h</sup></b>	<1.0	--	--
MW-19	20	<1.0	<1.0	<0.170	<b>7.07</b>
MW-20	11	<1.0	<1.0	--	--
MW-20	20	<1.0	<1.0	--	--
DUP-1 (B-203)	17.5	<1.0	<1.0	--	--
DUP-2 (MW-18)	3.5	<1.0	<1.0	<b>10.0</b>	<b>860</b>
DUP-3 (B-205)	6.0	<1.0	<1.0	--	--
<b>Screening Criteria<sup>i</sup></b>		<b>1.0</b>	<b>1,900</b>	<b>NC</b>	<b>50 / 220</b>

<sup>a</sup> mg/kg: milligrams per kilogram

<sup>b</sup> pg/g: picograms per gram

<sup>c</sup> BGS: below ground surface

<sup>d</sup> PCP: pentachlorophenol

<sup>e</sup> TCP: 2,3,4,6-Tetrachlorophenol

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

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

<sup>h</sup> J: Test results that fall below the reporting limit and above the method detection limit are considered approximate values.

<sup>i</sup> California Department of Toxic Substances Control (DTSC), Human Health Risk Assessment (HHRA) Note Number 3; Residential soil screening level (June 2020).



---

**BOARD OF DIRECTORS**  
**Humboldt Bay Municipal Water District**  
**August 14, 2025**

---

**ITEM NO. 5.6**

ITEM: Consider Approval of the Job Class, Job Description and Wage Rates for Junior/Assistant/Associate Engineer

PRESENTED BY: Michiko Mares, General Manager

TYPE of ITEM: ACTION

TYPE of ACTION: General Vote

**Recommendation**

---

Staff recommend the Board discuss and consider approval of a new job class for Junior/ Assistant /Associate Engineer to be created as an alternative to the Regulatory Analyst I/II position.

**Discussion**

---

The recent recruitment of the vacant Regulatory Analyst I/II position was unsuccessful. The vacant Regulatory Analyst I/II position has provided an opportunity to reconsider the current and future business and operational needs of the District.

The District requires staff to manage the District's regulatory permits, reporting, and analysis. In addition to regulatory needs, the District also requires staff to manage projects, perform engineering computations and analysis, leverage business intelligence, deliver transparent communication with regulatory agencies and stakeholders, develop emergency and business continuity plans, and coordinate safety plans to support the District's business and operations functions.

Based on the needs of the District, it is intended that only one staff engineer position will be occupied at any given time. The three levels within the engineering series include: Junior, Assistant, and Associate Engineer.

Reference the job description attachment for a more detailed presentation of the proposed Engineer job class and the three levels within the series.

**Alternatives**

---

Do not create the Engineer Job Class and attempt to recruit for Regulatory Analyst I/II again.

**Fiscal Analysis**

---

The District budgeted \$119,617 for the Regulatory Analyst position for FY26. Based on timing, none of these funds have been spent to date. It is anticipated the Staff Engineer position will be

filled in October 2025. If a Staff Engineer position were filled as an *Associate* in step-5, the cost to the District for FY26 would be \$102,249, still providing the District a savings of \$17,368.

**Environmental Requirements**

---

Not Applicable

**Exhibits/Attachments**

---

Attachment 1- Job Description for Junior/Assistant/Associate Engineer

Attachment 2- Proposed Wage Rates for Junior/Assistant/Associate Engineer

# Humboldt Bay Municipal Water District

## JUNIOR/ASSISTANT/ASSOCIATE ENGINEER - A6

### Position Description

#### **GENERAL PURPOSE**

The Engineer job class will manage the District's regulatory permits, reporting, and analysis. In addition, this job class will manage projects, performing increasingly difficult engineering computations and analysis to support the District's overall business and operational functions. Based on the needs of the District, it is intended that only one staff engineer position be occupied at any given time. The three levels within the engineering series include: Junior, Assistant, and Associate Engineer. The distinguishing features, experience, and educational requirements are outlined below.

#### **DISTINGUISHING FEATURES**

**Junior Engineer** - This is the trainee level in the staff engineering series. Individuals in this position possess a bachelor's degree in an engineering field, but lack practical professional engineering experience (typically a recent college graduate). This position learns and performs less complex office and field engineering work in preparation for advancement to the Assistant Engineer level. Engineering assignments are generally limited in scope. This position is responsible for learning all regulatory requirements, obligations, and reporting requirements for the District. The complexity of some regulatory reports may necessitate the need to retain an outside consultant to complete the task. Under direct supervision and guidance, this position is responsible for all required regulatory reports and monitors and tracks all District operating permits, working with management staff to ensure the District remains current on all regulatory requirements.

**Assistant Engineer** - This is the entry level in the staff engineering series. Individuals in this position possess a bachelor's degree in an engineering field and have limited (minimum 2-years) professional engineering work experience but potentially little or no directly related work experience. This position completes all the same duties as the Junior Engineer position; however, individuals in this position are expected to require less supervision and less training. Employees work under general supervision while performing office and field work engineering assignments of more complex scope. This position should be able to complete complex regulatory reporting but may still occasionally require the assistance of an outside consultant.

**Associate Engineer (P.E.)** - This is the journey level class in the staff engineering series. Individuals in this position possess a bachelor's degree in an engineering field and have multiple years of professional engineering work experience, some of which directly relate to working for a municipal water agency. Individuals in this position possess a current certificate of registration as a Professional Engineer (P.E) in the State of California. This position completes all the same duties as the Junior and Assistant Engineer position, but with a larger range of professional engineering duties as well as the full range of regulatory and permit requirements. Employees in this position are expected to manage most, if not all regulatory reporting requirements in-house. Employees at this level are expected to need only occasional instruction or

assistance as new requirements arise. Individuals in this position are fully aware of the District's regulatory obligations.

## **ALL STAFF ENGINEER POSITIONS - ESSENTIAL FUNCTIONS AND DUTIES**

### **1. Analytical**

- a. Performs complex analyses and studies regarding the District's water supply, water use, cost-of-service, infrastructure financing, water rates, and other business, operational, or technical matters.
- b. Provides analytical support to the budget and Capital Improvement Plan processes.
- c. Presents results, conclusions, and recommendations from the analyses and studies concisely and accurately.

### **2. Business Information Systems**

- a. Develops and maintains spreadsheets, databases, and other computer tools to input and retrieve data and to support a variety of business and operational needs.
- b. Business intelligence tools, application development platforms, project management software, and cloud computing platforms may be utilized to support District business and operational needs.
- c. Geographic Information System (GIS) principles and tools to build applications, analyze data, and automate workflows related to mapping and spatial analysis may be utilized.

### **3. Communication**

- a. Prepares routine and complex correspondence, reports, and regulatory filings.
- b. Prepares and manages grant applications.
- c. Prepares presentation material to communicate to the District's wholesale customers, the Board of Directors, and other audiences.

### **4. Engineering**

#### **i. Junior Engineer - under direct supervision:**

- (1) Analyze reports and special projects as assigned. Identify and interpret technical and numerical information as assigned.
- (2) Learn applicable laws and regulations related to the regulatory requirements of the District.
- (3) Learn to prepare accurate cost estimates and make related recommendations.
- (4) Prepare accurate, timely, and concise written correspondence and reports.
- (5) Perform related duties as assigned.

#### **ii. Assistant Engineer - under minimal supervision:**

- (1) All duties assigned to the Junior Engineer position
- (2) May check plans and specifications as needed; prepare and check engineering reports and studies.
- (3) May serve as project manager over assigned projects.
- (4) Analyze proposals and bids.
- (5) Provide technical assistance and support to District staff and District Engineer as needed.
- (6) Analyze problems and develop effective solutions.
- (7) Analyze and track project costs and recommend action on progress pay estimates.
- (8) Draft technical and administrative correspondence.
- (9) May conduct public meetings regarding District projects.

- (10) May inspect construction project sites.
- (11) Prepare bid documents and cost estimates.
- (12) Review and assist with the coordination of outside consultant's work.

iii. **Associate Engineer (P.E.) - under occasional supervision:**

- (1) All duties assigned to the Junior and Assistant Engineer positions.
- (2) Work directly with management staff regarding budgeting for capital projects.
- (3) Know all pertinent local, State, Federal regulatory requirements for all District facilities and work.
- (4) Monitor any outside consultants completing regulatory work, reporting progress to management on a regular basis.
- (5) On a continuous basis, analyze data for regulatory reporting, identify opportunities for improvement and streamlining.
- (6) Work with Essex staff as needed to maintain GIS database.
- (7) Work with the District Engineer to resolve complex engineering issues during plan review, assisting in the engineering design, as needed.
- (8) May prepare accurate estimates of costs, schedules, and other resources related to engineering project responsibilities and make recommendations related to existing or anticipated project budgets.
- (9) Work effectively with both internal and external customers to accomplish goals and objectives.
- (10) Prepare concise and understandable written reports, studies, and other written materials, including requests for qualifications/proposals (RFQ/RFP).

**5. Regulatory**

- a. Stay informed of existing or proposed regulations of interest to the District.
- b. To varying levels, depending on the position, prepares all required regulatory permits, reports, filings, and applications or coordinates with an outside consultant completing the work.
- c. Meets and confers with regulatory agency personnel.

**6. Safety**

- a. Eureka office Safety Coordinator - Oversees and monitors the Eureka office participation in the District's safety program.
- b. Work directly with Essex Safety Coordinator to ensure the District's Injury and Illness Prevention Plan (IIPP) and required safety practices meet all current and upcoming regulatory requirements.

**7. Other**

- a. May perform special projects as assigned by management staff.
- b. Assists the General Manager and Superintendent in Emergency Operations Center (EOC) activities or other emergency events.
- c. Responsible for maintaining the Emergency Action Plan (EAP) and coordinating with all interested stakeholders.
- d. Acts as Water Conservation Coordinator per UWMP requirements.
- e. All other duties as assigned.

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

1. Strong written communication skills including the use of proper English, spelling, grammar, and punctuation. Ability to compose complex and detailed correspondence and reports accurately.
2. Strong verbal communication and presentation skills.
3. Ability to work well and collaboratively with others.
4. Ability to meet deadlines, plan and adhere to a work plan.
5. Ability to prioritize, manage time effectively, and able to realign priorities as needed.
6. Ability to complete complex analyses and studies in an independent manner (e.g. define objectives, conduct research, collect data, analyze data, derive results, and formulate conclusions and recommendations).
7. Intermediate-to-advanced proficiency in Microsoft Office applications. Knowledge of Microsoft Access and ESRI's GIS software is highly desirable.

## **REQUIRED EDUCATION, TRAINING, AND EXPERIENCE**

### **Junior Engineer**

1. A bachelor's degree from an accredited college or university, preferably with major course work in civil or environmental engineering or a closely related field.
2. No professional experience is required; one year of technical engineering experience is desirable.
3. Knowledge of principles and practices of professional engineering as applied to a variety of public works, utilities, building/facilities construction, traffic, water quality, and/or private development projects.
4. Excellent written and oral communication skills.
5. Knowledge of principles and practices of work safety.
6. Ability to learn regulatory requirements and obligations of the District.
7. Ability to learn modern office procedures and computer equipment and software such as AutoCAD, ArcView GIS, PowerBI.

### **Assistant Engineer**

1. A bachelor's degree from an accredited college or university, preferably with major course work in civil or environmental engineering or a closely related field.
2. Two years of responsible professional engineering work.
3. Excellent written and oral communication skills.
4. Knowledge of principles and practices of work safety.
5. Ability to learn modern office procedures and computer equipment and software such as AutoCAD, ArcView GIS, PowerBI and software related to specific department operations.
6. Pertinent local, State, federal rules, regulations and laws related to area of engineering assignment.
7. Methods, materials, and techniques used in engineering.

### **Associate Engineer**

1. A bachelor's degree from an accredited college or university, preferably with major course work in civil or environmental engineering or a closely related field.
2. Possession of a current certificate of registration as a Professional Engineer in the State of California.
3. 2-8 years of experience working in the engineering field, with several years of working with municipal infrastructure.
4. Ability to check engineering plans and specifications; prepare and check engineering reports and studies.
5. Ability to obtain information through interview, to handle multiple assignments, and to work with interruption.
6. Excellent written and oral communication skills.
7. Experience with construction of municipal facilities.

### **SPECIAL REQUIREMENTS**

1. Possession of a valid California Driver's license issued by the State Department of Motor Vehicles. Proof of a good driving record, free from multiple or serious violations or accidents, and in accordance with any standards of the District's insurance carrier. Compliance with these requirements and established District vehicle operation standards are a condition of employment.
2. Understand and carry out oral and written directions.
3. Communicate well with others, verbally and in writing.
4. Work cooperatively and get along well with others, the Board of Directors, District staff, customers, and the public.
5. Think critically to address complex business and regulatory assignments.
6. Must be available to work evenings, weekends, or holidays in the event of an emergency or other significant operational requirement.

### **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 not considered "safety sensitive" in nature, the person selected for appointment to this position will not be required to have a pre-employment drug screening. The medical examination 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. Operate a variety of office equipment, especially computers.
2. Sit for extended periods of time.
3. Perform minor physical activities which involve bending, lifting, and reaching.
4. Operate a motor vehicle.



**Proposed Wage Rates for Junior/Assistant/Associate Engineer**

Job Class	Notes	Step 1	Step 2	Step 3	Step 4	Step 5
Superintendent	CURRENT	130,491.24	137,027.01	143,873.19	151,064.26	158,617.47
(18% INCREASE FY26-FY28)	FY26 - JANUARY 3%	134,405.98	141,137.82	148,189.38	155,596.19	163,376.00
	FY27 (July & Jan 3% ea.)	142,470.33	149,606.09	157,080.75	164,931.96	173,178.56
	FY28 (July & Jan 3% ea.)	151,018.55	158,582.45	166,505.59	174,827.88	183,569.27
Business Manager	CURRENT	119,517.36	125,489.75	131,775.56	138,357.37	145,270.01
24% INCREASE FY26-FY28)	FY26 - JANUARY 4%	124,298.06	130,509.34	137,046.58	143,891.66	151,080.81
	FY27 (July & Jan 4% ea.)	134,241.90	140,950.09	148,010.30	155,403.00	163,167.28
	FY28 (July & Jan 4% ea.)	144,981.26	152,226.10	159,851.13	167,835.24	176,220.66
Maintenance/Electrical Supervisor	CURRENT	107,866.09	113,263.71	118,919.99	124,869.44	131,112.05
(18% INCREASE FY26-FY28)	FY26 - JANUARY 3%	111,102.07	116,661.62	122,487.59	128,615.52	135,045.41
	FY27 (July & Jan 3% ea.)	117,768.20	123,661.31	129,836.85	136,332.46	143,148.14
	FY28 (July & Jan 3% ea.)	124,834.29	131,080.99	137,627.06	144,512.40	151,737.03
Water Operations Supervisors	CURRENT	105,831.21	111,125.35	116,678.17	122,524.15	128,646.05
(18% INCREASE FY26-FY28)	FY26 - JANUARY 3%	109,006.14	114,459.11	120,178.52	126,199.88	132,505.43
	FY27 (July & Jan 3% ea.)	115,546.51	121,326.66	127,389.23	133,771.87	140,455.75
	FY28 (July & Jan 3% ea.)	122,479.30	128,606.26	135,032.58	141,798.18	148,883.10
Assistant Maintenance/Electrical Supervisor	CURRENT	102,727.15	107,866.09	113,263.71	118,919.99	124,869.44
(18% INCREASE FY26-FY28)	FY26 - JANUARY 3%	105,808.96	111,102.07	116,661.62	122,487.59	128,615.52
	FY27 (July & Jan 3% ea.)	112,157.50	117,768.20	123,661.31	129,836.85	136,332.46
	FY28 (July & Jan 3% ea.)	118,886.95	124,834.29	131,080.99	137,627.06	144,512.40
Assistant Water Operations Supervisor	CURRENT	100,795.73	105,831.21	111,125.35	116,678.17	122,506.91
(18% INCREASE FY26-FY28)	FY26 - JANUARY 3%	103,819.60	109,006.14	114,459.11	120,178.52	126,182.11
	FY27 (July & Jan 3% ea.)	110,048.78	115,546.51	121,326.66	127,389.23	133,753.04
	FY28 (July & Jan 3% ea.)	116,651.70	122,479.30	128,606.26	135,032.58	141,778.22
Accounting Specialist I *						
Regulatory Analyst I *		75,575.66	79,359.47	83,327.44	87,496.32	91,866.12
Accounting Specialist II *						
Regulatory Analyst II *		96,441.24	101,263.35	106,326.45	111,642.79	117,224.94
Junior Engineer		67,152.84	70,687.20	74,407.58	78,323.76	82,446.07
Assistant Engineer		86,785.33	91,352.98	96,161.03	101,222.14	106,549.62
Associate Engineer		112,157.50	117,768.20	123,661.31	129,836.85	136,332.46

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



<b><u>BANK ACCOUNT BALANCES AT MONTH-END</u></b>	July 31, 2025	July 31, 2024
<b>GENERAL ACCOUNTS</b>		
1. US Bank - General Account	1,026,133.91	567,781.69
2. US Bank - Xpress BillPay/Electronic Payments Account	6,220.57	7,381.24
<i>Subtotal</i>	1,032,354.48	575,162.93
<b>INVESTMENT &amp; INTEREST BEARING ACCOUNTS</b>		
3. US Bank - PARS Investment Account	912,896.48	927,601.87
<i>Contributions = \$800,000    Disbursements = \$221,619</i>		
4. L. A. I. F Account - MSRA Reserve Account	496,978.50	469,711.45
5. CalTRUST - Restricted Inv. Account (Medium Term)	1,886,881.67	1,803,361.28
6. CalTRUST - General Reserve Account (Short-Term)	3,938,843.52	4,738,078.81
<b><i>Total CalTRUST Accounts</i></b>	<b><i>5,825,725.19</i></b>	<b><i>6,541,440.09</i></b>
7. California CLASS - DWFP Reserve Account	275,825.54	263,326.04
8. California CLASS - ReMat Reserve Account	1,681,260.17	1,605,083.24
9. California CLASS - General Reserve Account	2,743,472.81	2,619,167.64
<b><i>Total California CLASS Accounts</i></b>	<b><i>4,700,558.52</i></b>	<b><i>4,487,576.92</i></b>
10. Humboldt County - SRF Loan Payment Account	1,030,713.01	465,856.57
11. Humboldt County - 1% Tax Account	670,386.25	1,376,568.34
<i>Subtotal</i>	13,637,257.95	18,756,332.16
<b>OTHER ACCOUNTS</b>		
12. ReMat Deposit - Mellon Bank	27,000.00	27,000.00
13. Cash on Hand	700.00	650.00
<i>Subtotal</i>	27,700.00	27,650.00
<b>TOTAL CASH</b>	<b>14,697,312.43</b>	<b>19,359,145.09</b>

