



HUMBOLDT BAY MUNICIPAL WATER DISTRICT
Board of Directors Meeting
January 08, 2026



HEADQUARTERS
December 2025



BOARD OF DIRECTORS
Humboldt Bay Municipal Water District
Agenda for Regular and Closed Session Meetings of the Board of Directors
828 7th 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=MjZldGxRa08wZ0FWOHJrUjNhZnFLQT09>

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

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

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

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

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 7th Street, Eureka, California, during normal business hours, and can be viewed on our website at 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.



AGENDA
REGULAR BUSINESS MEETING

Thursday, January 08, 2026

1:00 p.m.

828 7th 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 2 recommendations.

- 3.1. Approve the Draft Minutes of the Regular Board Meeting of December 11, 2025
- 3.2. Discuss and Consider Approval of Memorandum of Understanding with Wiyot Tribe Regarding the Samoa Peninsula Waterline Right-of-Way Maintenance Project
- 3.3. Discuss and Consider Approval of Calendar Year 2026 Board Calendar

4. Presentations:

- 4.1. NONE

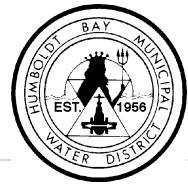


5. Discussion and Action:

- 5.1. Informational Memo Concerning the Former McNamara and Peepe Mill Site
- 5.2. Discuss and Consider Approval of Resolution 2026-01 Affirming Adoption of the Humboldt County Multi-Jurisdiction Hazard Mitigation Plan and Compliance with Assembly Bill 2140
- 5.3. Discuss and Consider Approval of Updated Board of Directors Payment Schedule
- 5.4. Discuss and Consider Approval of Withdrawing from FEMA Grant DR-4407 Collector Mainline Redundancy Project
- 5.5. Discuss and Consider Approval to Terminate District Participation on the Redwood Coast Energy Authority (RCEA) and Redwood Region Economic Development Commission (RRDEC) Boards
- 5.6. Discuss and Consider Approval of December Financial Statement & Vendor Detail Report
- 5.7. Discuss and Consider Approval of Items pulled from Consent Calendar

6. Reports:

- 6.1. Staff Report
 - 6.1.a. Operations Report
 - 6.1.b. Management Report
- 6.2. Active Ad-Hoc Committee Reports
 - 6.2.a. Instream Flow Dedication – (Met December 10th and 17th)
- 6.3. Director Reports - General Director Comments
 - 6.3.a. Vice-President Director Woo
 - 6.3.b. Director Wheeler
 - 6.3.c. Director Stevens
 - 6.3.d. Director Rupp
 - 6.3.e. President Fuller
- 6.4. Organizations on which HBMWD Serves
 - 6.4.a. Association of CA Water Agencies (ACWA)
 - 6.4.b. Association of CA Water Agencies/Joint Powers Insurance Authority (ACWA-JPIA)



6.4.c. Redwood Coast Energy Authority (RCEA)

6.4.d. Redwood Region Economic Development Commission (RREDC)

7. Discussion of Future Agenda Items:

7.1. Information Management System

7.2. Artificial Intelligence Policy

7.3. Association Memberships related to Local Business and Economic
Development

8. Adjournment:

The next Regular Meeting of the Board of Directors will be held at 1:00 PM on
Thursday, February 12, 2026.



AGENDA

CLOSED SESSION MEETING

Thursday, January 08, 2026

2:30 PM

828 7th Street, Eureka, CA 95501

- 1. Call to Order:**
 - 1.1. Roll Call

- 2. Public Comment:** Members of the public are invited to address the Board on items listed on the Closed Session 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.

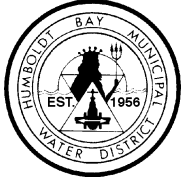
- 3. Announcement of Closed Session Agenda: Time Set - (2:30 PM)**
 - 3.1. CONFERENCE WITH LEGAL COUNSEL - EXISTING LITIGATION.
 - 3.1.a. (Paragraph (1) of subdivision (d) of Section 54956.9)
 - 3.1.b. Name of case: Petitions for Change and Instream Flow Dedication for Permits 11714 (Application 16454) and 11715 (Application 17291)

- 4. Adjourn to Closed Session:**

- 5. Announcements from Closed Session:**

- 6. Adjournment:**

(The Board will discuss Closed Session agenda items in the Boardroom)



ITEM: Consider Approval of Draft Minutes of Regular Meeting of the Board of Directors on December 11, 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 December 11, 2025, Regular Meeting.

Discussion

The Draft Minutes of December 11, 2025, Regular meetings 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 December 11, 2025, Regular Meeting

**Humboldt Bay Municipal Water
District 828 7th Street, Eureka**



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

December 11, 2025

9:00 a.m.

1.1 ROLL CALL

President Fuller called the meeting to order at 9:00 a.m. Roll call was conducted. Directors Fuller, Rupp, Stevens, Wheeler, and Woo were present. Also present were General Manager Michiko Mares, Director of Maintenance and Operations Dale Davidsen, Director of Finance and Human Resources Chris Harris, and Board Secretary Contessa Dickson.

1.2 PLEDGE OF ALLEGIANCE

President Fuller led the Pledge of Allegiance.

1.3 ACCEPT AGENDA

ACTION: Motion #25-039 to accept Agenda

Maker: Director Rupp

Second: Director Woo

Vote: 5-0 to approve

2. PUBLIC COMMENT

No public comment.

3. CONSENT CALENDAR

ACTION: Motion #25-040 to approve Consent Calendar, less items 3.3, 3.6, and 3.9.

Maker: Director Woo

Second: Director Wheeler

Vote: 5-0 to approve

Director Rupp requested that items 3.3, 3.5, and 3.9 be pulled and moved to Discussion and Action for separate consideration.

3.1 Approve the Draft Minutes of the Regular Board Meeting of October 9, 2025, and November 13, 2025

3.2 Approve the Draft Minutes of the Special Board Meeting of November 20, 2025

~~3.3 Approve Informational Memo Concerning Strategic Planning Initiative~~

3.4 Approve Informational Memo Concerning the Un-Naming of the Mad River

3.5 Approve Informational Memo Concerning Board Policy, Sections 1000 and 4000 Series

~~3.6 Approve Implementation of Program to Administer Disaster Service Workers Oath of Allegiance~~

3.7 Approve the Fence Installation Contract at the Eureka Office

3.8 Approve Attendance and Expenses for Staff and Board Members at the 2026 CSDA Special Districts Legislative Days

~~3.9 Approve Employee Emergency Loan Program (EELP) to Support District's Emergency Preparedness~~

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District 828 7th Street, Eureka**



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Directors**

December 11, 2025

9:00 a.m.

4. PRESENTATIONS

None.

5. DISCUSSION AND ACTION:

5.1 Approve Resolution 2025-18 – Celebrating Thirty Years of Distinguished Service by Director Bruce Rupp

ACTION: Motion #25-041 to approve Resolutions 2025-18

Maker: Director Woo

Second: Director Stevens

Vote: 5-0 to approve by roll call vote.

- Director Wheeler: Aye
- Director Woo: Aye
- Director Fuller: Aye
- Director Rupp: Aye
- Director Stevens: Aye

(5 ayes, 0 no, 0 abstention)

The Board adopted a resolution recognizing Director Rupp's 30 years of service and expressed appreciation for his dedication and contributions to the District.

5.2 Approve Resolution 2025-17 – Revising Board Policy Section 4235 – Types of Board Meetings

ACTION: Motion #25-042 to approve Resolution 2025-17

Maker: Director Woo

Second: Director Stevens

Vote: 5-0 to approve by roll call vote

- Director Wheeler: Aye
- Director Woo: Aye
- Director Fuller: Aye
- Director Rupp: Aye
- Director Stevens: Aye

(5 ayes, 0 no, 0 abstention)

The Board adopted Resolution No. 2025-17 approving revisions to Board Policy Section 4235 to change the regular Board meeting start time from 9:00 a.m. to 1:00 p.m., effective January 8, 2026, and to eliminate the Treasurer position.

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December 11, 2025

9:00 a.m.

5.3 Approve Termination of Emergency Authorization for Emergency Relocation of Water Transmission Pipeline on Samoa Peninsula

ACTION: Motion #25-043 to approve termination of emergency authorization.

Maker: Director Rupp

Second: Director Stevens

Vote: 5-0 to approve

The Board discussed and approved the termination of the emergency authorization for the emergency relocation of the District's water transmission pipeline on the Samoa Peninsula, as the emergency work and site restoration had been completed.

5.4 Approve Board Ad-Hoc Committee Assignments

ACTION: Motion #25-044 to approve committee assignments and new committee and members.

Maker: Director Rupp

Second: Director Stevens

Vote: 5-0 to approve

Ms. Mares reviewed the District's standing and ad hoc committee structure pursuant to Board Policy 4105.2, standing committees of the Board will be established at the end or beginning of the calendar year. She reviewed the current ad hoc committees and their purposes. Ms. Mares also identified additional ad hoc committees to consider throughout the year, including Performance Evaluation of the General Manager, Legislative Advocacy, Annual Audit, and Water Rights Renewal. The Board approved the following committee assignments:

Committee / Assignment	Board Members
Board Policy	President Fuller; Director Rupp
Former McNamara & Peepe Mill Site Cleanup	President Fuller; Director Wheeler
Mad River (Baduwa't) Headwaters	Director Rupp; Director Wheeler
Un-Naming of the Mad River	President Fuller; Director Wheeler
Instream Flow Dedication	President Fuller; Director Stevens (<i>replacing Director Woo</i>)
Performance Evaluation of the General Manager (<i>New</i>)	President Fuller; Director Woo
Legislative Advocacy (<i>New</i>)	President Fuller; Director Rupp
Annual Audit (<i>New</i>)	Director Stevens; Director Rupp
Water Rights Renewal (<i>New</i>)	Director Stevens; Director Fuller

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District 828 7th Street, Eureka**



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Directors**

December 11, 2025

9:00 a.m.

5.5 Approve District Memberships

ACTION: Motion #25-045 to approve District memberships.

Maker: Director Wheeler

Second: Director Woo

Vote: 5-0 to approve

Ms. Mares outlined District association memberships and related costs. The Board discussed business and economic development memberships, particularly RCEA and RRDEC, as well as the possibility of joining the Humboldt Community Organizations Active in Disaster (COAD). The Board approved staff recommended Items 1, 3, 4, and 5, and approved joining COAD. Item 2, business and economic development memberships will be added to item 7, discussion of future agenda items.

5.6 Approve Applicant's Agent Resolution for Non-State Agencies, CAL-OES form 130

ACTION: Motion #25-046 to approve Applicant's Agent Resolution for Non-State Agencies, CAL-OES form 130

Maker: Director Stevens

Second: Director Wheeler

Vote: 5-0 to approve by roll call vote

- Director Wheeler: Aye
- Director Woo: Aye
- Director Fuller: Aye
- Director Rupp: Aye
- Director Stevens: Aye

(5 ayes, 0 no, 0 abstention)

Ms. Mares summarized that this resolution authorizes designated staff to execute disaster assistance and mitigation grant documents and remains effective through December 11, 2028.

5.7 Approve Advance Revision of Ordinance 17 to increase Director Compensation

No action taken.

Following Board discussion, the Board directed staff to bring back a revised ordinance and develop a policy that provides for Directors to receive the District's February cost-of-living adjustment (COLA) annually at the March Board meetings.

5.8 Approve Installation of 25-ft Flagpole at Eureka Office

ACTION: Motion #25-047 to approve installation of 25-ft flagpole at Eureka Office to be included in the current FY26 budget.

Maker: Director Rupp

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District 828 7th Street, Eureka**



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Directors**

December 11, 2025

9:00 a.m.

Second: Director Wheeler

Vote: 4-1 to approve

The Board discussed the proposed location, lighting, and applicable requirements. Directors expressed support for including the project in the current FY 2026 budget. Mr. Davidsen noted that installing the concrete foundation in advance of gate installation would be most efficient.

Public comment was opened and received, then closed.

5.9 Approve the November Financial Statement & Vendor Detail Report

ACTION: Motion #25-048 to approve the November Financial Statement & Vendor Detail Report in the amount of \$835,339.645.

Maker: Director Fuller

Second: Director Rupp

Vote: 5-0 to approve

Ms. Harris presented the November financial statement, reporting a general account balance of \$1.6 million, investments totaling \$10 million, \$5.7 million in advance charges, and \$2.5 million in general reserves.

5.10 Approve Consent Calendar Item 3.3 - Informational Memo Concerning the Un-Naming of the Mad River

ACTION: Motion #25-049 to approve the informational Memo concerning the Un-Naming of the Mad River

Maker: Director Rupp

Second: Director Woo

Vote: 5-0 to approve

Director Rupp requested to pull this item from consent for discussion regarding the term "tribal sovereignty". Director Wheeler explained that tribal sovereignty is related to federally recognized tribes to retain inherent powers of self-government.

5.11 Approve Consent Calendar Item 3.5 - Implementation of Program to Administer Disaster Service Workers Oath of Allegiance

ACTION: Motion #25-050 to approve Implementation of Program to Administer Disaster Service Workers Oath of Allegiance

Maker: Director Rupp

Second: Director Stevens

Vote: 5-0 to approve

Director Rupp requested to pull this item from consent to provide staff a piece of legislation for an identification program to get through security lines in the event of an emergency. Ms. Mares responded that a employee security badge will be included in the Program. Ms. Mares reported that

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

December 11, 2025

9:00 a.m.

employees of public entities, including special districts, are designated as Disaster Service Workers by the State of California. This Program will require District staff up to take the Oath of Allegiance and will be a condition of employment for future employees.

5.12 Approve Consent Calendar Item 3.9 - Approve Employee Emergency Loan Program (EELP) to Support District's Emergency Preparedness

ACTION: Motion #25-051 to approve Employee Emergency Loan Program (EELP) to Support District's Emergency Preparedness

Maker: Director Rupp

Second: Director Stevens

Vote: 5-0 to approve

Director Rupp requested to pull this item from consent to discuss the fiscal impact of this Program. Ms. Harris explained that the Program will be funded from the general account, which is a non-interest-bearing account and will not fiscally impact the District.

6. Reports:

6.1 Staff Reports:

a. Operations Report

Non-Action Item

Mr. Davidsen presented the November Operations Report and reported that staff interviewed five candidates and selected a candidate for the Level I Electrical and Instrumentation Technician position, with an anticipated start date of December 16.

b. Management Report

Non-Action Item

Ms. Mares presented the General Manager's Report, providing updates on regulatory compliance, system operations, partnerships, and future planning efforts. Staff reported continued coordination with FERC and the Division of Safety of Dams on the R.W. Matthews Dam Seismic Stability Project, completion of seismic coupler installation at the 1MG Korblex tank, and planned service interruptions related to infrastructure improvements. Updates were also provided on the Samoa Peninsula waterline work, regional coordination efforts, water rights planning, and ongoing capital and energy efficiency initiatives. Director Woo requested an update on the chlorine discharge, which Ms. Mares addressed.

6.2 Active Committee Reports

a. Un-Naming the Mad River Ad-Hoc Committee

The committee (Directors Fuller and Wheeler) did not meet.

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9:00 a.m.

b. Board Policy Ad-Hoc Committee

The Board Policy Committee (Directors Rupp and Fuller) did not meet.

c. Mad River (Baduwa't) Headwaters Ad-Hoc Committee

The Mad River (Baduwa't) Headwaters Committee (Directors Wheeler and Rupp) met November 26.

d. Instream Flow Dedication Ad-Hoc Committee

This committee (Directors Fuller and Woo) met December 10, 2025; staff will bring a memo to the January Board meeting as a closed session item.

6.3 Director Reports

a. Director Wheeler:

No report.

b. Vice President Woo:

Expressed appreciation for staff efforts regarding recent projects.

c. Director Rupp:

Commended staff for pipeline relocation efforts.

d. Director Stevens:

No report.

e. President Fuller:

Thanked staff for all their work supporting recent emergencies and the fun holiday events.

6.4. Organizations on which HBMWD Serves

a. Association of CA Water Agencies (ACWA)

Non-Action Item

Director Rupp reported on his attendance at the final Board meeting of 2025, which included discussions on legislative matters. He provided an overview of the topics addressed and shared hyperlinks to ACWA legislative summary materials.

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

Non-Action Item

Director Rupp reported on his attendance at the JPIA Summit and ACWA Board Meeting held December 2–4 in San Diego. Director Woo thanked Director Rupp for representing the District and its small rural community.

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District 828 7th Street, Eureka**



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9:00 a.m.

c. Redwood Coast Energy Authority (RCEA)

Non-Action Item

Director Woo reported on the November meeting she attended.

e. Redwood Region Economic Development Commission (RREDC)

Non-Action Item

RRDEC did not meet due to a lack of quorum.

Discussion of Future Agenda Items

• Information Management System

Non-Action Item

No update.

• Artificial Intelligence Policy

Non-Action Item

No update.

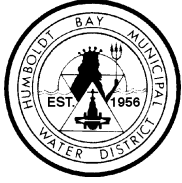
ADJOURNMENT

The meeting adjourned at 12:25 p.m.

Attest:

Michelle Fuller, Board President

Contessa Dickson, Secretary of the Board



ITEM: Discuss and Consider Approval of Memorandum of Understanding with the Wiyot Tribe Regarding the Samoa Peninsula Waterline Right-of-Way Maintenance Project

PRESENTED BY: Michiko Mares, General Manager

TYPE of ITEM: ACTION

TYPE of ACTION: Consent Calendar- General Vote

Recommendation

Staff recommend the Board consider approval authorizing the General Manager to complete negotiation and approval of the Memorandum of Understanding and Monitor Contract Agreement with the Wiyot Tribe regarding the Samoa Peninsula Waterline Right-of-Way Maintenance Project.

Discussion

The Samoa Peninsula Waterline Right-of-Way Maintenance Project involves grading and vegetation maintenance on existing access roads, and sand movement to cover exposed pipeline sections along the District's waterline right-of-way on the Samoa Peninsula. Given the cultural significance of the project area to the Wiyot Tribe and the potential for impacts to culturally significant plant species and cultural resources, staff have collaborated with the Wiyot Tribe to develop a framework for ongoing consultation and coordination.

Memorandum of Understanding

The proposed MOU establishes a cooperative relationship between the District and the Wiyot Tribe to minimize and mitigate potential impacts from the Project. Key provisions include:

Notification and Plant Collection: The District will provide the Wiyot Tribe with at least three months' notice before any grading, sand movement, or vegetation removal activities. This advance notification allows the Tribe the opportunity to collect culturally significant plants that may otherwise be impacted by project activities.

Cultural Monitoring: The MOU provides the framework for the Wiyot Tribe to elect to provide a Tribal Cultural Monitor for ground-disturbing activities. The specific terms and compensation for monitoring services would be governed by a separate Monitor Contract Agreement.

Seasonal Considerations: When feasible, the District will avoid grading, sand movement, and vegetation removal activities between April 1 and July 31 to protect beach strawberry (*Fragaria chiloensis*) during its fruiting season, which is culturally significant to the Tribe.

Flexibility: The MOU includes provisions for amendment or termination by written concurrence of all parties, allowing for adaptive management as the project proceeds.

Monitor Contract Agreement

The draft Monitor Contract Agreement establishes the terms under which the Wiyot Tribe would provide Tribal Cultural Monitor services on an as-needed basis. Key elements include:

Compensation: Monitors would be compensated at \$150 per hour with a two-hour minimum charge, plus mileage reimbursement at the current GSA rate of \$0.70 per mile. These rates are subject to annual adjustment.

Scope of Services: Cultural Monitors will oversee ground-disturbing activities for the presence of cultural resources and human remains. If cultural resources are discovered, work will stop within a 100-foot radius while the Tribe's Tribal Historic Preservation Officer (THPO) assesses the significance and develops a treatment plan.

Human Remains Protocol: The agreement outlines detailed procedures consistent with California Health and Safety Code and Public Resources Code requirements for the discovery of human remains, including immediate notification of the County Coroner and coordination with the Native American Heritage Commission.

Contract Terms: The agreement establishes the Wiyot Tribe as an independent contractor, includes standard provisions for confidentiality, indemnification, termination, and arbitration, and designates Ted Hernandez, THPO, as the primary point of contact.

Benefits and Considerations

This collaborative approach demonstrates the District's commitment to cultural resource protection and government-to-government consultation with the Wiyot Tribe. The agreements provide a clear framework for coordination while maintaining flexibility for project implementation. The advance notification provisions allow for proactive plant collection rather than reactive mitigation, and the seasonal work restrictions show sensitivity to culturally important species. The monitoring provisions ensure that any inadvertent discoveries of cultural resources or human remains will be handled appropriately and in accordance with state law and tribal protocols.

The General Manager seeks Board authorization to complete final negotiations and execute both the MOU and Monitor Contract Agreement to ensure the project can proceed in a culturally sensitive and legally compliant manner.

Alternatives

Not Applicable

Fiscal Analysis

Cultural awareness training will be provided in Fiscal Year 2026. The tribal monitor contract will be included in future fiscal year project budget related to right-of-way maintenance.

Environmental Requirements

Not Applicable

Exhibits/Attachments

- Attachment 1 – DRAFT MOU between the District and Wiyot Tribe
- Attachment 2 – DRAFT Monitor Contract Agreement between the District and the Wiyot Tribe.

**MEMORANDUM OF UNDERSTANDING
BETWEEN THE WIYOT TRIBE AND THE HUMBOLDT BAY MUNICIPAL
WATER DISTRICT REGARDING THE SAMOA PENINSULA WATERLINE
RIGHT OF WAY MAINTENANCE PROJECT**

Background and Purpose. The Humboldt Bay Municipal Water District (District) is proposing the Samoa Peninsula Waterline Right of Way Maintenance Project (Project) within and near the District’s existing waterline right-of-way on the Samoa Peninsula in Humboldt County, CA. The Project will include grading and vegetation maintenance on an existing access road and sand movement to cover exposed pipeline sections. Project activities have the potential to impact plant species that are culturally significant for the Wiyot Tribe. Additionally, ground disturbance could expose cultural resources. This memorandum of understanding (MOU) will allow for communication between the District and Wiyot Tribe and related actions that will minimize and mitigate the Project’s potential impacts to culturally significant plant species.

The District and Wiyot Tribe agree to the following.

1. Within three months of grading, movement of sand, or vegetation removal associated with the Project, the District will notify the Wiyot Tribe via email of the proposed activities.
2. Following the District’s notification, the Wiyot Tribe will have the opportunity to collect culturally significant plants that may otherwise be impacted.
3. For Project related ground-disturbing activities, the Wiyot Tribe may elect to provide a Tribal Cultural Monitor. Monitoring may be provided pursuant to a separate written agreement between the District and the Wiyot Tribe.
4. When feasible, the District will avoid grading, movement of sand, and vegetation removal activities between April 1 – July 31 to avoid the beach strawberry (*Fragaria chiloensis*) fruiting season.

Amendment or Termination. Any signatory to this MOU may at any time propose an amendment to or termination of this MOU, whereupon all signatories shall consult to consider such amendment or termination. This MOU may only be amended or terminated upon written concurrence of all signatories.

For the Wiyot Tribe

For the Humboldt Bay Municipal Water District

Name _____

Name _____

Title _____

Title _____

Signature _____

Signature _____

Date _____

Date _____



MONITOR CONTRACT AGREEMENT

The Parties to this CONTRACTOR agreement, made this (**Date of contract**), are (**Client**), (hereinafter "CLIENT"), and the **Wiyot Tribe** (hereinafter "CONTRACTOR"), who agree as follows:

- Description of Services:** CLIENT hereby retains CONTRACTOR to provide the services described in the ATTACHMENT - Description of CONTRACTOR Services and Activities and incorporated herein.
- Duration:** The term of this Agreement shall be for the period of (Project Dates). Contractor retains the option to renew this CONTRACTOR Agreement as necessary and prudent on an annual or more often basis.
- Compensation:** CONTRACTOR will be compensated **\$150.00** per monitor per hour, with a two-hour minimum charge, for services provided under this Contract. (Note Compensation rate subject to change at the beginning of each fiscal year of the Wiyot Tribe) The Client as well agrees to pay mileage to and from site at the current GSA rate of **\$0.70** per mile. (Note mileage subject to change throughout the year per Federal Rates) CONTRACTOR agrees to submit invoices for services rendered in accordance with the schedule contained in the *Description of CONTRACTOR Services and Activities*.
- Claims For Compensation:** CONTRACTOR agrees that he shall not be entitled to and shall not claim compensation for services performed under this contract for any hours or any working day if he receives other compensation for the same hours or same working day, and the source of such other compensation has been federal government provided funds. It is further agreed by the CONTRACTOR that any claim for compensation submitted in violation of this clause shall, if paid, be recoverable by CLIENT.
- Warranty, Indemnity, and Hold Harmless:** CONTRACTOR warrants and represents that he has every legal right to enter into the Agreement and to perform in accordance with its terms, and that he is not and will not become a party to any Agreement with anyone else which would be in violation of the rights granted to CLIENT hereunder. CONTRACTOR will indemnify and hold CLIENT harmless from and against any losses, damages, and liabilities, including reasonable attorney's fees. CLIENT makes no warranty, indemnity, or hold harmless Agreement.
- CONTRACTOR Status:** It is understood and agreed between the parties that the CONTRACTOR is engaged by CLIENT solely in the capacity of an independent CONTRACTOR, and that CLIENT shall not be obligated to withhold any federal, state, or local taxes from fees paid to CONTRACTOR, nor shall CLIENT have any liability for such withholding. Further, any required public liability, public damage, and/or Worker's Compensation Insurance shall be the sole responsibility of the CONTRACTOR.

7. **Confidential Information:** CONTRACTOR will not disclose directly or indirectly to or use for the benefit of any third party, any secret or confidential information, knowledge, programming code, or data acquired by virtue of its relationship with CLIENT, or developed through this contract with CLIENT, without the prior written approval of CLIENT. It is understood and agreed by the parties that the obligations of this paragraph shall survive the expiration or termination of this Agreement.
8. **Non-Assignability:** This Agreement may not be assigned or transferred by the CONTRACTOR without the prior written approval by the Executive Director of CLIENT. CLIENT reserves the right to assign or transfer the services and activities to be performed under this Agreement to another party, especially in the event that the CONTRACTOR fails to meet the performance requirements, timelines, and/or satisfactorily accomplish the defined tasks as specified and agreed to herein.
9. **Authority:** CONTRACTOR's authority to act under this Agreement, may be suspended upon written or verbal notice by the Executive Director of CLIENT or his designee. If verbal notice is given it shall be confirmed in writing within five (5) working days.
10. **Termination:** This Agreement may be terminated at any time, with or without cause, by either party, upon notice in writing as hereinafter provided. Any such termination shall be effective ten (10) days after receipt of such written notice mailed to either party at its designated address through registered mail.
11. **Arbitration:** Any controversy or claim arising out of or relating to the compensation to be paid by CLIENT or the CONTRACTOR for the services rendered or materials ordered or received, pursuant to the terms of this Agreement, shall be settled by arbitration in accordance with the rules of the American Arbitration Association, and judgment on the award rendered by the arbitrator or arbitrators may be entered in any court having jurisdiction thereof. Any party to this Agreement may submit to arbitration any said controversy or claim. The party requesting arbitration shall be solely liable for the cost incurred for the Arbitrator.
12. **Complete Agreement:** This Agreement constitutes the entire understanding between the parties, and no amendment or modification hereof shall be effective unless reduced to writing and signed by both parties.
13. **Severability:** Should any provision of this Agreement be held invalid, or unenforceable, such a holding shall not affect the validity or enforceability of any other provision hereof.
14. **Applicable Law:** This Agreement shall be governed by the laws of the State of California.

In consideration of the mutual promises of the parties this Agreement is executed on the date first above written, in duplicate, intending each duplicate to be an original.

(The Wiyot Tribe Hereby Authorizes the Tribal Administrator to sign on behalf of the Wiyot Tribe on this date.)

CONTRACTOR:

CLIENT:

Michelle Vassel, Tribal Administrator

Typed Name

Michiko Mares, General Manager

Typed Name

Signature

Signature

Date: (Place Date)

Date: _____

CONTRACTOR Address:

CLIENT Address:

1000 Wiyot Dr.

Loleta, CA 95551

*EIN # 94-2714533

(*For Federal and State Tax reporting purposes.)

828 7th Street

Eureka, CA 95501

Primary Contact Person:

Ted Hernandez THPO

Office: (707)733-5055

Cell: (707)499-5184

Email: ted@wiyot.us

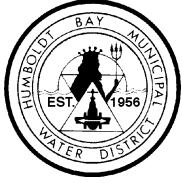
Address:

1000 Wiyot Dr.

Loleta, CA., 95551

	<ol style="list-style-type: none"> 3. <i>The Monitor shall immediately contact the Wiyot THPO about the discovery. Otherwise, keep information about the discovery confidential, on a need-to-know basis; no speaking to the press! Keep record of all calls & communications (date, time, who, etc.).</i> 4. <i>The coroner has two working days to examine human remains after being notified by the responsible person. If the remains are Native American, the Coroner has 24 hours to notify the Native American Heritage Commission (NAHC) at (916)373-3710.</i> 5. <i>The NAHC will immediately notify the person it believes to be the most likely descendent (MLD) of the deceased Native American.</i> 6. <i>The most likely descendent (MLD) has 48 hours to make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods.</i> 7. <i>If the MLD does not make recommendations within 48 hours the owner shall reinter the remains in an area of the property secure from further disturbance, or;</i> 8. <i>If the owner does not accept the MLD's recommendations, the owner or the MLD may request mediation by the NAHC.</i> 9. <i>Discuss and confer means the meaningful and timely discussion careful consideration of the views of each party.</i> <p><i>(California Health and Safety Code 7054 and 7050.5 and the California Public Resources Code Section 5097.9 and 5097.99)</i></p> <p><i>All decisions regarding Wiyot Cultural Resources shall be at the discretion of the Wiyot Tribe THPO.</i></p>
<p>Completion Schedule Date: (Client)</p>	

<p><i>Compensation:</i></p>	<p><i>Compensation Is stated in section 3 of this contract for said projects.</i></p>
<p>Authorized Contacts:</p>	<p>CLIENT:</p> <p><i>Wiyot Tribe Point of Contact: Ted Hernandez, Public Works Director/THPO, 1000 Wiyot Dr. Loleta, CA 95551, (707) 733-5055, Cell: (707)499-5184, ted@wiyot.us</i></p>



ITEM: Consider Approval of Calendar Year 2026 Board Calendar
PRESENTED BY: Michiko Mares
TYPE of ITEM: ACTION
TYPE of ACTION: General Vote – Consent Calendar

Recommendation

Staff recommend the Board approve the Calendar Year 2026 Board Calendar.

Discussion

Staff have prepared a Calendar Year 2026 Board calendar which includes proposed Board meeting dates. While the schedule is subject to change, it is being presented to assist the Board with future planning and scheduling of appointments.