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



<b>FUND BALANCES AT MONTH-END</b>	<b>July 31, 2025</b>	<b>July 31, 2024</b>
<b>RESTRICTED FUNDS - ENCUMBERED</b>		
1. Prior-Year Price Factor 2 Rebate	(24,761.00)	(19,928.33)
2. Prior-Year Restricted AP Encumbrances	(1,512,851.00)	(875,231.00)
3. Advanced Charges - 3x Tank Seismic Retrofit	(1,245,162.10)	(1,398,379.18)
4. Advanced Charges - Cathodic Protection Project	(124,999.96)	(124,999.96)
6. Advanced Charges - On-Site Generation of Chlorine	(92,977.40)	(594,259.34)
7. Advanced Charges - Redundant Pipeline	(463,531.77)	(395,282.70)
8. Advanced Charges - TRF Emergency Generator	(284,020.47)	(283,115.95)
9. 3AC Collected Funds - TRF Emergency Generator	(312,858.62)	(312,858.62)
11. Advanced Funding - August Complex-Ruth Paving	(112,456.22)	(112,456.22)
12. Advanced Charges - Assist. Spillway Seismic Grant	(484,567.44)	(384,490.32)
13. Advanced Funding - Eureka Cyber Security	(19,489.22)	(19,597.72)
14. Advanced Charges - Essex Facility Expansion	(105,400.00)	(105,400.00)
15. Advanced Charges - Ruth Storage Barn	(209,166.63)	(100,833.33)
16. Advanced Charges - Capital Financing/Debt Service	(1,027,899.56)	(651,159.19)
<i>Subtotal</i>	(6,020,141.39)	(5,377,991.86)
<b>RESTRICTED FUNDS - OTHER</b>		
17. 1% Tax Credit to Muni's	(670,386.25)	(1,290,816.49)
18. Pension Trust Reserves	(912,896.48)	(927,601.87)
19. ReMat Deposit	(27,000.00)	(27,000.00)
20. HB Retail Capital Replacement Reserves	(178,683.09)	(227,424.00)
<i>Subtotal</i>	(1,788,965.82)	(2,472,842.36)
<b>UNRESTRICTED FUNDS</b>		
<b>BOARD RESTRICTED</b>		
21. MSRA Reserves	(496,978.50)	(469,711.45)
22. DWFP Reserves	(275,825.54)	(263,326.04)
23. ReMat Reserves	(1,681,260.17)	(1,605,083.24)
24. Northern Mainline Extension Study Prepayment	(6,091.14)	56.40
25. Blue Lake Rancheria Extension Study Prepayment	(238.23)	(4,235.37)
<i>Subtotal</i>	(2,460,155.35)	(2,338,064.33)
<b>UNRESTRICTED RESERVES</b>		
30. General Fund Reserves	(4,428,049.87)	(9,175,878.98)
<i>Subtotal</i>	(4,428,049.87)	(9,170,246.54)
<b>TOTAL NET POSITION</b>	<b>(14,697,312.43)</b>	<b>(19,359,145.09)</b>

# HUMBOLDT BAY MUNICIPAL WATER DISTRICT

## REVENUE REPORT

July 31, 2025

8%

Of Budget Year



### A. REVENUE RETURNED TO CUSTOMERS VIA PF2

	MTD RECEIPTS	YTD RECEIPTS	PRIOR YEAR	BUDGET	% OF BUDGET
<b>1. Humboldt Bay Retail Water Revenue</b>	30,469	30,469	33,192	360,000	8%
<b>General Revenue</b>					
Power Sales (Net ReMat)	4,277	4,277	7,137	125,000	3%
Tax Receipts (1% Taxes)	68,399	68,399	0	1,450,000	5%
Interest - Muni PF2 Retained	18,998	18,998	0	30,000	
<b>2. Miscellaneous Revenue*</b>	513	513	351,420	50,000	1%
<i>*Detail on following page</i>					
<b>TOTAL PF2 REVENUE CREDITS</b>	<b>122,656</b>	<b>122,656</b>	<b>391,750</b>	<b>2,015,000</b>	<b>6%</b>

### B. DISTRICT REVENUE

	MTD RECEIPTS	YTD RECEIPTS	PRIOR YEAR	BUDGET	% OF BUDGET
<b>3. Industrial Water Revenue</b>					
Harbor District	0	0	0	0	0
<i>Subtotal Industrial Water Revenue</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>4. Municipal Water Revenue</b>					
City of Arcata	131,027	131,027	132,139	1,701,895	8%
City of Blue Lake	17,042	17,042	17,224	235,198	7%
City of Eureka	302,732	302,732	304,695	3,946,856	8%
Fieldbrook CSD	16,642	16,642	16,327	224,020	7%
Humboldt CSD	94,632	94,632	93,178	1,218,937	8%
Manila CSD	7,818	7,818	7,403	100,714	8%
McKinleyville CSD	107,682	107,682	104,757	1,333,276	8%
<i>Subtotal Municipal Water Revenue</i>	<i>677,575</i>	<i>677,575</i>	<i>675,724</i>	<i>8,760,896</i>	<i>8%</i>
<b>TOTAL INDUSTRIAL &amp; WHOLESALE REVENUE</b>	<b>677,575</b>	<b>677,575</b>	<b>675,724</b>	<b>8,760,896</b>	<b>8%</b>
<b>5. Power Sales</b>					
Power Sales (ReMat Revenue)	7,126	7,126	11,957	300,000	2%
Interest (ReMat Revenue)	0	0	0	0	
<b>TOTAL REMAT REVENUE</b>	<b>7,126</b>	<b>7,126</b>	<b>11,957</b>	<b>300,000</b>	<b>2%</b>
<b>6. Other Revenue and Grant Reimbursement</b>					
HB Retail Capital Replacement Rev.	3,846	3,846	4,091		
FCSD Contract	35,638	35,638	44,810		
FEMA/CalOES Grant Revenue	0	0	0		
SWRCB In-Stream Flow Grant Revenue	0	0	1,120		
Quagga Grant Revenue	0	0	0		
Misc. Grant Revenue	0	0	6,136		
CalFire Healthy Forest Funding	0	0	0		
Interest Earned	0	0	0		
Net Increase/(Decrease) Investment Accounts	44,567	44,567	69,035		
<b>TOTAL OTHER/GRANT REVENUE</b>	<b>84,051</b>	<b>84,051</b>	<b>125,191</b>		
<b>GRAND TOTAL REVENUE</b>	<b>891,408</b>	<b>891,408</b>	<b>1,204,622</b>	<b>11,075,896</b>	<b>8%</b>

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 MISCELANEOUS REVENUE - DETAIL REPORT  
 July 31, 2025



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

	MTD RECEIPTS	YTD RECEIPTS
<b><u>Miscellaneous Revenue</u></b>		
Dividend - Principal Life	-	-
Fees - Park Use	-	-
Rebate - CALCard	-	-
Refund - Diesel Fuel Tax	-	-
Refunds - Miscellaneous	-	-
Sale - Surplus Material/Equipment	283	283
Reimb. - Copies & Postage	-	-
Reimb. - Gas	-	-
Reimb. - Misc. Employee	-	-
Reimb. - Telephone	-	-
UB - Water Processing Fees	30	30
UB - Hydrant Rental Deposit/Use	-	-
UB - PF2 Rebate, Fairhaven Techite Balance	-	-
Sale of Scrap Metal/Gravel	-	-
<b><u>Ruth Area</u></b>		
Lease - Ruth Mutual Water Company	-	-
Rent - Ruth Cabin	200	200
Ruth Annual Lessee Water Fees	-	-
<b>TOTAL MISCELANEOUS REVENUE</b>	<b>513</b>	<b>513</b>

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 MONTHLY EXPENDITURE REPORT - PAGE 1 OF 3  
 July 31, 2025

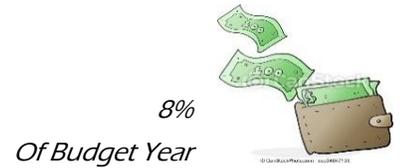


8%  
 Of Budget Year

**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	197,425.78	197,425.78	182,924.98	2,974,302	8%
2. Wages - Sick	5,684.42	5,684.42	5,013.63		
3. Wages - Vacation	26,326.94	26,326.94	20,893.81		
<i>Subtotal</i>	229,437.14	229,437.14	208,832.42	2,974,302	8%
4. Wages - Overtime	4,412.64	4,412.64	1,022.90	17,400	
5. Wages - Holiday (Worked)	2,062.92	2,062.92	1,948.68	17,587	
<i>Subtotal</i>	6,475.56	6,475.56	2,971.58	34,987	19%
6. Wages - Part-Time	11,856.11	11,856.11	8,800.71	103,224	11%
7. Wages - Shift Differential	957.92	957.92	940.63	12,342	8%
8. Wages - Standby	9,828.93	9,828.93	8,955.29	112,560	9%
9. Director Compensation	2,860.00	2,860.00	960.00	40,300	7%
10. Secretarial Fees	106.00	106.00	393.75	3,150	3%
11. Payroll Tax Expenses	19,865.93	19,865.93	17,357.54	261,094	8%
<i>Subtotal</i>	45,474.89	45,474.89	37,407.92	532,670	9%
<b>Employee Benefits</b>					
12. Health, Life,& LTD Ins.	46,530.69	46,530.69	45,575.89	706,282	7%
13. Air Medical Insurance	1,817.00	1,817.00	-	2,212	82%
14. Retiree Medical Insurance	15,026.61	15,026.61	11,245.45	106,500	14%
14a. Retiree Medical Reimb.	(6,348.46)	-	(1,725.82)		
15. Employee Dental Insurance	2,422.10	2,422.10	2,350.99	36,766	7%
16. Employee Vision Insurance	569.91	569.91	538.57	7,350	8%
17. Employee EAP	76.15	76.15	71.95	1,226	6%
18. Fitness Stipend	135.00	135.00	195.00	15,120	1%
19. 457b District Contribution	3,625.00	3,625.00	3,850.00	43,200	8%
20. CalPERS Expenses	428,335.28	428,335.28	367,128.25	652,398	66%
21. Workers Comp Insurance	17,772.11	17,772.11	26,900.64	119,736	15%
<i>Subtotal</i>	509,961.39	516,309.85	456,130.92	1,690,790	31%
<b>TOTAL S.E.B</b>	<b>791,348.98</b>	<b>797,697.44</b>	<b>705,342.84</b>	<b>5,232,749</b>	<b>15%</b>

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**  
**MONTHLY EXPENDITURE REPORT - PAGE 2 OF 3**  
**July 31, 2025**



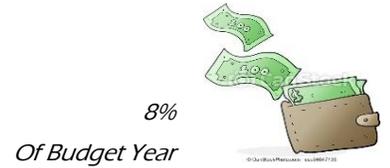
**SERVICE & SUPPLY EXPENDITURES (S & S)**

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
<b>Operations &amp; Maintenance</b>					
1. Auto Maintenance	2,616.05	2,616.05	3,024.91	50,000	5%
2. Engineering	-	-	5,019.65	75,000	0%
3. Lab Expenses	-	-	3,216.00	18,000	0%
4. Maintenance & Repairs					
General	2,332.81	2,332.81	2,491.61	48,000	5%
TRF	-	-	552.84	17,000	0%
<i>Subtotal</i>	<i>2,332.81</i>	<i>2,332.81</i>	<i>3,044.45</i>	<i>65,000</i>	<i>4%</i>
5. Materials & Supplies					
General	2,240.21	2,240.21	1,879.62	45,000	5%
TRF	242.73	242.73	1,899.33	44,000	1%
<i>Subtotal</i>	<i>2,482.94</i>	<i>2,482.94</i>	<i>3,778.95</i>	<i>89,000</i>	<i>3%</i>
6. Radio Maintenance	598.64	598.64	578.09	8,500	7%
7. Ruth Lake License	1,500.00	1,500.00	-	1,500	100%
8. Safety Equip./Training					
General	2,100.23	2,100.23	1,408.56	18,700	11%
TRF	258.28	258.28	-	2,000	13%
<i>Subtotal</i>	<i>2,358.51</i>	<i>2,358.51</i>	<i>1,408.56</i>	<i>20,700</i>	<i>11%</i>
9. Tools & Equipment	-	-	157.26	5,000	0%
10. USGS Meter Station	-	-	-	9,500	0%
<i>Operations Subtotal</i>	<i>11,888.95</i>	<i>11,888.95</i>	<i>20,227.87</i>	<i>342,200</i>	<i>3%</i>

**General & Administration**

11. Accounting Services	-	-	7,492.50	35,000	0%
12. Bad Debt Expense	-	-	-	-	0
13. Dues & Subscriptions	735.60	735.60	712.84	39,000	2%
14. IT & Software Maintenance	12,357.34	12,357.34	19,462.69	124,000	10%
15. Insurance	74,797.71	74,797.71	107,986.43	146,000	51%
16. Internet	860.09	860.09	796.67	11,150	8%
17. Legal Services	2,785.50	2,785.50	1,186.50	35,000	8%
18. Miscellaneous	-	-	371.51	10,000	0%
19. Office Building Maint.	1,236.78	1,236.78	2,272.14	19,000	7%
20. Office Expense	5,098.77	5,098.77	2,220.57	39,600	13%
21. Professional Services	1,075.00	1,075.00	-	20,000	5%
22. Property Tax	-	-	-	3,000	0%

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**  
**MONTHLY EXPENDITURE REPORT - PAGE 3 OF 3**  
**July 31, 2025**



<b>SERVICE &amp; SUPPLY EXPENDITURES (con't)</b>						
	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget	
23. Regulatory Agency Fees	174.22	174.22	12,356.00	216,000	0%	
24. Ruth Lake Programs	-	-	-	5,000	0%	
25. Safety Apparel	208.36	208.36	-	10,050	2%	
26. Technical Training	258.00	258.00	-	14,000	2%	
27. Telephone	1,333.38	1,333.38	1,058.34	15,000	9%	
28. Travel & Conference	420.42	420.42	2,069.06	22,000	2%	
<i>Gen. &amp; Admin. Subtotal</i>	<i>101,341.17</i>	<i>101,341.17</i>	<i>157,985.25</i>	<i>763,800</i>	<i>13%</i>	
<b>TOTAL SERVICE &amp; SUPPLY</b>	<b>113,230.12</b>	<b>113,230.12</b>	<b>178,213.12</b>	<b>1,106,000.00</b>	<b>10%</b>	

**Power**

29. Essex - PG & E	90,438.07	90,438.07	93,745.28		
30. 2Mw Generator Fuel	-	-	-		
<i>Subtotal Essex Pumping</i>	<i>90,438.07</i>	<i>90,438.07</i>	<i>93,745.28</i>	<i>937,000</i>	
31. All other PG & E	14,750.66	14,750.66	11,027.92	199,000	
<i>Subtotal All Power</i>	<i>105,188.73</i>	<i>105,188.73</i>	<i>104,773.20</i>	<i>1,136,000</i>	<i>9%</i>

**Total Service and Supplies incl.**

<b>Power</b>	<b>218,418.85</b>	<b>218,418.85</b>	<b>282,986.32</b>	<b>2,242,000</b>	<b>10%</b>
--------------	-------------------	-------------------	-------------------	------------------	------------

<b>GRAND TOTAL EXPENSES</b>	<b>1,009,767.83</b>	<b>1,016,116.29</b>	<b>988,329.16</b>	<b>7,474,749.00</b>	<b>14%</b>
-----------------------------	---------------------	---------------------	-------------------	---------------------	------------

**OTHER EXPENSES**

33. ReMat Consultant Exp.	753.52	753.52	3,216.14		
34. Capital Replacement Exp.	-	-	-		

**TOTAL EXPENSES WITH OTHER EXPENSES**

	<b>1,010,521.35</b>	<b>1,016,869.81</b>	<b>991,545.30</b>		
--	---------------------	---------------------	-------------------	--	--

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

SUPPLEMENTAL - FIELDBROOK-GLENDALE CSD CONTRACT SERVICES  
 MONTHLY BILLING/EXPENSE REPORT  
 July 31, 2025



	Month-to-Date	Year-to-Date
<b><i>Contract Services Billing</i></b>		
Administrative	1,261.23	1,261.23
Indirect/Overhead	999.28	999.28
Maintenance/Operations/Supplies	20,707.21	20,707.21
<b>Total FB-GCSD Billing</b>	<b>22,967.72</b>	<b>22,967.72</b>
<b><i>Contract Services Expenses</i></b>		
Employee Wages	10,495.20	10,495.20
Employee Benefits	4,337.10	4,337.10
Operations & Maintenance Expenses	431.23	431.23
General & Administrative Expenses	2,516.73	2,516.73
<b>Total FB-GCSD Expenses</b>	<b>17,780.26</b>	<b>17,780.26</b>
<b><i>NET Fieldbrook Contract Services</i></b>	<b>5,187.46</b>	<b>5,187.46</b>

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**  
**PROJECT PROGRESS REPORT**  
 July 31, 2025

8% Of Budget Year



**A. CAPITAL PROJECTS**

	MTD	YTD		% OF
GRANT FUNDED PROJECTS	EXPENSES	TOTAL	BUDGET	BUDGET
1 Grant - TRF Generator <i>(Treatment Facility Project, \$1.9M - FEMA, Approved)</i>	10,622	10,622	1,731,813	1%
2 Grant - Collector Mainline Redundancy Pipeline <i>(Treatment/Base Facility Project, \$3.2M - FEMA, Approved)</i>	0	0	3,200,000	0%
3 Grant - 2x Tank Seismic Retro	760,572	760,572	3,174,488	24%
3A Grant - 1x Tank (Industrial) Seismic Retrofit <i>(\$5.7M - FEMA Approved, Pending Add'l Funding)</i>	(549,456)	(549,456)		
4 Adv. Assistance Spillway Seismic Grant <i>(\$1.5M - FEMA Approved, Pending Add'l Funding)</i>	217,617	217,617	1,487,567	15%
<b>TOTAL GRANT FUNDED CAPITAL PROJECTS</b>	<b>439,354</b>	<b>439,354</b>	<b>9,593,868</b>	<b>5%</b>

**NON-GRANT FUNDED CAPITAL PROJECTS**

5 FY26 Mainline Valve Replacement Program	0	0	100,000	0%
6 Collector 4 Transformer & Switchboard Replacement	0	0	99,000	0%
7 Collector 4 Electrical Sub-Panel Replacements	0	0	14,250	0%
8 Roof Replacement & Modifications to OSG Bldg.	0	0	44,250	0%
9 Modular Training Room and EOC Building	0	0	365,000	0%
<b>TOTAL NON-GRANT FUNDED CAPITAL PROJECTS</b>	<b>0</b>	<b>0</b>	<b>622,500</b>	<b>0%</b>

**B. EQUIPMENT AND FIXED ASSET PROJECTS**

	MTD	YTD		% OF
	EXPENSES	TOTAL	BUDGET	BUDGET
10 FY26 Replace ESSEX Administrative Computers	0	0	6,500	0%
11 FY26 Replace Control Computers	0	0	5,250	0%
12 Traffic Control Equipment Upgrades	0	0	1,750	0%
13 Hyster Forklift Fork Extensions	0	0	2,000	0%
14 Replace Unit 7	0	0	76,000	0%
15 Replace Control Servers Essex	0	0	37,750	0%
16 Humboldt Bay Radio Read Meters	0	0	9,500	0%
17 Control Laptops for Electrical Dept	0	0	6,250	0%
18 Replace 35kW Generator	0	0	57,750	0%
19 Replace Chipper	0	0	67,500	0%
20 Replace Unit 12	0	0	88,250	0%
21 Replace Control Servers - TRF	0	0	37,750	0%

*(Treatment Facility Project)*

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

**PROJECT PROGRESS REPORT - PAGE 2 OF 5**

July 31, 2025

8% Of Budget Year



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

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
22 TRF Chlorine Analyzer Replacement Phase 2 of 2 <i>(Treatment Facility Project)</i>	0	0	22,500	0%
23 Purchase Spare Turbidimeter <i>(Treatment Facility Project)</i>	0	0	8,750	0%
24 FY26 Replace EUREKA Administrative Computers	0	0	6,000	0%
25 AC Units for Headquarters, Bunkhouse & Hydro Plant	0	0	10,750	0%
26 Ruth Slide Gate Rm Electl Upgrade & Hyd. Pump Rplt	0	0	10,250	0%
27 Ruth Hydro Weir Vault Modifications & Add Pump Cap	0	0	7,400	0%
28 Unit #6 AED Defibrillator	0	0	2,500	0%
29 Ruth Spillway Davit	0	0	5,750	0%
30 Ruth Hydro Emergency and Portable Lighting	0	0	2,000	0%
31 Ruth Hydro Sump Pump Replacement	0	0	6,500	0%
32 Replace 35kW Standby Generator	0	0	54,000	0%
33 Ruth Lake Decontamination Station	0	0	40,000	0%
<b>TOTAL EQUIPMENT &amp; FIXED ASSET PROJECTS</b>	<b>0</b>	<b>0</b>	<b>572,650</b>	