Alternatives

1. The Board may propose alternative Board meeting dates.
2. The Board may choose not to approve the proposed calendar.

Fiscal Analysis

N/A

Environmental Requirements

N/A

Exhibits/Attachments

Attachment 1 – Calendar Year 2026 Board Calendar



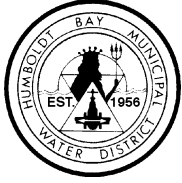
BOARD OF DIRECTORS
Humboldt Bay Municipal Water District
CALENDAR YEAR 2026 - BOARD CALENDAR

Date	Item
01/08/2026	Regular Business Meeting 1:00 PM
02/02/2026	Workshop Strategic Planning Initiative – Day 1 8:00 AM – 5:00 PM
02/03/2026	Workshop Strategic Planning Initiative – Day 2 8:00 AM – 5:00 PM
02/12/2026	Regular Business Meeting 1:00 PM
03/12/2026	Regular Business Meeting 1:00 PM
04/09/2026	Regular Business Meeting 1:00 PM
05/14/2026	Regular Business Meeting 1:00 PM
05/20/2026	Special Meeting - Fiscal Year 2027 Budget Review 1:00 PM
06/11/2026	Regular Business Meeting 1:00 PM
07/09/2026	Regular Business Meeting 1:00 PM
08/13/2026	Regular Business Meeting 1:00 PM
09/10/2026	Regular Business Meeting 1:00 PM
09/25/2026	Special Meeting – Joint Ruth Lake CSD 1:00 PM
09/26/2026	National Public Lands Day - Ruth Lake Cleanup 8:00 AM
10/08/2026	Regular Business Meeting 1:00 PM



BOARD OF DIRECTORS
Humboldt Bay Municipal Water District
CALENDAR YEAR 2026 - BOARD CALENDAR

11/12/2026	Regular Business Meeting 1:00 PM
12/10/2026	Regular Business Meeting 1:00 PM



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 elevated monitoring and engagement with regulatory agencies and elected officials given:

1. Unresolved regulatory discrepancy between DTSC's 2018 determination and NCRWCB's recent 2025 opinion.
2. Pending completion of formal Human Health Risk Assessment (HHRA) by lead agency DTSC.
3. The ongoing and documented presence of dioxins in storm water and groundwater at concentrations exceeding regulatory limits.
4. Critical importance of protecting the District's water supply for regional customers.

Discussion

North Coast Regional Water Quality Control Board (NCRWQCB) Actions during this calendar month:

- Memo regarding dioxin migration potential from McNamara and Peepe site through surface water and groundwater to Humboldt Bay Municipal Water District intake wells

DTSC Actions during this calendar month:

- No new documents have been provided by DTSC since September 2025 Board meeting.
- November Monthly Summary Report (No summary reports provided for September and October 2025)
- Storm water samples were collected on November 17, 2025
- New Project Manager assigned – Christian Bruchman

Summary of NCRWQCB Memo:

- Memo prepared by the NCRWQCB Professional Geologist to evaluate the current understanding of environmental conditions at the former McNamara and Peepe Mill Site

to assess potential risks of sediment and/or groundwater containing dioxins migrating to the HBMWD intake wells located one-mile downstream.

- The Memo is not a formal risk assessment; a Human Health Risk Assessment (HHRA) has been initiated by DTSC in 2024 and is not yet finalized. Once the HHRA is finalized, the NCRWQCB will provide a review and if the information presented warrants a change in opinion, the NCRWQCB will update the Memo.
- The NCRWQCB is of the opinion that the potential transport of dioxins in surface and groundwater into the Mad River would not result in dioxin exceedances at the HBMWD intake wells and have determined the Site does not pose a significant risk of dioxin entering the intake wells.
- The Memo provides recommendations regarding the sampling and analysis methods for dioxins, continued storm water and groundwater monitoring, and for the NCRWQCB to collect surface water samples from Hall Creek and the Mad River along with groundwater samples with the DTSC consultant.

Alternatives

Not Applicable

Fiscal Analysis

Not Applicable

Environmental Requirements

Not Applicable

Exhibits/Attachments

- Attachment 1 – NCRWQCB Memo regarding dioxin migration potential from McNamara and Peepe site through surface water and groundwater to Humboldt Bay Municipal Water District intake wells
- Attachment 2 – DTSC November Monthly Summary Report

North Coast Regional Water Quality Control Board

Date: December 5, 2025

To: Michiko Mares, Humboldt Bay Municipal Water District
Heidi Bauer, North Coast Regional Water Quality Control Board.

From: Michael W. Sullivan, P.G.

Site: McNamara & Peepe, 1619 Glendale Drive, Glendale, CA 95525
Humboldt County, GeoTracker Case No. T0602393345, DTSC Case No.
12240115

Subject: Memo regarding dioxin migration potential from McNamara and Peepe site
through surface water and groundwater to Humboldt Bay Municipal Water
District intake wells

1.0 Introduction

This memorandum is to evaluate the current understanding of environmental conditions at the former McNamara & Peepe Corporation (M&P) lumber mill located at 1619 Glendale Drive, Arcata, California (the Site; see Figure 1). The focus is on assessing potential risks of sediment and/or groundwater containing dioxins from M&P to the downstream intake wells operated by the Humboldt County Municipal Water District (Municipal Water District), exceeding the public health goal (PHG) of 0.05 picograms per liter (pg/L) one mile downstream when entering the intake wells.

The Regional Water Board was informed by the Municipal Water District that there has not been any dioxin detected in the Municipal Water District's intake wells, however they still expressed concerns as to whether the contaminants from M&P could reach their intake wells. This memorandum is provided in response to a request from Michiko Mares, the General Manager of the Municipal Water District, who asked the North Coast Regional Water Quality Control Board (Regional Water Board) to provide a formal position on the Site's potential risk to the Municipal Water District's supply wells.

2.0 Summary

To support the Regional Water Board's opinion that the Municipal Water District's intake wells are not likely to be contaminated by dioxins from M&P, I analyzed the data to determine what the resulting concentration of dioxins in the Mad River would be if released from both groundwater and stormwater. To complete this analysis, I utilized the following information:

- I reviewed the historical investigations reports on concentration and distribution of dioxins and other related contaminants from the lumber mill (taken from DTSC website [EnviroStor case number 11240115](#) and summarized in Appendix A: History of Environmental Investigations
- I created a summary of environmental conditions in Appendix B: Summary of Environmental Conditions and Tables 1, through Tables 3,
- I researched transportation methods of dioxins to see if they could be transported further than claimed by previous investigation reports and communications to the Municipal Water District, and
- I made rough calculations for stormwater and groundwater transport of dioxins into the Mad River to determine what the resulting concentration would be (Tables 4 and 5).

This is not a formal risk assessment. A Human Health Risk Assessment (HHRA) was initiated by the Department of Toxic Substances Control (DTSC) in 2024, and we are awaiting its finalization. DTSC HHRA will provide their review and conclusion on the data. The Regional Water Board will review the HHRA and if the information presented warrants a change in our opinion we will send you an update.

Dioxins are hydrophobic and do not readily dissolve in groundwater. While some research indicates that dioxins may be transported as colloids (non-crystalline particles) in groundwater and should be considered when investigating transportation of dioxins (2007 Hoffman), the distance between the Site and Mad River is greater than typically observed for such colloid migration (meters not hundreds of meters) as seen in other dioxin sites (2008 Persson). Historic releases in 1968 and 1981 of pentachlorophenol (PCP) have impacted the Mad River killing an excess of 10,000 fish. The PCP spills originated from the dip tanks in the Green Chain area which are assumed to have flowed into the tributary Hall Creek southeast of M&P and then west into the Mad River (Brown and Caldwell June 14, 1996 Draft Remedial Design Document Figure C-4). That area has since been capped with reinforced concrete, further minimizing the potential for soil erosion or contaminant runoff, however it doesn't stop groundwater mobilization.

Groundwater and stormwater are the most likely transport mechanisms for contaminants from M&P into the Mad River, although I estimate that substantial amount of dioxins from M&P would be required to impact water quality at the intake wells. The Regional Water Board believes M&P is not a likely source of dioxin for the Municipal Water District intake wells because the size and volume of the Mad River would significantly dilute any residual contamination to levels well below thresholds of concern. Calculations for stormwater and groundwater dilution support this and are provided later in this memo in Section 6.0.

At the Water Board's request in one of our joint agency calls, DTSC has had SHN conduct some housekeeping activities in the summer of 2025 to cleanup on-site surface soil, which is expected to further reduce risk by decreasing the amount of contaminated legacy sediment on the Site that could be impacting stormwater. Continued stormwater monitoring will help determine whether site conditions are improving.

3.0 Background

The 26-acre site is located at 1619 Glendale Drive, Glendale, California, in Humboldt County (the Site). The Site was originally owned by the Molalla- Arcata Corporation from the 1940s to 1969. Blue Lake Forest Products began operation in 1986 and filed for Chapter 11 bankruptcy on April 23, 2002. DTSC has been involved in the Site since 1984 when they took emergency measures to contain contaminated materials left by M&P after their bankruptcy, then a subsection of the Department of Health Services (DHS). Royal Gold has been operating on the Site since March 2009 for their composting facility.

Lumber processing and lumber treatment structures were situated in the southern portion of the Site. The central portion of the Site was used for log storage (deck area). The northern portion of the Site was formerly occupied by a small pond and bog and was used by M&P as a landfill for disposal of mill-generated wood waste, mud, bark, and rocks, and is currently not considered part of the Site, however it was sampled in the past with monitoring wells MW-2, MW-3 and MW-4. The landfill was filled and graded by M&P utilizing the fill areas for log storage. The quantity of log wood waste disposal in this area is unknown. The surrounding area is mixed commercial and residential. There are residential buildings west, south and northeast of the property with industrial land to the east and parkland to the north.

The Regional Water Board began its involvement in the case in 1968, when it issued a Waste Discharge Requirement Order in response to a spill that killed in excess of ten thousand fish in the Mad River. The Regional Water Board conducted some surface investigations in 1981 to monitor the nearby Hall Creek after complaints about another spill. The Regional Water Board issued a Notice of Violation to McNamara and Peepe for this discharge and subsequently issued Cease and Desist Orders in 1982 and 1984. The California Department of Health Services (DHS) took over regulation after McNamara and Peepe filed for Chapter 11 bankruptcy in 1984.

The lead agency is currently DTSC, case No. 12240115, and the records for this case are available on their EnviroStor website. State of California Health and Welfare Agency Department of Health Services Toxic Substances Control Division (predecessor to DTSC) issued a Remedial Action Order on March 21, 1989 (RAO # HAS 88/89-023) and DTSC issued an Amended Remedial Action Order dated April 15, 1996 (RAO # HAS 95/96-072) outlining remedial activities. Fungal treatment of the lumber produced at the Site took place in two areas: the dip tank, also known as the Green Chain, and spray applications of anti-staining chemicals at the Planer Chain.

The main contaminants of concern (COC) are PCP, 1,3,4,6-tetrachlorophenol (TCP), and dioxins and furans. Dioxins and furans are quantified as 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD), with the TCDD equivalent calculated using the 2005 World Health Organization toxic equivalent factor (TCDD TEQ equivalents). It is our understanding that DTSC has plans in the future to compare the 2005 and the 2022 TEQ calculated

results before determining which to use. The focus of this memo will be on the dioxins and equivalents since that was the Municipal Water Districts main concern. More details on the history of M&P can be found in Appendix A: History of Environmental Investigations.

4.0 Hydrogeology

The Site is in the Mad River watershed within the northern California Coastal Ranges Geomorphic Province. Groundwater flows generally to the southeast. The closest water body is Hall Creek, approximately 800 feet south of Glendale Drive and the Site, which drains into Mad River, which is approximately 1,700 feet from the Site. Hall Creek is the confluence of three creeks, Mill Creek, Noisy Creek, and Hall Creek. The nearby municipal well, Mad River Pump Station 4, is over a mile and a half downstream from the Site. The most likely path of water to leave the Site is by way of groundwater or surface flow across Glendale Drive to Hall Creek and then into the Mad River.

Regional geology consists of clastic marine and non-marine sediments of the Wildcat Group and Falor formation, from the Miocene and early Pliocene to early Pleistocene (Caver and Burke, 1992). The area is largely within the Eel River Basin, where basement rocks are part of the Central and Coastal belts of the Franciscan Complex. The terrain is highly deformed and is the product of the tectonic forces in the region, dominated by subduction, tectonic accretion, and large-scale lateral translation (Clarke and McLaughlin 1992)

The site-specific lithology, taken from boring logs onsite, consists of alluvial deposits that alternate between fine grained sand and silt with coarse-grained sand and gravel in the channel areas. Silty clay and sandy clay are generally encountered between three and 10 feet below ground surface (bgs), thickness varies, and the upper aquifer appears to be semi-confined. The clay layer is underlain by silty sand and gravel layer down to 50 feet bgs. The sand/gravel layer is intermittently intersected by silty sand to clayey silt lenses. Groundwater is typically encountered between 6 and 10 feet bgs.

5.0 Remediation

In October 1985, DHS performed interim remedial measures during which the following activities took place: 1) draining PCP solution from the new dip tank building across Glendale Drive and placing the solution in drums, 2) placing deteriorating drums that were left on site into overpack drums. A total of 45 drums were filled and stored onsite for disposal. Some of these drums were not removed and were ordered to be disposed of in DTSC's response to the remediation work plan December 1994, which identified seven drums that still needed to be disposed of.

From [August-September 1997](#), the steel reinforced concrete cap (Cap) was installed at the former green-chain area. The Cap consists of a 15-inch-thick reinforced concrete slab approximately 90 feet by 154 feet. The green-chain structure had been removed and soil graded to prepare for the cap. Soil for the subgrade was rolled and compacted to above 95 percent relative compaction. The Cap was designed to resist water and allow continued use for the lumber mill operations.

December 28, 2018, DTSC decertified the 1998

6.0 Evaluation of potential pathways to the Mad River

The Regional Water Board in this memo considers the following potential exposure routes, including calculations, to determine how likely dioxins from M&P could affect the quality of water at the Municipal Water District's intake wells.

6.1 Storm Water calculations on run off into Mad River

Storm water or surface water could flow from the Site over land into Hall Creek and downstream to the Mad River. Dioxins have a high potential for being sorbed onto soil particles, meaning they have an affinity for attaching to solids and can potentially be transported attached to sediment during storm events into Hall Creek and then the Mad River. Two historical releases in the 1960s and 1980s involved surface spills that reached the Mad River. With the dip tanks now removed and the source soil capped, storm water is the most likely pathway for dioxins to enter the river due to contact with exposed surfaces in the saw mill area. As a result, calculations were conducted to determine the concentrations of dioxins in storm water that could pose a threat to the Mad River.

Since this is a viable pathway for contaminant transport, the Regional Water Board staff suggested that DTSC have surface soil from the Site and from cracks in the pavement removed, pressure wash the hard surfaces, collect the wastewater, and sample it to see if there are remaining contaminants that should be additionally removed to protect downstream receptors. This work was funded by DTSC grant and conducted by SHN in the summer of 2025. SHN should be submitting the technical memo of the results shortly. March 31, 2025, surface water sampling results (Table 2) were submitted to us despite the report still under DTSC review. Comparison of the results from after the summer 2025 pressure washing work should provide insight into its effectiveness in reducing future storm water mobilization of dioxins from the surface of the Site.

Depending on their placement, storm water sampling locations can help determine whether dioxins are leaving the Site. When appropriately located, they can serve as analogues for surface water discharge from the Site. Sampling point SW-5 (south of Glendale Drive), and SW-8 (south of SW-5 and within the McNord Site) are the two locations that can provide us with this information. Surface water sampling location SW-8 was only sampled twice (December 15, 2021, and April 14, 2022) and has not been sampled again due to access issues since it is on the McNord site. In December 2021, SW-8 was non-detect for TCDD, so the calculated TCDD equivalents are used. The sample SW-8 showed that the calculated TCDD equivalents decreased from 3.8 pg/L in December 2021 to 1.35 pg/L in April 2022. Two points of data are not enough to determine the trends at SW-8, so SW-5 is used as the evaluating point for dioxins leaving the Site. SW-5 only had one detection of TCDD in December 2022 at 1.55 pg/L, which is two and a half orders of magnitude above the 0.05 pg/L PHG for TCDD. While these concentrations are high compared to the PHG, considering the volume of the Mad

River compared to the volume of water that would be entering it from M&P it is unlikely that this translates into a measurable concentration above the PHG.

To test if there was a likelihood of contamination from M&P that could impact the Mad River, the Regional Water Board has created a worst-case calculation to estimate what surface water or groundwater would be if there were dioxin exceedances of the PHGs in the Mad River from contamination mobilizing off site. Surface water calculations are detailed in Table 4, even though SW-5 is the most reasonable analogue for concentrations leaving the Site as discussed above, SW-6 in the middle of the Mill Area, was used instead, since it has the highest historical TCDD equivalent calculated (Table 2, 121 pg/L) and represents the worst-case scenario.

Assumptions:

- 1) The amount of surface area contributing possible contamination from storm water runoff into the Mad River is the entire paved area of M&P. The M&P property is 26 acres, approximately 15 acres are paved, measured in polygon from Google Earth. Assuming contamination is coming from the limited area near the Sawmill and Planar Chain, as the Green Chain is capped and therefore wouldn't contribute to contaminated storm water, a rough estimate of surface discharge could be assumed to be closer to 2-acres, however I used the more conservative 15 acres to give us a worst-case scenario. Rainfall data from NOAA in the Eureka area from 2000-2025 shows the highest daily precipitation at 6.79 inches resulting in a volume of 6.79 inches of water over 15 acres.
- 2) All the surface water makes it into the Mad River, no loss from infiltration along the way to the Mad River.
- 3) The entire amount of rainwater collected at M&P is contaminated at a concentration of the highest detected storm water concentration. The highest detected TCDD concentration was 5.18 pg/L in 2023. The highest TCDD equivalent TCDD equivalents was calculated as 121 pg/L.

The highest detected concentrations of TCDD (5.18 pg/L, SW-2 Table 2) and the calculated TCDD equivalents (121 pg/L, SW-6, Table 2) were for the storm water sampling event on April 14th, 2022. During that event the Mad River flowed at a rate of 1,418 ft³/s during that rainstorm. Therefore, this date was used with the highest concentrations in the storm water calculations. Calculations were made assuming no loss of water, sorption, or anything reducing the dioxin concentration from the Site and that the entire mass of storm water leaving the Site is the same concentration as when it enters the Mad River.

Our calculations begin with calculating the potential discharge of storm water from M&P into the Mad River. Equation 4.1, Table 4, determines the discharge, or volumetric flow rate, for storm water (Q_{sw}). The discharge rate is calculated using assumption 1 with the paved surface area (A) and the precipitation data taken from the NOAA website from April 14, 2022 (Pr).

$$(4.1) Q_{sw} = A * Pr$$

The contaminant flux for storm water (M_{sw}) (equation 4.2, Table 4) was calculated by taking the maximum concentration of dioxin in storm water (C_{sw}) multiplied by the volume of rainwater from a single day (Q_{sw}). The volume of rainwater was estimated as 15 acres, the approximate paved area of M&P, and 0.93 inches of rain from the NOAA rainfall data (Table 3).

$$(4.2) M_{sw} = C_{sw} * Q_{sw}$$

The dilution of the dioxin in the Mad River would result in the concentration (C_r) (equation 4.3, Table 4), which was calculated by dividing the contaminant flux (M_{sw}) by the reported Mad River flow rate (Q_r) around the time of sampling taken from the California Nevada River Forecast Center NOAA website (CNRFC NOAA April 14, 2022). This storm event represented the highest calculated TCDD equivalent reported at M&P and used 121 pg/L from SW-6 (Table 2) as the entire storm water concentration. Samples were taken between 11am and 12pm on April 14, 2022, and the river was flowing at 1,418 ft³/s.

$$(4.3) C_r = \frac{M_{sw}}{Q_r}$$

The Mad River concentration after dilution from April 14, 2022 storm water sampling event, estimated in Equation 4.3 as 0.00075 pg/L, did not exceed the PHG of 0.05 pg/L.

To better estimate the conditions under which stormwater could elevate dioxin levels in the Mad River above PHGs, additional calculations were conducted as shown in Equation 4.4:

$$(4.4) C_{sw} = \frac{C_{PHG} * Q_r}{Q_{sw}}$$

The resulting predicted concentration (1,269 pg/L) agrees with the earlier estimate needing a storm water concentration at least an order of magnitude higher than the highest calculated TCDD equivalent in storm water at M&P (121 pg/L, SW-6, Table 2) to exceed the PHGs. The concentration at SW-5, the furthest south storm water monitoring point was 3.74 pg/L and would be a more likely representation of storm water leaving the Site. The contamination would be further diluted by travelling one mile to the municipal intake wells. Therefore, for this event, it is unlikely to have exceeded the PHGs at the intake wells. Since this was the highest recorded storm water result, and the highest concentration on-site and leaving the Site are orders of magnitude below what they would need to be to become a health risk, it's unlikely that storm water from M&P would be a source of dioxin in the municipal intake wells.

6.2 Groundwater calculations on potential migration into the Mad River

Groundwater migration from the Site would have to travel either directly towards the Mad River, which is approximately 1,500 feet southwest (Google Earth) or into Hall Creek which is approximately 1,200 feet south and then west into Mad River. Then it would be necessary to travel over a mile downstream to the municipal intake wells. This route is impractical for several reasons.

- The groundwater gradient at the Site is 0.04 ft/ft (2nd half Groundwater Monitoring report SHN), which would take 60 years to travel to the river (Table 5, estimated travel time).
- Dioxins were detected at low levels in groundwater, ranging from calculated TCDD equivalence 194 pg/L to 0.00125 pg/L at M&P (Table 1), which would be diluted when it reaches the Mad River.
- Dioxins are not known to travel far in groundwater, as DTSC has explained in several of their letters (Appendix A). Dioxins are hydrophobic and don't readily dissolve into groundwater.
- Dioxin's mobility in colloids was reported to be on the order of a few meters deep with the aid of surfactants (2008 Persson)

To further address the Municipal Water Districts concerns of discharge of dioxins from M&P into the Mad River by groundwater, I am providing additional analysis below of dioxin transport through groundwater beyond those provided above.

Quantifying the transport distance of dioxins in groundwater is complex without the aid of numerical modeling. Dioxins could become mobile in groundwater as colloids (2007 Hofmann) even if they aren't dissolved into the groundwater, by adsorbing onto fine suspended grains of sediment. These colloids theoretically could travel through the groundwater towards Hall Creek. In a joint agency call held in October 2022, Patrick Kelly of the U.S. EPA presented a groundwater transport model which estimated that dioxins would migrate approximately 850 feet in groundwater before their movement is significantly attenuated due to adsorption, retardation, and diffusion processes. The Mad River is approximately 1,300 feet southwest from the Green Chain and Hall Creek is approximately 1,200 feet south. The relatively low hydraulic gradient and high retardation factor due to the sorption of dioxins to soil greatly reduce the potential of groundwater contamination reaching the Mad River. In this memo, I attempted to test this theory by calculating what the groundwater dioxin concentration at M&P would need to be to before diluting in the Mad River exceed PHGs if they were the source of contamination.

To determine the groundwater concentration required for detection at the intake wells, I utilized simplified equations for advective transport and dilution into the Mad River. This calculation assumes no loss of TCDD due to degradation or retardation during its travel from M&P to the Mad River, representing a worst-case scenario. The groundwater calculations can be found in Table 5.

The following assumptions were made:

- 1) The most likely path of groundwater would be south to tributary Hall Creek and then into the Mad River. To maximize the impact, the calculations assume the groundwater is discharging directly into the Mad River instead of the Hall Creek tributary.
- 2) The plume reaches the Mad River and there is no retardation or sorption of dioxins while in transit, nor is there any degradation or filtration by subsurface media or directly at the municipal well treatment system.
- 3) The maximum concentration measured onsite was used and applied to the whole groundwater plume entering the Mad River.
- 4) The plume cross-sectional area interacting with the Mar River was assumed to be the largest area of groundwater impacts; from the Green Chain to the eastern boarder of the Site, which is 600 feet. The saturated thickness was assumed to be 15 feet; and most groundwater monitoring wells are screened between 10-20 feet bgs with depth to groundwater averaging around 5 feet bgs.
- 5) The amount of water in the Mad River diluting the groundwater was taken from NOAA database and a dry season flow of 47 ft³/s give us a worst-case scenario since rain events, which can be over 2,000 cubic feet per second, can dilute contaminant concentrations.

Since February 22, 2023, groundwater monitoring event at M&P had the highest dioxin detection, TCDD equivalent of 194 pg/L (Table 1, MW-1), hydrological data from this event was used for these calculations. At a high, the Mad River had a water level of 3 meters and was flowing at 1,332 ft³/s in February 2023 (CNRFC NOAA). The more conservative lower volume of the Mad River is 2 meters and 47 ft³/s, in October 2025 (CNRFC NOAA). Without knowing the exact location of the Municipal Water District's intake wells, the cross-sectional area near the Mad River Pump Station 4 was used. At its narrowest the Mad River is 42 meters and at the pump station it is 95 meters, measured approximately using Google Earth. The highest detection of groundwater for TCDD was 3.44 pg/L on February 28, 2024 (MW-1, Table 1).

Assuming there is no degradation or retardation of TCDD, a simple advection using the Darcy velocity equation was used to determine the transportation of the contaminated groundwater into the Mad River (Table 5).

Groundwater velocity (v , Equation 5.1, Table 5) was calculated using a concrete hydraulic conductivity (K) taken from the Fetter Hydrogeology textbook for sandy silts, which range from 10^{-6} to 10^{-4} cm/s (2001 Fetter), the K value used in the 2022 EPA model was 1.5×10^{-5} cm/s, therefore 10^{-5} cm/s was used in these calculations. The groundwater gradient (i) was taken from the SHN groundwater monitoring report of the 2nd quarter of 2024 which was 0.04, the EPA model was based on 2022 data and used 0.0325. Effective porosity was also taken from Fetter; sandy silt can range from 20%-35% (2001 Fetter), the EPA 2022 model used 22.5%, I used 20%.

$$(5.1) v = \frac{Ki}{n}$$

Based on this calculation, the groundwater velocity would be 0.002 meters per day or 0.006 feet per day which equates to approximately 600 years for groundwater to travel from the cap area to Hall Creek. This calculation shows, as the EPA did, that groundwater is unlikely to be contributing dioxins into the Mad River due to its very slow flow rate.

However, a dilution calculation was done to see what the concentration of dioxins would be if groundwater reached the Mad River from M&P to determine if it could be a potential future issue. To determine this, the amount of groundwater was estimated by calculating the mass flux from M&P.

The discharge or mass flux from groundwater (Q_g , Equation 5.2, Table 5) was calculated using a large cross-sectional area (A), assuming the entire plume can transverse the distance between the Site and the Mad River without any loss in concentration. For February 22, 2023, groundwater sampling event (Table 1), the highest calculated TCDD equivalence was 194 pg/L in MW-1, which is the highest calculated to date. MW-5 had a calculated TCDD equivalence of 0.0 pg/L and MW-11 was calculated at 0.008 pg/L, which are below the PHG of 0.05 pg/L, therefore the distance between these wells were assumed the maximum width of plume for our calculations. The width from MW-5 to MW-11 is approximately 400 feet, measured in Google Earth. The average saturated thickness of the groundwater was assumed to be 15 feet, since most wells are screened from 10 to 20 feet bgs and groundwater can be up 5 feet bgs. Multiplying the area by the groundwater velocity results in a volume of water entering the Mad River per day.

$$(5.2) Q_g = V * A$$

Groundwater velocity was calculated to be approximately 0.006 feet per day, (0.002 m/day). Compared to October 2025 Mad River flow rate of 47 ft³/s it is an insignificant amount of water being added to the river.

Assuming the dilution is equal to the difference in the flux of groundwater and river flow, two calculations were made to predict what the dioxin concentration would need to be at M&P in groundwater to raise the Mad River above PHGs. To figure out these groundwater concentrations, dioxin in groundwater (C_g) is calculated by assuming it is either equal to the mass flux of the Mad River (Q_r) at the MCL (C_{MCL}) or the PHG (C_{PHG}) divided by the mass flux of the groundwater.

Equations 5.3 and 5.4 were developed to estimate the groundwater concentration (C_g) required to exceed the MCL or PHG in the Mad River. The reason both the MCL and PHG were used in calculations is because the MCL for dioxin (1.0 pg/L) is closer to the method detection limits (MDL) that laboratories have been reporting, which ranged from 0.7 pg/L to 4.7 pg/L. This theory could be confirmed by testing the river to determine if dioxins are exceeding the MCLs. PHGs are what the Municipal Water District was concerned with and therefore I wanted to make sure and address their concerns.

$$(5.3) C_g = \frac{C_{MCL} * Q_r}{Q_g} \quad (5.4) C_g = \frac{C_{PHG} * Q_r}{Q_g}$$

For both equations the discharge of the Mad River was kept the same, using a more conservative discharge rate or mass flux for the Mad River (Q_r). The discharge of the Mad River fluctuates between the wet and dry seasons; it's been as high as 9,000 ft³/s and the average for the dry seasons being 57 ft³/s (USGS). For example, the Mad River fish kill events in October 1968 and February 1981 (Appendix A), had discharge rates of 56.7 ft³/s and 2,504.6 ft³/s, respectively, according to USGS statistics (USGS). During February 2023, when the highest groundwater TCDD equivalents was calculated, the Mad River discharge rate was 1,332 ft³/s, however these calculations used a more conservative lower discharge rate from this year (October 2025, NOAA) of 47 ft³/s.

The groundwater concentration of dioxin (C_g) was calculated to estimate the level required to exceed the MCL when discharged into the Mad River. The first calculation (Equation 5.3, Table 5) yielded a result of 119,384 pg/L, five orders of magnitude above the MCL and three orders of magnitude higher than the highest calculated TCDD equivalence. A second calculation (Equation 5.4, Table 5) estimated the concentration needed to exceed the PHG, resulting in 5,969 pg/L, four orders of magnitude above the PHG and one order of magnitude above the highest TCDD equivalence.

The highest TCDD equivalent calculated value at MW-1 (194 pg/L on 2/22/2023, Table 1) is an order of magnitude below what I estimate would be required and this was only in a single well, not the entire plume, The other wells have been calculated with a TCDD equivalence to be between 0.0175 pg/L and 5.46 pg/L (Table 1). These calculations are a gross overestimate of what would be entering the river since numerous attenuating factors like adsorption to soil media, dispersion, diffusion and natural attenuation are not considered. We also assumed that water is taken directly from the Mad River and is unfiltered when considering the risk. However, the municipal wells themselves do not draw directly from the river, as pointed out in the January 2024 Consumer Confidence Report by the Municipal Water District. The Municipal Water District's wells draw water from the Mad River from the water-bearing zone 60-90 feet below the riverbed.

“The Humboldt Bay Municipal Water District is a regional water wholesaler that supplies drinking water to local communities. Drinking water delivered by the District is drawn from wells below the bed of the Mad River northeast of Arcata. This water-bearing ground below the river is called an aquifer. These wells, called Ranney Wells, draw water from the sands and gravel of the aquifer at depths of 60 to 90 feet, thereby providing a natural filtration process.”

Groundwater monitoring wells at M&P are screened from 6 to 25 feet below ground surface (bgs), therefore the intake wells are drawing from deeper underground and not directly from the Mad River. Based on these calculations, even with the assumptions made, there does not appear to be evidence that the dioxins at M&P are a significant risk to the intake wells.

Using the above calculations, dioxins have not been measured high enough at M&P, to meet these conditions at the Mad River 1,250 feet away, let alone one mile downgradient where the municipal intake wells are.

7.0 Conclusions

At the request of the Municipal Water District, the Regional Water Board has presented information explaining our opinion that the potential transport of dioxins in surface water and groundwater from M&P into the Mad River would not result in dioxin PHG exceedances at the Municipal Water District's intake wells. Based on our review of historical and ongoing investigations, monitoring data, remedial activities, and calculations on effects of groundwater or storm water to the Mad River, Regional Water Board staff have determined that the Site does not pose a significant risk of dioxin entering the Municipal Water District's intake wells above the PHG.

However, the irrigation well located south of M&P at 1551 Glendale Drive remains potentially vulnerable since there have been detections in the past. This well is closer in proximity to the Green Chain and sawmill areas which still show dioxin detections. This well should continue to be monitored regularly to ensure protection of residents.

8.0 Recommendations

Based on the findings of this memo, the Regional Water Board will be making the following recommendations.

1. Due to the potential for dioxins to exist in colloidal form, the Regional Water Board recommends that groundwater samples not be filtered. Since dioxin containing colloids can be as large as 0.7 micron (2008 Persson), filtration with 0.45-micron filters may remove colloidal-bound dioxins, leading to an underestimation of actual contaminant concentrations. The Regional Water Board suggests doing both filtered and unfiltered samples to compare the difference.
2. Current laboratory method detection limits (MDLs) in EPA Method 8290A for dioxins appear to be higher than those used in analyses prior to 2022. The Regional Water Board recommends that DTSC explore whether the current laboratory can achieve lower MDLs, and/or consider using an alternative certified laboratory capable of improved sensitivity for dioxin analysis.
3. The Regional Water Board recommends continued storm water and groundwater monitoring, especially following cleanup efforts conducted in 2025, to evaluate whether site conditions are improving.
4. The Regional Water Board proposes that during a future sampling event, the Regional Water Board collects surface water samples from Hall Creek and the Mad River and also collect groundwater split samples with DTSC consultant from groundwater locations with historic high levels dioxin to confirm results.

9.0 Disclaimer

This memo is not intended to replace or limit the authority of DTSC to regulate the Site; this memo is to summarize the Regional Water Board's history of regulation of the Site and its evaluation of current conditions.

10.0 References

2011 Grant, Sharon, Munro Mortimer, Gavin Stevenson, Don Malcom, and Caroline Gaus. Facilitated Transport of Dioxins in soil following Unintentional Release of Pesticide-Surfactant Formulations. *Environ Sci. Technol.* 2011, 45, 406-411 (2011).

2007 Hofmann, T., Wendelborn, A. Colloid facilitated transport of polychlorinated dibenzo-*p*-dioxins and dibenzofurans (PCDD/Fs) to the groundwater at Ma Da Area, Vietnam. *Env Sci Poll Res Int* **14**, 223–224 (2007).
<https://doi.org/10.1065/espr2007.02.389>

2008 Persson, Y., Shchukarev, A., Öberg, L. *et al.* Dioxins, chlorophenols and other chlorinated organic pollutants in colloidal and water fractions of groundwater from a contaminated sawmill site. *Environ Sci Pollut Res* **15**, 463–471 (2008).
<https://doi.org/10.1007/s11356-008-0014-3>

2006 Alvarez, Pedro J.J., Walter A Illman. Bioremediation and natural attenuation: process fundamentals and mathematical models. Published 2006 John Wiley & Sons, Inc. IBN-13 978-0-471-65043-0

2001 Fetter, C. W., Applied Hydrogeology Fourth Edition, Published 2001 by Prentice-Hall, Inc

USGS <https://waterdata.usgs.gov//monitoring-location/USGS-11481000> accessed November 24, 2025

NOAA <https://water.noaa.gov/gauges/arcc1> accessed November 24, 2025

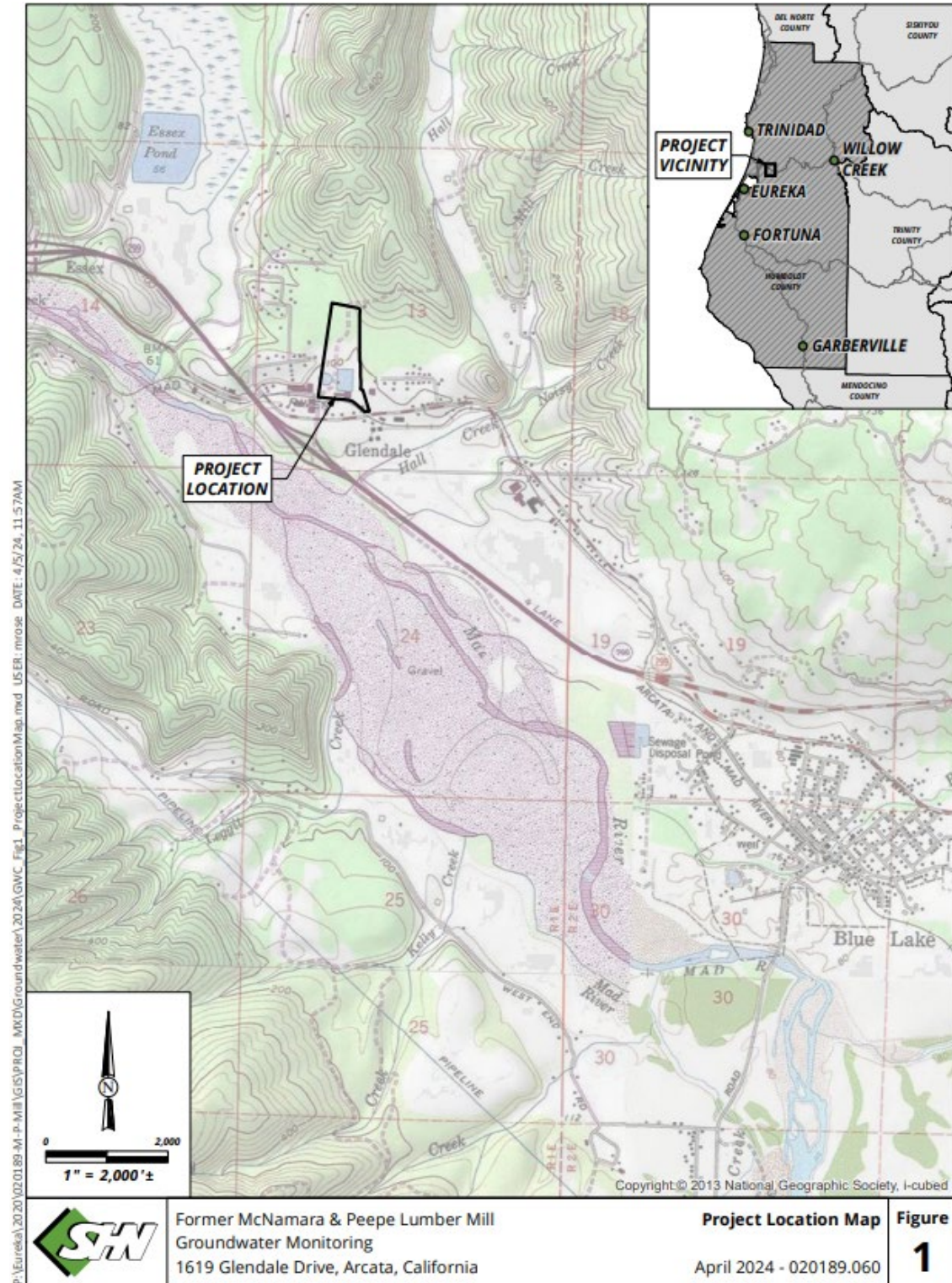


Figure 1: SHN 2024 Map of McNamara & Peepe Lumber Mill.

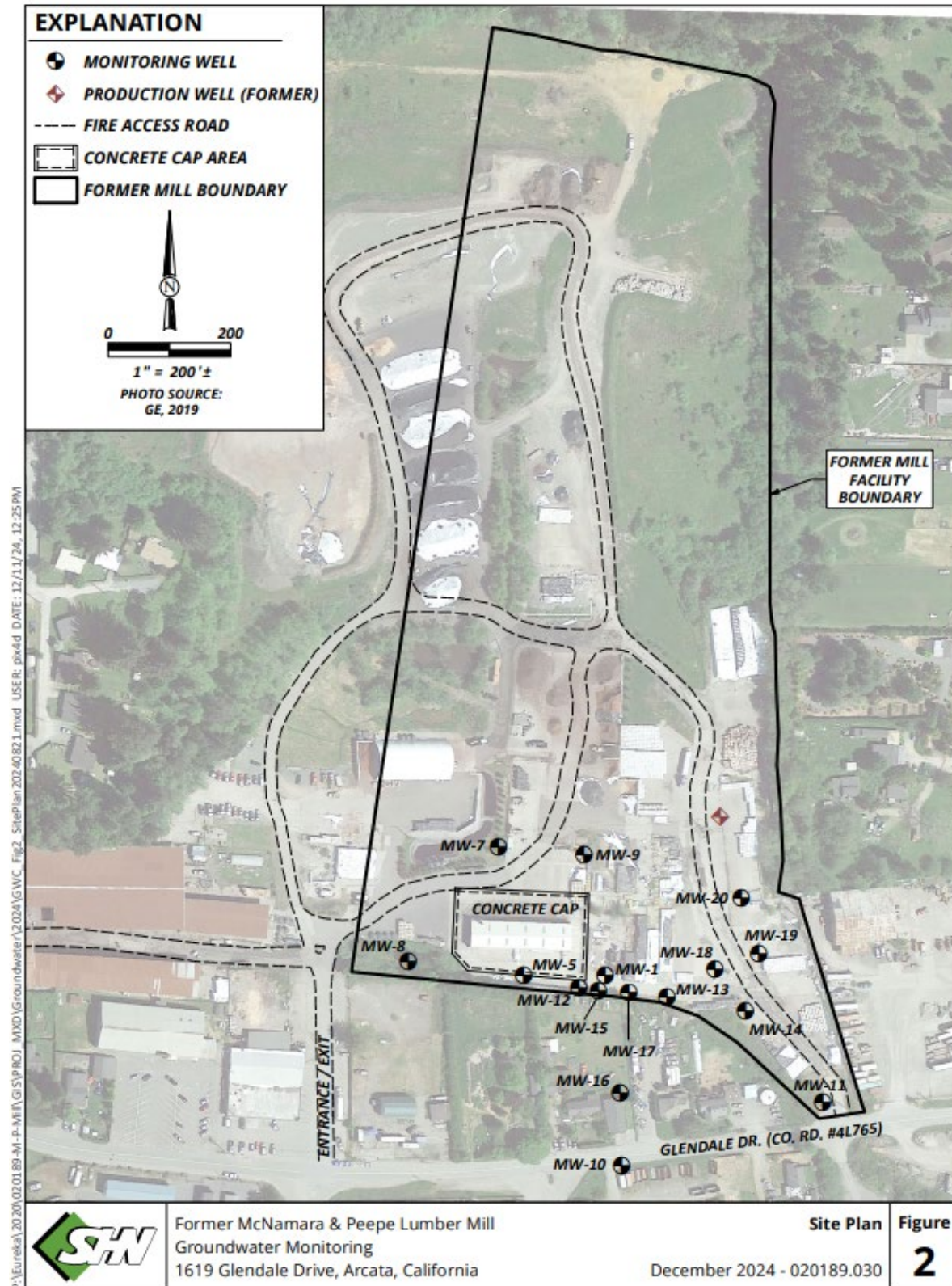


Figure 2. SHN 2024. Map showing locations of Groundwater Monitoring Wells

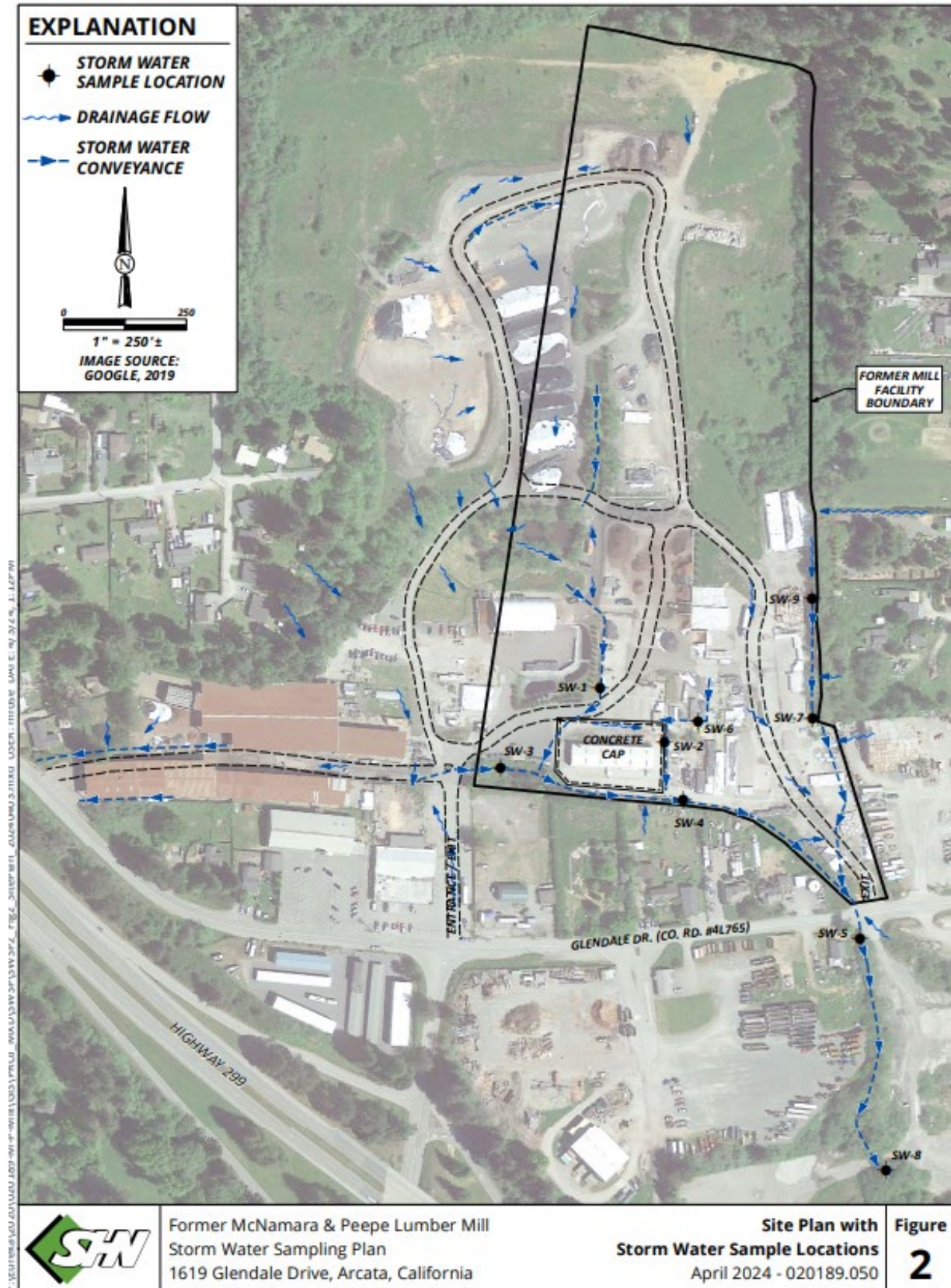


Figure 3: SHN 2024. Map showing location of Storm Water Sampling Locations.

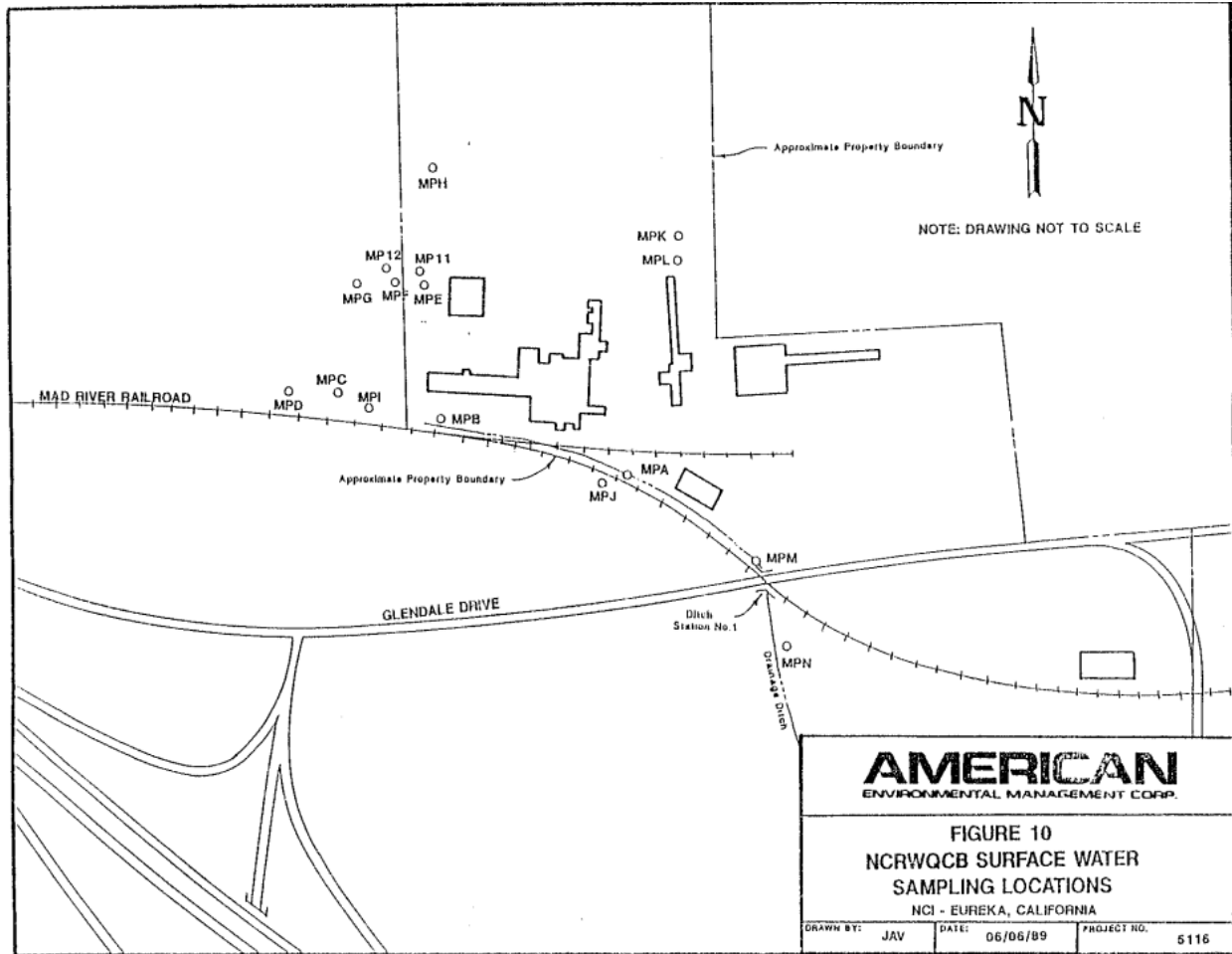


Figure 4a: 1989 Americal Environmental Management Corp surface water sampling locations (MPA through MPN)

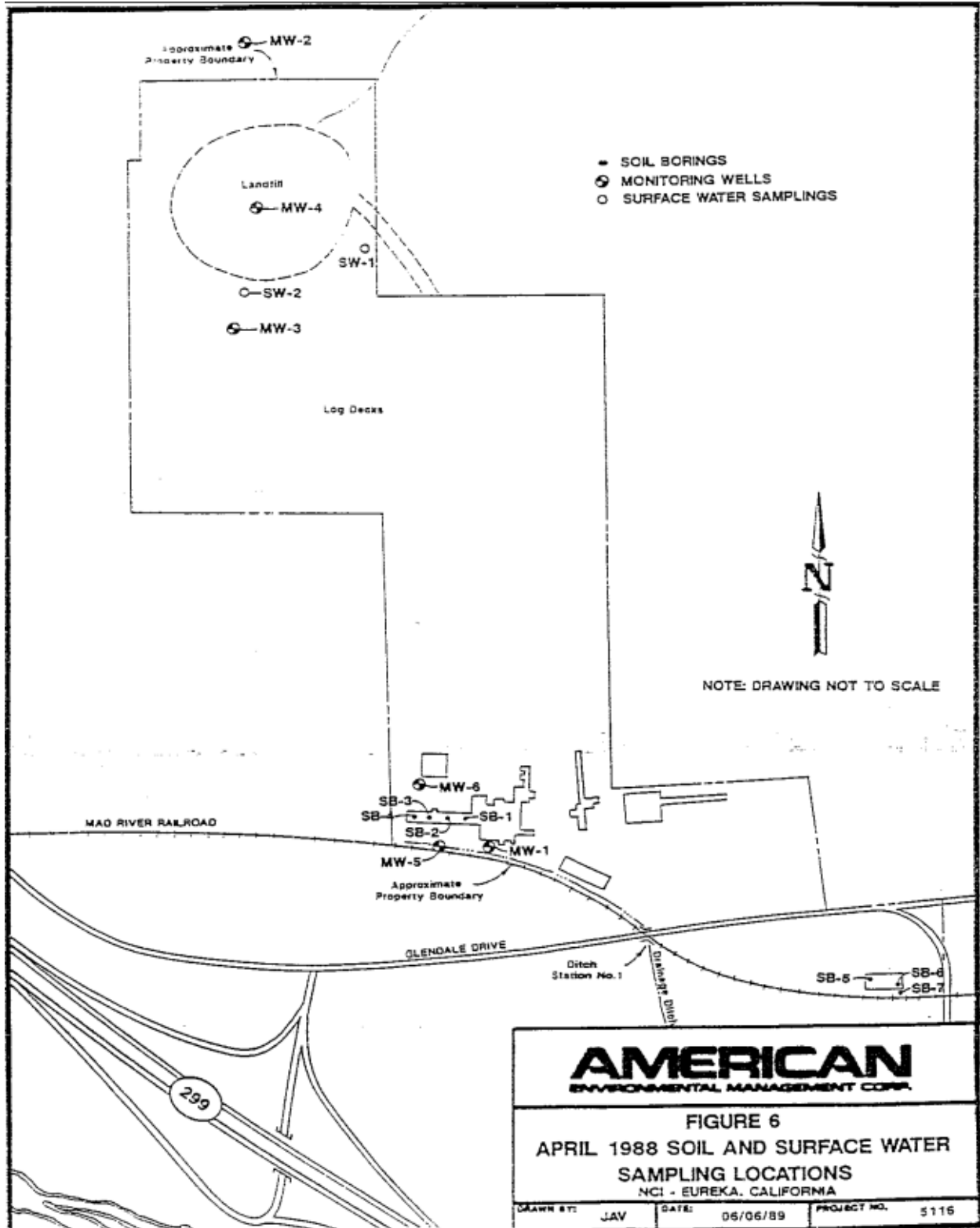


Figure 4b: 1989 Americal Environmental Management Corp surface water sampling locations (SW-1 and SW-2)

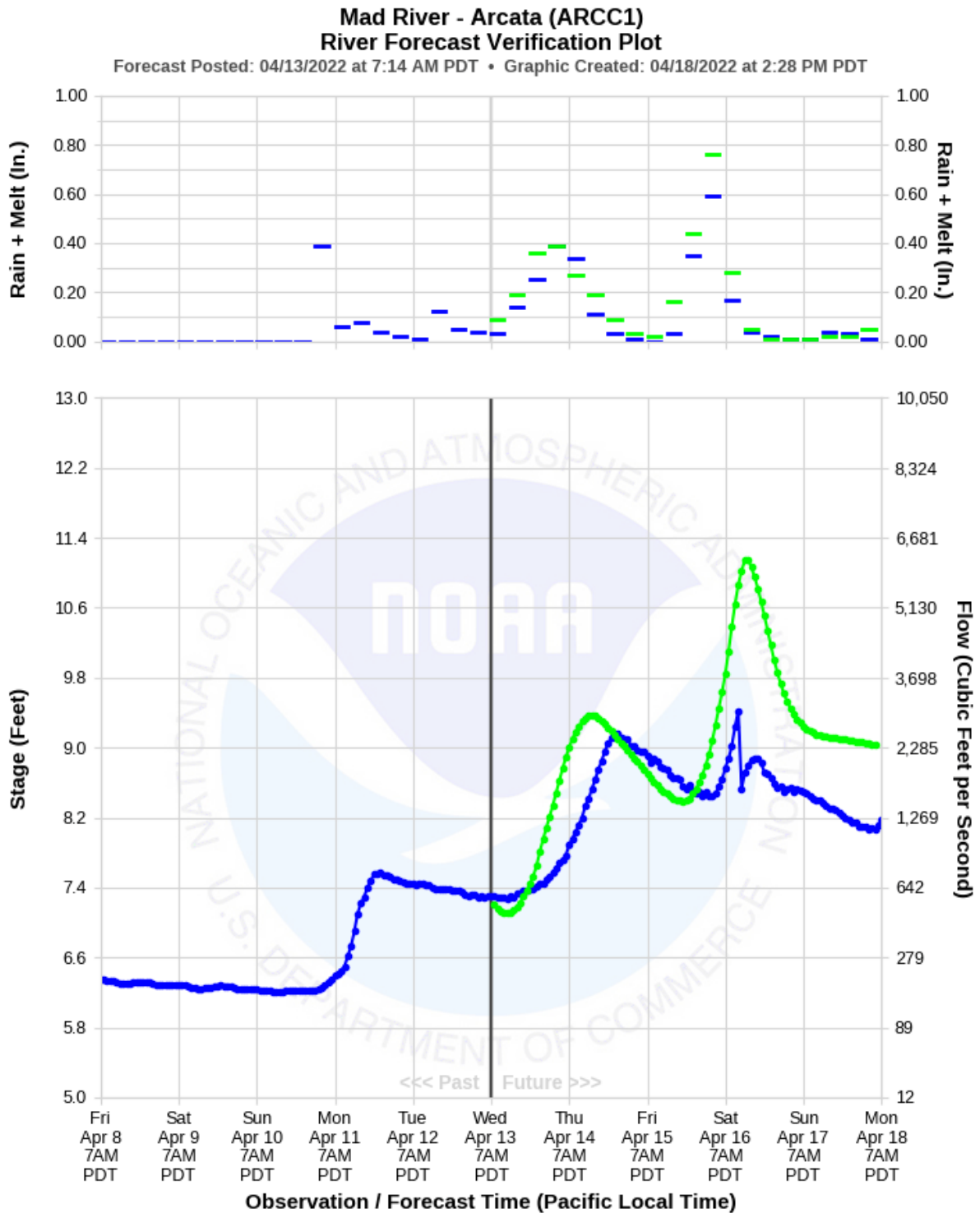


Figure 5: NOAA graph showing Mad River flow rate and rain fall data.