**C. MAINTENANCE PROJECTS**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
34 FY26 Pipeline Maintenance	0	0	14,000	0%
35 FY26 Main Line Meter Flow Calibration	0	0	16,000	0%
36 FY25 Technical Support and Software Updates	0	0	24,000	0%
37 FY26 Generator Services	0	0	3,600	0%
38 FY26 Hazard & Diseased Tree Removal	0	0	8,000	0%
39 FY26 Cathodic Protection	0	0	1,500	0%
40 FY26 Maintenance Emergency Repairs	0	0	50,000	0%
41 FY26 Fleet Paint Repairs	0	0	5,000	0%
42 FY26 12kV Electric System General Maintenance	0	0	10,500	0%
43 FY26 Voice and SCADA Radio Maintenance	0	0	3,000	0%
44 FY26 Safety Certification of Electrical Tools	0	0	2,500	0%
45 FY26 Collector Lube Oil System Maintenance	0	0	4,500	0%
46 FY26 Fleet Vehicle ALL DATA Software Subs & CanDo	0	0	3,750	0%
47 FY26 Unit Compliance Testing	0	0	5,000	0%
48 FY26 SB198 Safety Committee Funding	0	0	5,000	0%
49 Production Flow Meter Calibrations	0	0	9,500	0%
50 Line Shed 4 Roof Replacement	3,018	3,018	57,750	0%
51 Maintenance Shop Roof Replacement	0	0	57,750	0

# HUMBOLDT BAY MUNICIPAL WATER DISTRICT

## PROJECT PROGRESS REPORT - PAGE 3 OF 5

July 31, 2025

8% Of Budget Year



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

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
52 FY26 Pipeline R-O-W Maintenance	0	0	20,000	0%
53 Equipment Storage Building Roof Replacement	0	0	6,500	0%
54 Unit 2 and Unit 13 Engine Oil Leak Repairs	0	0	6,750	0%
55 FY26 TRF Generator Service <i>(Treatment Facility Project)</i>	0	0	500	0%
56 FY26 TRF Limitorque Valve Retrofit Supplies <i>(Treatment Facility Project)</i>	0	0	15,000	0%
57 TRF Valve Network Upgrade (Phase 2) <i>(Treatment Facility Project)</i>	0	0	55,000	0%
58 FY26 Brush Abatement Ruth Hydro	0	0	22,000	0%
59 FY26 LTO Insurance	0	0	6,000	0%
60 FY26 Spillway Repairs	0	0	10,000	0%
61 FY26 Howell Bungler Valve Inspection	0	0	1,500	0%
62 FY26 Log Boom Inspection	0	0	1,500	0%
63 Ruth Hydro Maintenance and Improvements	0	0	10,250	0%
64 FY26 Eureka Office Generator Service	0	0	500	0%
65 Main Office Paint/Repairs/Fencing	0	0	8,000	0%
<b>TOTAL MAINTENANCE PROJECTS</b>	<b>3,018</b>	<b>3,018</b>	<b>444,850</b>	<b>0</b>

### D. PROFESSIONAL & CONSULTING SERVICES

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
66 FY26 Crane Testing/Certification	0	0	12,000	0%
67 FY26 On-Site Sodium Hypochlorite System Maintenance	0	0	20,750	0%
68 FY26 Hydro Plant Annual Electrical & Maint Inspect	0	0	4,000	0%
69 FY26 Cyber Security Maintenance	0	0	5,500	0%
70 FY23 Hydro Plant Annual Elec. Maint./Testing	0	0	7,200	0%
71 FY26 GHD Review & Report of Essex MR CrossSection	0	0	6,000	0%
72 Mitigation Funds, Samoa Dunes EIR	0	0	50,000	0%
73 Litigation Assessment	0	0	20,000	0%
74 FY26 Technical Training	0	0	20,000	0%
75 FY26 O & M Training	0	0	24,500	0%
76 FY26 Cross Connection Control Certification	0	0	3,000	0%
77 FY26 Public Education Funds	0	0	5,000	0%
78 FY26 Mad River Regulatory Compliance Assistance	0	0	50,000	0%

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

PROJECT PROGRESS REPORT - PAGE 4 OF 5

8% Of Budget Year



July 31, 2025

**D. PROFESSIONAL & CONSULTING SERVICES (CONT)**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
79 FY26 Grant Applications Assistance	0	0	20,000	0%
80 Construction Contract Documents Development Assistance - GHD	0	0	10,000	0%
81 FY26 Asst w/401/404 Permits;LTSAA;Other-Stillwater	0	0	50,000	0%
82 Cathodic Protection Close-Interval Potential Surv.	0	0	25,400	0%
83 FY26 Dam Spillway Wall Monument Survey-Points West	0	0	10,000	0%
84 FY26 Matthews Dam Spillway Wingwall & Floor Survey	0	0	7,000	0%
85 Vertical Monument Monitoring - Points West	0	0	5,800	0%
86 Vertical Monument Monitoring - Data Review (GHD)	0	0	5,000	0%
87 West (Left) Abutment Slide Monitoring -Points West	0	0	8,700	0%
88 West (Left) Abutment Monitoring -Data Review (GHD)	0	0	4,000	0%
89 FY26 FERC Dam Safety Surveillance and Monitoring Report	0	0	11,518	0%
90 FY26 FERC Chief Dam Safety Engineer	0	0	16,804	0%
91 GEI - Task 2-Part 12D; PFMA	0	0	15,674	
92 GRANT-Adv. Asst Spillway Seism Out of Scope Boring	0	0	100,000	0%
93 Left/Right Abutment Assessment - SHN	0	0	10,000	0%
<b>TOTAL PROF/CONSULTING SERVICES</b>	<b>0</b>	<b>0</b>	<b>527,846</b>	<b>0%</b>

**E. INDUSTRIAL SYSTEM PROJECTS**

94 Maintain Water Supply to Indust. Pump Station 6	0	0	13,250	0%
95 Repairs to I/W Reservoir Fence	0	0	10,000	0%
96 Grant - 1x Tank (Industrial) Seismic Retrofit	549,456	549,456	1,303,743	42%
<b>TOTAL INDUSTRIAL SYSTEM PROJECTS</b>	<b>549,456</b>	<b>549,456</b>	<b>1,326,993</b>	<b>41%</b>

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

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

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

97 Prof. Services for New Capital Debt	59,128	59,128	162,200	36%
98 Grant - 3x Tank Seismic Retrofit	18,988	18,988	227,859	8%
<b>TOTAL ADVANCED CHARGES COLLECTED</b>	<b>78,116</b>	<b>78,116</b>	<b>390,059</b>	<b>20%</b>

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

PROJECT PROGRESS REPORT - PAGE 5 OF 5

July 31, 2025

8% Of Budget Year



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

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
On-Site Generation of Chlorine <i>(\$1.4M - FY25, Treatment Facility Project)</i>	27,255	27,255	179,313	15%
Humboldt Bay Radio Read Meters <i>(Capital Replacement Funds)</i>	0	0	9,500	0%
Ruth Paving and Repairs <i>(Non-FEMA August Complex Wildfire Funds Collected)</i>	0	0	112,000	0%
North Mainline Extension Study	0	0	0	0
BL Rancheria Water	0	0	0	0
<b>TOTAL NOT CHARGED TO CUSTOMERS</b>	<b>27,255</b>	<b>27,255</b>	<b>300,813</b>	<b>9%</b>

**PROJECT PROGRESS REPORT SUMMARY OF ALL ACTIVITY**

CUSTOMER CHARGES	MTD	YTD	BUDGET	% BUDGET
TOTAL NON-GRANT FUNDED CAPITAL PROJECTS	0	0	622,500	0%
<i>Treatment Facility Portion</i>	0	0	0	
TOTAL EQUIPMENT & FIXED ASSET PROJECTS	0	0	572,650	0%
<i>Treatment Facility Portion</i>	0	0	69,000	
TOTAL MAINTENANCE PROJECTS	3,018	3,018	444,850	1%
<i>Treatment Facility Portion</i>	0	0	70,500	
TOTAL PROF/CONSULTING SERVICES	0	0	527,846	0%
<i>Treatment Facility Portion</i>	0	0	0	
TOTAL INDUSTRIAL SYSTEM PROJECTS	549,456	549,456	1,326,993	0
TOTAL CARRYOVER PROJECTS	0	0	0	0
<i>Treatment Facility Portion</i>	0	0	0	
TOTAL ADVANCED CHARGES/DEBIT SERVICE	78,116	78,116	390,059	20%
<i>Treatment Facility Portion</i>	\$0	\$0	\$0	
<b>TOTAL CUSTOMER CHARGES</b>	<b>\$630,590</b>	<b>\$630,591</b>	<b>\$3,884,898</b>	<b>16%</b>
NON-CUSTOMER CHARGES (CURRENT FY)	MTD	YTD	BUDGET	% BUDGET
TOTAL GRANT FUNDED CAPITAL PROJECTS	439,354	439,354	9,593,868	5%
TOTAL NON-CUSTOMER CHARGES	27,255	27,255	300,813	9%
TOTAL USE OF ENCUMBERED FUNDS	78,478	78,478	1,597,771	5%
<b>TOTAL NON-CUSTOMER CHARGES</b>	<b>\$545,087</b>	<b>\$545,087</b>	<b>\$11,492,452</b>	<b>5%</b>
<b>GRAND TOTAL PROJECT BUDGET ACTIVITY</b>	<b>\$1,175,679</b>	<b>\$1,175,678</b>	<b>\$15,377,350</b>	<b>8%</b>

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**  
**ENCUMBERED FUNDS RECONCILIATION REPORT**  
**July 31, 2025**



	MTD EXPENSES	YTD TOTAL	AMOUNT ENCUMBERED	REMAINING
<b>A. CAPITAL PROJECTS</b>				
1E Mainline Valve Replacement Program	0	0	55,173	55,173
2E Retaining Wall for Valve Access	0	0	70,000	70,000
3E Replace Pump 2-2 (Pre-Approved 04/2024)	734	734	26,713	25,979
4E Peninsula Communications Options	0	0	42,000	42,000
5E Mainline Valve Replacement Program	0	0	50,000	50,000
6E Purchase Collector 4 Transformer	0	0	48,325	48,325
7E Purchase Switchboard for Collector 4	0	0	41,589	41,589
8E Resize Chemical Feed System	0	0	6,304	6,304
9E Storage Barn at Headquarters	0	0	218,108	218,108
<b>B. EQUIPMENT &amp; FIXED ASSET PROJECTS</b>				
10E FY25 Replace ESSEX Administrative Computers	0	0	2,978	2,978
11E Telemetry Radio and Antenna Replacement	0	0	14,000	14,000
12E District Lighting Upgrades	2,402	2,402	11,950	9,548
13E Construction Tooling	383	383	1,473	1,090
14E TRF Filter Gallery Heaters and Air Circulation	8,856	8,856	9,000	144
15E Air Actuated Chemical Pump	2,392	2,392	2,000	(392)
16E FY25 Replace EUREKA Administrative Computers	0	0	5,086	5,086
<b>C. MAINTENANCE PROJECTS</b>				
17E FY25 Main Line Meter Flow Calibration	1,344	1,344	15,900	14,556
18E FY25 Technical Support and Software Updates	0	0	6,442	8,000
19E FY25 Hazard & Diseased Tree Removal	0	0	8,000	5,000
20E FY25 Fleet Paint Repairs	0	0	5,000	51,500
21E TRF Valve Network Upgrade (Phase 2)	0	0	51,500	1,500
22E FY25 Howell Bunger Valve Inspection	0	0	1,500	88,750
23E Replace Hydro Plant PLC's	0	0	88,750	5,000
24E FY25 Maintenance Emergency Repairs	0	0	5,000	0
<b>D. PROFESSIONAL &amp; CONSULTING SERVICES</b>				
25E Caselle A/R Module	0	0	5,000	5,000
26E CIP 10-yr Financial Revision and Project Review	5,905	5,905	22,960	17,055
27E Retail Rate Study	0	0	12,000	12,000
28E 404 Permit Assistance	9,522	9,522	9,131	(391)
29E Technical Dam/Spillway Support	1,246	1,246	189,909	188,663
30E FY25 Cyber Security Maintenance	0	0	5,250	5,250
31E Microsoft 360 Email	11,267	11,267	7,274	(3,993)
32E Professional Consulting Services for FERC Comprehensive Analysis	30,449	30,449	504,865	474,416
33E Shatz Energy Research - Tesla Battery/Generator	3,978	3,978	14,296	10,318
34E Samoa Peninsula Coastal Development Permit (Change of Scope)	0	0	40,295	40,295
<b>ENCUMBERED FUNDS TOTAL</b>	<b>78,478</b>	<b>78,478</b>	<b>1,597,771</b>	<b>1,512,851</b>

Vendor Name	Date Paid	Description	Amount Paid
<b>101 NETLINK</b>			
101 NETLINK	07/07/2025	Ruth Data Link/Internet	340.00
Total 101 NETLINK:			340.00
<b>ACWA/JPIA</b>			
ACWA/JPIA	07/29/2025	Cyber Liability Insurance FY25/26	4,036.00
ACWA/JPIA	07/03/2025	Workers Compensation April - June 2025	17,772.11
ACWA/JPIA	07/21/2025	COBRA Dental	229.32
ACWA/JPIA	07/21/2025	COBRA Vision	55.68
ACWA/JPIA	07/21/2025	RETIREE MEDICAL	14,741.61
ACWA/JPIA	07/29/2025	Property Program - General 7/1/25-3/31/26	42,432.81
ACWA/JPIA	07/29/2025	Property Program - Ruth Hydro 7/1/25-3/31/26	6,475.98
ACWA/JPIA	07/29/2025	Property Program - TRF 7/1/25-3/31/26	21,852.92
Total ACWA/JPIA:			107,596.43
<b>Advanced Security Systems</b>			
Advanced Security Systems	07/29/2025	Eureka Office Alarm - Annual Billing	184.68
Total Advanced Security Systems:			184.68
<b>AirGas NCN</b>			
AirGas NCN	07/29/2025	Safety supplies for shop inventory	46.66
AirGas NCN	07/29/2025	Saline cartridges for Essex lab	258.28
AirGas NCN	07/29/2025	Saline cartridges for TRF	258.28
AirGas NCN	07/29/2025	N-95 Respirators	56.78
Total AirGas NCN:			620.00
<b>Albat</b>			
Albat	07/17/2025	3 X Tank Seismic Retrofit Preconstruction #24-1440	29,501.25
Albat	07/17/2025	3 X Tank Seismic Retrofit Preconstruction #24-1440	25,581.44
Albat	07/17/2025	3 X Tank Seismic Retrofit Preconstruction #24-1440	8,240.59
Albat	07/17/2025	3 X Tank Seismic Retrofit Preconstruction #24-1440	49,160.00
Albat	07/23/2025	3 X Tank Seismic Retrofit Preconstruction #24-1440	39,813.18
Albat	07/23/2025	3 X Tank Seismic Retrofit Preconstruction #24-1440	22,807.47
Total Albat:			175,103.93
<b>Almquist Lumber</b>			
Almquist Lumber	07/29/2025	Painting supplies for OSG pump room	302.25
Total Almquist Lumber:			302.25
<b>AT &amp; T</b>			
AT & T	07/07/2025	Eureka/Essex LandLine	31.54
AT & T	07/07/2025	Arcata/Essex LandLine	31.54
AT & T	07/07/2025	Eureka Office/Alarm	64.72
AT & T	07/07/2025	TRF	31.58
AT & T	07/07/2025	Essex office/Modem/Control Alarm System	31.58
AT & T	07/29/2025	Eureka/Essex LandLine	31.54
AT & T	07/29/2025	Arcata/Essex LandLine	31.54
AT & T	07/29/2025	Eureka Office/Alarm	64.72
AT & T	07/29/2025	TRF	31.58
AT & T	07/29/2025	Essex office/Modem/Control Alarm System	31.58

Vendor Name	Date Paid	Description	Amount Paid
Total AT & T:			381.92
<b>ATS Communications</b>			
ATS Communications	07/17/2025	Monthly ProIT support for Essex	1,499.00
ATS Communications	07/17/2025	Microsoft email accounts	1,137.95
ATS Communications	07/17/2025	Email Migration to MS 365	10,094.57
Total ATS Communications:			12,731.52
<b>Bartle Wells Associates</b>			
Bartle Wells Associates	07/29/2025	Long-Range Financial Plan Contract #24-1770	5,905.00
Total Bartle Wells Associates:			5,905.00
<b>BDI - M&amp;S Arcata</b>			
BDI - M&S Arcata	07/29/2025	Chemical transfer pump	223.42
BDI - M&S Arcata	07/29/2025	Chemical transfer pump	2,168.90
Total BDI - M&S Arcata:			2,392.32
<b>Cal Poly Humboldt</b>			
Cal Poly Humboldt	07/17/2025	Contract for Tesla BESS and generator coordination #25-0441	3,977.84
Total Cal Poly Humboldt:			3,977.84
<b>CalPERS</b>			
CalPERS	07/02/2025	Unfunded Accrued Liability Classic	390,344.00
CalPERS	07/17/2025	SSA 218 Annual Fee	110.00
CalPERS	07/02/2025	Unfunded Accrued Liability PEPR	6,598.00
Total CalPERS:			397,052.00
<b>City of Eureka</b>			
City of Eureka	07/18/2025	Eureka office water/sewer	129.29
Total City of Eureka:			129.29
<b>Coastal Business Systems Inc.</b>			
Coastal Business Systems Inc.	07/17/2025	Eureka office copy and fax machine	799.12
Coastal Business Systems Inc.	07/17/2025	Essex copy/fax machine	285.75
Coastal Business Systems Inc.	07/29/2025	Eureka office copy and fax machine	799.12
Coastal Business Systems Inc.	07/29/2025	Essex copy/fax machine	285.75
Total Coastal Business Systems Inc.:			2,169.74
<b>Coyote Logistics LLC</b>			
Coyote Logistics LLC	07/29/2025	Shipping charges For fall arrest winch for repairs	421.89
Total Coyote Logistics LLC:			421.89
<b>Cummins Sales and Service</b>			
Cummins Sales and Service	07/17/2025	2MW generator control programming for TESLA bank project	693.00
Total Cummins Sales and Service:			693.00

Vendor Name	Date Paid	Description	Amount Paid
<b>Department of Water Resources</b>			
Department of Water Resources	07/17/2025	Filing Fee for application related to Assist Spillway Seismic Gra	30,551.00
Total Department of Water Resources:			30,551.00
<b>Downey Brand Attorneys LLP</b>			
Downey Brand Attorneys LLP	07/29/2025	Legal Fees May 2025	1,235.50
Total Downey Brand Attorneys LLP:			1,235.50
<b>DXP Enterprises, Inc.</b>			
DXP Enterprises, Inc.	07/17/2025	Shipping charges for Pump Replacement	112.36
Total DXP Enterprises, Inc.:			112.36
<b>Eureka Oxygen</b>			
Eureka Oxygen	07/29/2025	cylinder rental	128.80
Total Eureka Oxygen:			128.80
<b>Eureka Rubber Stamp</b>			
Eureka Rubber Stamp	07/29/2025	Name Tags	219.20
Total Eureka Rubber Stamp:			219.20
<b>FleetPride</b>			
FleetPride	07/29/2025	Coolant heater hose	16.50
FleetPride	07/29/2025	Tailight assembly for 16K trailer	61.75
Total FleetPride:			78.25
<b>Frontier Communications</b>			
Frontier Communications	07/29/2025	Ruth HQ Phone	75.42
Frontier Communications	07/29/2025	Ruth Hydro/Ruth Dataline	283.69
Total Frontier Communications:			359.11
<b>Gannett Fleming, Inc</b>			
Gannett Fleming, Inc	07/17/2025	R.W. Matthews Dam Part 12D Comprehensive Assessment	22,088.75
Total Gannett Fleming, Inc:			22,088.75
<b>GEI Consultants, Inc</b>			
GEI Consultants, Inc	07/29/2025	Advanced Assistance Seismic Spillway - GRANT #25-1814	46,615.00
GEI Consultants, Inc	07/29/2025	Advanced Assistance Seismic Spillway - GRANT #25-1814	70,289.00
GEI Consultants, Inc	07/29/2025	2025 Qualified Dam Safety Engineering Consulting #25-0180	445.00
GEI Consultants, Inc	07/29/2025	Dam Wind Wave Analysis #25-1324	801.00
GEI Consultants, Inc	07/29/2025	Advanced Assistance Seismic Spillway - GRANT #25-1814	14,885.25
GEI Consultants, Inc	07/29/2025	Advanced Assistance Seismic Spillway - GRANT #25-1814	55,137.10
Total GEI Consultants, Inc:			188,172.35
<b>GHD</b>			
GHD	07/17/2025	Reservoirs Seismic Retrofit Phs 2 #24-0812	1,986.03
GHD	07/17/2025	Reservoirs Seismic Retrofit Phs 2 #24-0812	3,666.47