Table 1: Groundwater results

Well Name	Date Sampled	PCP	TCP	2,3,7,8-TCDD	2005 WHO TEQ	OCDD	HpCDD
		(µg/L)	(µg/L)	(pg/L)	(pg/L)	(pg/L)	(pg/L)
MW-1	5/13/2015	690	14		--		
MW-1	11/11/2015	610	120		--		
MW-1	5/23/2016	830	7.1		--		
MW-1	12/14/2016	1.2	<1.0		--		
MW-1	5/8/2017	570	8.4		--		
MW-1	8/21/2019	1,200	29		31.0		
MW-1	3/5/2021	460	5.6	<0.941	93.6		
MW-1	2/22/2022	920	7.7	<0.727	34.2		
MW-1	8/23/2022	1,300	<1000	<0.937	34.0		
MW-1	2/22/2023	3.4	<1.0	<0.767	194.0		
MW-1	8/23/2023	400	12	<5.11	48.3		
MW-1	2/28/2024	600	8.4	3.44	154.0		
MW-1	8/22/2024	94	2.4	<1.92	1.15		
MW-5	5/13/2015	35	4.3		--		
MW-5	11/11/2015	65	3.3		--		
MW-5	5/23/2016	56	1.6		--		
MW-5	12/14/2016	39	2.3		--		
MW-5	5/8/2017	46	2.3		--		
MW-5	3/5/2021	18	<1.0	<0.622	0.0361		
MW-5	2/22/2022	19	1.1	<0.696	0.0334		
MW-5	8/23/2022	0.63	<1.0	<0.789	0.0104		
MW-5	2/22/2023	9.5	0.65	<0.433	0.00		
MW-5	8/22/2023	4.6	0.62	<5.2	0.0		
MW-5	2/27/2024	8.5	<1.0	<4.76	5.5		
MW-5	8/22/2024	<0.3	<1.0	<1.93	0.0		
MW-7	5/13/2015	<0.3	<1.0		--		
MW-7	11/11/2015	<0.3	<1.0		--		
MW-7	5/23/2016	<0.3	<1.0		--		
MW-7	12/14/2016	<0.3	<1.0		--		
MW-7	5/8/2017	<0.3	<1.0		--		
MW-7	8/21/2019	<0.3	<1.0		--		
MW-7	3/5/2021	<0.3	<1.0		--		
MW-7	2/22/2022	0.26	<1.0		--		
MW-7	8/23/2022	0.14	<1.0		--		
MW-7	2/22/2023	<0.3	<1.0		--		
MW-7	8/22/2023	0.17	<1.0		--		
MW-7	2/27/2024	<0.3	<1.0		--		
MW-7	8/21/2024	<0.3	<1.0		--		
MW-8	5/13/2015	<0.3	<1.0		--		
MW-8	11/11/2015	<0.3	<1.0		--		
MW-8	5/23/2016	<0.3	<1.0		--		
MW-8	12/14/2016	<0.3	<1.0		--		
MW-8	5/8/2017	<0.3	<1.0		--		
MW-8	8/21/2019	<0.3	<1.0		--		
MW-8	3/5/2021	<0.3	<1.0		--		
MW-8	2/22/2022	0.13	<1.0		--		
MW-8	8/23/2022	<0.3	<1.0		--		
MW-8	2/22/2023	<0.3	<1.0		--		
MW-8	8/22/2023	<0.3	<1.0		--		
MW-8	2/27/2024	<0.3	<1.0		--		
MW-8	8/22/2024	<0.3	<1.0		--		

Table 1: Groundwater results

Well Name	Date Sampled	PCP	TCP	2,3,7,8-TCDD	2005 WHO TEQ	OCDD	HpCDD
MW-9	5/13/2015	<0.3	<1.0		--		
MW-9	11/11/2015	<0.3	<1.0		--		
MW-9	5/23/2016	<0.3	<1.0		--		
MW-9	12/14/2016	<0.3	<1.0		--		
MW-9	5/8/2017	<0.3	<1.0		--		
MW-9	8/21/2019	<0.3	<1.0		--		
MW-9	3/5/2021	<0.3	<1.0		--		
MW-9	2/22/2022	0.13	<1.0		--		
MW-9	8/23/2022	<0.3	<1.0		--		
MW-9	2/22/2023	<0.3	<1.0		--		
MW-9	8/22/2023	<0.3	<1.0		--		
MW-9	2/27/2024	<0.3	<1.0		--		
MW-9	8/22/2024	<0.3	<1.0		--		
MW-10	5/13/2015	<0.3	<1.0		--		
MW-10	11/11/2015	<0.3	<1.0		--		
MW-10	5/23/2016	<0.3	<1.0		--		
MW-10	12/14/2016	<0.3	<1.0		--		
MW-10	5/8/2017	<0.3	<1.0		--		
MW-10	8/21/2019	<0.3	<1.0		0.1		
MW-10	8/21/2019	<0.3	<1.0		3.7		
MW-10	3/5/2021	<0.3	<1.0	<0.539	0.0438		
MW-10	3/5/2021	<0.3	<1.0				
MW-10	2/22/2022	0.12	<1.0	<0.658	1.35		
MW-10	2/22/2022	0.26	<1.0	<0.92	0.0459		
MW-10	8/23/2022	<0.3	<1.0	<0.956	2.4		
MW-10	8/23/2022	<0.3	<1.0	<0.92	2.110		
MW-10	2/22/2023	<0.3	<1.0	<0.619	2.230		
MW-10	2/22/2023	<0.3	<1.0	<0.66	4.020		
MW-10	8/22/2023	<0.3	<1.0	<5.2	0.000		
MW-10	8/22/2023			<4.84	0.000		
MW-10	2/27/2024	<0.3	<1.0	<4.74	0.097		
MW-10	2/27/2024	<0.3	<1.0	<4.69	0.018		
MW-10	8/22/2024	<0.3	<1.0	<1.99	0.081		
MW-11	5/13/2015	<0.3	<1.0				
MW-11	11/11/2015	<0.3	<1.0				
MW-11	5/23/2016	<0.3	<1.0				
MW-11	12/14/2016	<0.3	<1.0				
MW-11	5/8/2017	1.9	<1.0				
MW-11	8/21/2019	<0.3	<1.0				
MW-11	3/5/2021	<0.3	<1.0				
MW-11	2/22/2022	0.14	<1.0	0.983	0.0805		
MW-11	8/23/2022	<0.3	<1.0	<0.773	0.0669		
MW-11	2/22/2023	<0.3	<1.0	<0.621	0.0286		
MW-11	8/22/2023	<0.3	<1.0	<5.39	0.0300		
MW-11	2/27/2026	<0.3	<1.0	<4.76	0.00726		
MW-11	8/22/2024	<0.3	<1.0	<1.96	0.000		

Table 1: Groundwater results

Well Name	Date Sampled	PCP	TCP	2,3,7,8-TCDD	2005 WHO TEQ	OCDD	HpCDD
MW-12	5/13/2015	52	<1.0				
MW-12	11/11/2015	51	<1.0				
MW-12	5/23/2016	120	<1.0				
MW-12	12/14/2016	46	<1.0				
MW-12	5/8/2017	81	<1.0				
MW-12	8/21/2019	110	1.7				
MW-12	3/5/2021	120	<1.0	<0.542	0.0284		
MW-12	2/22/2022	120	0.49	<0.656	0.0337		
MW-12	8/23/2022	130	<100	<0.82	0.00513		
MW-12	2/22/2023	9.4	0.61	<0.448	0.0312		
MW-12	8/22/2023	<0.3	<1.0	<4.82	0.0408		
MW-12	2/27/2024	14	<1.0	<4.78	0.0125		
MW-12	8/22/2024	16	<1.0	<1.97	0.0		
MW-13	2/22/2022	0.27	<1.0	<0.677	0.0399		
MW-13	8/23/2022	0.77	<1.0	<0.837	0.00408		
MW-13	2/22/2023	0.17	<1.0	<0.638	0.00435		
MW-13	8/22/2023	0.42	<1.0	<4.71	0.0		
MW-13	2/27/2024	1.6	<1.0	<4.76	3.5		
MW-13	8/22/2024	<0.3	<1.0	<1.97	0.0		
MW-14	2/22/2022	85	1.7				
MW-14	8/23/2022	84	<10	<0.897	0.671		
MW-14	2/22/2023	48	<1.0	<0.53	0.00801		
MW-14	8/22/2023	57	1.3	<4.84	0.0399		
MW-14	2/28/2024	60	1.6	<4.76	0.0		
MW-14	8/22/2024	1.6	0.69	<1.74	0.0		
MW-15	8/22/2023	8.7	0.54	<4.89	0.257		
MW-15	2/27/2024	0.37	<1.0	<4.76	1.97		
MW-15	8/22/2024	0.92	<1.0	<1.9	0.00258		
MW-16	8/22/2023	5.2	<1.0	<5.09	0.0175	58.2	<8.35
MW-16	2/27/2024	<0.3	<1.0	<4.76	0.0	<23.8	<7.62
MW-16	8/22/2024	<0.3	<1.0	<1.86	0.0	<10.8	<3.09
MW-17	8/22/2024	4.9	2.1	<1.92	0.0367		
MW-18	8/21/2024	1.6	<1.0	<1.9	0.0		
MW-19	8/21/2024	34	0.29	<1.9	0.0		
MW-19	8/21/2024	28	<1.0	<1.86	0.0		
MW-20	8/21/2024	<0.3	<1.0	<1.86	0.0		
1551 Glendale	1/19/2022	0.54		<0.950	0.0464	17.8	4.64
1551 Glendale	6/13/2022	<0.3	<1.0	<.744	0.00125	4.17	<2.18
1551 Glendale	8/18/2023	<0.3	<1.0	<0.635	0.0		
Evaluation Criteria							
MCL		30	NR	1	NR		
PHGs		0.3	NR	0.05	NR		

Glossery of Terms and abbreviations

2,3,7,8-TCDD = 2, 3,7, 8-Tetrachlorodibenzotetrachlorodibenzo-p-dioxin

ND = <1.0

Red = 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.

Bold = detected above MCL

MCL: maximum contaminant level, State Water Resources Control Board, August 16, 2023

PHGs: California public health goals, Office of Environmental Health Hazard Assessment, August 16, 2023

Table 2: Storm Water Results

Sample Location	Date Sampled	PCP (µg/L)	TCP (µg/L)	2,3,7,8-TCDD (pg/L)	2005 WHO TEQ (pg/L)
		µg/L	µg/L	pg/L	pg/L
MPA	Feb-82	0.31	0.28		
MPA	Mar-82	10	0.98		
MPB	Feb-82	<0.18	<0.10		
MPC	Feb-82	<0.10	<0.20		
MPC	Mar-82	<0.11	0.16		
MPD	Feb-82	1.5	<0.19		
MPD	Mar-82	1.6	0.24		
MPE	Feb-82	<0.10	<0.17		
MPE	Mar-82	<0.11	0.18		
MPF	Feb-82	<0.10	<0.20		
MPG	Feb-82	<0.10	<0.20		
MPG	Mar-82	<0.10	<0.14		
MPH	Feb-82	<0.10	0.21		
MPI	Feb-82	0.65	0.23		
MPI	Mar-82	1.9	1.1		
MPJ	Feb-82	1.0	0.53		
MPJ	Mar-82	2.0	2.2		
MPK	Feb-82	<0.10	<0.16		
MPL	Feb-82	<0.10	<0.19		
MPM	Feb-82	<0.10	0.32		
MPM	Mar-82	<0.12	0.66		
MPN	Feb-82	2	0.34		
MPN	Mar-82	1.5	1.0		
SW-1 (north)	Apr-88	ND	--		
SW-2 (north)	Apr-88	ND	--		
SW-1	2/18/2021	<0.30	<1.0	<0.512	0.0736
SW-1	12/15/2021	<0.30	<1.0	<0.721	0.351
SW-1	4/14/2022	<0.30	<1.0	<0.743	0.181
SW-1	12/8/2022	<0.30	<1.0	<0.592	4.37
SW-1	2/27/2023	<0.30	<1.0	<0.714	0.00
SW-1	12/7/2023	<0.30	<1.0	<1.69	0.00
SW-1	3/11/2024	<0.30	<1.0	<4.76	0.0123
SW-1	11/20/2024	<0.30	<1.0	<4.76	0.177
SW-1	3/31/2025	<0.30	<1.0	<50	0
SW-2	2/18/2021	<0.30	<1.0	<0.609	7.79
SW-2	12/15/2021	<0.30	<1.0	<0.508	2.7
SW-2 (filtered)	12/15/2021	--	--	<0.645	0.308
SW-2	4/14/2022	<0.30	<1.0	5.18	96.1
SW-2	12/8/2022	<0.30	<1.0	<0.604	2.58
SW-2	2/27/2023	<0.30	<1.0	<1.36	1.73
SW-2	12/7/2023	<0.30	<1.0	<1.69	0.643
SW-2	3/11/2024	<0.30	<1.0	<4.72	0.358
SW-2	11/20/2024	<0.30	<1.0	<4.77	0.61
SW-2	3/31/2025	<0.30	<1.0	<47.5	1.44
SW-3	2/18/2021	0.099	<1.0	<0.530	4.44
SW-3	12/15/2021	0.091	<1.0	<0.688	6.82
SW-3	4/14/2022	<0.30	<1.0	<0.745	0.179
SW-3	12/8/2022	<0.30	<1.0	<0.733	4.47
SW-3	2/27/2023	<0.30	<1.0	<0.618	0.262
SW-3	12/7/2023	<0.30	<1.0	<1.69	0.0477

Table 2: Storm Water Results

Sample Location	Date Sampled	PCP (µg/L)	TCP (µg/L)	2,3,7,8-TCDD (pg/L)	2005 WHO TEQ (pg/L)
SW-3	3/11/2024	<0.30	<1.0	<4.69	0.135
SW-3	11/20/2024	<0.30	<1.0	<4.75	2.05
SW-3	3/31/2025	<0.30	<1.0	<50.0	1.02
SW-4	2/18/2021	0.11	<1.0	<0.459	11.4
SW-4	12/15/2021	<0.30	<1.0	<0.715	5.87
SW-4 (filtered)	12/15/2021	--	--	<0.715	0.945
SW-4	4/14/2022	<0.30	<1.0	<0.817	0.233
SW-4	12/8/2022	<0.30	<1.0	<0.715	3.3
SW-4	2/27/2023	<0.30	<1.0	<0.597	0.255
SW-4	12/7/2023	<0.30	<1.0	<1.69	0.945
SW-4	3/11/2024	<0.30	<1.0	<4.76	1.45
SW-4	11/20/2024	<0.30	<1.0	<4.76	1.35
SW-4	3/31/2025	<0.30	<1.0	<24.2	2.47
SW-5	2/18/2021	0.14	<1.0	<0.762	8.04
SW-5	12/15/2021	<0.30	<1.0	<0.602	4.06
SW-5 (filtered)	12/15/2021	--	--	<0.785	1.39
SW-5	4/14/2022	<0.30	<1.0	<0.697	3.74
SW-5	12/8/2022	<0.30	<1.0	1.55	19.1
SW-5	2/27/2023	<0.30	<1.0	<0.466	0.483
SW-5	12/7/2023	<0.30	<1.0	<1.70	1.67
SW-5	3/11/2024	<0.30	<1.0	<4.69	2.37
SW-5	11/20/2024	<0.30	<1.0	<4.78	2.86
SW-5	3/31/2025	<0.30	<1.0	<23.9	1.9
SW-6	12/15/2021	<0.30	<1.0	4.12	63.9
SW-6 (filtered)	12/15/2021	--	--	<0.713	0.0572
SW-6	4/14/2022	0.48	<1.0	4.95	121
SW-6	12/8/2022	<0.30	<1.0	<0.700	8.54
SW-6	2/27/2023	<0.30	<1.0	0.805	6.1
SW-6	12/7/2023	<0.30	<1.0	<1.70	1.36
SW-6	3/11/2024	<0.30	<1.0	<4.74	2.08
SW-6	11/20/2024	<0.30	<1.0	<4.78	0.541
SW-6	3/31/2025	<0.30	<1.0	<47.9	1.38
SW-7	12/15/2021	0.21	<1.0	<0.634	4.87
SW-7 (filtered)	12/15/2021	--	--	<0.728	0.97
SW-7	4/14/2022	0.15	<1.0	<0.771	0.317
SW-7	12/8/2022	<0.30	<1.0	2.59	36.8
SW-7	2/27/2023	<0.30	<1.0	<0.799	1.66
SW-7	12/7/2023	0.31	<1.0	<1.70	3.23
SW-7	3/11/2024	<0.30	<1.0	<4.72	3.31
SW-7	11/20/2024	<0.30	<1.0	<4.81	1.45
SW-7	3/31/2025	<0.30	<1.0	<24.0	8.34
SW-8	12/15/2021	<0.30	<1.0	<0.797	3.8
SW-8 (filtered)	12/15/2021	--	--	<0.733	2.38
SW-8	4/14/2022	<0.30	<1.0	<0.715	1.35
SW-9	3/11/2024	<0.30	<1.0	<4.72	0.120
SW-9	11/20/2024	<0.30	<1.0	<4.78	0.328
SW-9	3/31/2025	<0.30	<1.0	<4.83	1.73
Average		0.20		3.20	6.78

Table 2: Storm Water Results

Sample Location	Date Sampled	PCP (µg/L)	TCP (µg/L)	2,3,7,8-TCDD (pg/L)	2005 WHO TEQ (pg/L)
Max		0.48		5.18	121
STDev					19.41
MCL		30	NR	1	1
PHGs		0.3	NR	0.05	0.05

2,3,7,8-TCDD = 2, 3,7, 8-Tetrachlorodibenzotetrachlorodibenzo-p-dioxin

-- = not sampled

ND = <1.0

Bold = detected above MCL

MCL: maximum contaminant level, State Water Resources Control Board

PHGs: California public health goals, Office of Environmental Health Hazard Assessment

Table 3: Rainfall Data

Monthly Highest Precipitation (daily maximum) for Eureka Area, CA (ThreadEx)
 Data from Eureka Area from NOAA website: <https://www.weather.gov/wrh/Climate?wfo=eka>

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2000	1.89	1.25	0.51	0.92	0.39	0.15	0.02	T	0.36	0.9	0.97	0.39	1.89
2001	1.2	0.63	0.8	0.61	0.57	0.51	0.15	0.15	0.14	0.45	1.2	2.01	2.01
2002	1.52	2.26	0.64	0.5	0.34	0.16	0.01	0.01	0.03	0.03	1.36	6.79	6.79
2003	1.43	1.63	0.97	1.17	0.59	0.03	0.01	0.43	0.16	0.16	0.95	1.77	1.77
2004	1.24	1.89	0.79	0.54	0.72	0.03	0.02	0.17	0.31	1.31	0.63	1.77	1.89
2005	1.59	0.6	1.35	1.23	0.83	1.06	0.02	0.02	0.06	0.61	1.63	1.93	1.93
2006	1.71	2.04	1.37	1.48	0.34	0.21	0.02	T	0.04	0.3	0.86	0.98	2.04
2007	0.97	2.32	0.62	0.76	0.31	0.19	0.88	0.06	0.44	1.99	0.61	1.59	2.32
2008	1.42	0.84	0.62	0.93	0.03	0.15	0.01	0.21	0.04	0.54	1.05	1.35	1.42
2009	0.43	1.08	1.61	0.27	1.74	0.08	0.04	0.01	0.99	1.09	1.28	1	1.74
2010	1.62	1.76	1.22	1.53	0.9	0.9	0.02	0.05	0.62	2.05	0.74	1.6	2.05
2011	1.03	1.34	1.39	1.46	0.3	0.65	0.06	0.04	0.3	1.07	1.3	0.83	1.46
2012	2.26	0.81	2.2	1.22	0.2	0.75	0.52	0.02	0.03	0.64	2.15	1.62	2.26
2013	0.63	0.52	1.04	1.04	0.5	0.19	0	0.02	1.38	0.02	0.53	0.23	1.38
2014	0.54	1.26	2.58	0.28	0.25	0.28	0.01	0.01	2.59	0.79	0.76	1.38	2.59
2015	0.5	1.6	0.95	1.66	0.06	0.02	0.08	0.36	0.21	0.65	1.47	2.2	2.2
2016	2.28	0.79	1.88	0.59	0.28	0.02	0.3	0.04	0.01	1.97	1.05	2.31	2.31
2017	1.6	1.15	1.16	0.67	0.57	0.37	0.04	0.02	0.34	1.36	1.18	0.81	1.6
2018	1.69	0.58	1.19	1.31	0.46	0.36	0.02	0.02	0.19	0.42	1.39	0.95	1.69
2019	2.26	2.56	1.27	0.85	0.7	0	0	0.11	1.05	0.89	0.9	1.44	2.56
2020	0.78	0.26	0.96	1.22	1.38	0.09	0.01	0.06	0.28	0.36	1.16	0.87	1.38
2021	1.51	0.73	1.76	0.42	0.09	0.73	0.14	0.01	0.78	1.01	0.95	0.96	1.76
2022	0.64	0.24	0.55	0.93	0.46	0.7	0.35	0.03	0.35	0.07	1.4	1.91	1.91
2023	1.09	1.02	1.54	0.97	0.34	0.1	0.01	0.06	1.67	0.62	1.11	1.77	1.77
2024	2.45	1.85	1.07	0.36	1.99	0.57	0.03	1.19	0.03	0.77	2.12	1.65	2.45
2025	1.71	1.52	1.71	0.49	0.46	0.07	0.02	0.03	0.83	0.04	M	M	1.71
Mean	1.38	1.25	1.22	0.9	0.57	0.32	0.11	0.12	0.51	0.77	1.15	1.6	2.11
Max	2.45	2.56	2.58	1.66	1.99	1.06	0.88	1.19	2.59	2.05	2.15	6.79	6.79
	2024	2019	2014	2015	2024	2005	2007	2024	2014	2010	2012	2002	2002
Min	0.43	0.24	0.51	0.27	0.03	0	0	T	0.01	0.02	0.53	0.23	1.38
	2009	2022	2000	2009	2008	2019	2019	2006	2016	2013	2013	2013	2020

MONTHLY SUMMARIZED DATA - calculates averages, totals, daily extremes or frequencies for the selected variable for each month of the year for the selected range of years. Note: trace precipitation/snowfall/snow depth amounts are treated as zero in sums, mean, and number of days counts. Annual average temperatures are the average of the twelve monthly values. Temperatures are reported in degrees F; precipitation, snowfall and snow depth are reported in inches.

Table 3: Rainfall Data

Monthly Total Precipitation for EUREKA WFO WOODLEY ISLAND, CA
 Data from Eureka Area from NOAA website: <https://www.weather.gov/wrh/Climate?wfo=eka>

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2000	9.71	7	2.81	2.15	1.86	0.54	0.04	T	0.55	2.99	3.51	1.97	33.13
2001	3.79	3.6	2.45	2.54	0.71	0.69	0.2	0.21	0.28	1	7.71	11.56	34.74
2002	6.37	5.76	4.32	2.42	0.55	0.28	0.03	0.01	0.06	0.06	2.66	23.31	45.83
2003	5.51	3.84	4.91	11.25	1.74	0.04	0.02	0.49	0.35	0.55	5.78	11.35	45.83
2004	6.29	8.12	2.38	1.68	1.37	0.06	0.06	0.43	0.68	5.71	1.87	9.43	38.08
2005	5.91	2.41	6.24	4.7	3.9	3.08	0.05	0.07	0.08	2.4	8.52	12.72	50.08
2006	12.09	6.34	11.11	4.08	1.03	0.35	0.04	T	0.09	0.58	7.41	7.09	50.21
2007	1.86	11.86	2.51	2.72	0.86	0.46	0.97	0.08	0.6	4.92	2.33	7.3	36.47
2008	9.7	2.73	3.16	2.12	0.04	0.24	0.02	0.47	0.05	0.93	4.05	6.66	30.17
2009	1.58	6.2	5.45	1.23	2.93	0.18	0.06	0.02	1.03	1.95	4.15	4.17	28.95
2010	9.29	4.2	6.06	7.76	3.51	2.31	0.04	0.15	1.39	4.26	4.69	10.08	53.74
2011	2.23	3.62	11.88	4.07	1.43	1.29	0.17	0.04	0.37	4.21	3.86	2.22	35.39
2012	7.76	2.63	12.02	4.76	0.77	2	0.67	0.07	0.04	2.72	6.36	10.97	50.77
2013	2.57	1.78	3.09	2.44	1.17	0.43	0	0.08	3.14	0.05	1.29	0.56	16.6
2014	1.35	6.09	6.25	1.37	0.58	0.35	0.02	0.02	3.09	4.74	3.89	9.75	37.5
2015	1.36	5.04	3.21	2.57	0.07	0.04	0.15	0.41	0.27	1.18	4.88	14.66	33.84
2016	12.06	2.98	8.11	2.84	0.76	0.02	0.54	0.04	0.01	10.92	6.98	7.87	53.13
2017	10.51	11.1	7.97	5.46	1.31	0.59	0.07	0.05	1.01	1.64	7.4	1.94	49.05
2018	7.86	2.87	8.5	5.02	0.79	0.7	0.03	0.05	0.19	0.85	4.94	4.95	36.75
2019	6.67	14.43	4.79	2.51	2.61	0	0	0.18	1.92	1.51	1.75	7.63	44
2020	7.5	0.6	3.69	2.05	4.73	0.2	0.03	0.08	0.74	0.41	2.55	3.96	26.54
2021	7.1	4.32	3.93	0.71	0.25	1.06	0.21	0.03	1.24	4.02	2.85	7.25	32.97
2022	1.9	0.51	1.49	4.57	1.36	1.53	0.76	0.11	0.43	0.14	5.36	8.54	26.7
2023	7.89	5.74	9.25	2.66	0.97	0.23	0.02	0.11	1.83	2.09	3.85	7.78	42.42
2024	11.85	8.85	7.42	1.18	3	0.79	0.05	1.47	0.07	2.45	10.85	9.88	57.86
2025	3.82	7.5	10.7	1.95	0.62	0.07	0.05	0.06	1.71	M	M	M	M
Mean	6.33	5.39	5.91	3.34	1.5	0.67	0.17	0.18	0.82	2.49	4.78	8.14	39.63
Max	12.09	14.43	12.02	11.25	4.73	3.08	0.97	1.47	3.14	10.92	10.85	23.31	57.86
	2006	2019	2012	2003	2020	2005	2007	2024	2013	2016	2024	2002	2024
Min	1.35	0.51	1.49	0.71	0.04	0	0	T	0.01	0.05	1.29	0.56	16.6
	2014	2022	2022	2021	2008	2019	2019	2006	2016	2013	2013	2013	2013

MONTHLY SUMMARIZED DATA - calculates averages, totals, daily extremes or frequencies for the selected variable for each month of the year for the selected range of years. Note: trace precipitation/snowfall/snow depth amounts are treated as zero in sums, mean, and number of days counts. Annual average temperatures are the average of the twelve monthly values. Temperatures are reported in degrees F; precipitation, snowfall and snow depth are reported in inches.

Table 4: Storm Water Calculations

Worst Case using highest TCDD detected Storm Water Event April 14, 2022.				
Estimated volume of storm water leaving M&P				
Explanation	Variable	Units	Value	Sources
(4.1) $Q_{sw} = A * Pr$				
Surface Area of paved area	A	Acres	15	From Google Earth
		ft ²	653,400	
Max daily rainfall precipitation on highest observed concentration date, April 14, 2022	Pr	in/day	0.93	Table 3: NOAA rainfall data
		ft/day	0.08	
Discharge/Volumetric flow of storm water leaving property in a day	Q _{sw}	ft ³ /day	5.06E+04	
		m ³ /day	136.72	
Estimated mass of dioxin leaving M&P in a rain event				
(4.2) Contaminant flux (M_{sw}) = ($C_{sw} * Q_{sw}$)				
Max Storm Water Concentration for TCDD	C _{sw}	pg/L	19.10	Table 2: SW-5, April 14, 2022
		pg/m ³	1.91E+04	
Mass of contamination in Storm Water leaving site per day	M _{sw}	pg/day	2.61E+06	
Estimated river concentration when mass flux dilutes into river				
(4.3) $Cr = \frac{M_{sw}}{Q_r}$				
April 14, 2022 Mad River flow (around time of sampling, 12pm)	Q _r	ft ³ /sec	1,418	CNRFC - Ensemble Products - ARCC1
		m ³ /day	3,469,250	
Concentration of river at entry point assuming all rainwater on site is contaminated at max SW concentration	Cr	pg/m ³	0.75	
		pg/L	0.00075	
Worst Case using highest calculated TCDD equivalent TEQ for Storm Water Event, April 14, 2022.				
Estimated volume of storm water leaving M&P				
(4.1) $Q_{sw} = A * Pr$				
Explanation	Variable	Units	Value	Sources
Surface Area of paved area	A	Acres	15	
		ft ²	653,400	
Max daily rainfall precipitation on highest observed concentration date, April 14, 2022	Pr	in/day	0.93	Table 3: NOAA rainfall data
		ft/day	0.08	
Discharge of rain leaving property in a day as storm water	Q _{sw}	ft ³ /day	5.06E+04	
		m ³ /day	136.72	
Estimated mass of dioxin leaving M&P in a rain event				
(4.2) Contaminant flux (M_{sw}) = ($C_{sw} * Q_{sw}$)				
Max Storm Water Concentration for TCDD	C _{sw}	pg/L	121.00	Table 2: SW-6, April 14, 2022
		pg/m ³	1.21E+05	
Mass of contamination in Storm Water leaving site per day	M _{sw}	pg/day	1.65E+07	

Table 4: Storm Water Calculations

Estimated river concentration when mass flux dilutes into river				
$(4.3) C_r = \frac{M_{SW}}{Q_r}$				
April 14, 2022 Mad River discharge (around time of sampling, 12pm)	Q _r	ft ³ /sec	1,418	CNRFC - Ensemble Products - ARCC1
		m ³ /day	3.47E+06	
Concentration of river at entry point assuming all rainwater on site is contaminated at max SW concentration	C _r	pg/m ³	4.77	
		pg/L	0.00477	
Estimated storm water concentration of dioxin required to exceed PHG in river				
Storm Water concentration to Exceed PHG $(4.4) C_{SW} = \frac{C_{PHG} \cdot Q_r}{Q_{SW}}$				
April 14, 2022 Mad River discharge (around time of sampling, 12pm)	Q _r	ft ³ /sec	1,418	CNRFC - Ensemble Products - ARCC1
		m ³ /day	3.47E+06	
PHG	C_{PHG}	pg/L	0.05	
Storm Water concentration to Exceed PHG when mixed with Mad River	C_{SW}	pg/L	1,269	
MCL		pg/L	1	September 2010 OEHHA
PHGs		pg/L	0.05	September 2010 OEHHA

References

Applied Hydrogeology, fourth edition by C.W. Fetter 2001

TCDD (Dioxin) PHG	September 2010 OEHHA, https://oehha.ca.gov/sites/default/files/media/downloads/water/chemicals/phg/091610tcddphg.pdf
NOAA website	Mad River https://water.noaa.gov/gauges/arcc1
EnviroStor	Case 12240115

Table 5: Groundwater Calculations

Groundwater velocity leaving site	Using Darcy velocity of groundwater leaving the site, Advection only			
Calculate velocity of groundwater at M&P	(5.1) $V = \frac{K \cdot i}{n}$			2001 Fetter, Equation 10.4
Explanation	Variable	Units	Value	Source
Hydraulic conductivity	K	cm/s	1.00E-05	2001 Fetter, sandy silts (10 ⁻⁶ cm/s to 10 ⁻⁴ cm/s)
		m/day	0.009	
		m/day	0.013	EPA High K Scenario used 1.5E-05 cm/s
Convert cm/s to m/day		1x10 ⁻⁴ cm/s = 864 m/day		2001 Fetter
Groundwater hydrologic gradient	i	ft/ft	0.040	Second Half 2024 Groundwater Monitoring Report
Effective porosity for sandy silt	n	%	0.20	2001 Fetter, 20%-35%
Distance to Mad River	L	m	381.000	
Velocity, linear seepage, how fast groundwater flows towards the river	v	m/day	0.002	
		ft/day	0.006	
		$t = \frac{L}{v}$		
Estimated travel time from source to river	t	days	220,486	It would take 60 years for groundwater to make it's way from M&P to the river through groundwater advection
		years	604	
Discharge/Mass Flux from groundwater to river	Assuming a continuous contaminant plume discharging is making it into the river with no degradation or retardation, the contaminant flux Qc is entering the river from the groundwater at M&P			
Explanation	Variable	Units	Value	Source
Discharge rate of groundwater going offsite from M&P <small>Cross sectional area of plume, assume 15 feet depth (most wells are screened 10-20 feet bgs and groundwater is around 5 feet bgs). Width is assumed as max area of detection assuming 400 between MW-5 and MW-11 which were ND in 2020</small>	(5.2) Qg = v * A			2001 Fetter Equation 2.13
	A	ft ²	6,000	
		m ²	557	
		0.0929 ft ² = 1 m ²		
Groundwater discharge rate into river converted from cubic meters per day to liters per day	Qg	m ³ /day	0.96	

Table 5: Groundwater Calculations

Groundwater concentration calculation where plume enters Mad River		Assuming instant mixing of groundwater discharge with river flow, the resulting contaminant concentration in the river Cr can be approximated		
Explanation	Variable	Units	Value	Source
October 2025 discharge rate is close to average per quarter (57 cubic feet per second in third quarter)	Qr	ft ³ /s	47.0	From NOAA October 2025 Mad River station, https://water.noaa.gov/gauges/arcc1
		m ³ /day	1.15E+05	
		1 ft ³ /s = 2446.58 m ³ /day		2001 Fetter
Discharge rate of Mad River at highest TCDD equivalent calculated at M&P in groundwater (February 22, 2023)	Qr	ft ³ /s	1,332	From NOAA February 22, 2023 Mad River station, https://water.noaa.gov/gauges/arcc1
		m ³ /day	3.26E+06	
M&P concentration in groundwater for Mad River to exceeds MCL or PHG		Cr needs to be at least the detection limit to be detected, calculation of what groundwater would have to be with river dilution to be detected and assuming the flux of groundwater stays the same.		
Back calculate the groundwater concentration based on river concentration	$(5.3) C_g = \frac{C_{MCL} * Q_r}{Q_g}$			
Explanation	Variable	Units	Value	Source
Maximum Contaminant Level (MCL)	C _{MCL}	pg/L	1.0	September 2010 OEHHA
Concentration would have to be in groundwater at M&P to be detectable in Mad River above MCL a C_{MCL}	Cg	pg/L	119,384	Estimated concentration groundwater would have to be to be above MCL at lowest reported flow rate on Mad River while sampling dioxins (October 2020)
Concentration would have to be in groundwater at M&P to be detectable in Mad River above MCL a C _{MCL}	Cg	pg/L	3,384,575	Estimated concentration groundwater would have to be to be above MCL in river using February 22, 2023, highest detected M&P groundwater concentration date.
Estimated concentration of groundwater to become above PHG in river	$(5.4) C_g = \frac{C_{PHG} * Q_r}{Q_g}$			
Explanation	Variable	Units	Value	Source
Public Health Goal for TCDD, OEHHA September 2010.	C _{PHG}	pg/L	0.05	OEHHA September 2010
Concentration groundwater at M&P would have to be above PHGs for dioxins in Mad River at C_{PHG}	Cg	pg/L	5,969	Estimated concentration groundwater would have to be to be above PHG at lowest reported flow rate on Mad River while sampling dioxins (October 2020)
Concentration would have to be in groundwater at M&P to be detectable in Mad River above PHG a C _{PHG}	Cg	pg/L	169,229	Estimated concentration groundwater would have to be to be above MCL in river using February 22, 2023, highest detected M&P groundwater concentration date.