Vendor Name	Date Paid	Description	Amount Paid
Total GHD:			5,652.50
<b>Grainger</b>			
Grainger	07/17/2025	Materials for TRF filer gallery ventilation	6,691.72
Grainger	07/17/2025	Materials for TRF filer gallery ventilation	1,837.56
Grainger	07/17/2025	Materials for TRF filer gallery ventilation	185.31
Grainger	07/17/2025	Materials for TRF filer gallery ventilation	141.90
Total Grainger:			8,856.49
<b>Health Equity Inc</b>			
Health Equity Inc	07/07/2025	HSA Admin Fee July 2025 - 20 employees	59.00
Health Equity Inc	07/07/2025	HSA Admin Fee July 2025 - 6 employees	17.70
Total Health Equity Inc:			76.70
<b>Hensel Hardware</b>			
Hensel Hardware	07/29/2025	Filter housing orings	10.57
Hensel Hardware	07/29/2025	Supplies for Ruth	52.85
Hensel Hardware	07/29/2025	Shop supplies	45.17
Hensel Hardware	07/29/2025	Weather stripping for storage box at HQ cabin	16.53
Hensel Hardware	07/29/2025	OSG building alarm keypad relocation	13.32
Hensel Hardware	07/29/2025	Tyvek suits	57.29
Hensel Hardware	07/29/2025	OSHG cleaning chemical	66.08
Total Hensel Hardware:			261.81
<b>Henwood Associates, Inc</b>			
Henwood Associates, Inc	07/17/2025	Consultant Services Agreement- May 2025	376.76
Total Henwood Associates, Inc:			376.76
<b>Humboldt County Treasurer</b>			
Humboldt County Treasurer	07/23/2025	Capital Financing Project	45,611.43
Total Humboldt County Treasurer:			45,611.43
<b>Humboldt Redwood Company, LLC</b>			
Humboldt Redwood Company, LLC	07/29/2025	Mt Pierce Lease site	333.41
Total Humboldt Redwood Company, LLC:			333.41
<b>Humboldt Waste Management Authority</b>			
Humboldt Waste Management Authority	07/29/2025	dump fee	36.00
Humboldt Waste Management Authority	07/29/2025	Dump fee - line shed sheet rock demo	191.80
Humboldt Waste Management Authority	07/29/2025	Hazwaste disposal fee	50.00
Total Humboldt Waste Management Authority:			277.80
<b>Industrial Electric</b>			
Industrial Electric	07/29/2025	Conduit elbows	23.66
Industrial Electric	07/29/2025	Materials for plant water system	78.28
Total Industrial Electric:			101.94

Vendor Name	Date Paid	Description	Amount Paid
<b>Jacob Morris Logging Inc.</b>			
Jacob Morris Logging Inc.	07/17/2025	Waste wood disposal fee	74.10
Total Jacob Morris Logging Inc.:			74.10
<b>JTN Energy, LLC</b>			
JTN Energy, LLC	07/17/2025	Consultant Services Agreement - May 2025	376.76
Total JTN Energy, LLC:			376.76
<b>Kernen Construction</b>			
Kernen Construction	07/17/2025	Asphalt for paving on Pipeline Rd	528.29
Kernen Construction	07/29/2025	Asphalt for Essex Yard repairs	222.27
Total Kernen Construction:			750.56
<b>Mario Palmero</b>			
Mario Palmero	07/14/2025	Per Diem for Backflow Training	258.00
Total Mario Palmero:			258.00
<b>Mendes Supply Company</b>			
Mendes Supply Company	07/29/2025	Eureka office supplies	78.61
Total Mendes Supply Company:			78.61
<b>Miller Farms Nursery</b>			
Miller Farms Nursery	07/17/2025	Chainsaw chaps	121.79
Miller Farms Nursery	07/17/2025	Weed eater supplies	48.93
Total Miller Farms Nursery:			170.72
<b>Mission Linen</b>			
Mission Linen	07/17/2025	maintenance supplies & uniform rentals	46.75
Mission Linen	07/17/2025	maintenance supplies & uniform rentals	62.00
Mission Linen	07/17/2025	maintenance supplies & uniform rentals	58.42
Mission Linen	07/17/2025	maintenance supplies & uniform rentals	87.66
Mission Linen	07/17/2025	maintenance supplies & uniform rentals	27.52
Mission Linen	07/17/2025	maintenance supplies & uniform rentals	72.39
Mission Linen	07/17/2025	maintenance supplies & uniform rentals	11.47
Mission Linen	07/17/2025	maintenance supplies & uniform rentals	87.66
Total Mission Linen:			453.87
<b>NAPA AUTO PARTS</b>			
NAPA AUTO PARTS	07/29/2025	Diesel exhaust fluid for Unit #9	18.73
NAPA AUTO PARTS	07/29/2025	Unit 13 AC system recharge	50.72
NAPA AUTO PARTS	07/29/2025	Shop supplies	23.14
Total NAPA AUTO PARTS:			92.59
<b>NHA Advisors, LLC</b>			
NHA Advisors, LLC	07/29/2025	Professional Services for Financial Assistance & Capital Fundin	1,075.00
Total NHA Advisors, LLC:			1,075.00

Vendor Name	Date Paid	Description	Amount Paid
<b>North Coast Journal, Inc</b>			
North Coast Journal, Inc	07/29/2025	<i>Legal Notice - Public Hearing</i>	450.00
Total North Coast Journal, Inc:			450.00
<b>Northcoast Employer's Advisory Council</b>			
Northcoast Employer's Advisory Council	07/29/2025	<i>Membership Fee FY 25/26</i>	40.00
Total Northcoast Employer's Advisory Council:			40.00
<b>Northern California Safety Consortium</b>			
Northern California Safety Consortium	07/29/2025	<i>membership fee - FY 25/26</i>	900.00
Total Northern California Safety Consortium:			900.00
<b>Notthoff Underwater Service</b>			
Notthoff Underwater Service	07/23/2025	<i>Slidegate structure and plunge pool inspections</i>	4,180.00
Notthoff Underwater Service	07/23/2025	<i>Slidegate structure and plunge pool inspections</i>	4,180.00
Total Notthoff Underwater Service:			8,360.00
<b>Optimum</b>			
Optimum	07/07/2025	<i>Essex internet</i>	279.18
Optimum	07/07/2025	<i>Essex Phones</i>	87.30
Optimum	07/07/2025	<i>Eureka Internet</i>	210.95
Optimum	07/07/2025	<i>Fieldbrook-Glendale CSD Internet</i>	408.93
Optimum	07/07/2025	<i>TRF Internet</i>	29.96
Optimum	07/07/2025	<i>TRF Internet - Blue Lake SCADA Monitoring</i>	59.90
Optimum	07/07/2025	<i>TRF Internet - Fieldbrook-Glendale CSD</i>	59.90
Total Optimum:			1,136.12
<b>PACE Engineering, Inc.</b>			
PACE Engineering, Inc.	07/29/2025	<i>TRF Generator Project</i>	10,621.50
Total PACE Engineering, Inc.:			10,621.50
<b>Pacific Gas &amp; Electric Co.</b>			
Pacific Gas & Electric Co.	07/07/2025	<i>Eureka Office</i>	149.48
Pacific Gas & Electric Co.	07/07/2025	<i>Jackson Ranch Rd Rectifier</i>	21.28
Pacific Gas & Electric Co.	07/07/2025	<i>HWY 299 Rectifier</i>	52.42
Pacific Gas & Electric Co.	07/07/2025	<i>West End Road Rectifier</i>	231.98
Pacific Gas & Electric Co.	07/07/2025	<i>TRF</i>	10,650.24
Pacific Gas & Electric Co.	07/07/2025	<i>Ruth Hydro Valve Control</i>	46.75
Pacific Gas & Electric Co.	07/07/2025	<i>Ruth Hydro</i>	25.70
Pacific Gas & Electric Co.	07/07/2025	<i>Samoa Booster Pump Station</i>	1,314.94
Pacific Gas & Electric Co.	07/07/2025	<i>Samoa Dial Station</i>	75.31
Pacific Gas & Electric Co.	07/17/2025	<i>Essex Pumping June 2025</i>	1,907.92
Pacific Gas & Electric Co.	07/17/2025	<i>Essex Pumping June 2025</i>	1,676.58
Pacific Gas & Electric Co.	07/17/2025	<i>Essex Pumping June 2025</i>	88,742.14
Pacific Gas & Electric Co.	07/29/2025	<i>Ruth Bunk House</i>	121.24
Pacific Gas & Electric Co.	07/29/2025	<i>Ruth HQ</i>	172.75
Total Pacific Gas & Electric Co.:			105,188.73
<b>Pacific Paper Co./Arcata Stationers</b>			
Pacific Paper Co./Arcata Stationers	07/29/2025	<i>Adjustable arms for office chair</i>	198.45

Vendor Name	Date Paid	Description	Amount Paid
Total Pacific Paper Co./Arcata Stationers:			198.45
<b>Paso Robles Tank, Inc.</b>			
Paso Robles Tank, Inc.	07/17/2025	Samoa Res Seismic Retrofit #25-0755	448,240.40
Paso Robles Tank, Inc.	07/17/2025	Korblex Res Seismic Retrofit #25-0754	131,575.00
Total Paso Robles Tank, Inc.:			579,815.40
<b>Pitney Bowes Global Financial Services</b>			
Pitney Bowes Global Financial Services	07/17/2025	red ink cartridge	100.65
Total Pitney Bowes Global Financial Services:			100.65
<b>Platt Electric Supply</b>			
Platt Electric Supply	07/29/2025	Conduit for Panametrics cabling	260.03
Platt Electric Supply	07/29/2025	Plant water system PLC upgrade	164.45
Platt Electric Supply	07/29/2025	Lighting panels and hardware for Eureka Office	268.83
Platt Electric Supply	07/29/2025	Lighting panels and hardware for Eureka Office	24.35
Platt Electric Supply	07/29/2025	Lighting panels and hardware for Eureka Office	1,702.59
Platt Electric Supply	07/29/2025	Lighting panels and hardware for Eureka Office	42.69
Platt Electric Supply	07/29/2025	Lighting panels and hardware for Eureka Office	359.64
Total Platt Electric Supply:			2,822.58
<b>PPG Architectural Coatings</b>			
PPG Architectural Coatings	07/17/2025	Collector Pump 2-2 Installation	563.97
PPG Architectural Coatings	07/17/2025	Epoxy Paint for Inventory	563.98
Total PPG Architectural Coatings:			1,127.95
<b>Purchase Power</b>			
Purchase Power	07/17/2025	Postage Refill	1,009.75
Total Purchase Power:			1,009.75
<b>Recology Arcata</b>			
Recology Arcata	07/18/2025	Essex Garbage/Recycling Service - June 2025	812.76
Total Recology Arcata:			812.76
<b>Recology Humboldt County</b>			
Recology Humboldt County	07/18/2025	Eureka office garbage/recycling service - June 2025	110.05
Total Recology Humboldt County:			110.05
<b>Ruth Lake C.S.D.</b>			
Ruth Lake C.S.D.	07/17/2025	Quagga Grant expense reimbursement - Pass Thru Reimburseme	7,664.15
Ruth Lake C.S.D.	07/29/2025	Ruth Lake License Fee	1,500.00
Total Ruth Lake C.S.D.:			9,164.15
<b>Safe and Sound Security</b>			
Safe and Sound Security	07/18/2025	Monthly help desk/tech support for Dam cameras	67.97
Total Safe and Sound Security:			67.97

Vendor Name	Date Paid	Description	Amount Paid
<b>Sequoia Construction Specialties</b>			
Sequoia Construction Specialties	07/29/2025	<i>OSHG Installation and Integration</i>	27,255.03
Total Sequoia Construction Specialties:			27,255.03
<b>Stillwater Sciences</b>			
Stillwater Sciences	07/17/2025	<i>404 Permit Assistance #25-1610</i>	9,522.00
Total Stillwater Sciences:			9,522.00
<b>Streamline</b>			
Streamline	07/17/2025	<i>Website maintenance membership fee 7/1/25-7/1/26</i>	8,640.00
Total Streamline:			8,640.00
<b>Sunnybrae Ace Hardware</b>			
Sunnybrae Ace Hardware	07/18/2025	<i>Filter housing orings</i>	9.91
Total Sunnybrae Ace Hardware:			9.91
<b>SWRCB-DWOCP</b>			
SWRCB-DWOCP	07/29/2025	<i>D3 Cert Application - E. Schillinger</i>	90.00
Total SWRCB-DWOCP:			90.00
<b>TechnoFlo Systems</b>			
TechnoFlo Systems	07/29/2025	<i>Eureka meter mainline meter calibration/repair</i>	1,344.33
Total TechnoFlo Systems:			1,344.33
<b>The Mill Yard</b>			
The Mill Yard	07/29/2025	<i>District lighting upgrades</i>	4.18
The Mill Yard	07/29/2025	<i>Tape measurer</i>	30.86
The Mill Yard	07/29/2025	<i>Line shed 4 roof replacement</i>	203.94
The Mill Yard	07/29/2025	<i>Line shed 4 roof replacement</i>	26.53
The Mill Yard	07/29/2025	<i>Line shed 4 roof replacement</i>	1,294.95
The Mill Yard	07/29/2025	<i>Line shed 4 roof replacement</i>	1,301.12
Total The Mill Yard:			2,861.58
<b>The Mitchell Law Firm, LLP</b>			
The Mitchell Law Firm, LLP	07/29/2025	<i>Legal Services- June 2025</i>	139.50
The Mitchell Law Firm, LLP	07/29/2025	<i>Legal Services- June 2025</i>	1,550.00
Total The Mitchell Law Firm, LLP:			1,689.50
<b>Thrifty Supply</b>			
Thrifty Supply	07/29/2025	<i>Park 4 toilet flush assembly</i>	137.79
Total Thrifty Supply:			137.79
<b>Trinity County General Services</b>			
Trinity County General Services	07/29/2025	<i>Pickett Peak site lease - Aug 2025</i>	265.23
Total Trinity County General Services:			265.23

Vendor Name	Date Paid	Description	Amount Paid
<b>U.S. Bank Corporate Payment System</b>			
U.S. Bank Corporate Payment System	07/08/2025	Eureka Office Supplies	49.94
U.S. Bank Corporate Payment System	07/08/2025	Hitch pins for JD4052 flail mower connection	15.40
U.S. Bank Corporate Payment System	07/08/2025	Essex Office Supplies	7.46
U.S. Bank Corporate Payment System	07/08/2025	Reusable ice packs	44.08
U.S. Bank Corporate Payment System	07/08/2025	Calibration service for Ruth hydro turbine flow measurements	382.55
U.S. Bank Corporate Payment System	07/08/2025	Spendwise Monthly Subscription	90.00
U.S. Bank Corporate Payment System	07/08/2025	GoDaddy Domain Renewal	33.99
U.S. Bank Corporate Payment System	07/08/2025	Testing for Regulatory Analyst position	330.00
U.S. Bank Corporate Payment System	07/08/2025	AirMed Memberships - 23 employees	1,817.00
U.S. Bank Corporate Payment System	07/08/2025	2025 Compliance Fee Unit 8 & Unit 4	64.22
U.S. Bank Corporate Payment System	07/08/2025	Mower blade bolt and washer	64.14
U.S. Bank Corporate Payment System	07/08/2025	Shop vac filters	29.06
U.S. Bank Corporate Payment System	07/08/2025	Rebar cutter and bender tool	382.80
Total U.S. Bank Corporate Payment System:			3,310.64
<b>Underground Service Alert of Northern CA</b>			
Underground Service Alert of Northern CA	07/29/2025	Annual Membership - Humboldt Bay Retail	527.10
Underground Service Alert of Northern CA	07/29/2025	Annual Membership - Fieldbrook-Glendale CSD	1,500.20
Underground Service Alert of Northern CA	07/29/2025	California State Fee for Regulatory Costs FY25/26	168.50
Underground Service Alert of Northern CA	07/29/2025	California State Fee for Regulatory Costs FY24/25	479.59
Total Underground Service Alert of Northern CA:			2,675.39
<b>USA Blue Book</b>			
USA Blue Book	07/29/2025	OSHG PPE	204.83
USA Blue Book	07/29/2025	Acid neutralizing kit	229.89
Total USA Blue Book:			434.72
<b>VALEO Networks</b>			
VALEO Networks	07/17/2025	Eureka office monthly computer maintenance	2,150.37
Total VALEO Networks:			2,150.37
<b>Valley Pacific Petroleum Serv. Inc</b>			
Valley Pacific Petroleum Serv. Inc	07/18/2025	Cardlock-Pumping & Control	582.76
Valley Pacific Petroleum Serv. Inc	07/18/2025	Cardlock-Water Quality	582.76
Valley Pacific Petroleum Serv. Inc	07/18/2025	Cardlock-Maintenance	582.76
Valley Pacific Petroleum Serv. Inc	07/18/2025	Cardlock-HB Retail	151.51
Valley Pacific Petroleum Serv. Inc	07/18/2025	Cardlock-FBGCS D	431.23
Total Valley Pacific Petroleum Serv. Inc:			2,331.02
<b>Verizon Wireless</b>			
Verizon Wireless	07/18/2025	General Manager	51.96
Verizon Wireless	07/18/2025	Humboldt Bay Retail	10.62
Verizon Wireless	07/18/2025	Fieldbrook Glendale CSD	30.23
Verizon Wireless	07/18/2025	Humboldt Bay IPAD	9.88
Verizon Wireless	07/18/2025	Fieldbrook Glendale CSD IPAD	28.13
Verizon Wireless	07/18/2025	Ruth Area	15.73
Verizon Wireless	07/18/2025	Ruth Hydro	15.73
Total Verizon Wireless:			162.28

Vendor Name	Date Paid	Description	Amount Paid
Grand Totals:			<u>1,802,632.03</u>

**Active Large Contract Progress Report**

Project Description	Funding Source / Budget	Active Contracts and Financial Status <sup>1</sup>	Schedule Tracking	Progress / Status Update
<p><b>Samoa Peninsula Waterline Right-of-Way Maintenance EIR and CDP</b></p> <p>Studies, EIR, and Permit applications for maintaining District infrastructure on the peninsula. Permit applications include:CDP, Section 404 (not required), 401, CESA, ESA</p> <p>Phase: EIR in progress</p>	<p>HBMWD FY 25/26 Budget (100%): \$40,295</p>	<p><u>Consulting (GHD)</u></p> <p>Original Contract Amount: \$337,050                      Amendments to Date: \$108,725                      Amendments Percent Increase/Decrease: 32%                      Current Contract Amount: \$445,775                      Total Invoiced to Date: \$319,225                      Percent Invoiced to Date: 72%</p>	<p>Contract Award Date: 1/20/2023                      Amendment 2 Date: 6/10/2025                      Current Contract Completion: 6/30/2026                      EIR Estimated Completion: 11/30/2025                      Permit App Estimated Submission: 12/31/2025                      Mitigation Negotiations and Plan Est.: 2/28/2026                      Percent Schedule Elapsed: 74%</p>	<p>GHD working on updating EIR sections to reflect updated project scope. Confirmed with attorney that no additional CEQA noticing is required; drafted email to tribes with project update for AB52 compliance; Project Description updated and in review; Biological Memo for bio resources within access road completed and in review.</p>
<p><b>Collector Mainline Redundancy</b> DR4407-PJ0701</p> <p>The District's source water from the collectors comes together in one common pipeline that conveys water to the TRF via Pipeline Road. This project will analyze a redundant pipeline to the TRF via an alternate route. This project will also re-route the pipe that currently runs under the Essex Control Building.</p> <p>Phase: Phase One on hold (submitted SOW revision request)</p>	<p><u>HMGP Phase One Grant (Current)</u>                      Cal OES / FEMA (75% Current Share): \$339,255                      HBMWD (25% Current Match): \$113,085  <b>Total Current Project Budget: \$452,340</b></p> <p><u>HMGP Phase One Grant Total Request (Response Pending)</u>                      Cal OES / FEMA (75% Requested Share): \$1,040,085                      HBMWD (25% Proposed Match): \$346,695  <b>Total Requested Project Budget: \$1,386,780</b></p>	<p><u>Phase One Consulting (GEI)</u></p> <p>Original Contract Amount: \$422,103                      Amendments to Date: \$0                      Amendments Percent Increase/Decrease: 0%                      Current Contract Amount: \$422,103                      Total Invoiced to Date: \$165,215                      Percent Invoiced to Date: 39%</p> <p>Anticipated Contract Amount (if SOW revision approved): \$1,346,590</p>	<p>Contract Award Date: 3/9/2023                      Original Contract Completion: 3/1/2024                      Extended Calendar Days: 0                      Current Contract Completion: 3/1/2024                      Estimated Completion: On hold                      Percent Schedule Elapsed: On hold                      Grant SOW Completion: 10/20/2025                      Grant Period of Performance: 12/4/2025</p>	<p>Scope of work revision request sent to Cal OES in August 2023 to include additional geotechnical work to analyze fault and landslide along proposed new pipeline alignment. Response pending.</p> <p>Budget increase request sent to Cal OES in March 2025, response pending.</p>
<p><b>Matthews Dam Seismic Stability</b> DR4569-PA0538</p> <p>Geotechnical and seismic studies to determine the response of Matthews Dam to the Cascadia seismic event and whether retrofits are required. Also includes 65% design and CEQA if retrofits are required.</p> <p>Phase: Studies being performed</p>	<p><u>HMGP Advance Assistance Grant (Current)</u>                      Cal OES / FEMA (75% Share): \$1,532,963                      HBMWD (25% Match): \$510,988  <b>Total Current Project Budget: \$2,043,950</b></p> <p><u>HMGP Adv. Assist. Grant Total Request (Response Pending)</u>                      Cal OES / FEMA (75% Requested Share): \$3,482,963                      HBMWD (25% Proposed Match): \$1,252,362  <b>Total Requested Project Budget: \$4,735,324</b></p>	<p><u>Consulting (GEI)</u></p> <p>Original Contract Amount: \$2,945,139                      Amendments to Date: \$152,197                      Amendments Percent Increase/Decrease: 5%                      Current Contract Amount: \$3,097,336                      Total Invoiced to Date (pending): \$283,852                      Percent Invoiced to Date: 9%</p> <p>Anticipated Contract Amount (if SOW revision approved): \$4,730,407</p>	<p>Contract Award Date: 5/29/2025                      Original Contract Completion: 12/31/2027                      Extended Calendar Days: 0                      Current Contract Completion: 12/31/2027                      Estimated Completion: 11/18/2027                      Percent Schedule Elapsed: 7%                      Grant SOW Completion: 3/31/2026                      Grant Period of Performance: 8/28/2026</p>	<p>Budget increase request sent to Cal OES in April 2025, response pending.</p> <p><u>Geotechnical Investigation:</u>                      Received DSOD and FERC comments on Draft Spillway Drilling Program Plan (DPP), met with DSOD, prepared responses to comments and revised DPP to incorporate comments; Submitted embankment DPP for DSOD/FERC review; performed spillway crack mapping and visual assessments; performed site visit with driller, barge, and crane subcontractors; coordinated with environmental agencies regarding permits for overwater borings.</p> <p><u>Environmental Special Studies</u>                      On-going environmental surveying</p>
<p><b>Matthews Dam Part 12D Comprehensive Assessment</b> FERC requirement to evaluate Matthews Dam's current integrity and long-term safety</p> <p>Phase: Studies being performed</p>	<p>HBMWD FY 25/26 Budget (100%): \$504,865</p>	<p>Original Contract Amount: \$538,621                      Amendments to Date: \$0                      Amendments Percent Increase/Decrease: 0%                      Current Contract Amount: \$538,621                      Total Invoiced to Date: \$56,651                      Percent Invoiced to Date: 11%</p>	<p>Contract Award Date: 11/25/2024                      Original Contract Completion: 1/31/2027                      Extended Calendar Days: 0                      Current Contract Completion: 1/31/2027                      Estimated Completion: 1/31/2027                      Percent Schedule Elapsed: 32%</p>	<p>Continued development of the hydrologic hazard and consequence assessments;</p>

<sup>1</sup>This report summarizes the statuses of current contracts and may not correlate with current financial statements.

**Active Large Contract Progress Report**

Project Description	Funding Source / Budget	Active Contracts and Financial Status <sup>1</sup>	Schedule Tracking	Progress / Status Update
<p><b>Turbidity Reduction Facility Generator</b> DR4558-PJ0389</p> <p>The existing 100 kW generator at the TRF only powers the chemical pumps. The project includes installation of a new 750 kW generator to power backwash pumps and other critical components.</p> <p>Phase: Construction</p>	<p><u>HMGP Phase Two Grant (Current)</u> Cal OES / FEMA (75% Share): \$1,303,876 HBMWD (25% Match): \$434,625 <b>Total Phase Two Project Budget: \$1,738,501</b></p> <p><u>HBMWD Match Budget</u> HBMWD (25% Match): \$434,625 Contingency: \$162,254 Total HBMWD Match Budget: \$596,879</p>	<p><u>Construction (Wahlund)</u> Original Contract Amount: \$1,193,600 Change Orders to Date: \$829 Change Order Percent Increase/Decrease: 0% Current Contract Amount: \$1,194,429 Total Invoiced to Date: \$182,922 Percent Invoiced to Date: 15%</p> <p><u>Engineering and Construction Management (PACE)</u> Original Contract Amount: \$432,000 Amendments to Date: \$0 Amendments Percent Increase/Decrease: 0% Current Contract Amount: \$432,000 Total Invoiced to Date: \$147,629 Percent Invoiced to Date: 34%</p> <p><b>Total Current Phase Two Contract Amount: \$1,626,429</b></p>	<p>Notice of Award: 3/14/2025 Notice to Proceed: 4/11/2025 Original Contract Calendar Days: 361 Original Contract Completion: 4/7/2026 Extended Calendar Days: 0 Current Contract Completion: 4/7/2026 Estimated Completion: 3/17/2026 Percent Schedule Elapsed: 33% Grant SOW Completion: 3/29/2026 Grant Period of Performance: 8/26/2026</p>	<p>Generator lead time leads to estimated completion date of March 2026. The generator pad submittal has been approved, and the contractor can proceed with pouring the generator pad in advance of the generator arriving. PACE, Wahlund, and the District met to discuss the specifics regarding hardware, programming, and the necessary data that the subcontractor needs to complete the SCADA integration portion of the work. PACE recently received a revised stairs and platform submittal, and their structural team is working on reviewing and providing submittal comments.</p>
<p><b>Reservoirs Seismic Retrofit</b> DR4344-PJ0040</p> <p>Seismic retrofit of the District's three tanks to meet current California Building Code seismic requirements.</p> <p>Phase: Construction</p>	<p><u>HMGP Phase Two Grant (Current)</u> Cal OES / FEMA (75% share up to \$4,058,768): \$4,058,768 HBMWD (25% Match + Remainder): \$3,529,741 <b>Total Current Phase Two Project Budget: \$7,588,509</b></p> <p><u>HMGP Phase Two Grant Total Request (Response Pending)</u> Cal OES / FEMA (75% Requested Share): \$5,187,864 HBMWD (25% Match + Remainder): \$2,400,645 <b>Total Requested Phase Two Project Budget: \$7,588,509</b></p> <p><u>HBMWD Match Budget</u> HBMWD Match Requirement: \$3,529,741 Contingency: \$ (1,017,037) Total HBMWD Match Budget: \$2,512,704</p>	<p><u>Samoa Construction (Paso Robles Tank)</u> Original Contract Amount: \$2,357,200 Change Orders to Date: \$0 Change Order Percent Increase/Decrease: 0% Current Contract Amount: \$2,357,200 Total Invoiced to Date: \$1,971,269 Percent Invoiced to Date: 84%</p> <p><u>Korblex Construction (Paso Robles Tank)</u> Original Contract Amount: \$3,992,008 Change Orders to Date: \$0 Change Order Percent Increase/Decrease: 0% Current Contract Amount: \$3,992,008 Total Invoiced to Date: \$1,965,452 Percent Invoiced to Date: 49%</p> <p><u>Construction Management (Albat)</u> Original Contract Amount: \$336,642 Amendments to Date: \$347,920 Amendments Percent Increase/Decrease: 103% Current Contract Amount: \$684,562 Total Invoiced to Date: \$411,749 Percent Invoiced to Date: 60%</p> <p><u>Design and Engineering Services during Construction (GHD)</u> Original Contract Amount: \$263,148 Amendments to Date: \$0 Amendments Percent Increase/Decrease: 0% Current Contract Amount: \$263,148 Total Invoiced to Date: \$245,611 Percent Invoiced to Date: 93%</p> <p><b>Total Current Phase Two Contract Amount: \$7,296,918</b></p>	<p><u>Samoa Construction</u> Notice of Award: July 2024 Notice to Proceed: 8/13/2024 Original Contract Calendar Days: 280 Original Contract Completion: 5/20/2025 Extended Calendar Days: 0 Current Contract Completion: 5/20/2025 Estimated Completion: 10/17/2025 Percent Schedule Elapsed: 128%</p> <p><u>Korblex Construction</u> Notice of Award: July 2024 Notice to Proceed: 8/13/2024 Original Contract Calendar Days: 11/5/1900 Original Contract Completion: 6/19/2025 Extended Calendar Days: 0 Current Contract Completion: 6/19/2025 Estimated Completion: 10/17/2025 Percent Schedule Elapsed: 116%</p> <p><u>Grant Deadlines</u> Grant SOW Completion: 12/30/2025 Grant Period of Performance: 3/30/2026</p>	<p><u>Samoa Construction</u> Foundation, roof, and coatings have been completed, which are big milestones. Paving and minor punch list items are all that remain. Paving will occur concurrently with paving the Korblex site when that is ready.</p> <p><u>Korblex Construction</u> The 1 MG tank is complete.</p> <p>The roof and shell reinforcement on the 2 MG tank are complete, which are big milestones. The contractor is prepping for coating.</p>

<sup>1</sup>This report summarizes the statuses of current contracts and may not correlate with current financial statements.

## July 2025 Tanks Retrofit Construction Photos



**Figure 1** 1 MG Samoa Tank Coating Containment



**Figure 2 1 MG Samoa Tank Scaffolding**



**Figure 3** 1 MG Samoa Tank with Roof and Coating Complete



**Figure 4** 2 MG Korblex Tank Roof



**Figure 5 2 MG Korblex Tank Reinforcing Band**



***Figure 6 2 MG Korblex Tank Reinforcing Band and Additional Top Ring***



***Figure 7 2 MG Korblex Tank with Complete Reinforcing Band, Additional Top Ring and Roof***

Business Report  
No Report

Memo to: HBMWD Board of Directors  
From: Dale Davidsen, Superintendent  
Date: August 1, 2025  
Subject: Essex/Ruth July 2025 Operational Report

### **Upper Mad River, Ruth Lake, and Hydro Plant**

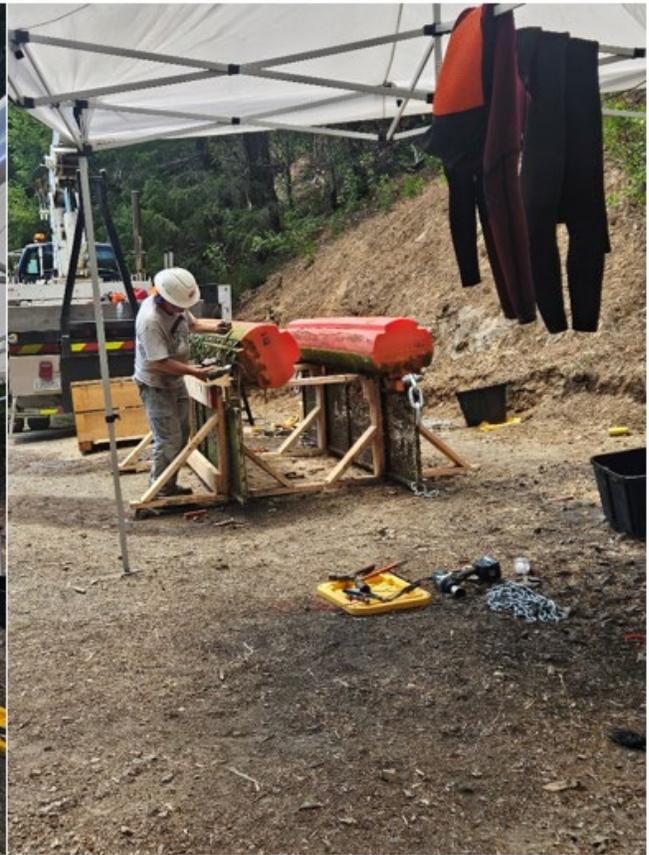
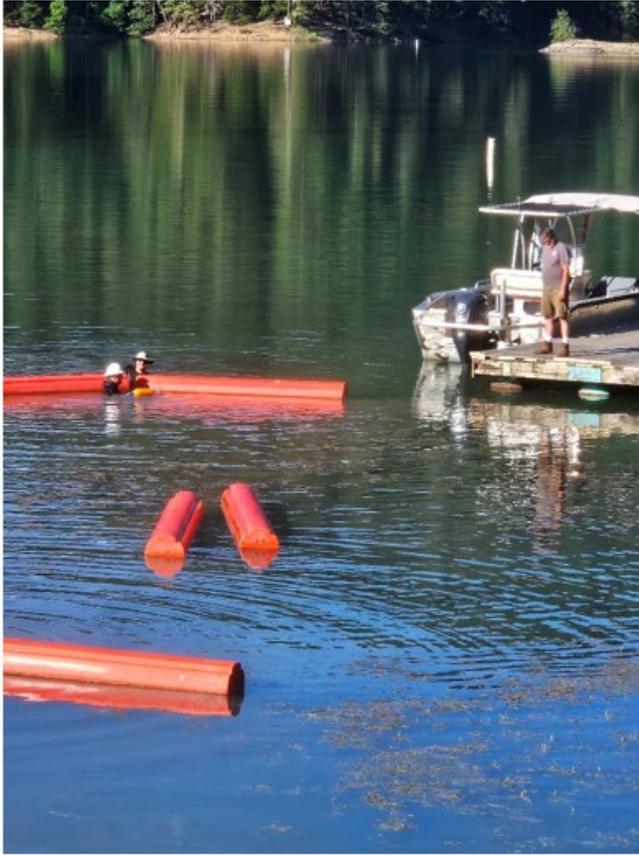
1. Average flow at Mad River above Ruth Reservoir (Zenia Bridge) in July was 2 cfs. The maximum flow was 4 cfs on July 1<sup>st</sup>.
2. The conditions at Ruth Lake for July were as follows:  
The lake level on July 31<sup>st</sup> was 2649.46 feet, which is:
  - 2.74 feet lower than June 30<sup>th</sup>, 2025;
  - 2.32 feet higher than July 31<sup>st</sup>, 2024;
  - 1.20 feet higher than the ten-year average;
  - 4.54 feet below the spillway.
3. Ruth Headquarters recorded 0 inches of rainfall in July.
4. Ruth Hydro generated 141,600 kWh in July with two PGE shutdowns, causing 6850 kWh loss in production.
5. The lake discharge averaged 40 cfs with a high of 45 cfs on July 27<sup>th</sup>.

### **Lower Mad River, Winzler Control, and TRF**

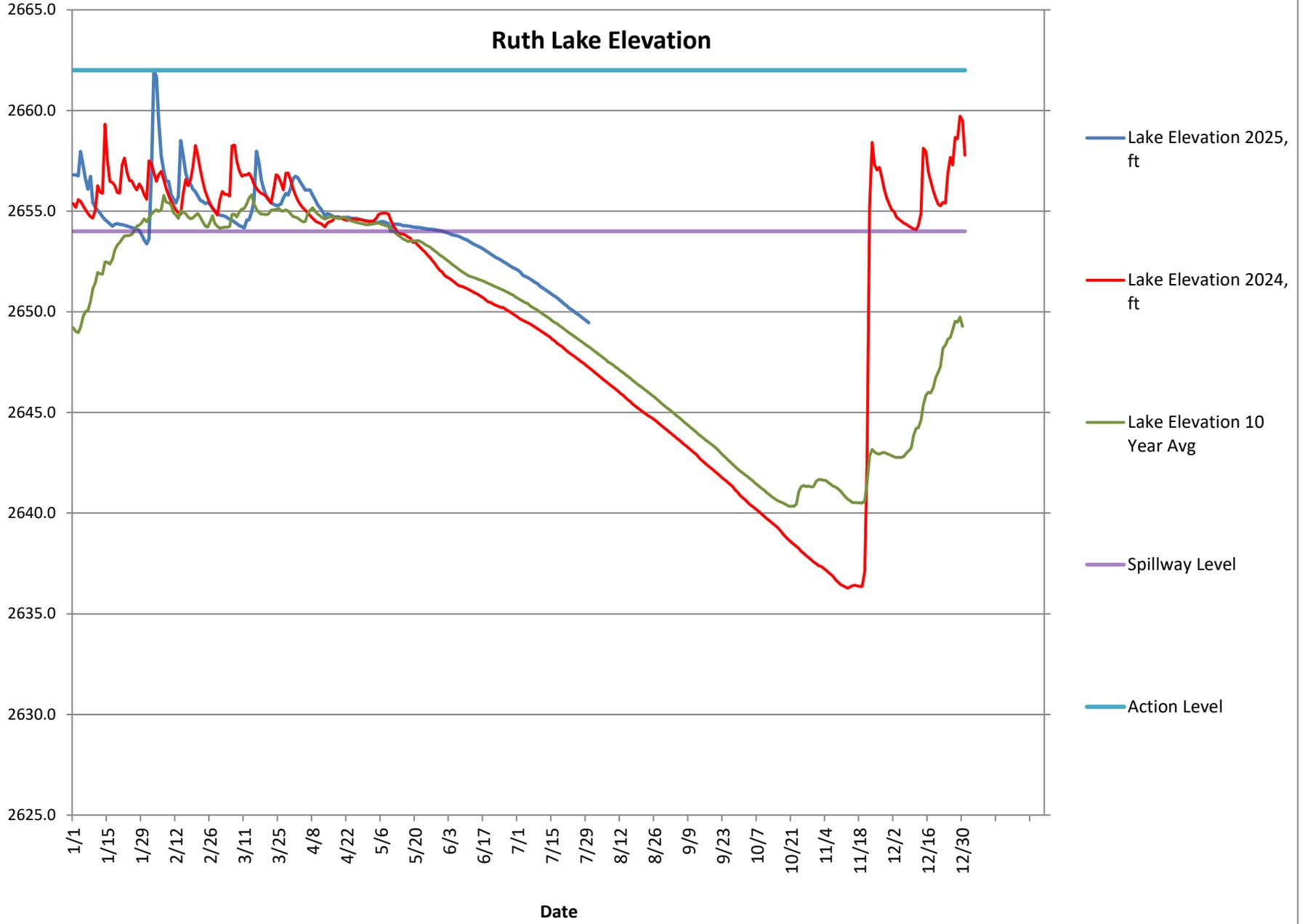
6. The river at Winzler Control Center in July had an average flow of 102 cfs. The river flow was at a high of 115 cfs on July 3<sup>rd</sup>.
7. The domestic water conditions were as follows:
  - a. The domestic water turbidity average was 0.09 NTU, which meets Public Health Secondary Standards;
  - b. As of July 31<sup>st</sup>, we pumped 248.520 MG at an average of 8.017 MGD;
  - c. The maximum metered daily municipal use was 8.838 MG on July 11<sup>th</sup>
8. The TRF is online:
  - a. Average monthly source water turbidity was 0.47 NTU;
  - b. Average monthly filtered water turbidity was 0.07 NTU;
  - c. The number of monthly filter backwashes was 20.