Table 5: Groundwater Calculations

MCL		pg/L	1.0	September 2010 OEHHA
PHGs		pg/L	0.05	September 2010 OEHHA
Concentration groundwater, highest TEQ equivalent for TCDD detected in groundwater	Cg ₁	pg/L	194	Table 1, MW-1, February 22, 2023
Concentration groundwater, highest TCDD detected in groundwater	Cg ₂	pg/L	3.44	Table 1, MW-1, February 28, 2024

References

Applied Hydrogeology, fourth edition by C.W. Fetter 2001

TCDD (Dioxin) PHG

[September 2010 OEHHA,](https://oehha.ca.gov/sites/default/files/media/downloads/water/chemicals/phg/091610tcddphg.pdf)

<https://oehha.ca.gov/sites/default/files/media/downloads/water/chemicals/phg/091610tcddphg.pdf>

NOAA website

[Mad River https://water.noaa.gov/gauges/arcc1](https://water.noaa.gov/gauges/arcc1)

[EnviroStor](#)

[Case 12240115](#)

Appendix A: History of Environmental Investigations and Monitoring

- October 11, 1968, during operation by Molalla-Arcata a spill was reported from the PCP containing dip tank (also called the Green Chain), that caused a large fish kill in the Mad River.
- December 4, 1968, the Regional Water Board established waste discharge requirements (WDR), for the Site. The WDRs specified that no chemical fungicide or other toxic materials should be discharged into waters of the state. The Regional Water Board conducted a site inspection and noted two areas that used PCP and tetrachlorophenol (TCP) to treat lumber. The dip tank (Green Chain) and spray system at the Planer Chain. Drippings were observed to fall onto unsealed soil below the Planer Chain.
- February 18, 1981, the Regional Water Board conducted sampling from Hall Creek, which drains into the Mad River. Concentrations of PCP were detected at up to 200 parts per billion (ppb) in Hall Creek. As a result, M&P was required to monitor stream and drainage ditch runoff on a regular basis.
- April 10, 1981, the Regional Water Board notified McNamara and Peepe that the company was in violation of the WDR and requested immediate action to correct the problem. Water Code section 13267 Investigative Order for monitoring discharge was also issued.
- June 28, 1981, during operation by McNamara and Peepe, another spill at the dip tank was reported. The green chain building stayed in place, but the dip tank was dismantled and ceased spray applications of anti-stain chemicals in the Planar Chain area. Anti-stain application was moved south of Glendale to a new Dip Tank Building with a new dip tank at this time.
- August 11, 1981, the Regional Water Board notified M&P that dipping of lumber in the green chain dip tank should be terminated. McNamara and Peepe discontinued use of the green chain dip tank and began dipping lumber in a unit dip tank located in a building on the south side of Glendale Drive.
- January 28, 1982, the Regional Water Board revised WDR 82-2 and Cease and Desist Order 82-3 for the Site, updating from the December 1968 language in conformance with WDR's for similar industries. At the same time the Water Board issued a Cease-and-Desist Order (Order No. 82-3) which required 1) McNamara and Peepe to determine the sources of chlorinated phenol discharges from the Site; 2) prepare a plan for eliminating discharges from these sources; and 3) implement the plan.
- In February and March 1982, Regional Water Board sampled surface water for PCP and TCP along Mad River Railroad, at sampling locations MPA through MPN (Table 2, Figure 4a and Figure 4b), which go through the Site and cross Glendale Drive. Offsite upstream sampling reportedly revealed low levels of chlorinated phenols in the surface water entering the Site.
- March 29, 1984, the Regional Water Board rescinded the Cease-and-Desist Order. The Rescission of the order occurred after investigation and cleanup activities were conducted by McNamara and Peepe.
- May 1984, operations were shut down by M&P when they filed for bankruptcy.

- June 1984, the State Water Resources Control Board (State Water Board) received a notification that the in-ground dip tank containing PCP was onsite and possibly leaked.
- October 18, 1984, the DHS conducted an inspection of the Site as a follow-up to notification from the State Water Board. Soil samples and a sample of the solution in the dip tank were collected. PCP was detected in the dip tank located south of Glendale; lead (Pb) was detected in the soil.
- March 1985, DHS issued a Notice of Violation of the California Hazardous Waste Control Act to M&P, ordering remedial actions to be performed at the Site. Which M&P was financially incapable of fulfilling.
- October 1985, the DHS took emergency measures to contain and repackage PCP and other hazardous or unknown materials from 13 deteriorating drums and the dip tank in the building south of Glendale Drive. A total of 45 drums were used to contain hazardous materials and disposed of by NCI, Incorporated.
- November 1986, Blue Lake Forest Products took over and resumed operations at the dip tank across from Glendale Drive using the chemical fungicide copper-8-quinolinolate. According to Trans Tech, 1994 this fungicide does not contain PCP.
- June 30, 1987-December 11, 1988, investigations were conducted by NCI and American Environmental Management Corporation, taking surface water, soil and groundwater samples from the Site to characterize the extent of contamination.
- March 21, 1989, DTSC, then a division of the DHS, issued a remedial action order (RAO) docket # HAS 88/89-023. DTSC named the following contaminants of concern: chlorinated dibenzodioxins (dioxins), dibenzofurans (furans), PCP, and TCP. It was noted that all of these had been detected in the solution of the dip tank across Glendale and required M&P to dispose of them.
- June 1989, American Environmental Management Corporation submitted a Final Remedial Investigation Report, detailing a soil, surface water, and groundwater investigation conducted from June 1987 through June 1989. In addition, dip tank building surface and groundwater sampling from February 1, 1982, through November 15, 1988, occurred. Only PCP and TCP were analyzed in these samples and detected in samples ranging from non-detect (<0.10 µg/L PCP (MPG) to 10 µg/L PCP, MPA and dip station ditch).
- November 1993, Trans Tech Consultants submits a Final Remedial Action Plan (RAP). The RAP contains a summary of investigation findings, Health and Environmental Risk Assessment (1994 Risk Assessment), and Remediation Feasibility Study where they evaluate alternative remedial alternatives. The remedial action chosen was to install a reinforced concrete cap (Cap) over the former Green Chain area, identifying the Cap as the most cost-effective solution.
- December 1994, DTSC approved the Final Remedial Action Plan that will install a Cap over the Green Chain area.
- April 15, 1996, a DTSC Remedial Action Order required respondents (M&P corporation, Arkley Lumber, Molalla Forest Products inc., Masonite Corporation, the Estate of James G. Laier, Simpson Timber Company and Blue Lake Forest Products Inc) to perform all work consistent with and based on CERCLA

requirements. A Remedial Design (RD) was to be submitted describing details for a final Remedial Action Plan (RAP) within 30 days. Deed restrictions would be placed on the property. The RAP should be implemented upon approval of DTSC. Operations and maintenance shall comply with approved RAP and RD. A Five-Year review will be submitted after the FAP is completed.

- December 1997, Cap installed.
- February 4, 1998, a deed restriction is placed on the property restricting future use from being a residence, hospital, day care facility, or school. The Cap is also required to be continually maintained and DTSC shall be granted access to the property for inspection and monitoring.
- March 9, 1998, DTSC certified remedial action was complete, with the exception that the groundwater and Cap are monitored and inspected as part of long-term cleanup efforts.
- April 23, 2002, Blue Lake Forest Products filed for Chapter 11 bankruptcy and ceased operations.
- 2005 Blue Lake ceased to monitor the groundwater and Cap, and DTSC began conducting soil and groundwater investigations to monitor Cap.
- December 28, 2018, DTSC issued a decertification of March 9, 1998, citing that the previous Remedial Action Certification (RAC) was no longer protective of human health and the environment and therefore remedial action was no longer considered complete. Reasons for the 1998 RAC being no longer protective were: (a) rising groundwater levels have mobilized PCP/TCP in soil beneath the Green Chain area cap due to cessation of the onsite production well in 2002, (b) surface water can percolate through PCP/TCP impacted soil present below the former saw mill area, which is partially unpaved and/or covered with building foundation in poor condition and (c) PCP/TCP can migrate offsite in groundwater or surface water runoff across the former saw mill area. DTSC planned to prepare a Remedial Action Plan Amendment and select the appropriate remedy or remedies necessary to mitigate the impact of hazardous substances at the Site.
- January 2, 2020, stop work order for ERRG, the consultant who was working for DTSC to monitor the groundwater and surface water, was issued, and the contract expired.
- September 24, 2020, DTSC response to Humboldt Bay Municipal Water District states that surface water monitoring will be added to the new contract.
- December 16, 2020, SHN Consulting was awarded a work order to continue work on monitoring and inspection of the Site.
- February 3, 2021, SHN workplan for surface water sampling proposed. Surface water sampling began semi-annually to test water leaving the Site.
- March 7, 2022, Humboldt Baykeeper had the domestic irrigation well at 1551 Glendale Drive sampled. The residential property is located approximately 200 feet south of the former Green Chain area. Dioxin congeners Octachlorodibenzo-P-dioxin (OCDD) and 1,2,3,4,6,7,8-Heptachlorodibenzo-P-dioxin (HpCDD) were reported at 17.8 pg/L and 4.64 pg/L respectively. TEQ were calculated using the 2005 WHO method to be 0.00534 pg/L from the OCDD and 0.0464 pg/L from the HpCDD.

- June 13, 2022, GHD sampled the domestic irrigation well at 1551 Glendale Drive and had a monitoring well (MW-16) installed near the irrigation well (August 18, 2023) to monitor contamination migrating offsite. HpOCDD were non-detect. OCDD was detected at 4.17 pg/L, TEQ was calculated at 0.00125 pg/L.
- October 26, 2022, SHN continues semi-annual sampling of groundwater wells. TCDD was not detected in any of the wells above laboratory reporting limits.
- December 8, 2022, SHN conducts storm water sampling, TCDD was detected in SW-5 at 1.55 pg/L and SW-7 at 2.59 pg/L.
- May 5, 2023, SHN, first semi-annual groundwater monitoring report. MW-1 had a detection of PCP which had dropped to 0.34 µg/L, significantly lower than the previous event, potentially due to surface water getting into the well. It was determined later that the well box and surface seal of MW-1 needed repair, workplan for the repair was submitted June 12, 2023, by SHN.
- May 19, 2023, SHN reports February 2023 storm water sampling results. TCDD are not detected above laboratory reporting limits. Reporting limits are higher than previous reports by an order of magnitude, from <0.714 pg/L to <1.69 pg/L.
- April 9, 2024, SHN reports December 2023 storm water sampling results. Samples are below laboratory detection limits for TCDD.
- March 21, 2024, SHN submits second semi-annual 2023 groundwater monitoring report. TCDD was not detected in any of the groundwater monitoring wells.
- June 13, 2023, DTSC approves SHN workplan for additional investigation. The workplan included 12 soil borings at the cap area and along the eastern property boundary to collect soil samples, installing temporary well points and sampling groundwater at six of the soil borings at the Cap area and along the eastern property boundary, installing two new groundwater monitoring wells (MW-15 and MW-16), repair of MW-1, and the removal the onsite production well.
- June 11, 2024, SHN reports results of 2023 site investigation. TCDD was detected in boring B105 5.5 feet bgs (0.222 pg/g) and B106 at 6.5 feet bgs (0.147pg/g) and 17.0 feet bgs 0.111 pg/g). These locations are in the southeast corner of the Green Chain northwest of MW-12. Temporary wells had no detections of TCDD above laboratory reporting limits.
- June 28, 2024, SHN submitted the March 2024 storm water sampling report, the calculated TCDD equivalence ranged from 3.31 pg/L (SW-7) and 0.0123 pg/L (SW-1).
- July 18, 2024, SHN submits a data gap workplan to investigate three areas: the Historic Sawmill area, the Conical Burner area and the Planar Chain area. Four new monitoring wells are proposed: MW-17 through MW-20.
- January 22, 2025, SHN reported the November 2024 storm water sampling results. TCDD was below laboratory detection limits in all samples.
- May 27, 2025, SHN submits the November 2024 storm water sampling report. MW-1 showed TCDD at 3.44 pg/L and non-detect in all other samples, however the laboratory reporting limit was <4.76 pg/L for the other samples which is above the only detection.
- August 1, 2025, SHN submits the second semi-annual 2024 groundwater monitoring report. TCDD was below laboratory reporting limits of <1.74pg/L to <1.93 pg/L in all samples.

- July 8, 2025, first half of groundwater monitoring report submitted by SHN but DTSC is still finishing their review. The April 2025 results are shown in Table 1. During this sampling event turbidity was greater than 1,000 nephelometric turbidity units (NTU) for wells MW-10 and MW-13. Field filtered samples were taken at locations with elevated turbidity, which was about half the wells.
- July 14, 2025, SHN submitted the March 2025 stormwater sampling results, but this is still in DTSC review. All samples were non-detect TCDD. The MDL for TCDD ranged from <4.83 pg/L at SW-9 to 50.0 <pg/L at SW-1. Calculated TCDD equivalents ranged from 0 at SW-1 to 8.34 at SW-7.

Appendix B: Summary of Environmental Conditions

1.0 Soil

The cap over the former Green Chain area covers the historically most contaminated soils on the Site. The highest detection in soil of PCP was 5,700 mg/kg 3-4.5 feet bgs just south of the Green Chain. PCP has been detected in soil to a depth of 21 feet bgs. There are also detections of PCP in soil in the former sawmill area immediately east of the Green Chain, where the highest detection was 23 mg/kg at 6 feet bgs at EB-7, north of MW-1. Soil concentrations of dioxins seem to be limited to the areas around the Green Chain and the Planar Chain areas.

2.0 Groundwater

Groundwater has been sampled at the Site since wells MW-1 through MW-5 were installed in 1988. Additional wells have been installed since, to further delineate groundwater contamination and there are now monitoring wells up to MW-20 (Figure 2 and Table 1).

The chemical properties of the dioxins have been detailed by DTSC on how the properties impact transport. On April 6, 2020, DTSC wrote a letter in response to Thomas Law Group, who were representing the Municipal Water District, regarding the April 2019 groundwater sampling report. In this letter DTSC also explained the chemical and physical properties of dioxins being hydrophobic and how readily its sorbs to soil and how that reduces off-site migration potential. The article by Hoffmans (2007) explained that dioxins sorb onto soil particles and could be transported in groundwater as colloids. The amount of dioxin that can mobilize is dependent on organic carbon available (2008 Persson). The potential mobility of dioxin in colloids is a factor in transport distance. Turbidity has been historically an issue with some of the wells, particularly in the former sawmill area. The first half of the 2025 groundwater monitoring report had ten out of sixteen wells with turbidity greater than 20 NTU which were filtered using a 0.45 micron filter. In the 2008 Persson article colloids containing dioxins can be as large as 0.70 microns, therefore the filters used by SHN would be removing some of the mobile colloids containing dioxins.

Researching how far dioxin containing colloids can travel, I found an article regarding a fire at a pesticide manufacturing facility in Australia (2011 Grant) where colloids containing dioxins combined with surfactants were found in soil at a depth of approximately three meters bgs, having traveled further than anticipated. In the 2011 Grant article, pesticides were noted to have been observed at several meters in soil or in groundwater below agricultural and pesticide/chemical production facilities without the aid of surfactants. The surfactants from the fire-fighting foams were attributed in the 2021 Grant article to increasing the mobility of the dioxins up to three meters. There are no historical forest fires or surfactant spills at M&P therefore while colloids are noted to increase the mobility of dioxins, articles supporting more than a few meters distance were not found. Further research is suggested in these articles.

Investigations into the extent of groundwater contamination are currently ongoing. The wells MW-13 and MW-14 were installed in 2023 to fill in some data gaps in the southeast portion of the property. In the 2023 Site investigation Report of Findings by SHN submitted June 2024, it was posited that groundwater contamination detected in these wells could be coming from the former Planar Chain or conical burner area on the east side of the property (Figure 2). SHN suggested that the area needs additional monitoring and monitoring wells MW-17 through MW-20 were installed in 2024 to address this data gap.

The furthest down gradient wells, MW-10, (off site and south of Glendale Drive) and MW-11 (onsite north and north of Glendale Drive), have been non-detect for TCDD since 2022, and the TCDD TEQ equivalent has been calculated below 0.1 pg/L since August 2023. MW-11 had a detection of 0.983 pg/L TCDD February 2022, which is the only detection of TCDD in groundwater in the southern wells.

MW-16 is an offsite well situated near the domestic irrigation well at 1551 Glendale Drive, immediately adjacent to M&P south of MW-12 and MW-15 and north of MW-10. The domestic well has been sampled three times, with a detection of only PCP on August 22, 2023, and been non detect, less than 0.3 pg/L since then.

The laboratory reporting levels for TCDD in the more recent lab reports, beginning in 2023, are an order of magnitude higher than in previous years. This makes evaluation of TCDD difficult and so trends for the TCDD equivalents were used in this memo. The Regional Water Board would like DTSC to use the newer 2022 standard of evaluating dioxins toxicity. We understand that DTSC will be adopting a new standard in the future. The TCDD equivalents results appear to have a decreasing trend in most of the wells; however, more accurate data and statistical analysis are needed to determine if this is a stable trend. Detections of dioxins at MW-5 and MW-1 appear to have increasing trends. These wells are closest to the Green Chain.

3.0 Storm water

Storm water has been sampled periodically since 1980s, either by the Regional Water Board or consultants for M&P (Figure 3 and Table 2). In February 2021 DTSC added surface water sampling to the program and surface water has been monitored semi-annually since then. Since 2021 samples have been analyzed for PCP, TCP, and TCDD equivalents by calculating the TCDD equivalents. Only the dioxins are discussed in this memo as they are the most relevant to the Municipal Water Districts concerns.

There are nine (9) surface water sampling locations (SW-1 through SW-9) that have been sampled on and off site (Figure 3). SW-1 to SW-5 were sampled starting in February 2021, SW-6 through SW-8 were added December 2021, and SW-9 was added in 2024 upgradient of the former Planer Chain.

The detections of TCDD and the calculated TCDD equivalence in the most recent storm water sampling event on March 31, 2025, were above the MCL of 1.0 pg/L in all of the samples except SW-1 which had a TCDD equivalence of 0.0 pg/L. The other locations

ranged from 1.02 TCDD equivalence at SW-3 to 8.34 at SW-7. The furthest south storm water monitoring location SW-5 had a calculated TCDD equivalence of 1.9 pg/L. The PHG for dioxin is 0.05 µg/L. For direct measurement of dioxins, TCDD was often not detected above the maximum detection limit (MDL), which has ranged from 0.319 pg/L to 50 pg/L depending on the sample date. Turbidity and the laboratory's procedures are a major factor in the elevated MDLs between sampling events. In this case the calculations of TCDD equivalence are the more reliable source of quantifying contamination in the storm water. The highest detections have been measured at SW-6, located east of the Green Chain, at 121 pg/L on April 14, 2022. SW-2 is down the storm water flow direction from SW-6, which then flows to SW-4 and SW-5 then offsite (see Figure 3 for storm water flow direction). Concentrations in the subsequent storm water sampling points show a reduction of TCDD equivalence (Table 2). Sampling location, SW-8, closest to Hall Creek, has not had a detection of TCDD above MDLs and had a calculated TCDD equivalence that ranged from 1.35 pg/L to 3.8 pg/L in the two events when it was sampled. This location wasn't sampled after 2022, as access for sampling at the location was denied by the current property owner, however locations SW-4 and SW-5 represent what is flowing off site from the Green Chain area and the Planar Chain area.

The First Quarter 2025 storm water sampling was conducted after cleaning the surface of the former sawmill area near MW-1 of debris and was non-detect for TCDD. The TCDD equivalent was calculated to be between 0 pg/L (SW-1) and 8.34 pg/L (SW-7). TCDD equivalent has been calculated as higher in storm water than in groundwater therefore the Regional Water Board considers this to be the greatest risk for mobilization off site into Hall Creek. Storm water being episodic would have a momentary high flux of contamination into the river. However, these are during storm events when the river has significantly more volume and recharge. The concentration detected in storm water represents storm events, not a continual influx of contaminants, along with increased water entering the creeks and rivers. According to the NOAA California Nevada River Forecast Center (cnrfc.noaa.gov), the Mad River flow rate changes between 50 cubic feet per second (ft³/s) when it is not raining into the thousands of ft³/s during rain events. The Mad River was gauged at over 2,000 ft³/s on February 27, 2023, when the last detection of TCDD was observed at SW-6 (Figure 4). It seems is unlikely that any of these events have contributed to high enough concentrations to put the municipal intake wells at risk. Therefore, the Regional Water Board did dilution estimates for storm water using NOAA rainfall data (Table 3 and Table 4).

4.0 Summary of Groundwater Monitoring at 1551 Glendale Drive

4.1 History and Current Condition of Domestic Irrigation Well

Initial sampling of the domestic irrigation well at 1551 Glendale Drive indicated the presence of dioxins like Octachlorodibenzodioxin (OCDD) and Heptachloridibenzodioxin (HpCDD). On January 19, 2022, the 1551 Glendale well was sampled by the Humboldt Bay Keeper finding that TCDD was non-detect however there were detections of Octachlorodibenzodioxin (OCDD) at 17.8 pg/L and heptochlorodibenzodioxin (HpCDD) at 4.64 pg/L, the dioxin equivalence was calculated to be 0.0464 pg/L from HpCDD. On

June 13, 2022, when sampled by SHN, OCDD was detected at 4.17 pg/L and HpCDD and TCDD were non-detect, the dioxin equivalence was calculated as 0.00125 pg/L from OCDD. August 23, 2022, SHN sampled the domestic well again and also had non-detects for TCDD and calculated dioxin equivalence as 0.0 pg/L. Subsequent samplings showed a significant reduction in OCDD levels and non-detectable levels of TCDD, with TCDD equivalents calculated at minimal levels. Over time, the well consistently showed non-detects for all contaminants, indicating improved water quality.

4.2 History and Current Condition of Monitoring Well MW-16

Monitoring well MW-16 was installed in August 2023 near the 1551 Glendale well to continue monitoring. On August 22, 2023, the TCDD equivalence in MW-16 was calculated as 0.0175 pg/L and calculated as 0.0 in each subsequent monitoring event in 2024. Initial findings August 22, 2023, showed detectable levels of OCDD (58.2 pg/L August 22, 2023), though TCDD equivalents remained low (0.0175 pg/L). Subsequent monitoring indicated non-detect levels for OCDD, TCDD, and TCDD equivalents. Over time, MW-16 has consistently shown non-detect levels for all contaminants, reflecting a stable and improved condition of groundwater quality.

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

November 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 during November 2025.

It is noted in this November 2025 monthly update that DTSC did not provide monthly updates for September and October 2025.

a. Actions during September and October 2025.

- Project Manager Update. Christian Bruchman (Christian.Bruchman@dtsc.ca.gov) has been assigned as the new DTSC project manager.
- Virtual Quarterly Update Meeting. A virtual quarterly update meeting with DTSC, HBMWD, and Humboldt Waterkeeper was held on October 29, 2025.

b. Actions during this calendar month (November)

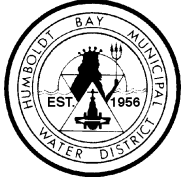
- Data Gap Investigation Report of Findings. A summary of activities and results for fieldwork completed in August was submitted by SHN in March 2025 and is under DTSC review.
- First Semi-Annual 2025 Groundwater Sampling Report. A summary of activities and results for the first semi-annual groundwater sampling event was submitted by SHN in July 2025 and is under DTSC review.
- March 2025 Stormwater Sampling Report. The March 2025 stormwater sampling report was submitted by SHN in July 2025 and is being reviewed by DTSC.
- Health and Human Risk Assessment (HHRA). The HHRA was submitted by SHN in August 2025 and is under DTSC review.
- Site Housekeeping Technical Memo: A summary of housekeeping activities performed on-site was submitted by SHN in October 2025 and is under DTSC review.
- Stormwater samples were collected on November 17, 2025. A report documenting this sampling and the results is being prepared.

c. Planned activities for next month (December) and beyond.

- DTSC to respond to reports mentioned above and provide report comment letters.
- Groundwater and stormwater sampling events in 2026.

d. 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.



ITEM: Discuss and Consider Approval of Resolution 2026-01 Affirming Adoption of the Humboldt County Multi-Jurisdiction Hazard Mitigation Plan 2025 Update and Compliance with Assembly Bill 2140

PRESENTED BY: Michiko Mares, General Manager

TYPE OF ITEM: ACTION

TYPE OF ACTION: Roll Call Vote

Recommendation

Staff recommend the Board adopt Resolution 2026-01 affirming that Humboldt County adopted an Operational Area Hazard Mitigation Plan (HMP) on December 9, 2025 (Resolution 25-184) in accordance with the Disaster Mitigation Act of 2000, and the HMP was incorporated by reference into the Humboldt County General Plan Safety Element in compliance with Assembly Bill 2140.

Discussion

The California Governor's Office of Emergency Services (Cal OES) requires Humboldt County to demonstrate compliance with Assembly Bill 2140 (AB 2140), which addresses the relationship between Local Hazard Mitigation Plans (LHMPs) and General Plan Safety Elements. Compliance with AB 2140 is required to maintain eligibility for funding under the California Disaster Assistance Act for eligible projects exceeding 75 percent of state-eligible costs.

In October 2017, the Humboldt County Board of Supervisors adopted an update to the General Plan Safety Element, which incorporated the Humboldt Operational Area Hazard Mitigation Plan by reference through Policy S-P35. In 2020, the Board adopted the most recent update to the LHMP, which was subsequently approved by both Cal OES and the Federal Emergency Management Agency (FEMA). An update to the LHMP was initiated in 2023. As of November 2025, Cal OES has reviewed and approved the updated Operational Area Hazard Mitigation Plan (Attachments 2 and 3).

Adoption of Resolution 2026-01 documents compliance with AB 2140 and affirms prior County actions related to hazard mitigation planning and General Plan integration. Participating jurisdictions are required to adopt the plan within five years of the County approval date. The next resubmission date is December 9, 2030.

Minor, non-substantive revisions following adoption, such as typographical or formatting corrections, may be made administratively by staff. Substantive amendments or plan updates will require separate Board action.

The General Manager has volunteered to participate on the LHMP Steering Committee to gain a broader understanding of the local, state, and federal emergency services and associated grant funding.

Alternatives

The Board may elect not to approve the resolution; however, this is not recommended, as it would jeopardize eligibility for state and federal hazard mitigation and disaster recovery funding.

Fiscal Analysis

Approval of the resolution maintains eligibility for state and federal disaster mitigation and recovery funding and has no direct fiscal impact to the District General Fund. FEMA-approved hazard mitigation plans enable jurisdictions to compete for specific grant programs and may result in long-term cost avoidance. The current budget does not include dedicated funding for plan administration or implementation; grant application development is anticipated to be supported through Sheriff's Office budget units.

Environmental Requirements

Not Applicable

Exhibits/Attachments

Attachment 1 – Resolution 2026-01

Attachment 2 – Signed HMP County of Humboldt Resolution #25-184

Attachment 3 – Links to approved LHMP:

[2025 Humboldt County LHMP Vol.1](#)

[2025 Humboldt County LHMP Vol.2](#)

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT
RESOLUTION NO. 2026-01**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE HUMBOLDT
BAY MUNICIPAL WATER DISTRICT
AUTHORIZING THE ADOPTION OF THE HUMBOLDT COUNTY MULTI-
JURISDICTION HAZARD MITIGATION PLAN 2025 UPDATE**

WHEREAS, all of Humboldt County has exposure to natural hazards that increase the risk to life, property, the environment, and the regional economy; and

WHEREAS, proactive mitigation of known hazards before a disaster can reduce or eliminate long-term risk to life and property; and

WHEREAS, the Disaster Mitigation Act of 2000 (Public Law 106-390) established new requirements for pre- and post-disaster hazard mitigation programs; and

WHEREAS, a coalition of Humboldt County, cities, towns, tribes, and special districts with like planning objectives has been formed to pool resources and create consistent mitigation strategies within the Humboldt County Operational Area; and

WHEREAS, the coalition has completed a planning process that engages the public, assesses risk and vulnerability to natural hazards, develops mitigation strategies consistent with uniform goals and objectives, and establishes a framework for implementing, evaluating, and revising those strategies; and

WHEREAS, adoption of the Humboldt County Operational Area Hazard Mitigation Plan is required for the Humboldt Bay Municipal Water District to remain eligible for certain federal hazard mitigation funding programs;

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

- 1) Adopts in its entirety, Volume I and the introduction, chapter 1 -the Unincorporated Humboldt County jurisdictional annex, and the appendices of Volume II of the Humboldt County Operational Area Hazard Mitigation Plan (HMP);
- 2) Will use the adopted and approved portions of the HMP to guide pre- and post-disaster mitigation of the hazards identified;

- 3) Will coordinate the strategies identified in the HMP with other planning programs and mechanisms under its jurisdictional authority;
- 4) Will continue its support of the Steering Committee and continue to participate in the Planning Partnership as described by the HMP; and
- 5) Will help to promote and support the mitigation successes of all HMP Planning Partners.