9. June 30<sup>th</sup> - July 3<sup>rd</sup> – Maintenance worked on replacement of logboom connecting links. (See Photos)
10. July 8<sup>th</sup> – 9<sup>th</sup> – 90 day truck inspections
11. July 14<sup>th</sup> & 15<sup>th</sup> – Maintenance pulled Pump 2-2. NCF on-site for crane support.
12. July 15<sup>th</sup> – 18<sup>th</sup> – Mario attended a Cros Connection Control class to renew his certification
13. July 21<sup>st</sup> – Electrical staff attended CPR/ First Aid training at NCSC.
14. July 22<sup>nd</sup> – SWRCB Regional Engineer, Scott Gilbreath was on-site to inspect our system and FB System
15. July 24<sup>th</sup> - SB 198 Employee / Management safety meeting
16. July 25<sup>th</sup> – I went to Ruth to meet with GEI, Barge Company and Drill operator to coordinate placing barge and drilling for Seismic Stability Study
17. July 30<sup>th</sup> – Coastal Tree Service on-site for hazard tree removal
18. Current and Ongoing Projects
  - a. I attended several meetings and correspondence with the engineers and contractors on multiple projects and attended all progress meetings.
    - i. Reservoir Seismic retrofit project.
    - ii. TRF generator project.
    - iii. FB reservoir replacement project.
    - iv. RW Matthews Dam Stability Study
  - b. Tesla battery bank / generator coordination project – In progress. Working on final integration details and coordinating connections with Tesla and generator manufacture.
  - c. Painted General Managers office
  - d. Dis-assemble and refurbish
  - e. Line Shed 4 roof – Demo old roof, re-sheet roof and install new fascia boards.
  - f. TRF maintenance
  - g. Vegetation management on Right-of-Ways and Parks
  - h. Routine annual equipment maintenance and services.

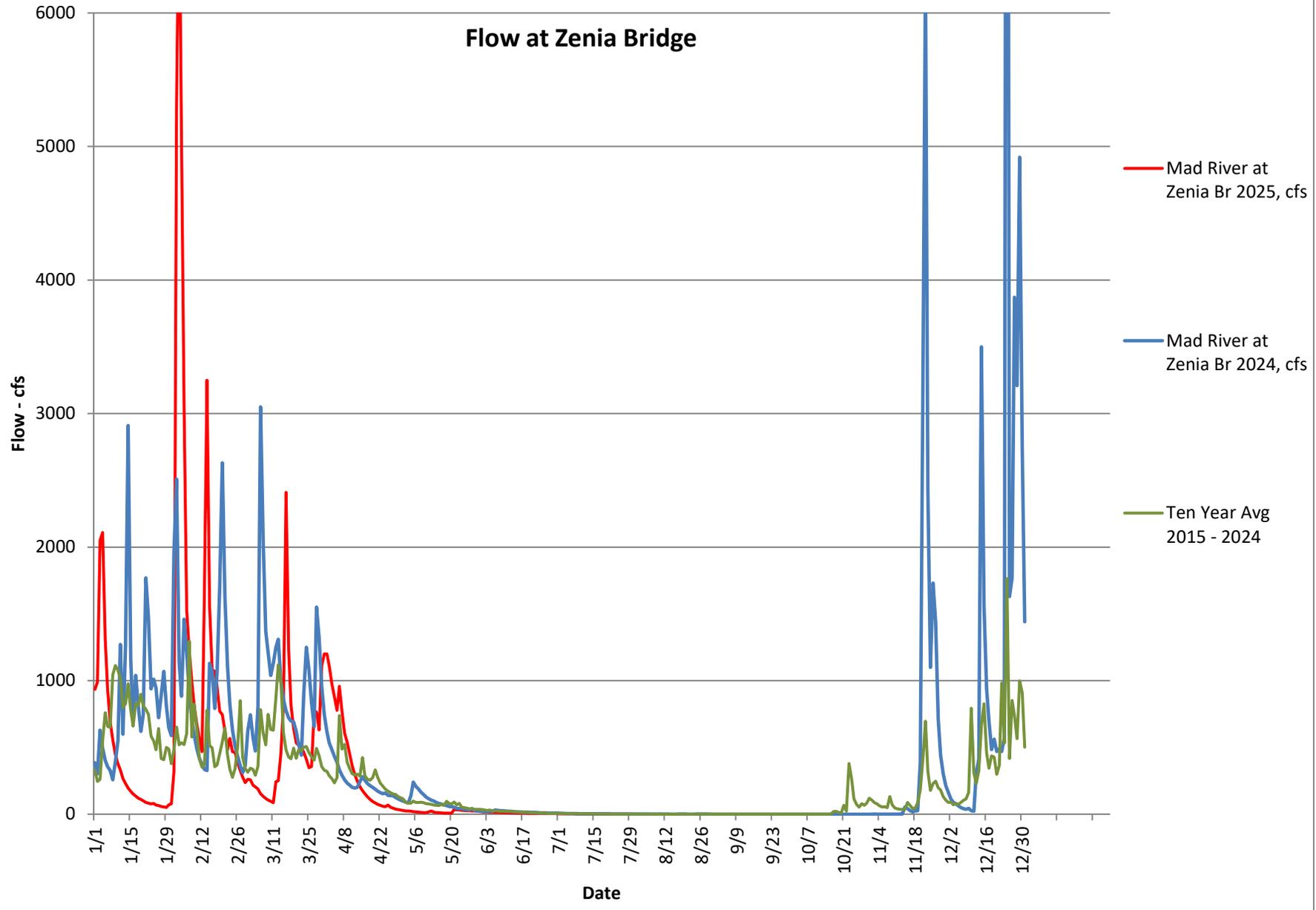




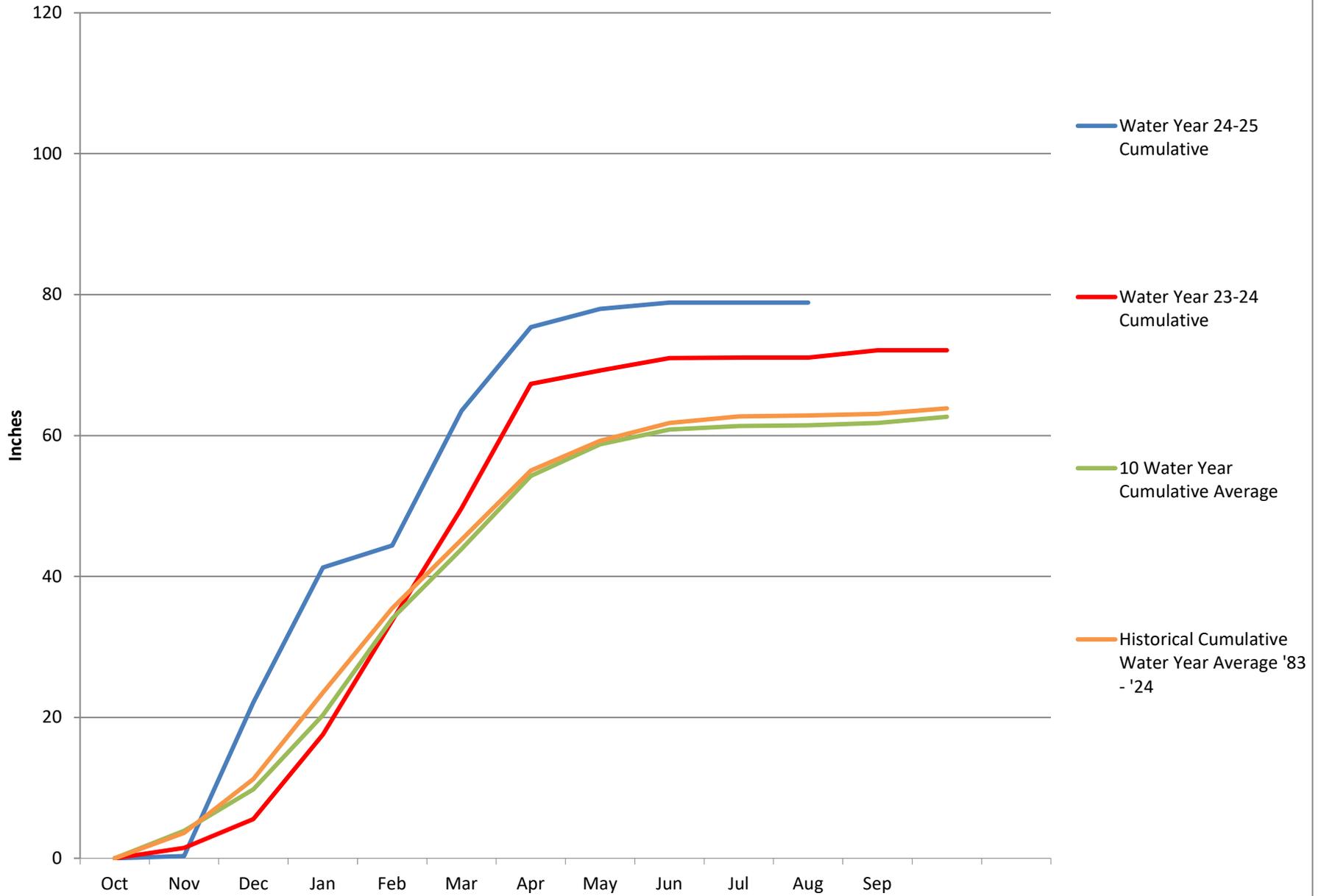
# Ruth Lake Elevation

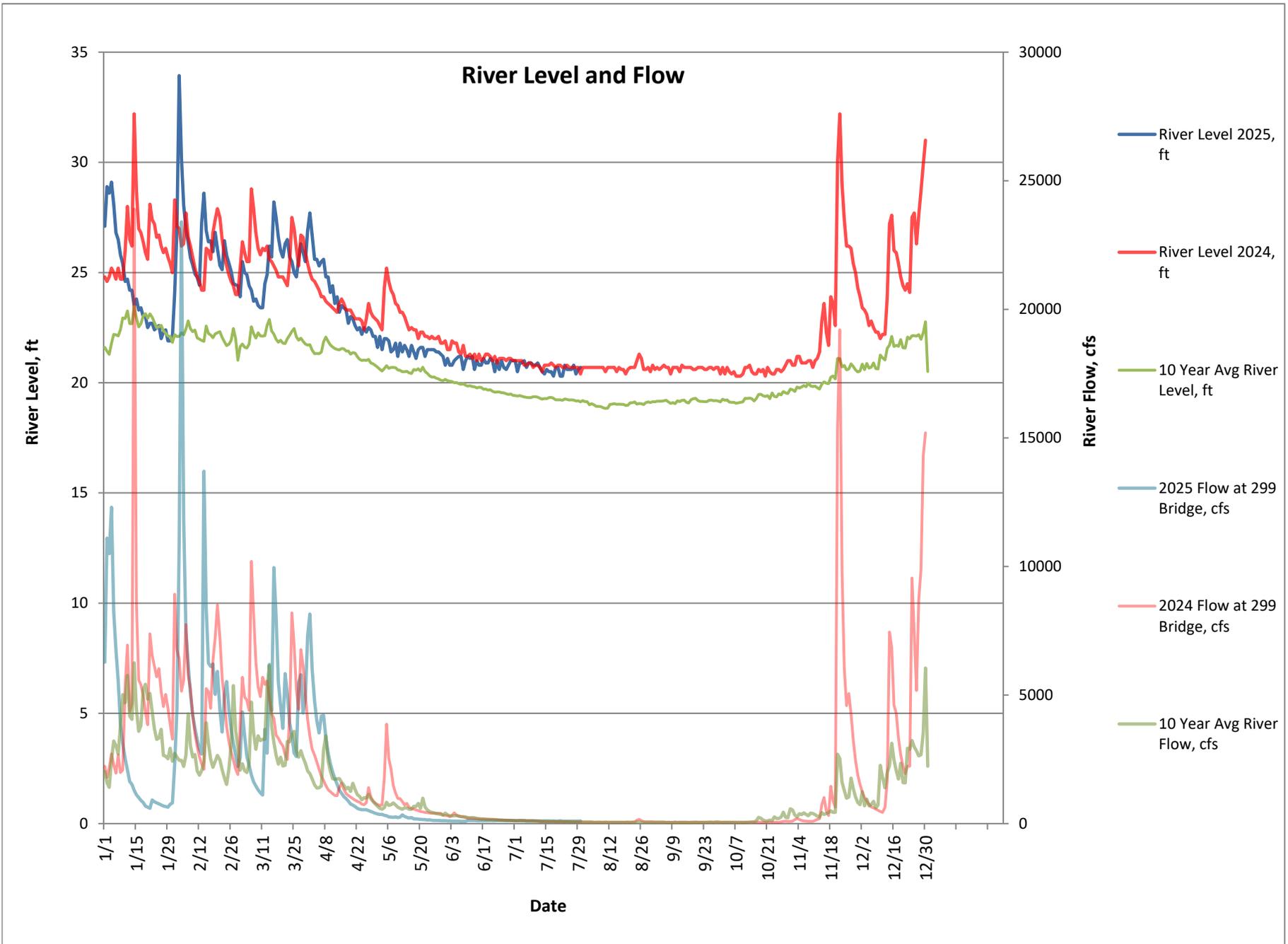


# Flow at Zenia Bridge

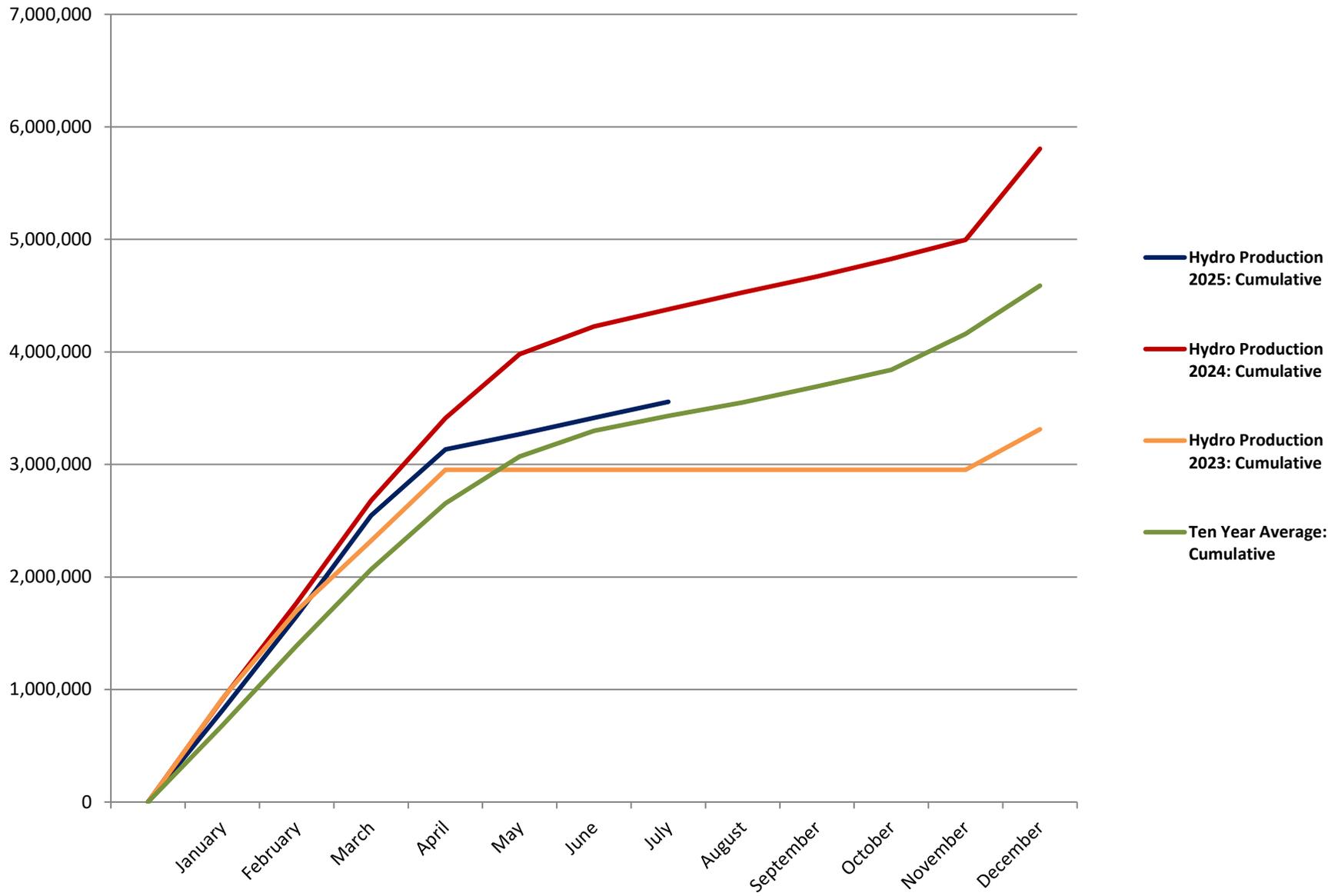


### Ruth Rainfall - Water Year 2024-2025





# Ruth Hydro Production: Cumulative kWh





ITEM: General Manager's Report  
PRESENTED BY: Michiko Mares, General Manager  
TYPE of ITEM: Informational  
TYPE of ACTION: None

The General Manager's Monthly Report is intended to provide informational updates regarding issues which impact the District's Mission at a management level.

### **Regulatory Compliance**

---

**Workplace Safety.** No reportable injuries.

**Water Quality and Public Health.** Maintained perfect compliance with all state and federal drinking water regulations. Staff met with the State Water Resources Control Board for the Annual Inspection on July 22, 2025.

### **Permits, Reporting, Mitigations.**

**Mad River Maintenance Permits.** Staff submitted 401-permit applications for Ruth Lake and Essex facilities to the North Coast Regional Water Quality Control Board (NCRWQCB) on July 24, 2025. Comments were received regarding Ruth Lake facilities on July 31, 2025, and the application was resubmitted on August 1, 2025. Additional comments were received by August 5, 2025 and require an additional response. Comments were received regarding Essex facilities on August 4, 2025, and require a response.

Staff met with the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife (CDFW) on July 30, 2025 to discuss the District's Long-Term Streambed Alteration Agreement (LTSAA) and Habitat Conservation Plan (HCP). Specific reporting requirements, mitigations, and training were discussed for clarification. More in-depth conversations regarding conservation recommendations were held to gain a deeper mutual understanding of the long-term concerns regarding riparian habitat and geomorphological methods to eliminate the long-term need for in-stream berms/trenches.