AYES:

NOES:

ABSENT:

ABSTAIN:

Michelle Fuller, President

Attest:

Contessa Dickson, Secretary of the Board

BOARD OF SUPERVISORS, COUNTY OF HUMBOLDT, STATE OF CALIFORNIA
Certified Copy of Portion of Proceedings for the Meeting of December 9, 2025

RESOLUTION NO. 25 – 184

HUMBOLDT COUNTY OPERATIONAL AREA HAZARD MITIGATION PLAN 2025 UPDATE

WHEREAS, all of Humboldt County has exposure to natural hazards that increase the risk to life, property, environment and the County's economy; and

WHEREAS, pro-active mitigation of known hazards before a disaster event can reduce or eliminate long-term risk to life and property; and

WHEREAS, The Disaster Mitigation Act of 2000 (Public Law 106-390) established new requirements for pre- and post-disaster hazard mitigation programs; and

WHEREAS, a coalition of Humboldt County, Cities, Towns, Tribes and Special Districts with like planning objectives has been formed to pool resources and create consistent mitigation strategies within the Humboldt County Operational Area; and

WHEREAS, the coalition has completed a planning process that engages the public, assesses the risk and vulnerability to the impacts of natural hazards, develops a mitigation strategy consistent with a set of uniform goals and objectives, and creates a plan for implementing, evaluating and revising this strategy; and

NOW, THEREFORE, IT IS HEREBY PROCLAIMED that the Humboldt County Board of Supervisors: Adopts in its entirety, Volume 1: Area-Wide Elements and Volume 2: Planning Partner Annexes of the Humboldt County Operational Area Hazard Mitigation Plan (HMP). Will use the adopted and approved portions of the HMP to guide pre- and post-disaster mitigation of the hazards identified. Will coordinate the strategies identified in the HMP with other planning programs and mechanisms under its jurisdictional authority. Will continue its support of the Steering Committee and continue to participate in the Planning Partnership as described by the HMP. Will help to promote and support the mitigation successes of all HMP Planning Partners.

Dated: 12/9/2025



Supervisor Natalie Arroyo, Vice-Chair
Humboldt County Board of Supervisors

Adopted on motion by Supervisor Madrone, Seconded by Supervisor Bushnell, and the following vote:

BOARD OF SUPERVISORS, COUNTY OF HUMBOLDT, STATE OF CALIFORNIA
Certified Copy of Portion of Proceedings for the Meeting of December 9, 2025

AYES: Supervisors: -- Arroyo, Bushnell, and Madrone
NAYES: Supervisors: -- None
ABSENT: Supervisors: -- Bohn and Wilson
ABSTAIN: Supervisors: -- None
STATE OF CALIFORNIA
County of Humboldt

I, Tracy Damico, Clerk of the Board of Supervisors, County of Humboldt, State of California, do hereby certify the foregoing to be a full, true, and correct copy of the original made in the above-entitled matter by said Board of Supervisors at a meeting held in Eureka, California as the same now appears of record in my Office.

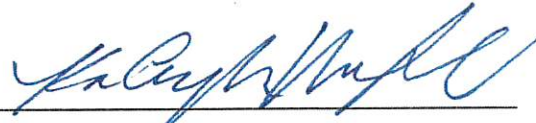
IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Seal of said Board of Supervisors.

The within instrument is a full, true and correct copy of the original on file in this office.

ATTEST:

TRACY DAMICO
Clerk of the Board of Supervisors
of the County of Humboldt,
State of California

By 
Deputy County Clerk



Kaleigh Maffei
Deputy Clerk of the Board of Supervisors of the
County of Humboldt, State of California



ITEM: Discuss and Consider Approval of Updated Board of Directors Payment Schedule

PRESENTED BY: Darcey Quinn, Accounting Specialist

TYPE of ITEM: ACTION

TYPE of ACTION: General Vote

Recommendation

Staff recommend the Board discuss and consider approval of a standardized payment period for Board member compensation. Payments would continue the 20th of each month but would replace the current practice of paying from the day after one Regular Business Board meeting through the day of the next Regular Business Board meeting.

Discussion

Currently, Board members are compensated for the period beginning the day after one Board meeting through and including the day of the subsequent Board meeting. This results in variable payment periods which align with meeting schedules rather than standardized calendar periods.

To improve administrative efficiency and provide greater predictability with fewer corrections, staff propose establishing a standardized compensation period with no change to the payment date. Board members will continue to receive compensation on the 20th of each month, consistent with the District's standard payroll processing schedule. If the 20th falls on a Saturday, payment will be processed on the Friday before. If the 20th falls on a Sunday, payment will be processed on the following Monday. Three options have been developed for Board consideration:

1. **Option 1:** Full Prior Calendar Month
 - a. Payment on the 20th covers the full prior calendar month (1st through the last day of the month)
 - b. Example: Payment on December 20th covers November 1 – November 30

2. **Option 2:** Mid-Month to Mid-Month (10th to 9th)
 - a. Payment on the 20th covers the period from the 10th of the prior month through the 9th of the current month
 - b. Example: Payment on December 20th covers November 10 – December 9

3. **Option 3: Mid-Month to Mid-Month (5th to 4th)**
 - a. Payment on the 20th covers the period from the 5th of the prior month through the 4th of the current month.
 - b. Example: Payment on December 20th covers November 5 – December 4.

Each option provides a consistent 30-day or near-30-day payment cycle with a predictable payment date. The selection between options may be based on preferences regarding alignment with calendar months versus meeting schedules, and administrative efficiency for payroll processing.

Alternatives

1. The Board may elect to maintain the current payment structure tied to Board meeting dates; however, this approach results in variable payment periods and increased administrative time and corrections.
2. The Board may also propose modifications to any of the three options presented above for discussion and approval.

Fiscal Analysis

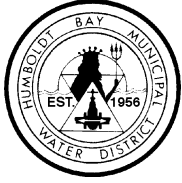
Implementation of any payment period option will have no direct fiscal impact on total Board member compensation. The change affects the timing and administrative processing of payments, not the amount of compensation. Any selected option may result in a one-time adjustment period transitioning from the current pay period to the new payment period.

Environmental Requirements

Not Applicable

Exhibits/Attachments

None



ITEM: Discuss and Consider Approval of Withdrawing from FEMA Grant DR-4407 Collector Mainline Redundancy Project

PRESENTED BY: Chris Harris, Director of Finance and Human Resources

TYPE of ITEM: ACTION

TYPE of ACTION: General Vote

Recommendation

Staff recommend the Board discuss and consider approval to authorize the General Manager to formally notify CalOES and FEMA of the District's intent to withdraw the Redundant Pipeline Project (DR-4407), immediately. This action will allow for the de-obligation of Federal funds and protect the District from potential future FEMA audit findings related to non-compliant procurement or budget variances.

Discussion

Since the time of the original grant application (February 2017), waitlist period (2018-2021) and final grant award from FEMA (August 2021), subsequent developments outside of the District's control have fundamentally altered the projects feasibility.

1. **Requested Change in Scope:** At the start of the project, during the background review of historical geotechnical boring data (Taber-previously conducted at the TRF and Essex sites), GEI uncovered documentation indicative of three potential additional geohazards (landslide, liquefaction, and a fault in a different location than previously thought) within the proposed project footprint. Since the geotechnical exploration as described in the original grant application was not sufficient to adequately characterize these additional geohazards, HBMWD requested a Scope of Work (SOW) modification (November 2023) to allow adjusted/additional geotechnical investigation activities as well as additional engineering design. This SOW change currently remains unapproved at FEMA which has halted forward progress on the project.
2. **Inadequate Budget/Funding:** The budget submitted in the original grant application (\$3.0M) is significantly lower than the current project budget (\$7.5M). The District has received an "earmarked" budget increase via email to a total of \$4.9M from CalOES (remaining shortage <\$2.6M>), but no official notification from FEMA. Continuing without an approved SOW or confirmed additional budget would require the District to

cover 100% of any costs outside the scope and above FEMA’s current funded budget amount, posing a severe risk to the District’s general reserve funds.

- 3. Period of Performance (POP) Constraints:** FEMA’s 2025 policy updates have reduced the timeframe for expenditure in certain programs, making it impossible to complete the expanded scope (if it were approved) within the required deadline. The District has requested (and received) four separate POP timeline extensions (most recently to January 2027). With the last approved time extension, the District was notified by FEMA that this would be the final time extension.

Next Steps

1. Submit a formal withdrawal letter to the CalOES Grant Project Manager.
Reconcile Advanced Charges collected (currently \$463k) and upon withdrawal approval from FEMA and CalOES, reallocate unspent Advanced Charges to other capital projects.

It is important to note that the last Capital Improvement Plan (CIP) was approved in February 2017 and this project was not identified as a project nor a priority. The upcoming CIP development will review this project and the priority in the overall CIP as related to the upcoming Strategic Planning Initiative.

Alternatives

Continue the Collector Mainline Redundancy Project and complete as many tasks as possible within the current POP, understanding that without an approved SOW and additional time extension, all costs will be subject to audit by FEMA and will likely be the obligation of the District.

Fiscal Analysis

Withdrawing now prevents the District from incurring "unsupported" or "ineligible" costs that FEMA would likely disallow during the final closeout audit. While the District will lose the potential grant revenue, it avoids a projected unfunded liability of \$2.6M – this is assuming the SOW is approved and the “earmarked” budget increase is official.

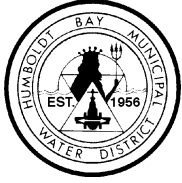
Withdrawing now also would allow the Advanced Charges collected to be reallocated to other capital projects, emergency expenses (Janes Creek emergency repair), or current unfunded projects (In-Stream Flow Dedication).

Environmental Requirements

Not Applicable

Exhibits/Attachments

None



ITEM: Discuss and Consider Approval to Terminate District Participation on the Redwood Coast Energy Authority (RCEA) and Redwood Region Economic Development Commission (RRDEC) Boards

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 terminating the District's participation on the Redwood Coast Energy Authority (RCEA) and Redwood Region Economic Development Commission (RRDEC) Boards.

Discussion

Staff note that participation on the RCEA and RRDEC Boards may not fully align with the "industry related" and "directly related to the purposes and operations" criteria outlined in Board Policy 1005.2. While community engagement and regional collaboration are valuable, these memberships are more focused on general business development and broader economic issues rather than the core operations and mission of a water utility.

Alternatives

The Board may choose not to approve the recommended action and instead continue the District's participation on the RCEA and RRDEC Boards.

Fiscal Analysis

Director's fees to participate on the RCEA and RRDEC Boards for FY25 were \$2,340.

Environmental Requirements

Not Applicable

Exhibits/Attachments

None.

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



BANK ACCOUNT BALANCES AT MONTH-END

December 31, 2025

December 31, 2024

GENERAL ACCOUNTS

1. US Bank - General Account	1,434,313.98	1,813,308.73
2. US Bank - Xpress BillPay/Electronic Payments Account	8,871.22	6,461.94
<i>Subtotal</i>	1,443,185.20	1,819,770.67

INVESTMENT & INTEREST BEARING ACCOUNTS

3. US Bank - PARS Investment Account	905,787.05	976,078.39
<i>Contributions = \$800,000 Disbursements = \$251,619</i>		

4. L. A. I. F Account - MSRA Reserve Account	502,407.40	480,644.32
5. CalTRUST - Restricted Inv. Account (Medium Term)	1,930,013.63	1,831,496.09
6. CalTRUST - General Reserve Account (Short-Term)	2,993,085.64	4,336,419.57
<i>Total CalTRUST Accounts</i>	<i>4,923,099.27</i>	<i>6,167,915.66</i>

7. California CLASS - DWFP Reserve Account	280,645.72	268,908.09
8. California CLASS - ReMat Reserve Account	1,415,834.86	1,639,095.66
9. California CLASS - General Reserve Account	2,791,416.22	2,674,668.95
<i>Total California CLASS Accounts</i>	<i>4,487,896.80</i>	<i>4,582,672.70</i>

10. Humboldt County - SRF Loan Payment Account	1,258,770.16	693,913.72
11. Humboldt County - 1% Tax Account	20,535.26	376,568.34

<i>Subtotal</i>	12,098,495.94	13,277,793.13
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OTHER ACCOUNTS

12. ReMat Deposit - Mellon Bank	27,000.00	27,000.00
13. Cash on Hand	700.00	700.00

<i>Subtotal</i>	27,700.00	27,700.00
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TOTAL CASH	13,569,381.14	15,125,263.80
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HUMBOLDT BAY MUNICIPAL WATER DISTRICT
STATEMENT OF FUND BALANCES - PAGE 2 OF 2



<u>FUND BALANCES AT MONTH-END</u>	December 31, 2025	December 31, 2024
RESTRICTED FUNDS - ENCUMBERED		
1. Prior-Year Price Factor 2 Rebate	(12,380.49)	(10,869.98)
2. Prior-Year Restricted AP Encumbrances	(1,321,779.00)	(652,673.00)
3. Advanced Charges - 3x Tank Seismic Retrofit	(1,321,115.10)	(1,398,379.18)
4. Advanced Charges - Cathodic Protection Project	(124,999.96)	(124,999.96)
6. Advanced Charges - On-Site Generation of Chlorine	(40,780.50)	(602,959.29)
7. Advanced Charges - Redundant Pipeline	(463,531.77)	(445,282.68)
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)
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)	(154,999.98)
16. Advanced Charges - Capital Financing/Debt Service	(1,127,577.67)	(946,799.54)
<i>Subtotal</i>	(5,827,666.87)	(5,554,882.44)
RESTRICTED FUNDS - OTHER		
17. 1% Tax Credit to Muni's	(20,535.26)	(548,072.04)
18. Pension Trust Reserves	(905,787.02)	(976,078.39)
19. ReMat Deposit	(27,000.00)	(27,000.00)
20. HB Retail Capital Replacement Reserves	(184,626.11)	(246,868.94)
<i>Subtotal</i>	(1,137,948.39)	(1,798,019.37)
UNRESTRICTED FUNDS		
BOARD RESTRICTED		
21. MSRA Reserves	(502,407.40)	(480,644.32)
22. DWFP Reserves	(280,645.72)	(268,908.09)
23. ReMat Reserves	(1,415,834.86)	(1,639,095.66)
24. Northern Mainline Extension Study Prepayment	(510.31)	56.40
25. Blue Lake Rancheria Extension Study Prepayment	117.77	(4,235.37)
<i>Subtotal</i>	(2,199,398.29)	(2,388,591.67)
UNRESTRICTED RESERVES		
30. General Fund Reserves	(4,404,367.59)	(5,389,402.76)
<i>Subtotal</i>	(4,404,367.59)	(5,383,770.32)
TOTAL NET POSITION	(13,569,381.14)	(15,125,263.80)

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

REVENUE REPORT

December 31, 2025

50%
Of Budget Year



A. REVENUE RETURNED TO CUSTOMERS VIA PF2

	MTD RECEIPTS	YTD RECEIPTS	PRIOR YEAR	BUDGET	% OF BUDGET
1. Humboldt Bay Retail Water Revenue	31,527	162,064	196,938	360,000	45%
General Revenue					
Power Sales (Net ReMat)	4,408	24,338	29,866	125,000	19%
Tax Receipts (1% Taxes)	0	149	440,914	1,450,000	0%
Interest - Muni PF2 Retained	0	10,815	10,933	30,000	
2. Miscellaneous Revenue*	158	611	111,777	50,000	1%
<i>*Detail on following page</i>					
TOTAL PF2 REVENUE CREDITS	36,093	197,977	790,428	2,015,000	10%

B. DISTRICT REVENUE

	MTD RECEIPTS	YTD RECEIPTS	PRIOR YEAR	BUDGET	% OF BUDGET
3. Industrial Water Revenue					
Harbor District	0	0	0	0	0
<i>Subtotal Industrial Water Revenue</i>	0	0	0	0	0
4. Municipal Water Revenue					
City of Arcata	142,143	843,913	806,057	1,701,895	50%
City of Blue Lake	19,829	117,405	105,370	235,198	50%
City of Eureka	332,437	1,973,493	1,522,833	3,946,856	50%
Fieldbrook CSD	18,842	93,151	102,687	224,020	42%
Humboldt CSD	102,104	499,247	571,575	1,218,937	41%
Manila CSD	8,645	51,075	46,399	100,714	51%
McKinleyville CSD	112,288	674,435	652,220	1,333,276	51%
<i>Subtotal Municipal Water Revenue</i>	736,288	4,252,719	3,807,141	8,760,896	49%
TOTAL INDUSTRIAL & WHOLESALE REVENUE	736,288	4,252,719	3,807,141	8,760,896	49%
5. Power Sales					
Power Sales (ReMat Revenue)	9,920	37,071	62,887	300,000	12%
Interest (ReMat Revenue)	0	0	0	0	
TOTAL REMAT REVENUE	9,920	37,071	62,887	300,000	12%
6. Other Revenue and Grant Reimbursement					
HB Retail Capital Replacement Rev.	3,942	19,746	23,536		
FCSD Contract	26,790	160,394	190,884		
FEMA/CalOES Grant Revenue	2,119,420	3,124,489	143,411		
SWRCB In-Stream Flow Grant Revenue	0	0	169,552		
Quagga Grant Revenue	0	0	0		
Misc. Grant Revenue	0	952	11,020		
Interest Earned	0	0	0		
Net Increase/(Decrease) Investment Accounts	36,301	241,612	339,082		
TOTAL OTHER/GRANT REVENUE	2,186,453	3,547,193	877,485		
GRAND TOTAL REVENUE	2,968,755	8,034,961	5,537,941	11,075,896	73%

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
 MISCELANEOUS REVENUE - DETAIL REPORT
 December 31, 2025



B. MISCELLANEOUS RECEIPTS (RETURNED TO CUSTOMERS VIA PF2)

	MTD RECEIPTS	YTD RECEIPTS
<u>Miscellaneous Revenue</u>		
Dividend - Principal Life	-	-
Fees - Park Use	-	-
Refund - Diesel Fuel Tax	127	147
Refunds - Miscellaneous	-	-
Sale - Surplus Material/Equipment	-	283
Reimb. - Copies & Postage	1	1
Reimb. - Gas	-	-
Reimb. - Misc. Employee	-	-
Reimb. - Telephone	-	-
UB - Water Processing Fees	30	180
UB - Hydrant Rental Deposit/Use	-	-
UB - PF2 Rebate, Fairhaven Techite Balance	-	-
Sale of Scrap Metal/Gravel	-	-
<u>Ruth Area</u>		
Lease - Ruth Mutual Water Company	-	-
Ruth Annual Lessee Water Fees	-	-
TOTAL MISCELANEOUS REVENUE	158	611

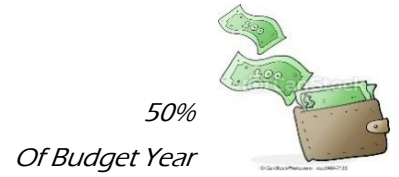
HUMBOLDT BAY MUNICIPAL WATER DISTRICT
 MONTHLY EXPENDITURE REPORT - PAGE 1 OF 3
 December 31, 2025



SALARY AND EMPLOYEE BENEFIT EXPENDITURES (S. E. B.)

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
Compensation					
1. Wages - Regular	217,636.22	1,240,900.73	1,136,995.99	2,974,302	47%
2. Wages - Sick	7,852.84	37,927.65	51,701.31		
3. Wages - Vacation	16,469.05	125,455.65	114,373.99		
<i>Subtotal</i>	241,958.11	1,404,284.03	1,303,071.29	2,974,302	47%
4. Wages - Overtime	2,554.34	42,299.01	5,975.94	17,400	
5. Wages - Holiday (Worked)	2,109.36	6,271.68	6,190.56	17,587	
<i>Subtotal</i>	4,663.70	48,570.69	12,166.50	34,987	139%
6. Wages - Part-Time	1,965.41	30,468.38	40,596.06	103,224	30%
7. Wages - Shift Differential	969.96	6,237.43	6,109.77	12,342	51%
8. Wages - Standby	10,293.80	60,615.78	53,754.03	112,560	54%
9. Director Compensation	4,030.00	20,073.00	17,600.00	40,300	50%
10. Secretarial Fees	212.00	954.00	1,552.25	3,150	30%
11. Payroll Tax Expenses	18,339.22	115,773.20	104,562.13	261,094	44%
<i>Subtotal</i>	35,810.39	234,121.79	224,174.24	532,670	44%
Employee Benefits					
12. Health, Life, & LTD Ins.	53,952.74	282,282.89	272,759.22	706,282	40%
13. Air Medical Insurance	632.00	2,528.00	474.00	2,212	114%
14. Retiree Medical Insurance	16,406.94	90,967.06	70,409.05	106,500	65%
14a. Retiree Medical Reimb.	(3,575.87)	(22,002.13)	(16,345.11)		
15. Employee Dental Insurance	4,602.12	16,376.29	14,997.91	36,766	45%
16. Employee Vision Insurance	568.96	3,319.10	3,426.34	7,350	45%
17. Employee EAP	76.02	440.98	457.84	1,226	36%
18. Fitness Stipend	315.00	675.00	515.49	15,120	4%
19. 457b District Contribution	3,737.50	21,900.00	22,975.00	43,200	51%
20. CalPERS Expenses	2919.67	539146.03	521,338.61	652,398	83%
21. Workers Comp Insurance	-	37,656.12	(4,652.53)	119,736	31%
<i>Subtotal</i>	79,635.08	973,289.34	886,355.82	1,690,790	58%
TOTAL S.E.B	362,067.28	2,660,265.85	2,425,767.85	5,232,749	51%

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
MONTHLY EXPENDITURE REPORT - PAGE 2 OF 3
December 31, 2025



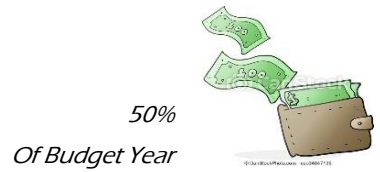
SERVICE & SUPPLY EXPENDITURES (S & S)

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
Operations & Maintenance					
1. Auto Maintenance	3,403.06	20,716.65	29,616.85	50,000	41%
2. Engineering	2,501.16	15,099.04	14,835.54	75,000	20%
3. Lab Expenses	3,441.00	9,503.00	7,171.00	18,000	53%
4. Maintenance & Repairs					
General	9,009.11	25,652.63	26,074.47	48,000	53%
TRF	0	6,097.23	4,900.45	17,000	36%
<i>Subtotal</i>	<i>9,009.11</i>	<i>31,749.86</i>	<i>30,974.92</i>	<i>65,000</i>	<i>49%</i>
5. Materials & Supplies					
General	3,104.46	34,405.02	25,622.53	45,000	76%
TRF	30,188.18	69,255.59	42,912.97	44,000	157%
<i>Subtotal</i>	<i>33,292.64</i>	<i>103,660.61</i>	<i>68,535.50</i>	<i>89,000</i>	<i>116%</i>
6. Radio Maintenance	1,265.46	3,591.84	6,961.15	8,500	42%
7. Ruth Lake License	-	1,500.00	1,500.00	1,500	100%
8. Safety Equip./Training					
General	6,701.89	12,870.15	9,193.42	18,700	69%
TRF	0	258.28	177.50	2,000	13%
<i>Subtotal</i>	<i>6,701.89</i>	<i>13,128.43</i>	<i>9,370.92</i>	<i>20,700</i>	<i>63%</i>
9. Tools & Equipment	-	1,544.35	1,262.77	5,000	31%
10. USGS Meter Station	-	9,570.00	9,110.00	9,500	101%
<i>Operations Subtotal</i>	<i>59,614.32</i>	<i>210,063.78</i>	<i>179,338.65</i>	<i>342,200</i>	<i>61%</i>

General & Administration

11. Accounting Services	-	13,092.00	21,157.50	35,000	37%
12. Bad Debt Expense	(2,472.79)	(2,472.79)	-	-	0
13. Dues & Subscriptions	474.20	35,698.62	33,113.92	39,000	92%
14. IT & Software Maintenance	6,967.91	43,867.97	64,291.12	124,000	35%
15. Insurance	-	150,464.80	192,471.70	146,000	103%
16. Internet	920.71	5,221.57	5,341.70	11,150	47%
17. Legal Services	14,404.00	42,780.50	5,063.00	35,000	122%
18. Miscellaneous	758.88	4,763.87	3,130.04	10,000	48%
19. Office Building Maint.	2,538.97	11,084.67	9,740.93	19,000	58%
20. Office Expense	5,255.98	24,846.23	22,138.24	39,600	63%
21. Professional Services	6,000.00	36,734.75	7,312.50	20,000	184%
22. Property Tax	-	-	2,764.00	3,000	0%

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
MONTHLY EXPENDITURE REPORT - PAGE 3 OF 3
December 31, 2025



SERVICE & SUPPLY EXPENDITURES (con't)					
	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
23. Regulatory Agency Fees	51,587.88	143,352.91	134,703.38	216,000	66%
24. Ruth Lake Programs	-	-	-	5,000	0%
25. Safety Apparel	-	904.79	7,695.25	10,050	9%
26. Technical Training	-	258.00	-	14,000	2%
27. Telephone	1,500.78	6,888.12	6,336.42	15,000	46%
28. Travel & Conference	-	9,240.37	10,352.29	22,000	42%
<i>Gen. & Admin. Subtotal</i>	<i>87,936.52</i>	<i>526,726.38</i>	<i>525,611.99</i>	<i>763,800</i>	<i>69%</i>
TOTAL SERVICE & SUPPLY	147,550.84	736,790.16	704,950.64	1,106,000.42	67%

Power					
29. Essex - PG & E	69,307.28	504,780.95	489,040.60		
30. 2Mw Generator Fuel	-	-	-		
<i>Subtotal Essex Pumping</i>	<i>69,307.28</i>	<i>504,780.95</i>	<i>489,040.60</i>	<i>937,000</i>	
31. All other PG & E	18,654.27	76,907.52	61,828.72	199,000	
<i>Subtotal All Power</i>	<i>87,961.55</i>	<i>581,688.47</i>	<i>550,869.32</i>	<i>1,136,000</i>	<i>51%</i>
Total Service and Supplies incl. Power	235,512.39	1,318,478.63	1,255,819.96	2,242,000	59%

GRAND TOTAL EXPENSES	597,579.67	3,978,744.48	3,681,587.81	7,474,749.42	53%
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OTHER EXPENSES					
32. ReMat Consultant Exp.	872.18	4,543.90	7,983.80		
33. Capital Replacement Exp.	-	-	-		
TOTAL EXPENSES WITH OTHER EXPENSES	598,451.85	3,983,288.38	3,689,571.61		

HUMBOLDT BAY MUNICIPAL WATER DISTRICT PROJECT PROGRESS REPORT

December 31, 2025

50% Of Budget Year



A. CAPITAL PROJECTS

GRANT FUNDED PROJECTS	MTD	YTD	BUDGET	% OF
	EXPENSES	TOTAL		BUDGET
1 Grant - TRF Generator <i>(Treatment Facility Project, \$1.9M - FEMA, Approved)</i>	4,176	437,141	1,731,813	25%
2 Grant - Collector Mainline Redundancy Pipeline <i>(Treatment/Base Facility Project, \$3.2M - FEMA, Approved)</i>	0	62	3,200,000	0%
3 Grant - 2x Tank Seismic Retro	186,323	4,343,348	3,174,488	137%
3A Grant - 1x Tank (Industrial) Seismic Retrofit <i>(\$5.7M - FEMA Approved, Pending Add'l Funding)</i>	(14,868)	(1,435,405)		
4 Adv. Assistance Spillway Seismic Grant <i>(\$1.5M - FEMA Approved, Pending Add'l Funding)</i>	29,436	460,185	1,487,567	31%
TOTAL GRANT FUNDED CAPITAL PROJECTS	205,068	3,805,332	9,593,868	40%

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.	1,709	31,340	44,250	71%
9 Modular Training Room and EOC Building	0	0	365,000	0%
TOTAL NON-GRANT FUNDED CAPITAL PROJECTS	1,709	31,340	622,500	5%

B. EQUIPMENT AND FIXED ASSET PROJECTS

	MTD	YTD	BUDGET	% OF
	EXPENSES	TOTAL		BUDGET
10 FY26 Replace ESSEX Administrative Computers	0	3,774	6,500	58%
11 FY26 Replace Control Computers	0	3,428	5,250	65%
12 Traffic Control Equipment Upgrades	1,144	1,144	1,750	65%
13 Hyster Forklift Fork Extensions	0	1,456	2,000	73%
14 Replace Unit 7	695	29,777	76,000	39%
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	4,238	6,250	68%
18 Replace 35kW Generator	45,581	45,581	57,750	79%
19 Replace Chipper	0	57,294	67,500	85%
20 Replace Unit 12	12,197	72,522	88,250	82%
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

December 31, 2025

50% 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>	22,887	22,887	22,500	102%
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	805	3,944	7,400	53%
28 Unit #6 AED Defibrillator	11	11	2,500	0%
29 Ruth Spillway Davit	0	0	5,750	0%
30 Ruth Hydro Emergency and Portable Lighting	0	1,502	2,000	75%
31 Ruth Hydro Sump Pump Replacement	0	6,254	6,500	96%
32 Replace 35kW Standby Generator	45,581	45,581	54,000	84%
33 Ruth Lake Decontamination Station	0	0	40,000	0%
TOTAL EQUIPMENT & FIXED ASSET PROJECTS	128,901	299,392	572,650	52%

C. MAINTENANCE PROJECTS

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
34 FY26 Pipeline R-O-W Maintenance	0	125	20,000	1%
35 FY26 Main Line Meter Flow Calibration	0	0	16,000	0%
36 FY25 Technical Support and Software Updates	0	245	24,000	1%
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	72,089	220,936	50,000	442%
41 FY26 Fleet Paint Repairs	0	0	5,000	0%
42 FY26 12kV Electric System General Maintenance	5,490	5,490	10,500	52%
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 Subscrptn	0	0	3,750	0%
47 FY26 Unit Compliance Testing	0	0	5,000	0%
48 FY26 SB198 Safety Committee Funding	509	3,355	5,000	67%
49 Production Flow Meter Calibrations	0	0	9,500	0%
50 Line Shed 4 Roof Replacement	28	12,011	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

50% Of Budget Year



December 31, 2025

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	0	0	500	0%
<i>(Treatment Facility Project)</i>				
56 FY26 TRF Limitorque Valve Retrofit Supplies	0	0	15,000	0%
<i>(Treatment Facility Project)</i>				
57 TRF Valve Network Upgrade (Phase 2)	0	0	55,000	0%
<i>(Treatment Facility Project)</i>				
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	1,565	10,000	16%
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	80	80	8,000	1%
TOTAL MAINTENANCE PROJECTS	78,195	243,808	450,850	54%

D. PROFESSIONAL & CONSULTING SERVICES

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
66 FY26 Crane Testing/Certification	10,130	10,130	12,000	84%
67 FY26 On-Site Sodium Hypochlorite System Maintenance	0	99	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	7,200	7,200	100%
71 FY26 GHD Review & Report of Essex MR CrossSection	990	990	6,000	17%
72 Mitigation Funds, Samoa Dunes EIR	0	0	50,000	0%
73 Litigation Assessment	0	0	20,000	0%
74 FY26 Technical Training	0	639	20,000	3%
75 FY26 O & M Training	0	825	24,500	3%
76 FY26 Cross Connection Control Certification	0	695	3,000	23%
77 FY26 Public Education Funds	0	500	5,000	10%
78 FY26 Mad River Regulatory Compliance Assistance	0	0	50,000	0%

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

PROJECT PROGRESS REPORT - PAGE 4 OF 5

50% Of Budget Year



December 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 Developoment Assistance - GHD	0	0	10,000	0%
81 FY26 Asst w/401/404 Permits;LTSAA;Other-Stillwater	0	104	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	10,000	10,000	100%
84 FY26 Matthews Dam Spillway Wingwall & Floor Survey	0	0	7,000	0%
85 Vertical Monument Monitoring - Points West	0	5,800	5,800	100%
86 Vertical Monument Monitoring - Data Review (GHD)	0	0	5,000	0%
87 West (Left) Abutment Slide Monitoring -Points West	0	8,700	8,700	100%
88 West (Left) Abutment Monitoring -Data Review (GHD)	0	0	4,000	0%
89 FY26 FERC Dam Safety Surveillance and Monitoring Report	124	124	11,518	1%
90 FY26 FERC Chief Dam Safety Engineer	2,874	11,384	16,804	68%
91 GEI - Task 2-Part 12D; PFMA	0	0	15,674	
92 GRANT-Adv. Asst Spillway Seism Out of Scope Boring	69	69	100,000	0%
93 Left/Right Abutment Assessment - SHN	0	0	10,000	0%
TOTAL PROF/CONSULTING SERVICES	14,187	57,260	527,846	11%

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	8,100	8,100	10,000	81%
96 Grant - 1x Tank (Industrial) Seismic Retrofit	14,868	1,435,405	1,303,743	110%
TOTAL INDUSTRIAL SYSTEM PROJECTS	22,968	1,443,505	1,326,993	109%

F. CARRY-OVER PROJECTS FROM PRIOR YEAR

TOTAL CARRYOVER PROJECTS	0	0	0	0%
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G. ADVANCED CHARGES & DEBIT SERVICE FUNDS COLLECTED

97 Prof. Services for New Capital Debt	59,128	354,768	162,200	219%
98 Grant - 3x Tank Seismic Retrofit	18,988	113,930	227,859	50%
TOTAL ADVANCED CHARGES COLLECTED	78,116	468,698	390,059	120%

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

PROJECT PROGRESS REPORT - PAGE 5 OF 5

December 31, 2025

50% 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>	(2,347)	56,657	179,313	32%
Humboldt Bay Radio Read Meters <i>(Capital Replacement Funds)</i>	0	0	9,500	0%
HQ and Dam Road Paving (FY23) <i>(August Complex Wildfire Funds Collected, ReMat Funds)</i>	0	145,825	112,000	130%
North Mainline Extension Study	13,892	18,959	0	0
BL Rancheria Water	0	178	0	0
TOTAL NOT CHARGED TO CUSTOMERS	11,545	221,619	300,813	74%

PROJECT PROGRESS REPORT SUMMARY OF ALL ACTIVITY

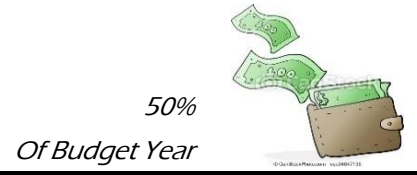
CUSTOMER CHARGES	MTD	YTD	BUDGET	% BUDGET
TOTAL NON-GRANT FUNDED CAPITAL PROJECTS	1,709	31,340	622,500	5%
<i>Treatment Facility Portion</i>	0	0	0	
TOTAL EQUIPMENT & FIXED ASSET PROJECTS	128,901	299,392	572,650	52%
<i>Treatment Facility Portion</i>	22,887	22,887	69,000	
TOTAL MAINTENANCE PROJECTS	78,195	243,808	450,850	54%
<i>Treatment Facility Portion</i>	0	0	70,500	
TOTAL PROF/CONSULTING SERVICES	14,187	57,260	527,846	11%
<i>Treatment Facility Portion</i>	0	0	0	
TOTAL INDUSTRIAL SYSTEM PROJECTS	22,968	1,443,505	1,326,993	1
TOTAL CARRYOVER PROJECTS	0	0	0	0
<i>Treatment Facility Portion</i>	0	0	0	
TOTAL ADVANCED CHARGES/DEBIT SERVICE	78,116	468,698	390,059	120%
<i>Treatment Facility Portion</i>	\$0	\$0	\$0	
TOTAL CUSTOMER CHARGES	\$324,076	\$2,544,002	\$3,890,898	65%
NON-CUSTOMER CHARGES (CURRENT FY)	MTD	YTD	BUDGET	% BUDGET
TOTAL GRANT FUNDED CAPITAL PROJECTS	205,068	3,805,332	9,593,868	40%
TOTAL NON-CUSTOMER CHARGES	11,545	221,619	300,813	74%
TOTAL USE OF ENCUMBERED FUNDS	16,942	295,481	1,617,260	18%
TOTAL NON-CUSTOMER CHARGES	\$233,555	\$4,322,432	\$11,511,941	38%
GRAND TOTAL PROJECT BUDGET ACTIVITY	\$557,631	\$6,866,434	\$15,402,839	45%

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
ENCUMBERED FUNDS RECONCILIATION REPORT
December 31, 2025



	MTD EXPENSES	YTD TOTAL	AMOUNT ENCUMBERED	REMAINING
A. CAPITAL PROJECTS				
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)	0	27,938	26,713	(1,225)
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	35,167	41,589	6,422
8E Resize Chemical Feed System	0	0	6,304	6,304
9E Storage Barn at Headquarters	0	0	218,108	218,108
B. EQUIPMENT & FIXED ASSET PROJECTS				
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	0	175	11,950	11,775
13E Construction Tooling	0	0	1,473	1,473
14E TRF Filter Gallery Heaters and Air Circulation	0	8,856	9,000	144
15E Air Actuated Chemical Pump	0	2,392	2,000	(392)
16E FY25 Replace EUREKA Administrative Computers	0	8,064	5,086	(2,978)
C. MAINTENANCE PROJECTS				
17E FY25 Main Line Meter Flow Calibration	0	1,690	15,900	14,210
18E FY25 Technical Support and Software Updates	0	710	6,442	5,732
19E FY25 Hazard & Diseased Tree Removal	0	3,550	8,000	4,450
20E FY25 Fleet Paint Repairs	0	4,603	5,000	397
21E TRF Valve Network Upgrade (Phase 2)	0	0	51,500	51,500
22E FY25 Howell Bunger Valve Inspection	0	1,631	1,500	(131)
23E Replace Hydro Plant PLC's	0	20,759	88,750	67,991
24E FY25 Maintenance Emergency Repairs	0	4,627	5,000	373
D. PROFESSIONAL & CONSULTING SERVICES				
25E Caselle A/R Module	0	0	5,000	5,000
26E CIP 10-yr Financial Revision and Project Review	0	5,905	22,960	17,055
27E Retail Rate Study	0	0	12,000	12,000
28E 404 Permit Assistance	2,519	40,615	9,131	(31,484)
29E Technical Dam/Spillway Support	0	1,246	189,909	188,663
30E FY25 Cyber Security Maintenance	0	0	5,250	5,250
31E Microsoft 360 Email	0	12,404	7,274	(5,130)
32E Professional Consulting Services for FERC Comprehensive Analysis	0	52,700	504,865	452,165
33E Shatz Energy Research - Tesla Battery/Generator	0	13,515	14,296	781
34E Samoa Peninsula Coastal Development Permit (Change of Scope)	14,423	29,131	40,295	11,164
35E Eureka Cyber Security	0	19,800	19,489	(311)
ENCUMBERED FUNDS TOTAL	16,942	295,481	1,617,260	1,321,779

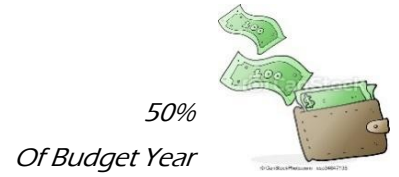
HUMBOLDT BAY MUNICIPAL WATER DISTRICT
 MONTHLY EXPENDITURE REPORT - PAGE 1 OF 3
 December 31, 2025



SALARY AND EMPLOYEE BENEFIT EXPENDITURES (S. E. B.)

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
Compensation					
1. Wages - Regular	217,636.22	1,240,900.73	1,136,995.99	2,974,302	47%
2. Wages - Sick	7,852.84	37,927.65	51,701.31		
3. Wages - Vacation	16,469.05	125,455.65	114,373.99		
<i>Subtotal</i>	241,958.11	1,404,284.03	1,303,071.29	2,974,302	47%
4. Wages - Overtime	2,554.34	42,299.01	5,975.94	17,400	
5. Wages - Holiday (Worked)	2,109.36	6,271.68	6,190.56	17,587	
<i>Subtotal</i>	4,663.70	48,570.69	12,166.50	34,987	139%
6. Wages - Part-Time	1,965.41	30,468.38	40,596.06	103,224	30%
7. Wages - Shift Differential	969.96	6,237.43	6,109.77	12,342	51%
8. Wages - Standby	10,293.80	60,615.78	53,754.03	112,560	54%
9. Director Compensation	4,030.00	20,073.00	17,600.00	40,300	50%
10. Secretarial Fees	212.00	954.00	1,552.25	3,150	30%
11. Payroll Tax Expenses	18,339.22	115,773.20	104,562.13	261,094	44%
<i>Subtotal</i>	35,810.39	234,121.79	224,174.24	532,670	44%
Employee Benefits					
12. Health, Life, & LTD Ins.	53,952.74	282,282.89	272,759.22	706,282	40%
13. Air Medical Insurance	632.00	2,528.00	474.00	2,212	114%
14. Retiree Medical Insurance	16,406.94	90,967.06	70,409.05	106,500	65%
14a. Retiree Medical Reimb.	(3,575.87)	(22,002.13)	(16,345.11)		
15. Employee Dental Insurance	4,602.12	16,376.29	14,997.91	36,766	45%
16. Employee Vision Insurance	568.96	3,319.10	3,426.34	7,350	45%
17. Employee EAP	76.02	440.98	457.84	1,226	36%
18. Fitness Stipend	315.00	675.00	515.49	15,120	4%
19. 457b District Contribution	3,737.50	21,900.00	22,975.00	43,200	51%
20. CalPERS Expenses	2919.67	539146.03	521,338.61	652,398	83%
21. Workers Comp Insurance	-	37,656.12	(4,652.53)	119,736	31%
<i>Subtotal</i>	79,635.08	973,289.34	886,355.82	1,690,790	58%
TOTAL S.E.B	362,067.28	2,660,265.85	2,425,767.85	5,232,749	51%

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
MONTHLY EXPENDITURE REPORT - PAGE 2 OF 3
December 31, 2025



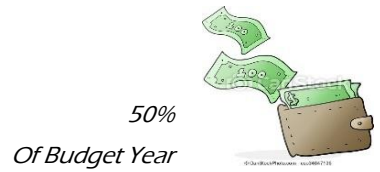
SERVICE & SUPPLY EXPENDITURES (S & S)

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
Operations & Maintenance					
1. Auto Maintenance	3,403.06	20,716.65	29,616.85	50,000	41%
2. Engineering	2,501.16	15,099.04	14,835.54	75,000	20%
3. Lab Expenses	3,441.00	9,503.00	7,171.00	18,000	53%
4. Maintenance & Repairs					
General	9,009.11	25,652.63	26,074.47	48,000	53%
TRF	0	6,097.23	4,900.45	17,000	36%
<i>Subtotal</i>	<i>9,009.11</i>	<i>31,749.86</i>	<i>30,974.92</i>	<i>65,000</i>	<i>49%</i>
5. Materials & Supplies					
General	3,104.46	34,405.02	25,622.53	45,000	76%
TRF	30,188.18	69,255.59	42,912.97	44,000	157%
<i>Subtotal</i>	<i>33,292.64</i>	<i>103,660.61</i>	<i>68,535.50</i>	<i>89,000</i>	<i>116%</i>
6. Radio Maintenance	1,265.46	3,591.84	6,961.15	8,500	42%
7. Ruth Lake License	-	1,500.00	1,500.00	1,500	100%
8. Safety Equip./Training					
General	6,701.89	12,870.15	9,193.42	18,700	69%
TRF	0	258.28	177.50	2,000	13%
<i>Subtotal</i>	<i>6,701.89</i>	<i>13,128.43</i>	<i>9,370.92</i>	<i>20,700</i>	<i>63%</i>
9. Tools & Equipment	-	1,544.35	1,262.77	5,000	31%
10. USGS Meter Station	-	9,570.00	9,110.00	9,500	101%
<i>Operations Subtotal</i>	<i>59,614.32</i>	<i>210,063.78</i>	<i>179,338.65</i>	<i>342,200</i>	<i>61%</i>

General & Administration

11. Accounting Services	-	13,092.00	21,157.50	35,000	37%
12. Bad Debt Expense	(2,472.79)	(2,472.79)	-	-	0
13. Dues & Subscriptions	474.20	35,698.62	33,113.92	39,000	92%
14. IT & Software Maintenance	6,967.91	43,867.97	64,291.12	124,000	35%
15. Insurance	-	150,464.80	192,471.70	146,000	103%
16. Internet	920.71	5,221.57	5,341.70	11,150	47%
17. Legal Services	14,404.00	42,780.50	5,063.00	35,000	122%
18. Miscellaneous	758.88	4,763.87	3,130.04	10,000	48%
19. Office Building Maint.	2,538.97	11,084.67	9,740.93	19,000	58%
20. Office Expense	5,255.98	24,846.23	22,138.24	39,600	63%
21. Professional Services	6,000.00	36,734.75	7,312.50	20,000	184%
22. Property Tax	-	-	2,764.00	3,000	0%

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
MONTHLY EXPENDITURE REPORT - PAGE 3 OF 3
December 31, 2025



SERVICE & SUPPLY EXPENDITURES (con't)					
	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
23. Regulatory Agency Fees	51,587.88	143,352.91	134,703.38	216,000	66%
24. Ruth Lake Programs	-	-	-	5,000	0%
25. Safety Apparel	-	904.79	7,695.25	10,050	9%
26. Technical Training	-	258.00	-	14,000	2%
27. Telephone	1,500.78	6,888.12	6,336.42	15,000	46%
28. Travel & Conference	-	9,240.37	10,352.29	22,000	42%
<i>Gen. & Admin. Subtotal</i>	<i>87,936.52</i>	<i>526,726.38</i>	<i>525,611.99</i>	<i>763,800</i>	<i>69%</i>
TOTAL SERVICE & SUPPLY	147,550.84	736,790.16	704,950.64	1,106,000.42	67%

Power

29. Essex - PG & E	69,307.28	504,780.95	489,040.60		
30. 2Mw Generator Fuel	-	-	-		
<i>Subtotal Essex Pumping</i>	<i>69,307.28</i>	<i>504,780.95</i>	<i>489,040.60</i>	<i>937,000</i>	
31. All other PG & E	18,654.27	76,907.52	61,828.72	199,000	
<i>Subtotal All Power</i>	<i>87,961.55</i>	<i>581,688.47</i>	<i>550,869.32</i>	<i>1,136,000</i>	<i>51%</i>

Total Service and Supplies incl.

Power	235,512.39	1,318,478.63	1,255,819.96	2,242,000	59%
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GRAND TOTAL EXPENSES	597,579.67	3,978,744.48	3,681,587.81	7,474,749.42	53%
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OTHER EXPENSES

32. ReMat Consultant Exp.	872.18	4,543.90	7,983.80		
33. Capital Replacement Exp.	-	-	-		

TOTAL EXPENSES WITH OTHER EXPENSES

	598,451.85	3,983,288.38	3,689,571.61		
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Vendor Name	Date Paid	Description	Amount Paid
101 NETLINK			
101 NETLINK	12/04/2025	<i>Ruth Data Link/Internet</i>	340.00
Total 101 NETLINK:			340.00
ACWA/JPIA			
ACWA/JPIA	12/19/2025	<i>RETIREE MEDICAL</i>	15,946.86
ACWA/JPIA	12/19/2025	<i>COBRA Dental</i>	404.40
ACWA/JPIA	12/19/2025	<i>COBRA Vision</i>	55.68
Total ACWA/JPIA:			16,406.94
Advanced Security Systems			
Advanced Security Systems	12/04/2025	<i>Eureka Office Commercial Fire Alarm</i>	942.00
Total Advanced Security Systems:			942.00
Amazon Capital Services			
Amazon Capital Services	12/30/2025	<i>Ruth Hydro Weir Vault 4' pump connection components</i>	234.44
Amazon Capital Services	12/23/2025	<i>Eureka Office Supplies</i>	25.35
Amazon Capital Services	12/23/2025	<i>Toner for Accounting Tech I Printer</i>	155.33
Amazon Capital Services	12/30/2025	<i>Cord Management for Board Room</i>	12.67
Amazon Capital Services	12/23/2025	<i>Fire control supplies for Essex maintenance yard</i>	509.26
Amazon Capital Services	12/30/2025	<i>Ruth Hydro Weir Vault 4' pump connection components</i>	596.12
Amazon Capital Services	12/30/2025	<i>CPR pocket mask for Unit 6</i>	10.85
Amazon Capital Services	12/30/2025	<i>CPR pocket mask for back stock</i>	10.85
Amazon Capital Services	12/30/2025	<i>Eureka Office Supplies</i>	203.01
Amazon Capital Services	12/30/2025	<i>Ruth Hydro Weir Vault 4' pump connection components</i>	234.44
Amazon Capital Services	12/23/2025	<i>Essex Supplies</i>	69.45
Amazon Capital Services	12/23/2025	<i>Cord Management for Board Room</i>	219.93
Total Amazon Capital Services:			1,812.82
Analytical Services, Inc			
Analytical Services, Inc	12/30/2025	<i>MPA's for Source water sampling - HB Retail</i>	2,957.00
Total Analytical Services, Inc:			2,957.00
AT & T			
AT & T	12/12/2025	<i>Eureka/Essex Landline</i>	31.54
AT & T	12/12/2025	<i>Arcata/Essex Landline</i>	31.54
AT & T	12/12/2025	<i>Eureka Office/Alarm</i>	66.44
AT & T	12/12/2025	<i>TRF</i>	32.44
AT & T	12/12/2025	<i>Essex office/Modem/Control Alarm System</i>	32.44
Total AT & T:			194.40
ATS Communications			
ATS Communications	12/12/2025	<i>IT and software maintenance subscriptions and support</i>	2,982.95
ATS Communications	12/12/2025	<i>ATS Help Desk - Emails and Remote Support</i>	595.70
Total ATS Communications:			3,578.65
AWWA			
AWWA	12/30/2025	<i>Annual Membership Renewal</i>	113.00

Vendor Name	Date Paid	Description	Amount Paid
Total AWWA:			113.00
Bedliners Plus			
Bedliners Plus	12/30/2025	<i>Spray on bedliner for new Unit 7</i>	695.00
Total Bedliners Plus:			695.00
Blue Star Gas - Sequoia Gas Co.			
Blue Star Gas - Sequoia Gas Co.	12/30/2025	<i>Tank Rental for Ruth HQ</i>	130.49
Total Blue Star Gas - Sequoia Gas Co.:			130.49
Charles Vickrey			
Charles Vickrey	12/09/2025	<i>Safe Work Practice Award 2025</i>	200.00
Total Charles Vickrey:			200.00
Chris Harris			
Chris Harris	12/09/2025	<i>Safe Work Practice Award 2025</i>	200.00
Total Chris Harris:			200.00
Chris Merz			
Chris Merz	12/23/2025	<i>Fitness Stipend Reimb 7/25-12/25</i>	270.00
Chris Merz	12/09/2025	<i>Safe Work Practice Award 2025</i>	200.00
Chris Merz	12/30/2025	<i>Wellness Grant Reimbursement</i>	40.00
Total Chris Merz:			510.00
City of Eureka			
City of Eureka	12/30/2025	<i>Eureka office water/sewer</i>	278.34
Total City of Eureka:			278.34
Coastal Business Systems Inc.			
Coastal Business Systems Inc.	12/04/2025	<i>Eureka office copy and fax machine</i>	799.12
Coastal Business Systems Inc.	12/04/2025	<i>Essex copy/fax machine</i>	285.75
Coastal Business Systems Inc.	12/30/2025	<i>Eureka office copy and fax machine</i>	799.12
Coastal Business Systems Inc.	12/30/2025	<i>Essex copy/fax machine</i>	285.75
Total Coastal Business Systems Inc.:			2,169.74
Contessa Dickson			
Contessa Dickson	12/09/2025	<i>Safe Work Practice Award 2025</i>	200.00
Total Contessa Dickson:			200.00
Corey Borghino			
Corey Borghino	12/09/2025	<i>Safe Work Practice Award 2025</i>	200.00
Total Corey Borghino:			200.00
Crane Certification Services, Inc.			
Crane Certification Services, Inc.	12/04/2025	<i>Crane Inspections</i>	10,130.00

Vendor Name	Date Paid	Description	Amount Paid
Total Crane Certification Services, Inc.:			10,130.00
Dale H. Davidsen			
Dale H. Davidsen	12/09/2025	Safe Work Practice Award 2025	200.00
Total Dale H. Davidsen:			200.00
Darcey Quinn			
Darcey Quinn	12/09/2025	Safe Work Practice Award 2025	200.00
Total Darcey Quinn:			200.00
David J. Corral			
David J. Corral	12/09/2025	Safe Work Practice Award 2025	200.00
Total David J. Corral:			200.00
Dazey's Arcata			
Dazey's Arcata	12/04/2025	Rice straw bale for erosion control	50.67
Dazey's Arcata	12/30/2025	Rice straw bale for erosion control	126.68
Total Dazey's Arcata:			177.35
Downey Brand Attorneys LLP			
Downey Brand Attorneys LLP	12/04/2025	Legal Fees Oct 2025	2,472.00
Downey Brand Attorneys LLP	12/04/2025	Legal Fees Oct 2025 - Instream Flow Investigation	5,328.00
Downey Brand Attorneys LLP	12/04/2025	Legal Fees Oct 2025 - Trinidad Rancheria	360.50
Downey Brand Attorneys LLP	12/30/2025	Legal Fees Nov 2025	747.50
Downey Brand Attorneys LLP	12/30/2025	Legal Fees Nov 2025 - Instream Flow Investigation	2,818.50
Total Downey Brand Attorneys LLP:			11,726.50
Ethan Schillinger			
Ethan Schillinger	12/09/2025	Safe Work Practice Award 2025	200.00
Total Ethan Schillinger:			200.00
Eureka Oxygen			
Eureka Oxygen	12/23/2025	cylinder rental	133.00
Total Eureka Oxygen:			133.00
FEDEX			
FEDEX	12/11/2025	Return Collector #3 turbidimeter for warranty repair	127.50
FEDEX	12/30/2025	Send work plan doc to DSOD	13.75
FEDEX	12/30/2025	Ship Cellular relay module	22.55
FEDEX	12/30/2025	Send work plan doc to DSOD	55.74
Total FEDEX:			219.54
Ferguson Waterworks #1423			
Ferguson Waterworks #1423	12/23/2025	Neptune meter reading software 1 year	1,850.00
Ferguson Waterworks #1423	12/23/2025	Neptune meter reading software 1 year	650.00
Total Ferguson Waterworks #1423:			2,500.00

Vendor Name	Date Paid	Description	Amount Paid
FleetPride			
FleetPride	12/30/2025	Mud flaps for Unit 10	41.21
FleetPride	12/30/2025	Transfer Hose for 10K diesel tank	61.81
Total FleetPride:			103.02
Frontier Communications			
Frontier Communications	12/04/2025	Ruth HQ Phone	75.58
Frontier Communications	12/04/2025	Ruth Hydro/Ruth Dataline	281.00
Frontier Communications	12/30/2025	Ruth HQ	76.00
Frontier Communications	12/30/2025	Ruth Hydro/Ruth Dataline	279.88
Total Frontier Communications:			712.46
GEI Consultants, Inc			
GEI Consultants, Inc	12/04/2025	CDSE Consultant Services #26-0131	2,874.02
GEI Consultants, Inc	12/04/2025	Advanced Assistance Seismic Spillway - GRANT #25-1814	16,754.99
GEI Consultants, Inc	12/04/2025	Advanced Assistance Seismic Spillway - GRANT #25-1814	12,557.50
Total GEI Consultants, Inc:			32,186.51
GHD			
GHD	12/11/2025	Reservoirs Seismic Retrofit Phs 2 #24-0812	178.13
GHD	12/11/2025	Reservoirs Seismic Retrofit Phs 2 #24-0812	3,882.88
GHD	12/11/2025	General Engineering	2,501.16
GHD	12/11/2025	General Engineering - TRF Generator Grant	61.88
GHD	12/11/2025	General Engineering - Mad River Cross-sectional	990.00
GHD	12/11/2025	General Engineering - Adv Asst Spillway Seismic	123.75
GHD	12/11/2025	General Engineering - FERC DSSMR	123.75
GHD	12/11/2025	Samoa Peninsula ROW EIR #23-0625	6,742.55
GHD	12/23/2025	CDP for Samoa Peninsula ROW Phase 1 #22-0626	603.51
GHD	12/30/2025	CDP for Samoa Peninsula ROW Phase 1 #22-0626	158.96
GHD	12/30/2025	Samoa Peninsula ROW EIR #23-0625	6,339.54
Total GHD:			21,706.11
GR Sundberg, Inc			
GR Sundberg, Inc	12/23/2025	Exposed pipe in Samoa #26-0730	68,116.81
Total GR Sundberg, Inc:			68,116.81
Grainger			
Grainger	12/12/2025	Breakers for OSHG metering pumps	2,346.96
Grainger	12/12/2025	Electrical marking flags	26.63
Total Grainger:			2,373.59
Health Equity Inc			
Health Equity Inc	12/04/2025	HSA Admin Fee Dec 2025 - 19 employees	56.05
Health Equity Inc	12/04/2025	HSA Admin Fee Dec 2025 - 6 employees	17.70
Total Health Equity Inc:			73.75
Hensel Hardware			
Hensel Hardware	12/04/2025	Tile for Maint Shop Restroom	47.37
Hensel Hardware	12/30/2025	Essex Lab repair parts	66.11
Hensel Hardware	12/04/2025	Essex Lab repair parts	59.49

Vendor Name	Date Paid	Description	Amount Paid
Hensel Hardware	12/04/2025	<i>Repair Essex sample sink</i>	34.14
Hensel Hardware	12/30/2025	<i>Shop supplies</i>	110.13
Hensel Hardware	12/30/2025	<i>Shop supplies</i>	54.17
Hensel Hardware	12/30/2025	<i>Essex Lab repair parts</i>	66.11
Total Hensel Hardware:			305.30
Henwood Associates, Inc			
Henwood Associates, Inc	12/12/2025	<i>Consultant Services Agreement- Oct 2025</i>	436.09
Total Henwood Associates, Inc:			436.09
Highway Specialty Co Inc			
Highway Specialty Co Inc	12/04/2025	<i>Traffic control equipment</i>	1,144.42
Total Highway Specialty Co Inc:			1,144.42
Humboldt County Treasurer			
Humboldt County Treasurer	12/23/2025	<i>Capital Financing Project</i>	45,611.43
Total Humboldt County Treasurer:			45,611.43
Humboldt Fasteners			
Humboldt Fasteners	12/30/2025	<i>Makita pole saw repairs</i>	1.50
Humboldt Fasteners	12/30/2025	<i>Roofing coil gun rental</i>	27.56
Total Humboldt Fasteners:			29.06
Humboldt Redwood Company, LLC			
Humboldt Redwood Company, LLC	12/23/2025	<i>Mt Pierce Lease site - Sept 2025</i>	333.41
Humboldt Redwood Company, LLC	12/23/2025	<i>Mt Pierce Lease site - Nov 2025</i>	333.41
Humboldt Redwood Company, LLC	12/23/2025	<i>Mt Pierce Lease site - Dec 2025</i>	333.41
Total Humboldt Redwood Company, LLC:			1,000.23
Humboldt Waste Management Authority			
Humboldt Waste Management Authority	12/30/2025	<i>dump fee</i>	157.07
Total Humboldt Waste Management Authority:			157.07
Hummel Tire & Wheel			
Hummel Tire & Wheel	12/23/2025	<i>Tire for Unit #3</i>	452.27
Total Hummel Tire & Wheel:			452.27
Ian Ivey			
Ian Ivey	12/09/2025	<i>Safe Work Practice Award 2025</i>	200.00
Total Ian Ivey:			200.00
Industrial Electric			
Industrial Electric	12/04/2025	<i>Essex gate lamp and photo cell</i>	97.15
Industrial Electric	12/23/2025	<i>Move McKinleyville meter cable to new conduit</i>	82.70
Industrial Electric	12/23/2025	<i>Move McKinleyville meter cable to new conduit</i>	68.36
Total Industrial Electric:			248.21

Vendor Name	Date Paid	Description	Amount Paid
Jasson Klingonsmith			
Jasson Klingonsmith	12/09/2025	Safe Work Practice Award 2025	148.00
Jasson Klingonsmith	12/09/2025	Safe Work Practice Award 2025	52.00
Total Jasson Klingonsmith:			200.00
Josiah Hargadon			
Josiah Hargadon	12/09/2025	Safe Work Practice Award 2025	200.00
Total Josiah Hargadon:			200.00
JTN Energy, LLC			
JTN Energy, LLC	12/12/2025	Consultant Services Agreement - Oct 2025	436.09
Total JTN Energy, LLC:			436.09
Justin Natividad			
Justin Natividad	12/09/2025	Safe Work Practice Award 2025	200.00
Total Justin Natividad:			200.00
Keenan Supply			
Keenan Supply	12/23/2025	Ruth hydro weir 4' pump connection components	209.03
Total Keenan Supply:			209.03
Keith Daggs			
Keith Daggs	12/09/2025	Safe Work Practice Award 2025	200.00
Total Keith Daggs:			200.00
Kelsie Sobol			
Kelsie Sobol	12/12/2025	Petty Cash - Employee Recognition	59.97
Kelsie Sobol	12/12/2025	Petty Cash - Office Supplies	110.14
Kelsie Sobol	12/09/2025	Safe Work Practice Award 2025	200.00
Total Kelsie Sobol:			370.11
Ken's Auto Parts			
Ken's Auto Parts	12/04/2025	Unit 12 commercial truck cap and bed slide	11,692.03
Total Ken's Auto Parts:			11,692.03
Larry Raschein			
Larry Raschein	12/09/2025	Safe Work Practice Award 2025	200.00
Total Larry Raschein:			200.00
Lui Ahmad			
Lui Ahmad	12/09/2025	Safe Work Practice Award 2025	200.00
Total Lui Ahmad:			200.00
Mario Palmero			
Mario Palmero	12/09/2025	Safe Work Practice Award 2025	200.00