**Matthews Dam Seismic Stability Assessment.** The Embankment Drilling Program Plan was submitted to Division of Safety of Dams (DSOD) and Federal Energy Regulatory Commission

(FERC) for review and approval. Comments were received from DSOD and FERC for the Spillway Drilling Program Plan.

Correspondence with permitting agencies to perform the geotechnical investigation include the United States Forest Service (USFS), United States Army Corps of Engineers (USACE), United States Fish and Wildlife Services (USFWS), NOAA NMFS, CDFW, and NCRWQCB. Clearance to proceed with the geotechnical investigation has been received from USFS, USACE, NOAA NFMS, CDFW, and NCRWQCB.

**Matthews Dam Part 12D Comprehensive Assessment.** FERC approved the Inspection Plan. The next milestone is completion of the Pre-Inspection Preparation Report (PIPR), due on April 4, 2026.

## **Resource Protection**

---

### **Aquatic Invasive Species – Golden Mussels.**

The District was awarded the SFRA Boating Access Grant Invasive Mussel Response on August 5, 2025 for \$100,000. Costs included in the grant include site improvement design, ancillary equipment (propane and water tanks), site work to prepare the site for a dip tank including civil, mechanical, electrical, and l pads for RLCSD staff to participate in the Watercraft Inspection and Decontamination (WID) system. Funding needs to be procured to install a dip tank at the Ruth Recreational Campground. This will be further discussed at the Joint Board meeting on September 26, 2025. See attached letter of award.

## **Water Resources Planning**

---

### **Local Water Sales.**

**North Mainline Extension.** The City of Trinidad approved moving forward with a feasibility study at the July 8, 2025, City Council meeting.

**Offshore Wind Heavy Lift Marine Terminal.** Harbor District and District staff have agreed to develop a memorandum of understanding (MOU) to include a cost reimbursement agreement for the District to prepare preliminary cost estimates to deliver potable and industrial water to the Heavy Lift Marine Terminal located on the Samoa Peninsula.

**Samoa Peninsula.** Staff are planning to meet with the Peninsula Community Services District (PCSD) in August to discuss development of a transition plan with the District to assume the distribution system infrastructure in the town of Fairhaven.

**Instream Flow Dedication.** The Draft Notices of Petitions for Change for Permits 11714 and 11715 were received from the State Water Resources Control Board Division of Water Rights on July 11, 2025. District comments were provided on July 21, 2025. The Notice of Petitions for Change have not posted yet for public comment.

**Transport.** No update.

## **Committees**

---

**Mad River (Badu'wat) Headwaters.** The Headwaters Committee met on July 21, 2025.

## **Customer, Community, and Governmental Services**

---

**Humboldt Community Services District (HCSD).** Staff have received a Notice of Filing from Humboldt County Local Agency Formation Commission (LAFCo) to annex the North McKay Ranch to the HCSD. The proposed annexation is within the District's division boundaries and sphere of influence. Water service in the proposed annexation will be provided by HCSD and their combined source capacity far exceeds the project's estimated water supply needs. The District does not anticipate providing comments regarding the proposed annexation. Refer to attachments for Notice of Filing, Plan for Services, and a figure representing the District Boundary relative to the proposed annexation.



State of California – Natural Resources Agency  
 DEPARTMENT OF FISH AND WILDLIFE  
 P.O. Box 944209  
 Sacramento, CA 94244-2090  
[wildlife.ca.gov](http://wildlife.ca.gov)

**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



August 5, 2025

828 7th Street  
 Eureka, CA 95501

## NOTICE OF AWARD

Ruth Lake Boat Decontamination Facility for Invasive Mussel Prevention

Dear Contessa Dickson:

We are pleased to inform you that your proposal, Ruth Lake Boat Decontamination Facility for Invasive Mussel Prevention, has been selected by the California Department of Fish and Wildlife (CDFW) for funding through the Boating Access Grant Program – Invasive Mussel Response. This letter serves as CDFW's award of up to \$100,100 under the Fiscal Year 2024/25 Proposal Solicitation Notice.

**U.S Fish and Wildlife Service Grant Number: F25AF01215-00**  
**Project Period: 07/01/2025 - 06/30/2028**

Your organization must enter into a grant agreement with CDFW to be reimbursed for project costs – we anticipate grant agreements being executed no sooner than September 2025.

I will contact you soon to discuss the grant agreement development process, next steps, and confirm the agreement term and deliverables.

To expedite the grant process, please also provide the following forms to CDFW as soon as possible.

1. A current (non-expired) federal Negotiated Indirect Cost Rate Agreement (NICRA) if not using the de minimis rate.
2. Federal Funding Accountability and Transparency Act 2006 Contractor Certification (DFW 868) and a Subrecipient Risk Assessment (DFW 870). Any project receiving federal funds as part of the grant award is required to complete these forms.

DFW 868 - <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=195539>

DFW 870 - <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=195540>

3. An authorizing resolution from your governing body that confirms its approval of the projects and grant monies.

Completed forms should be submitted to [Dominique.Norton@wildlife.ca.gov](mailto:Dominique.Norton@wildlife.ca.gov).

Finally, attached is a copy of CDFW's General Grant Provisions, which outlines our terms and conditions for entering into a grant agreement and will be attached to the final agreement.

Should you have questions regarding the process, please contact me.

Sincerely,

Dominique Norton  
Senior Environmental Scientist (Specialist)  
Invasive Species Program, Fisheries Branch

Attachments:

CDFW Grant Provisions



## NOTICE OF FILING

**DATE:** August 1, 2025

**TO:** Eureka Elementary School District  
Eureka Unified School District / Eureka SCID No. 1  
Humboldt County Office of Education  
Redwoods Joint Community College District  
Humboldt No. 1 Fire Protection District (Humboldt Bay Fire Authority)  
Humboldt Bay Municipal Water District  
Humboldt Bay Harbor, Recreation, and Conservation District  
Humboldt County Flood Control District (Zone 05)  
Humboldt County Roads (District No. 03)  
Humboldt County Resource Conservation District  
Humboldt County Office of Education  
Humboldt County Administrative Office  
Humboldt County Assessor's Office  
Humboldt County Auditor-Controller's Office  
Humboldt County Sheriff's Office  
Humboldt County Elections Office  
Humboldt County Environmental Health  
Humboldt County Office of Emergency Services  
Humboldt County Planning and Building Department  
Humboldt County Public Works Department  
City of Eureka

**Cc:** Terrence Williams, Humboldt Community Services District  
Kurt Kramer & Travis Green, Kramer Properties Inc.  
Mike Wilson, District 3 Supervisor  
Rex Bohn, District 1 Supervisor

**FROM:** Colette Santsche, LAFCo Executive Officer  
Krystle Brogna, LAFCo Clerk/Analyst

**SUBJECT:** APPLICATION RECEIVED – HUMBOLDT CSD NORTH MCKAY RANCH ANNEXATION

### APPLICATION INFORMATION

**Project:** North McKay Ranch Annexation to the Humboldt Community Services District  
**Location:** Cutten; Fern Street at Harrison Avenue – see Exhibit A  
**APNs:** 017-032-003, 017-071-009, 017-072-003, 017-073-007 and 017-073-008  
**Notice:** The above referenced application has been submitted to LAFCo and this notice of filing is being issued in accordance with Government Code Section 56658(b)(1). If you wish to receive a copy of the application and supporting documents, please contact LAFCo staff at colette@humboldtlaaco.org. We request agency comments by **September 1, 2025.**

### Proposal Overview

LAFCo has received an application submitted by the Humboldt Community Services District (HCSD or District) requesting annexation of approximately 72.35 acres (5 parcels) of land located adjacent to the District boundary and within its adopted Sphere of Influence (SOI). The proposed annexation would enable the District to extend water, wastewater, and street lighting services to the North McKay Ranch Subdivision—a mixed-use development with up to 320 housing units—located at the eastern terminus of Fern Street in the Cutten area.

### Reasons for Proposal

The annexation was initiated by resolution of application of HCSD. The property owner Fairhaven Cottages LLC has requested HCSD expand their jurisdictional boundary to provide water, wastewater, and street lighting services to the following APN's: 017-032-003, 017-071-009, 017-072-003, and 017-073-007. In addition, one parcel associated with the Redwood Empire Little League (APN 017-073-008) owned by Field Committee Corporation is proposed for annexation due to the proximity of the land entirely surrounded by the North McKay Ranch Subdivision Project.

### Development of Subdivision

The North McKay Ranch Subdivision consists of seven parcels totaling approximately 81 acres and is proposed to be developed in nine phases. The project includes a mix of residential and commercial uses, with full buildout allowing for up to 320 residential units and approximately 22,000 square feet of commercial space. Residential development would include 50 small-lot single-family homes, 96 standard-lot single-family homes, and 174 multifamily units. An additional 34 accessory dwelling units (ADUs) may also be constructed, bringing the potential total to 354 residential units.

The anticipated residential mix includes 146 single-family homes and 174 multifamily units. Approximately 21.73 acres of the site would remain undeveloped and preserved as open space, to be dedicated to the County for future trail management and public use. The subdivision is expected to be built over a 20-year period, with actual phasing to be determined based on market conditions.

The project also includes a variety of on-site and off-site infrastructure improvements to support development. The subdivision was approved by the Humboldt County Board of Supervisors on March 7, 2023, through a General Plan Amendment, Zoning Reclassification, Tentative Subdivision Map, and Planned Development Permit (County Record No. PLN-9902-GPA).

### Provision of Public Services

HCSD will provide water, wastewater, and street lighting services to the annexation area. To accommodate increased service demands associated with the North McKay Ranch Subdivision, the project's Water Supply Assessment identifies several critical infrastructure improvements.

A new 250,000-gallon water storage tank and upsizing of approximately 1,000 feet of existing water main along Walnut Drive (between Holly Street and Cypress Avenue) to 12-inch diameter are required to ensure adequate capacity and fire flow. These improvements will be funded by the project proponent, Kramer Properties, and are incorporated as Conditions of Approval. The water tank must be permitted before building permits are issued for Phase 2 and beyond, and it must be operational prior to final occupancy of any Phase 2 and beyond development.

HCSD currently provides water service to an existing single-family residence on APN 017-071-002, which lies outside the annexation area but is served by infrastructure that traverses the project site. As a condition of approval, HCSD will ensure that this existing service is maintained without interruption during all phases of project construction and implementation.

Wastewater service to the annexation area will require construction of a new sewer lift station in the northeastern portion of the site, also to be developed by the project proponent. In addition, the Hemlock Sewer Transmission Line Project—funded and completed by HCSD—must be in place before wastewater connections can be made for Phase 2 and beyond. Only Phase 1, consisting of three single-family homes on an extension of Manzanita Avenue, may proceed prior to completion of this capital project.

If street lighting services are requested, the developer will establish one or more assessment zones in accordance with HCSD Code. All necessary infrastructure will be installed at no cost to the District, and funding for ongoing services may come from private or other sources.

The annexation area is located within the jurisdiction of the Humboldt No. 1 Fire Protection District and will continue to be served by Humboldt Bay Fire Authority for fire protection and emergency response services.

#### Property Tax Exchange Agreement

Revenue and Taxation (R&T) Code Section 99 requires that, prior to LAFCo considering jurisdictional changes, a determination must be made regarding the exchange of property tax revenue among the affected local agencies. This ensures that the redistribution of tax revenue reflects changes in service responsibility.

This proposal is subject to the provisions of R&T Code Section 99.01, as it involves the extension of services by a special district to an area where those services have not previously been provided by any local agency. In such cases, the exchange of property tax revenue is limited to the annual tax increment generated within the area subject to the jurisdictional change and attributable to the affected local agencies.

Any special district involved may negotiate on its own behalf; however, if a district does not adopt a resolution approving the exchange, the County Board of Supervisors is authorized to determine the exchange on the district's behalf. The final property tax exchange must be documented by resolution of the County and must specify how the annual tax increment will be allocated in future years.

Completion of the property tax negotiation process is required before the LAFCo Executive Officer may issue a Certificate of Filing for the annexation.

#### Environmental Review

The North McKay Ranch Subdivision Project was subject to environmental review pursuant to the California Environmental Quality Act (CEQA). An Environmental Impact Report (EIR) was prepared to evaluate the potential environmental effects associated with the proposed development. Both a Draft EIR and Partial Recirculation Draft EIR were circulated for public review and comment, with all responses to comments incorporated into the Final EIR.

On March 7, 2023, the Humboldt County Board of Supervisors certified the Final Environmental Impact Report (SCH# 2019049166), finding that the EIR had been completed in compliance with

CEQA and that it adequately analyzed the environmental impacts of the project. As part of the certification, the Board adopted CEQA Findings of Fact, a Statement of Overriding Considerations, and a Mitigation Monitoring and Reporting Program (MMRP) to ensure implementation of required mitigation measures.

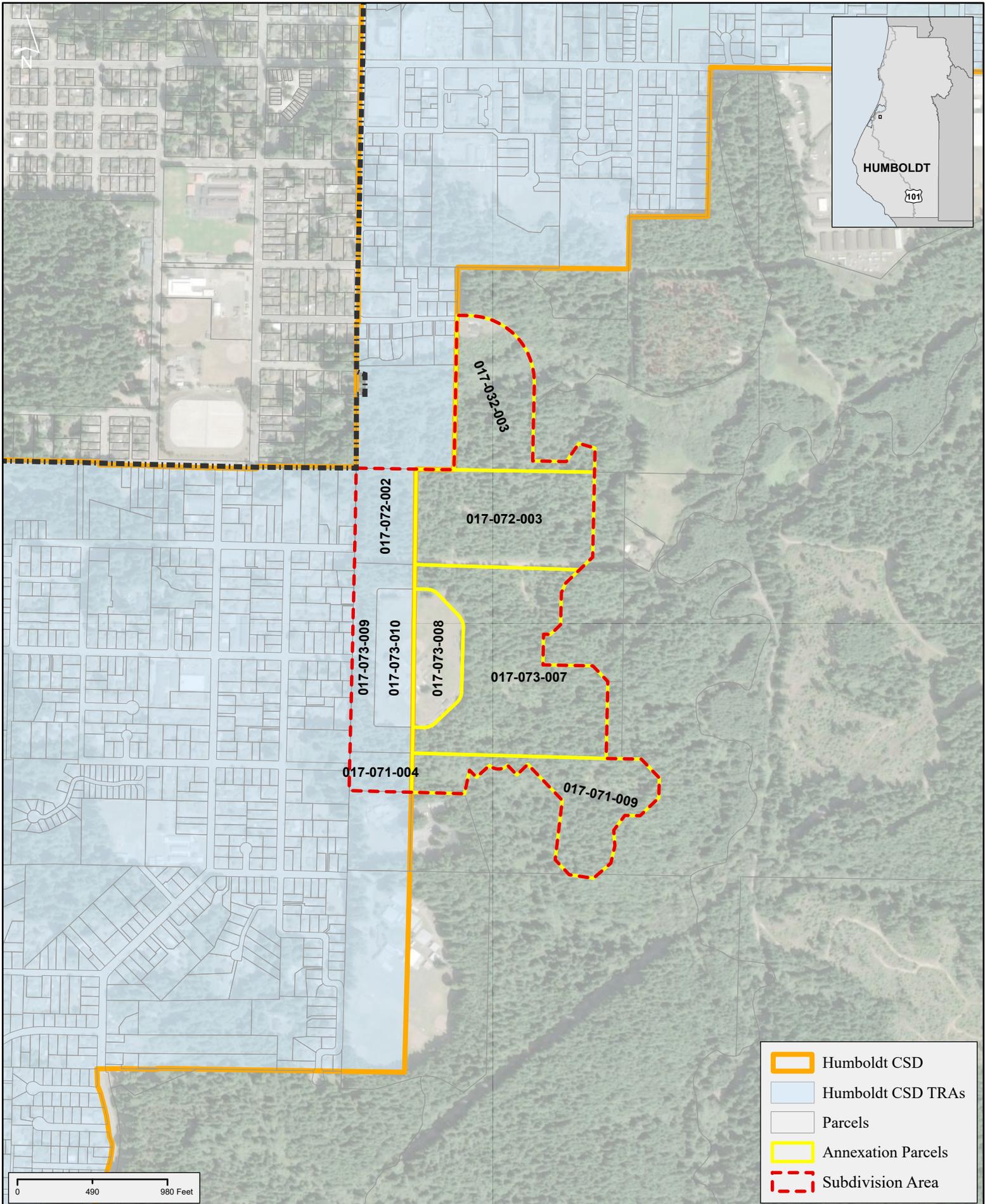
Humboldt LAFCo is a Responsible Agency under CEQA for this project and will rely on the certified EIR during its review and consideration of the proposed annexation.

The application described above is currently pending review by LAFCo and is anticipated to be presented as an informational item at the September 17, 2025, LAFCo meeting. Please review and provide any comments by September 1, 2025.

If you have any questions or would like a copy of the application materials, please contact LAFCo at (707) 445-7508 or via email at [colette@humboldtlaftco.org](mailto:colette@humboldtlaftco.org).

Exhibit A: Annexation Area Figure

Exhibit B: Plan for Services



# Humboldt Community Services District

*Dedicated to providing high quality, cost effective water and sewer service for our customers*

## North McKay Ranch Subdivision Project PLAN FOR SERVICES

### **INTRODUCTION & PURPOSE**

The purpose of this document is to outline a Plan for Services to support an application submitted to the Humboldt Local Agency Formation Commission (Humboldt LAFCo) for the service territory annexation by the Humboldt Community Services District. Humboldt Community Services District (HCSD or District) intends to submit an application to Humboldt LAFCo on behalf of property owner Fairhaven Cottages LLC, a subsidiary of Kramer Properties, inc. (Developer), to approve the extension of the existing HCSD boundary to include the following APNS: 017-032 -003, 017-071-009, 017-072-003, 017-073-007 and 017-073-008, which are currently within the District's Sphere of Influence, so that HCSD can provide street lighting, water and sewer services to the proposed project.

Note: parcel 017-073-008 is part of the sports fields owned by Field Committee Corporation and is not property of Developer. This property is being annexed along with the others listed above so as not to create an "island" within District boundaries.

### **Proposed Development Description**

The proposed subdivision will be accessed by an extension of Redwood Street approximately forming a loop around the Redwood Fields recreation area. The loop will have several cul-de-sacs and a secondary looped road. The development is proposed to commence in phases, with the initial phases centered in the project footprint, and the branched cul-de-sacs progressing afterward. The first phase also includes three units at the end of Manzanita Avenue. See the Appendix for the proposed subdivision and phasing maps. The development consists of a mix of small lot single-family, single-family, multifamily, and commercial units. Additionally, full-sized single-family residential lots are expected to be allowed to develop accessory dwelling units.

In total, 50 small lot single-family units, 96 single-family units, 174 multi-family units, and 2 commercial lots are proposed to be constructed. An additional 34 accessory dwelling units are estimated to be developed at full build out.

### **EXISTING INFRASTRUCTURE/SERVICE**

#### **Water**

Water services within the project area will be provided by HCSD. HCSD supplies water to 7,698 active connections, approximately 97 percent of which are residential and 3

percent commercial. Water service is not provided to any industrial users. In 2015, a total of 740.2 million gallons of water were distributed to customers within the HCSD service area. Average daily use for HCSD customers is estimated at 2.03 MGD in 2015, and peak daily use estimated at 3.6 MGD (Humboldt County 2017). HCSD receives approximately 74 percent of its water from Humboldt Bay Municipal Water District (HBMWD) and the City of Eureka. HCSD also maintains two water supply wells that supplement the water supply, with a rated capacity of 1,580 GPM, or 2.28 MGD. HCSD's active connection with the City of Eureka has a capacity of 800 GPM, or 1.15 MGD. The contract with the HBMWD allows for a peak rate allocation of 2.9 MGD. Therefore, the combined source capacity is estimated at 6.33 MGD.

### **Wastewater**

HCSD currently maintains 6,326 sewer service accounts, 97 percent of which are associated with residential users, with the remainder associated with commercial users (SHN Engineers and Geologists 2014). HCSD's wastewater infrastructure includes 28 wastewater pumping stations, and 78 miles of sewer mains. Five of HCSD's lift stations are located in the Pine Hill area, five in the Rosewood area, five in the Cutten and Ridgewood areas, six in the Myrtle town area, three in the King Salmon area, and five in the Humboldt Hill area. HCSD's peak daily wastewater flow is approximately 1.92 MGD, with an average wastewater flow of 0.92 MGD (SHN Engineers and Geologists 2014). HCSD has an agreement with the City of Eureka to purchase approximately 30 percent of the capacity at the City of Eureka Elk River Wastewater Treatment Plant (WWTP), which has a current peak dry weather treatment capacity of 8.6 MGD and peak wet weather treatment capacity of 12 MGD (Order No. RI - 2023-0016 NPDES No. CA0024449) (RWQCB2023).

## **ANTICIPATED SERVICE DEMANDS**

### **Water Supply Study**

A Water Supply Assessment Study was completed by SHN Consulting Engineers and Integral Consulting in October, 2020 as a requirement of the Project's Environmental Impact Report that was used to inform this plan for services.

### **Domestic Water Usage**

Domestic water use estimates were obtained from HCSD's meter data for single-family and multi-family residential units. The meter data was compared against HCSD's usage goal of 113 gallons per capita per day with an estimated 3 persons per equivalent dwelling unit (EDU) or 339 gallons per day per EDU (gpd/ EDU). This data was also compared with meter data from a single-family development in Eureka and a previous water supply assessment in HCSD's sphere of influence, both of which used approximately the same consumption basis per EDU. For the purposes of the Water Supply Assessment Study, small lot single family homes and accessory dwelling units were considered to have the same estimated water usage as a typical single-family unit. For the purpose of modeling demand, a typical single-family residence is estimated to

use 339 gpd on an average day. In total, 180 EDUs are associated with the single-family units. Multi-family residence buildings may be metered separately for each unit. Given that meter data from HCSD does not reflect the number of units per account and the design of the multi-family development has not begun, we assume 2.5 persons per multi-family unit for an average demand of 283 gpd/unit. Therefore, a multifamily unit is estimated to be 83.5% of the demand of a residential EDU. The multi-family count for the development is 145 EDUs (174 multi-family dwelling units x 83.5%).

### **Commercial Water Usage**

The size and type of commercial development has not been determined; therefore, typical commercial usage data from HCSD was utilized in the Water Supply Assessment Study. The two proposed commercial lot sizes are approximately 42,000 and 53,000 square feet. An estimate of the maximum size of each of the building footprints, accounting for setbacks and parking, is approximately 8,000 square feet. For the purposes of the Water Supply Assessment study, it was assumed that each commercial building will include four separate units.

According to HCSD's 2023 rate study, HCSD defines commercial accounts by wastewater strength. According to the study, light-, medium-, and high-strength connections have an average water usage of 615 gpd, 2,092 gpd, and 1,321gpd, respectively. The proposed commercial development is assumed to be a mix of light and medium strength accounts and, for the purposes of modeling, the Water Supply Assessment Study assumes one medium-strength and three light-strength units per commercial lot. Thus, the total combined water usage per day is estimated at 7,874 gpd on average for a total of approximately 23 EDUs. Because the building design and occupancy have not yet been completed, the water usage is a rough estimate that is considered to be conservative, and should be revisited in the planning phase of the commercial units.

## **PROPOSED SERVICE INFRASTRUCTURE**

### **Water Infrastructure**

Underground potable water pipelines will be extended to the project site at no cost to the District, and potable water supplies will be supplied by HCSD. Additionally, the Water Supply Assessment Study has determined that a new 250,000-gallon water storage tank will be required to serve the proposed project. The proposed water storage tank will be located approximately 2.5 miles south of the proposed project, near Ridgewood, California, adjacent to HCSD's existing water storage tank (Ridgewood Tank Site). A water supply study has been completed that identifies the exact size and location of the water storage tank.

The proposed water storage tank will be permitted before any building permits are issued for phase 2 and beyond. Further, the water storage tank will be in service before any of the new construction associated with phase 2 and beyond are certified for

occupancy (phase 1 consists of three single family homes on the extension of Manzanita Ave.).

The development agreement between the Developer and Humboldt County is valid until December 18, 2044. The Ridgewood Tank Site is ideally situated to supply water for future developments in Cutten, Ridgewood, and Elk River. The District estimates that approximately 5,000 undeveloped housing units in the area could be served by water stored at the Ridgewood Tank Site. Between now and when the Developer is ready to proceed with phase 2 of the North McKay Ranch Subdivision, other developers may express interest in developing properties that could rely on water supplied by the Ridgewood Tank Site. The District may also seek outside funding in the form of grants or other funding mechanisms to construct a tank capable of serving future developments near the Ridgewood Tank Site.

If either of these scenarios occurs, the storage tank requirement tied to the Water Supply Assessment Study will be reevaluated. The Developer may then meet the requirement for a water storage tank identified in the Water Supply Assessment Study by participating in a cost-sharing arrangement for a tank appropriately sized to supply all projects.

The District must act as stewards of its real property and assets. The Ridgewood tank site has a limited amount of space for the development of additional water storage. The District must implement a plan that does not restrict future capacity at the Ridgewood Tank Site to a single development. If funding for a water storage project at the Ridgewood Tank Site becomes available from other sources, the Developer will participate in a cost sharing agreement at that time or relinquish any claim to access water storage capacity resulting from the project or any claim to District property.

Alternatively, the Developer may choose to forgo using the Ridgewood Tank Site and construct an adequately sized water storage tower at a different location (either within the subdivision or on other land owned by the Developer) to meet the water supply requirements outlined in the Water Supply Assessment Study.

To provide additional flexibility, this Plan for Services allows for the possibility of adjusting timelines and responsibilities as the development landscape evolves. In the event that unforeseen changes arise, such as alterations in the timeline for the North McKay Ranch Subdivision or shifts in the region's development priorities, the parties may renegotiate the terms of the water supply and storage solutions. This could include the option for the Developer to collaborate with other stakeholders or pursue alternative strategies that align with the needs of the District and the broader community. If new development proposals emerge, the District and the Developer may explore various avenues for sharing resources, including but not limited to grants, enhanced infrastructure financing district(s), joint ventures, partnerships, or phased construction to ensure the efficient use of the Ridgewood Tank Site or an alternative location. Both parties agree to remain open to these possibilities and will work together in good faith to

address future challenges in a way that benefits the area's long-term water infrastructure and growth.

The Water Supply Assessment Study has also determined that the main on Walnut Drive between Holly Avenue and Cypress will need to be upsized to 12 inches to accommodate the proposed development and fire flow requirements. This condition of approval will be implemented before any new construction associated with phase 2 and beyond will be certified for final occupancy.

Due to the determination by SHN Consulting Engineers and Integral Consulting during the Water Supply Assessment that the water main within Walnut Drive will require upsizing to service the project, all associated costs of implementation will be funded privately or come from other sources and shall be at no cost to District. Given that the replacement of the line will be less than 1000 feet and will replace an existing facility, impacts associated with temporary service interruptions, noise, air quality and dust emissions from construction activities were estimated to account for this line replacement. As such, the previously circulated EIR sections accounted for a range of construction-based impacts, including utility replacements.

The Developer will enter into and comply with the terms of the mainline extension agreement(s) with HCSD to extend water service to the proposed North McKay Ranch subdivision project.

The developer or others will install all infrastructure required to provide drinking water services for this project at no cost to the District.

### **Wastewater**

Underground wastewater pipelines will be extended to the project site at no cost to the District, and wastewater collection and treatment services will be provided by HCSD. A new sewer lift station will be constructed by the developer at the northeastern portion of the subdivision that is planned to remain open space. The lift station will be designed and constructed by the Developer to the District's standards and specifications. All sewage within the subdivision will gravity flow to the low point at the north end of the subdivision to the new sewage lift station. The sewage will be pumped to the existing sanitary sewer manhole located on Hemlock Street at the intersection of Hemlock and Walnut Street via a new sewer line (forcemain) to be installed between the project site and the intersection of Walnut Drive and Hemlock Street by the Developer. The new sewer line will extend west onto Redwood Street, turning north onto Walnut Drive, and then connect to the existing sewer system manhole located on Hemlock Street at the intersection of Hemlock and Walnut Street. All utility work will occur in the existing right-of-way. All costs associated with wastewater improvements in relation to this project, will be funded privately or come from other sources and shall be at no cost to District. The Developer will enter into and comply with the terms of (a) main line extension agreement(s) with HCSD for extension of wastewater service to the proposed North McKay Ranch subdivision project.

All infrastructure required to provide wastewater services for this project will be designed and constructed to the District's standards and specifications by the Developer or others at no cost to the District.

### **Hemlock Sewer Transmission Line**

The Humboldt Community Services District is undertaking a project to increase sewer transmission capacity from the Cutten area by connecting the Hemlock Sewer Main to the Martin Slough Interceptor at the City's O Street metering station. This project must be completed before the collection system from phases 2 and beyond of the North McKay Ranch Subdivision Project can be connected to the Humboldt Community Services District system (phase 1 consists of three single family homes on the extension of Manzanita Ave.). The Hemlock Sewer Transmission Line project will be funded by HCSD.

### **Street Lighting**

Consistent with County Code Section 314-31.1.6.5.4, all utilities associated with the proposed project will be placed underground (Humboldt County 2017b). Lots are to be served by community water, wastewater, and street lighting services, which will be extended from HCSD. The HCSD prepared a Municipal Services Review (MSR) for expansion of its SOI that includes the project site. The developer will establish street lighting assessment zone(s) if street lighting services are to be provided by HCSD, funding for these services and all associated street lighting costs may be done privately or come from other sources and shall be at no cost to District.

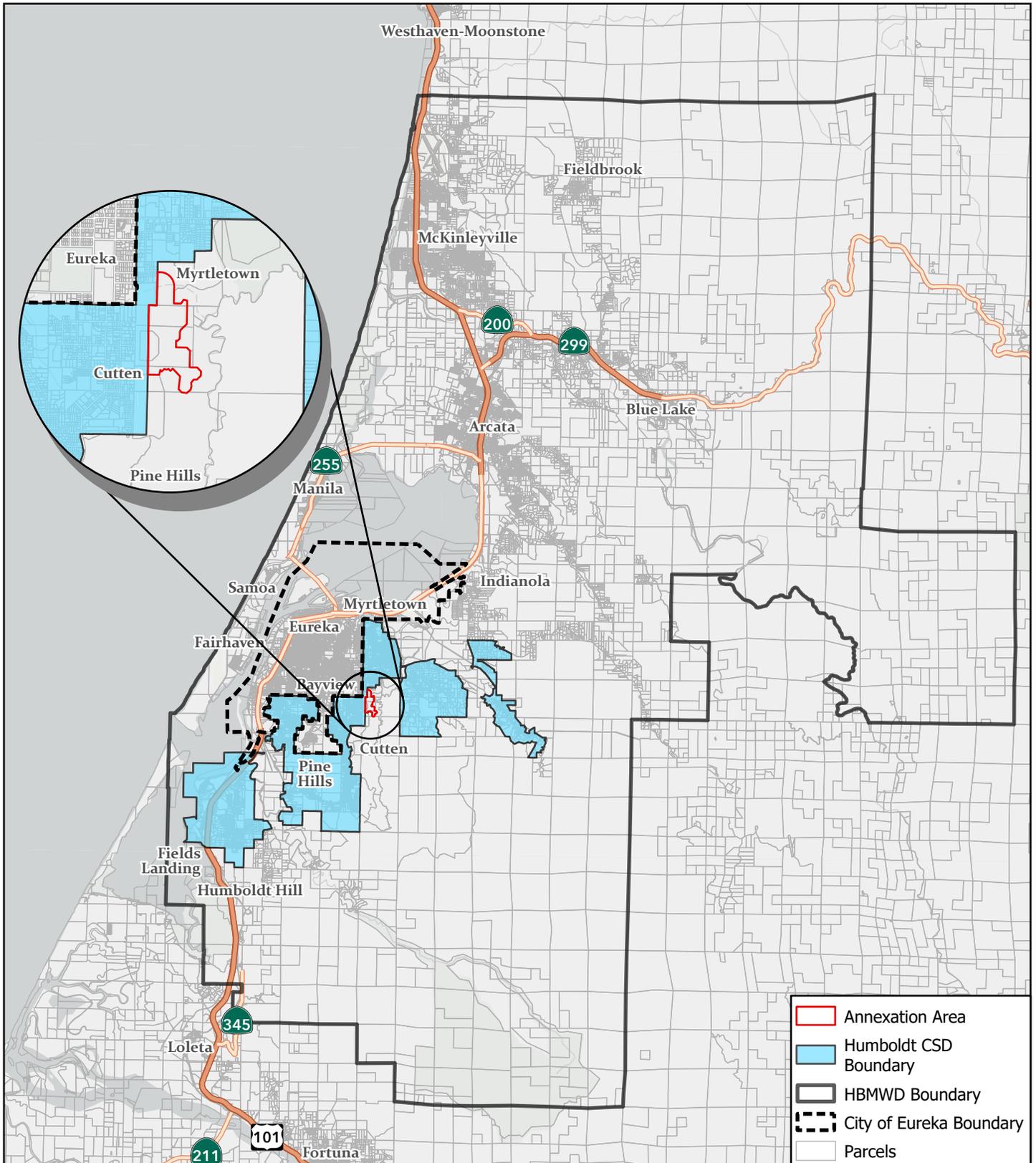
Lighting of the project site currently contains existing outdoor lighting around Redwood Fields Park and its associated parking areas. The new roadways and commercial buildings will have street lighting installed for security purposes. All new outdoor lighting will be the minimum lumens required for security purposes, directed downward, and shielded to prevent light spillover onto adjacent properties.

All infrastructure required to provide street lighting services for this project will be installed by the Developer or others through private funding or other sources and shall be at no cost to the District.

Services for the proposed project will be extended to the affected territory within the twenty-year period established in the executed Development Agreement by and between the County of Humboldt and Fairhaven Cottages LLC./Kramer Properties, Inc. relating to the North McKay Subdivision Project that extends until December 18, 2044, or ninety (90) days following the Project Build-out, whichever is earlier. Funding for these services may be done privately or come from other sources and shall be at no cost to the District.







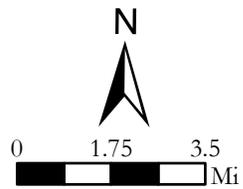
-  Annexation Area
-  Humboldt CSD Boundary
-  HBMWD Boundary
-  City of Eureka Boundary
-  Parcels



# Humboldt CSD North McKay Annexation

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community  
 Boundaries: Humboldt LAFCo  
 Roads: U.S. Census Bureau 2024 TIGER/Line Roads Shapefile

8/6/2025



Coordinate System: NAD 1983 UTM Zone 10N

Committee Meetings & Director Reports  
NO ATTACHMENT FOR THIS ITEM



# REDWOOD COAST Energy Authority

Arcata | Blue Lake | Blue Lake Rancheria | County of Humboldt | Eureka | Ferndale | Fortuna | Humboldt Bay Municipal Water District | Rio Dell | Trinidad | Yurok Tribe

## **BOARD OF DIRECTORS REGULAR MEETING AGENDA**

**Wharfinger Building, upstairs Great Room  
1 Marina Way, Eureka, CA 95501**

**July 24, 2025  
Thursday, 3:30 p.m.**

Any member of the public needing special accommodation to participate in this meeting or access the meeting materials should email [LTaketa@redwoodenergy.org](mailto:LTaketa@redwoodenergy.org) or call (707) 269-1700 at least 3 business days before the meeting. Assistive listening devices are available.

Pursuant to Government Code section 54957.5, all writings or documents relating to any item on this agenda which have been provided to a majority of the Board, including those received less than 72 hours prior to the Committee's meeting, will be made available to the public at [www.RedwoodEnergy.org](http://www.RedwoodEnergy.org).

NOTE: Speakers wishing to distribute materials to the Board at the meeting, please provide 13 copies to the Board Clerk.

### **THIS IS A HYBRID IN-PERSON AND VIRTUAL MEETING.**

The RCEA Board of Directors holds in-person hybrid meetings. When attending, please be courteous to those who choose to wear a mask.

**To participate in the meeting online**, go to <https://us02web.zoom.us/j/81972368051>.

**To participate by phone**, call (669) 900-6833 or (253) 215-8782. Enter webinar ID: 819 7236 8051.

**To speak during the public comment periods**, raise your hand in the online Zoom webinar, or press star (\*) 9 on your phone to raise your hand. Staff will ask you to unmute your phone or computer when it is your turn. You will have 3 minutes to speak.

**Email written comments** to [PublicComment@redwoodenergy.org](mailto:PublicComment@redwoodenergy.org). Identify the agenda item number in the subject line. Comments will be included in the meeting record but not read aloud during the meeting.

## **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 June 26, 2025, Board Meeting.
- 4.2 Accept Disbursements Report for May 2025, and Financial Reports for This Fiscal Year Through May 2025.
- 4.3 Award Design-Build Agreement to Stephens Electrical to Perform Design-Build Services for the Energy Resilience at Rural Fire Stations Project for a Not to Exceed Value of \$1,700,000 through December 31, 2026, and Authorize the Executive Director to Execute All Applicable Documents.
- 4.4 Receive Federal Activity Report.
- 4.5 Award a Professional Services Agreement to Sacramento Municipal Utilities District to Perform the Northern Rural Energy Network Commercial Energy Assessment for a Not to Exceed Value of \$187,610 and Authorize the Executive Director to Execute All Applicable Documents.

### **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. CCE BUSINESS CONSENT CALENDAR – None.**

All matters on the Community Choice Energy Business Consent Calendar are considered to be routine by the CCE-participating jurisdiction Board members 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 CCE Business Consent Calendar, any Board member or members of the public can request that an item be removed for separate discussion.

**7. OLD CCE BUSINESS** – None.

**8. NEW CCE BUSINESS**

- 8.1.** California Community Choice Association Presentation on Electricity Market Regionalization: the Pathways Initiative and SB 540

Adopt CalCCA recommended position on SB 540.

- 8.2.** 2025 California Summer Market Conditions Assessment

Accept 2025 California Summer Market Conditions Assessment.

**END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS**

**9. OLD BUSINESS** – None.

**10. NEW BUSINESS**

- 10.1** Humboldt Transit Authority Hydrogen Fuel Project Presentation (Information only)
- 10.2** Cost-of-Service Electricity Rate Setting Design Contract Award

Award Professional Services Agreement with NewGen Strategies and Solutions, LLC, for a not-to-exceed value of \$116,900 for cost of service and rate design services through July 2026 and authorize the Executive Director to execute the agreement and all associated documents.

**11. STAFF REPORTS**

- 11.1.** Executive Director's Report

**12. FUTURE AGENDA ITEMS**

Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

**13. ADJOURNMENT**

---

**NEXT REGULAR MEETING**

Thursday, August 28, 2025, 3:30 p.m.

Wharfinger Building upstairs Great Room, 1 Marina Way, Eureka, CA 95501

Online and phone participation will 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 RREDC Board of Directors**

**July 28, 2025 at 6:30 pm PT**

**HAS BEEN CANCELED DUE TO LACK OF QUORUM**

**The next Regular Meeting of the RREDC Board of Directors**

**is scheduled for August 25, 2025 at 6:30 pm PT**

*The Redwood Region Economic Development Commission will, on request, make agendas available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in implementation thereof. Individuals who need this agenda in an alternative format or who need a disability-related modification or accommodation in order to participate in the meeting should contact the Board Secretary at (707) 445-9651. Notification 48 hours prior to the meeting will enable the Commission to make reasonable arrangements for accommodation.*

**RREDC  
Member  
Agencies**

*Cities* Arcata · Blue Lake · Eureka · Ferndale · Fortuna · Rio Dell · Trinidad  
*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