Vendor Name	Date Paid	Description	Amount Paid
Total Mario Palmero:			200.00
Matthew Davis			
Matthew Davis	12/09/2025	Safe Work Practice Award 2025	200.00
Total Matthew Davis:			200.00
McMaster-Carr Supply			
McMaster-Carr Supply	12/30/2025	Sample and gauge port plumbing for both IMG tanks	355.25
Total McMaster-Carr Supply:			355.25
Michiko Mares			
Michiko Mares	12/09/2025	Safe Work Practice Award 2025	200.00
Total Michiko Mares:			200.00
Microbac Laboratories, Inc			
Microbac Laboratories, Inc	12/23/2025	Lab Tests - Humboldt Bay Retail	136.00
Microbac Laboratories, Inc	12/23/2025	Lab Tests - FBGCSD	116.00
Microbac Laboratories, Inc	12/23/2025	Lab Tests - Humboldt Bay Retail	116.00
Microbac Laboratories, Inc	12/23/2025	Lab Tests - Humboldt Bay Retail	116.00
Microbac Laboratories, Inc	12/23/2025	Lab Tests - FBGCSD	116.00
Microbac Laboratories, Inc	12/23/2025	Lab Tests - Humboldt Bay Retail	58.00
Microbac Laboratories, Inc	12/23/2025	Lab Tests - Humboldt Bay Retail	58.00
Total Microbac Laboratories, Inc:			716.00
Miller Farms Nursery			
Miller Farms Nursery	12/11/2025	IW Reservoir security fencing repairs #26-0423	8,100.00
Total Miller Farms Nursery:			8,100.00
Mission Linen			
Mission Linen	12/12/2025	maintenance supplies & uniform rentals	100.32
Mission Linen	12/12/2025	maintenance supplies & uniform rentals	87.66
Mission Linen	12/12/2025	maintenance supplies & uniform rentals	73.45
Mission Linen	12/12/2025	maintenance supplies & uniform rentals	72.39
Mission Linen	12/12/2025	maintenance supplies & uniform rentals	22.93
Mission Linen	12/12/2025	maintenance supplies & uniform rentals	87.66
Total Mission Linen:			444.41
N1 Critical Technologies			
N1 Critical Technologies	12/30/2025	120V Battery	3,588.75
Total N1 Critical Technologies:			3,588.75
NAPA AUTO PARTS			
NAPA AUTO PARTS	12/04/2025	Batteries for Ditch Witch Vacuum Trailer	494.59
NAPA AUTO PARTS	12/30/2025	Windsheild wiper fluid	23.09
NAPA AUTO PARTS	12/30/2025	Trailer hitch reducer	60.63
NAPA AUTO PARTS	12/30/2025	Service Unit 4 and Unit 3	202.99
NAPA AUTO PARTS	12/30/2025	Unit 8 annual service	47.69

Vendor Name	Date Paid	Description	Amount Paid
Total NAPA AUTO PARTS:			828.99
Northern California Safety Consortium			
Northern California Safety Consortium	12/23/2025	HAZWOPER Refresher training -5 employees	500.00
Northern California Safety Consortium	12/23/2025	HAZWOPER Refresher training -5 employees	500.00
Total Northern California Safety Consortium:			1,000.00
NTU Technologies, Inc			
NTU Technologies, Inc	12/23/2025	TRF chemical supplies	5,184.00
NTU Technologies, Inc	12/23/2025	Use Tax - Added	453.60
NTU Technologies, Inc	12/23/2025	Use Tax - Payable	453.60
Total NTU Technologies, Inc:			5,184.00
Optimum			
Optimum	12/04/2025	Essex internet	279.90
Optimum	12/04/2025	Essex Phones	87.30
Optimum	12/04/2025	Eureka Internet	210.95
Optimum	12/04/2025	Fieldbrook-Glendale CSD Internet	408.93
Optimum	12/04/2025	TRF Internet	29.96
Optimum	12/04/2025	TRF Internet - Blue Lake SCADA Monitoring	59.90
Optimum	12/04/2025	TRF Internet - Fieldbrook-Glendale CSD	59.90
Total Optimum:			1,136.84
PACE Engineering, Inc.			
PACE Engineering, Inc.	12/23/2025	TRF Generator Project	4,114.50
Total PACE Engineering, Inc.:			4,114.50
Pacific Gas & Electric Co.			
Pacific Gas & Electric Co.	12/15/2025	Eureka Office	286.79
Pacific Gas & Electric Co.	12/15/2025	Jackson Ranch Rd Rectifier	26.02
Pacific Gas & Electric Co.	12/15/2025	HWY 299 Rectifier	47.17
Pacific Gas & Electric Co.	12/15/2025	West End Road Rectifier	25.29
Pacific Gas & Electric Co.	12/15/2025	TRF	10,715.77
Pacific Gas & Electric Co.	12/15/2025	Ruth Hydro Valve Control	45.23
Pacific Gas & Electric Co.	12/15/2025	Ruth Hydro	25.82
Pacific Gas & Electric Co.	12/15/2025	Samoa Booster Pump Station	661.39
Pacific Gas & Electric Co.	12/15/2025	Samoa Dial Station	67.67
Pacific Gas & Electric Co.	12/15/2025	Essex Pumping Nov 2025	5,172.45
Pacific Gas & Electric Co.	12/15/2025	Essex Pumping Nov 2025	2,174.85
Pacific Gas & Electric Co.	12/15/2025	Essex Pumping Nov 2025	68,479.74
Pacific Gas & Electric Co.	12/30/2025	Ruth Bunk House	44.74
Pacific Gas & Electric Co.	12/30/2025	Ruth HQ	188.62
Total Pacific Gas & Electric Co.:			87,961.55
Paso Robles Tank, Inc.			
Paso Robles Tank, Inc.	12/11/2025	Samoa Res Seismic Retrofit #25-0755	18,335.53
Paso Robles Tank, Inc.	12/11/2025	Korblex Res Seismic Retrofit #25-0754	163,875.95
Total Paso Robles Tank, Inc.:			182,211.48

Vendor Name	Date Paid	Description	Amount Paid
Paul Jorgensen			
Paul Jorgensen	12/09/2025	<i>Safe Work Practice Award 2025</i>	200.00
Total Paul Jorgensen:			200.00
Pitney Bowes Global Financial Services			
Pitney Bowes Global Financial Services	12/08/2025	<i>red ink cartridge</i>	100.65
Pitney Bowes Global Financial Services	12/03/2025	<i>postage meter lease - Oct 20 2025 - Jan 19 2026</i>	209.72
Total Pitney Bowes Global Financial Services:			310.37
Platt Electric Supply			
Platt Electric Supply	12/04/2025	<i>GM office painting project</i>	80.11
Platt Electric Supply	12/04/2025	<i>Materials for backup contactor for 10HP sump pump</i>	1,274.12
Platt Electric Supply	12/04/2025	<i>Materials for backup contactor for 10HP sump pump</i>	1,291.69
Platt Electric Supply	12/04/2025	<i>Surface brackets</i>	109.47
Total Platt Electric Supply:			172.01
Purchase Power			
Purchase Power	12/30/2025	<i>Postage Refill</i>	502.25
Total Purchase Power:			502.25
Recology Arcata			
Recology Arcata	12/04/2025	<i>Essex Garbage/Recycling Service - Nov 2025</i>	866.17
Total Recology Arcata:			866.17
Recology Humboldt County			
Recology Humboldt County	12/04/2025	<i>Eureka office garbage/recycling service - Nov 2025</i>	120.46
Total Recology Humboldt County:			120.46
Rexel USA, Inc			
Rexel USA, Inc	12/30/2025	<i>Backwash Bild Fiber Project</i>	601.64
Rexel USA, Inc	12/30/2025	<i>Collector 2 fiber project</i>	1,174.59
Total Rexel USA, Inc:			1,776.23
RMI Outdoors			
RMI Outdoors	12/30/2025	<i>Ruth work boat engine servie and fuel gauge repair</i>	626.36
Total RMI Outdoors:			626.36
Ryan Chairez			
Ryan Chairez	12/09/2025	<i>Safe Work Practice Award 2025</i>	200.00
Total Ryan Chairez:			200.00
Ryan V Murphy			
Ryan V Murphy	12/09/2025	<i>Safe Work Practice Award 2025</i>	200.00
Total Ryan V Murphy:			200.00
Safe and Sound Security			
Safe and Sound Security	12/04/2025	<i>Monthly help desk/tech support for Dam cameras</i>	67.97

Vendor Name	Date Paid	Description	Amount Paid
Total Safe and Sound Security:			67.97
Seth Stone			
Seth Stone	12/09/2025	Safe Work Practice Award 2025	200.00
Total Seth Stone:			200.00
Shred Aware			
Shred Aware	12/04/2025	Shredding of purged files	84.90
Total Shred Aware:			84.90
Six Rivers Communications			
Six Rivers Communications	12/12/2025	Unit 12 radio and antenna installation	505.45
Total Six Rivers Communications:			505.45
Stillwater Sciences			
Stillwater Sciences	12/30/2025	404 Permit Assistance #26-0002	2,518.75
Stillwater Sciences	12/23/2025	Environmental Survey to support emergency repairs #26-0307	3,956.25
Total Stillwater Sciences:			6,475.00
Stoel Rives LLP			
Stoel Rives LLP	12/04/2025	Legal Fees August 2025 - Water Line Maintenance Project (EIR)	267.00
Stoel Rives LLP	12/04/2025	Legal Fees August 2025 - Trinidad Racheria North Mainline	11,991.50
Stoel Rives LLP	12/04/2025	Legal Fees Sept 2025 - Water Line Maintenance Project (EIR)	311.50
Stoel Rives LLP	12/11/2025	Legal Fees - Trinidad Racheria North Mainline	1,508.50
Stoel Rives LLP	12/11/2025	General Environmental Advice	6,000.00
Total Stoel Rives LLP:			20,078.50
SWRCB Accounting Office			
SWRCB Accounting Office	12/23/2025	NPDES Drinking Water Perveyors Annual Permit Fee	3,630.00
SWRCB Accounting Office	12/23/2025	Essex Annual Permit Fee	563.00
SWRCB Accounting Office	12/11/2025	Wholesaler Water System Annual Fees FY 2025/26	17,716.15
Total SWRCB Accounting Office:			21,909.15
Tehama Tire Service			
Tehama Tire Service	12/04/2025	TR15 Tube	24.24
Total Tehama Tire Service:			24.24
Telstar Instruments			
Telstar Instruments	12/30/2025	TRF chlorine analyser replacement phase 2 of 2 #26-0602	15,331.58
Telstar Instruments	12/30/2025	TRF chlorine analyser replacement phase 2 of 2 #26-0602	7,555.00
Total Telstar Instruments:			22,886.58
Thatcher Company, Inc			
Thatcher Company, Inc	12/11/2025	TRF chemicals	23,797.88
Total Thatcher Company, Inc:			23,797.88

Vendor Name	Date Paid	Description	Amount Paid
The Mill Yard			
The Mill Yard	12/04/2025	Vacuum filters	40.78
The Mill Yard	12/30/2025	Weather stripping for Collector 1 back door	3.47
The Mill Yard	12/30/2025	Shop supplies	140.47
The Mill Yard	12/30/2025	Shop supplies	79.40
Total The Mill Yard:			264.12
The Mitchell Law Firm, LLP			
The Mitchell Law Firm, LLP	12/04/2025	Legal Services- Oct 2025	1,193.50
The Mitchell Law Firm, LLP	12/04/2025	Legal Services- Oct 2025 North Mainline Extension Study	31.00
The Mitchell Law Firm, LLP	12/04/2025	Legal Services- Oct 2025 Emergency Repairs	15.50
The Mitchell Law Firm, LLP	12/30/2025	Legal Services- Nov 2025	1,302.00
The Mitchell Law Firm, LLP	12/30/2025	Legal Services Ruth- Nov 2025	542.50
Total The Mitchell Law Firm, LLP:			3,084.50
Tim Farrell			
Tim Farrell	12/09/2025	Safe Work Practice Award 2025	200.00
Total Tim Farrell:			200.00
Times Printing			
Times Printing	12/04/2025	envelopes	18.08
Times Printing	12/04/2025	envelopes	18.09
Times Printing	12/04/2025	envelopes	72.32
Total Times Printing:			108.49
Trinity County			
Trinity County	12/23/2025	Annual CUPA Billing - Ruth HQ 2026	809.00
Trinity County	12/23/2025	Annual CUPA Billing - Ruth Hydro 2026	1,306.00
Total Trinity County:			2,115.00
Trinity County General Services			
Trinity County General Services	12/23/2025	Pickett Peak site lease - Jan 2026	265.23
Total Trinity County General Services:			265.23
Trinity County Solid Waste			
Trinity County Solid Waste	12/04/2025	Ruth HQ dump fees	15.75
Trinity County Solid Waste	12/04/2025	Ruth Hydro dump fees	15.75
Trinity County Solid Waste	12/30/2025	Ruth HQ dump fees	11.25
Trinity County Solid Waste	12/30/2025	Ruth Hydro dump fees	11.25
Total Trinity County Solid Waste:			54.00
Trinity Diesel, Inc			
Trinity Diesel, Inc	12/30/2025	Unit 8 OBD 2 testing for CARB requirements	110.00
Total Trinity Diesel, Inc:			110.00
U.S. Bank Corporate Payment System			
U.S. Bank Corporate Payment System	12/09/2025	12KV repairs in Corp Yard	296.42
U.S. Bank Corporate Payment System	12/09/2025	Wheel chock for Unit 4	15.42
U.S. Bank Corporate Payment System	12/09/2025	Desk ruler	2.20

Vendor Name	Date Paid	Description	Amount Paid
U.S. Bank Corporate Payment System	12/09/2025	Essex Office Supplies	165.72
U.S. Bank Corporate Payment System	12/09/2025	Essex Office Supplies	125.75
U.S. Bank Corporate Payment System	12/09/2025	Essex Office Supplies	25.10
U.S. Bank Corporate Payment System	12/09/2025	Spendwise Monthly Subscription	90.00
U.S. Bank Corporate Payment System	12/09/2025	Clean Truck Check Program - 2025 Compliance Fee	32.11
U.S. Bank Corporate Payment System	12/09/2025	Annual Renewal of Microsoft 365 - Director Laptops	99.99
U.S. Bank Corporate Payment System	12/09/2025	Airmed Membership X 7	553.00
U.S. Bank Corporate Payment System	12/09/2025	Eureka Office Supplies	49.59
U.S. Bank Corporate Payment System	12/09/2025	Resource Associates Hiring Tests	70.00
U.S. Bank Corporate Payment System	12/09/2025	Airmed Membership	79.00
U.S. Bank Corporate Payment System	12/09/2025	Bluebeam software annual subscription	330.00
U.S. Bank Corporate Payment System	12/09/2025	Board Lunch Nov Meeting	160.90
U.S. Bank Corporate Payment System	12/09/2025	Call-em-all credits - HB Retail	45.00
U.S. Bank Corporate Payment System	12/09/2025	Resource Associates Hiring Tests	140.00
U.S. Bank Corporate Payment System	12/09/2025	Resource Associates Hiring Tests	35.00
U.S. Bank Corporate Payment System	12/09/2025	HBMWD Vinyl Banners	57.32
U.S. Bank Corporate Payment System	12/09/2025	Mop stick & dist mop refill	51.57
U.S. Bank Corporate Payment System	12/09/2025	Broom and mop head	51.56
U.S. Bank Corporate Payment System	12/09/2025	Civil Engineer License - M. Mares	180.00
U.S. Bank Corporate Payment System	12/09/2025	Essex Office Supplies	147.98
U.S. Bank Corporate Payment System	12/09/2025	Gate opener for Unit 2	31.53
U.S. Bank Corporate Payment System	12/09/2025	Safety placards	370.04
U.S. Bank Corporate Payment System	12/09/2025	Technical Manual	356.71
U.S. Bank Corporate Payment System	12/09/2025	Keys for Elite Gate Opener	28.16
U.S. Bank Corporate Payment System	12/09/2025	Eyewash station for OSG Building	1,708.56
U.S. Bank Corporate Payment System	12/09/2025	Dinner for late night work crew	204.79
Total U.S. Bank Corporate Payment System:			5,503.42
U.S. Postal Service			
U.S. Postal Service	12/23/2025	Annual PO Box Rental	244.00
Total U.S. Postal Service:			244.00
United Rentals (North America), Inc			
United Rentals (North America), Inc	12/04/2025	Sorbent pads for inventory	120.16
United Rentals (North America), Inc	12/30/2025	CalOsha Training	89.00
Total United Rentals (North America), Inc:			209.16
USC Foundation			
USC Foundation	12/23/2025	Backflow prevention Annual Membership - FB	88.80
USC Foundation	12/23/2025	Backflow Prevention Annual Membership - HB	31.20
Total USC Foundation:			120.00
USDA Forest Service			
USDA Forest Service	12/30/2025	US Forest Service Special Use Permit 2026	13,765.81
USDA Forest Service	12/30/2025	US Forest Service Special Use Permit 2026	13,765.81
Total USDA Forest Service:			27,531.62
VALEO Networks			
VALEO Networks	12/04/2025	Eureka office monthly computer maintenance	2,351.37
Total VALEO Networks:			2,351.37

Vendor Name	Date Paid	Description	Amount Paid
Valley Pacific Petroleum Serv. Inc			
Valley Pacific Petroleum Serv. Inc	12/04/2025	Cardlock-Pumping & Control	434.68
Valley Pacific Petroleum Serv. Inc	12/04/2025	Cardlock-Water Quality	434.68
Valley Pacific Petroleum Serv. Inc	12/04/2025	Cardlock-Maintenance	434.68
Valley Pacific Petroleum Serv. Inc	12/04/2025	Cardlock-HB Retail	113.02
Valley Pacific Petroleum Serv. Inc	12/04/2025	Cardlock-FBGCSO	321.66
Valley Pacific Petroleum Serv. Inc	12/04/2025	Sorbent pads	71.67
Valley Pacific Petroleum Serv. Inc	12/30/2025	Fuel for Ruth	1,028.27
Valley Pacific Petroleum Serv. Inc	12/30/2025	Oil absorbent pads for Ruth Hydro	143.33
Total Valley Pacific Petroleum Serv. Inc:			2,981.99
Verizon Wireless			
Verizon Wireless	12/23/2025	General Manager	52.00
Verizon Wireless	12/23/2025	Humboldt Bay Retail	14.57
Verizon Wireless	12/23/2025	Fieldbrook Glendale CSD	41.45
Verizon Wireless	12/23/2025	Humboldt Bay IPAD	9.88
Verizon Wireless	12/23/2025	Fieldbrook Glendale CSD IPAD	28.13
Verizon Wireless	12/23/2025	Ruth Area	13.83
Verizon Wireless	12/23/2025	Ruth Hydro	13.83
Total Verizon Wireless:			173.69
Wahlund Construction			
Wahlund Construction	12/23/2025	Breaker Door Handle Installation #26-0440	5,490.00
Total Wahlund Construction:			5,490.00
Watt's Cleaning Services			
Watt's Cleaning Services	12/23/2025	Eureka Office Cleaning 11/12 & 11/26/25	278.00
Total Watt's Cleaning Services:			278.00
West Coast Energy Systems LLC			
West Coast Energy Systems LLC	12/30/2025	Replace Essex Generator	45,580.53
West Coast Energy Systems LLC	12/30/2025	Replace Ruth Hydro Generator	45,580.54
Total West Coast Energy Systems LLC:			91,161.07
Zachery Bunke			
Zachery Bunke	12/09/2025	Safe Work Practice Award 2025	200.00
Total Zachery Bunke:			200.00
Grand Totals:			785,069.31

Memo to: HBMWD Board of Directors
From: Dale Davidsen, Superintendent
Date: January 5, 2026
Subject: Essex/Ruth December 2025 Operational Report

Upper Mad River, Ruth Lake, and Hydro Plant

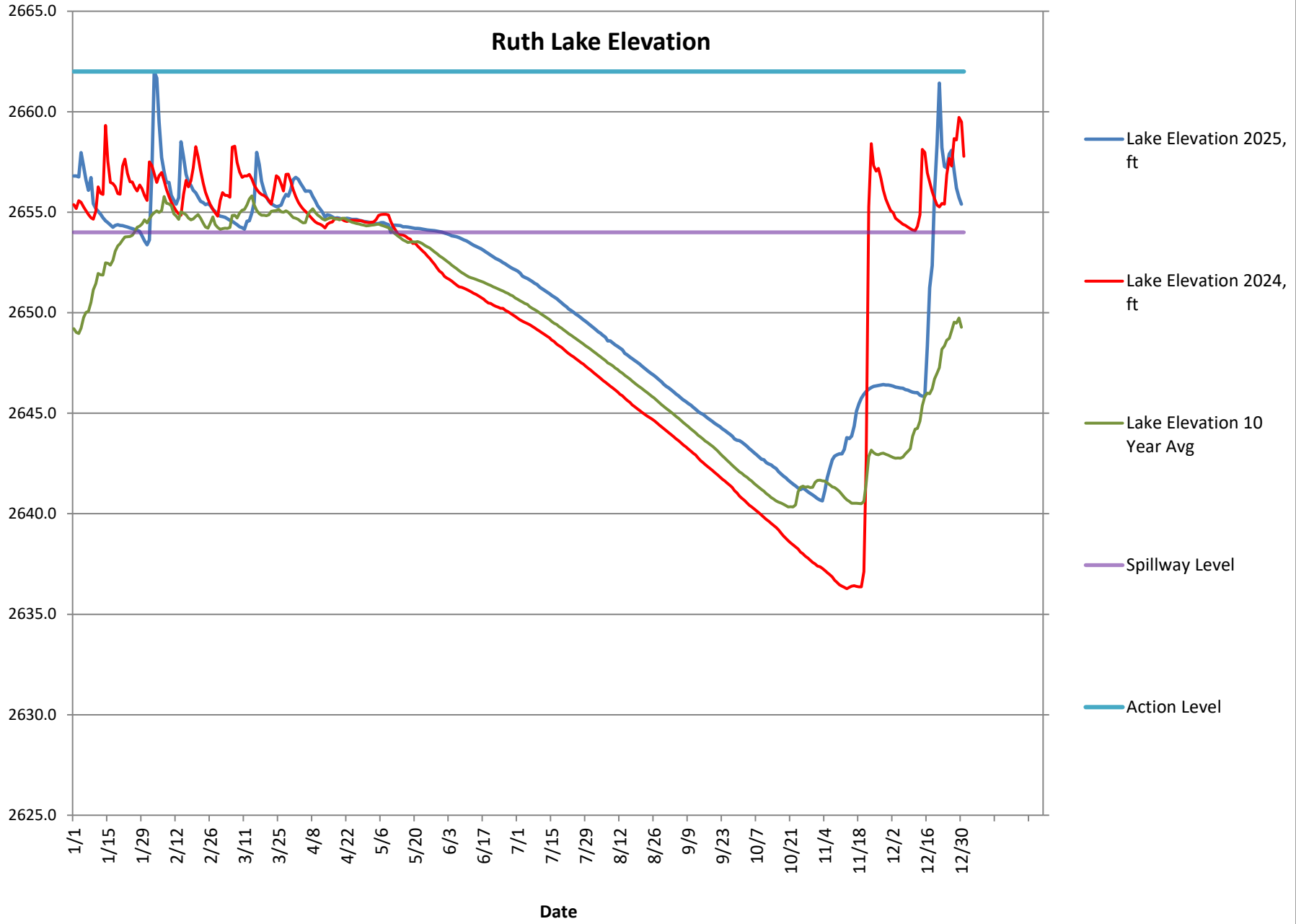
1. Average flow at Mad River above Ruth Reservoir (Zenia Bridge) in December was 991.36 cfs.
2. The conditions at Ruth Lake for December were as follows:
The lake level on December 31st was 2655.4 feet, which is:
 - 9.1 feet higher than November 31st, 2025.
 - 2.28 feet lower than December 30th, 2024.
 - 6.12 feet higher than the ten-year average.
 - 1.4 feet above the spillway.
3. Ruth Headquarters recorded 18.8 inches of rainfall in December.
4. Ruth Hydro generated 477600 kWh in December with two PGE shutdowns, causing 957 kWh loss in production.
5. The lake discharge averaged 1039 cfs with a high of 7347 cfs on December 22nd.

Lower Mad River, Winzler Control, and TRF

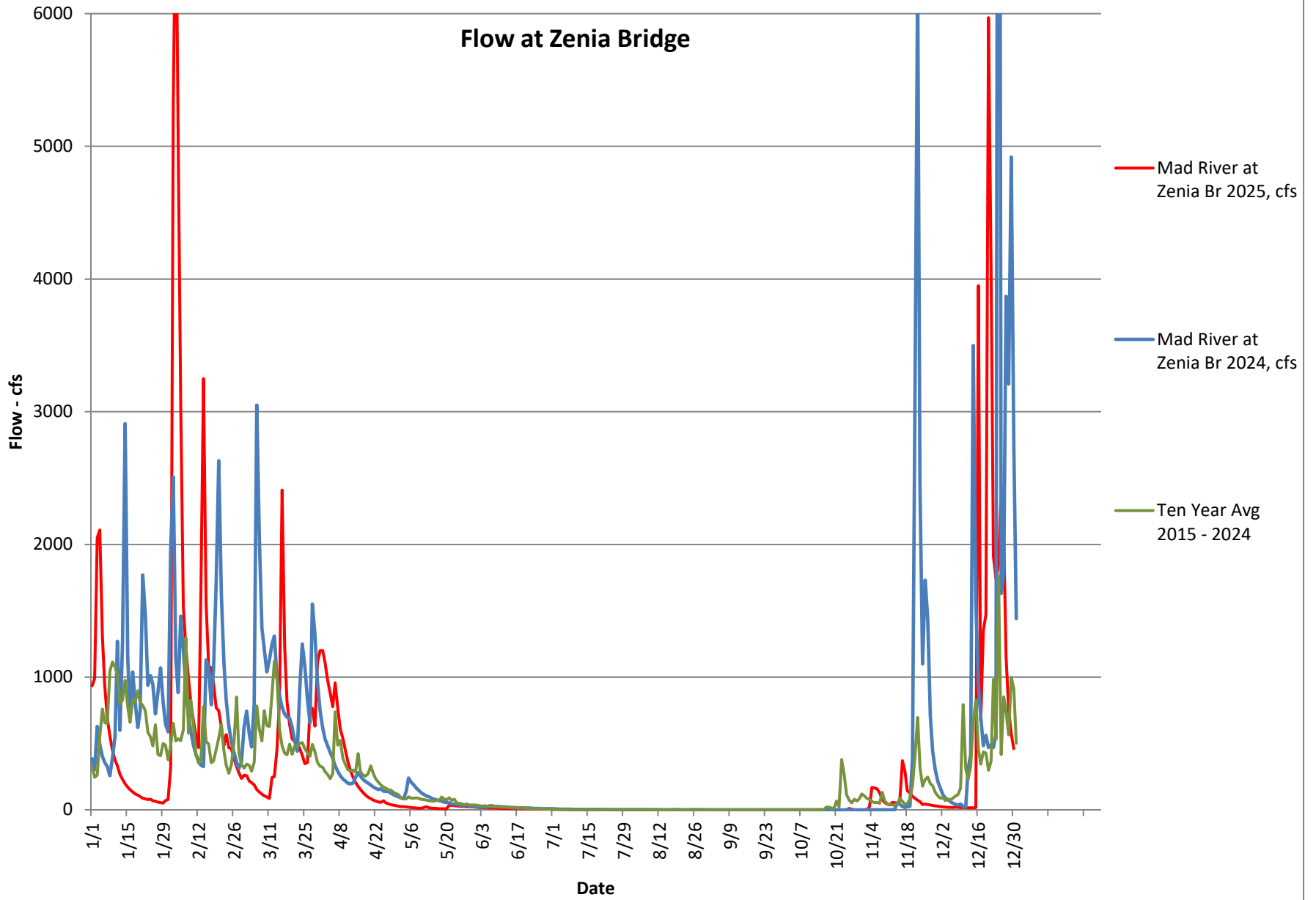
6. The river at Winzler Control Center in December had an average flow of 3879 cfs. The river flow was at a high of 25800 cfs on December 22nd.
7. The domestic water conditions were as follows:
 - a. The domestic water turbidity average was 0.11 NTU, which meets Public Health Secondary Standards.
 - b. As of December 31st, we pumped 214.67 MG at an average of 6.925 MGD.
 - c. The maximum metered daily municipal use was 5.503 MG on December 5th.
8. The TRF is online:
 - a. Average monthly source water turbidity was 1.64 NTU.
 - b. Average monthly filtered water turbidity was 0.08 NTU.
 - c. The number of monthly filter backwashes was 40.
9. December 1st – GRS completed the pipeline re-alignment and tie-in on New Navy Base Rd.
10. December 4th – 5 Essex staff completed their 8 Hr Hazwoper refresher training at NCSC.
11. December 5th - 5 more Essex and Ruth staff completed their 8 Hr Hazwoper refresher training at NCSC.

12. December 8th – Nate, Nathaniel and I did a punch list walk through for the DW and CT reservoirs seismic retrofit projects.
13. December 10th – Maintenance went to Ruth to install the auxiliary pump for the weir.
14. December 11th – Safety Day. Full day of safety training
 - a. Traffic control
 - b. Workplace ergonomics
 - c. Asbestos and Silica
 - d. Trench and Excavation Safety.
 - e. Rigging Safety
15. December 13th – Saturday – Truckers Parade.
16. December 15th
 - a. Final cleanup of the Happy Valley perk ponds we made for the Curtis Heights leak repair process.
 - b. Telstar onsite installing new CL2 analyzers
17. December 16th – First day for our new E & I Tech - Level 1 employee Cody Emmons. He is going to be a great asset to the team
18. December 20th – Saturday. Due to heavy rain, we called in 2 maintenance staff to repair a 12” culvert that came apart behind the maintenance shop and caused flooding in the shop.
19. December 22 – The lake level briefly reached the 2662’ elevation of 8’ over spillway.
20. December 23rd – Due to the forecast of more heavy rain and very high winds, we found and rented 2 large generators for the TRF. These generators were delivered by 2330 from out of the area so in the event of a power outage we could wire into our panels and do backwashes of the filters.
21. Current and Ongoing Projects
 - a. I attended several meetings and correspondence with the engineers and contractors on multiple projects.
 - i. Reservoir Seismic retrofit project.
 - ii. TRF generator project.
 - iii. FB reservoir replacement project. – Online, but still working on punch list items
 - 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. Submitted formal paperwork to HCSO for them to patrol some District R-o-W’s for urban campers.
 - d. TRF maintenance
 - e. Routine annual equipment maintenance and services.

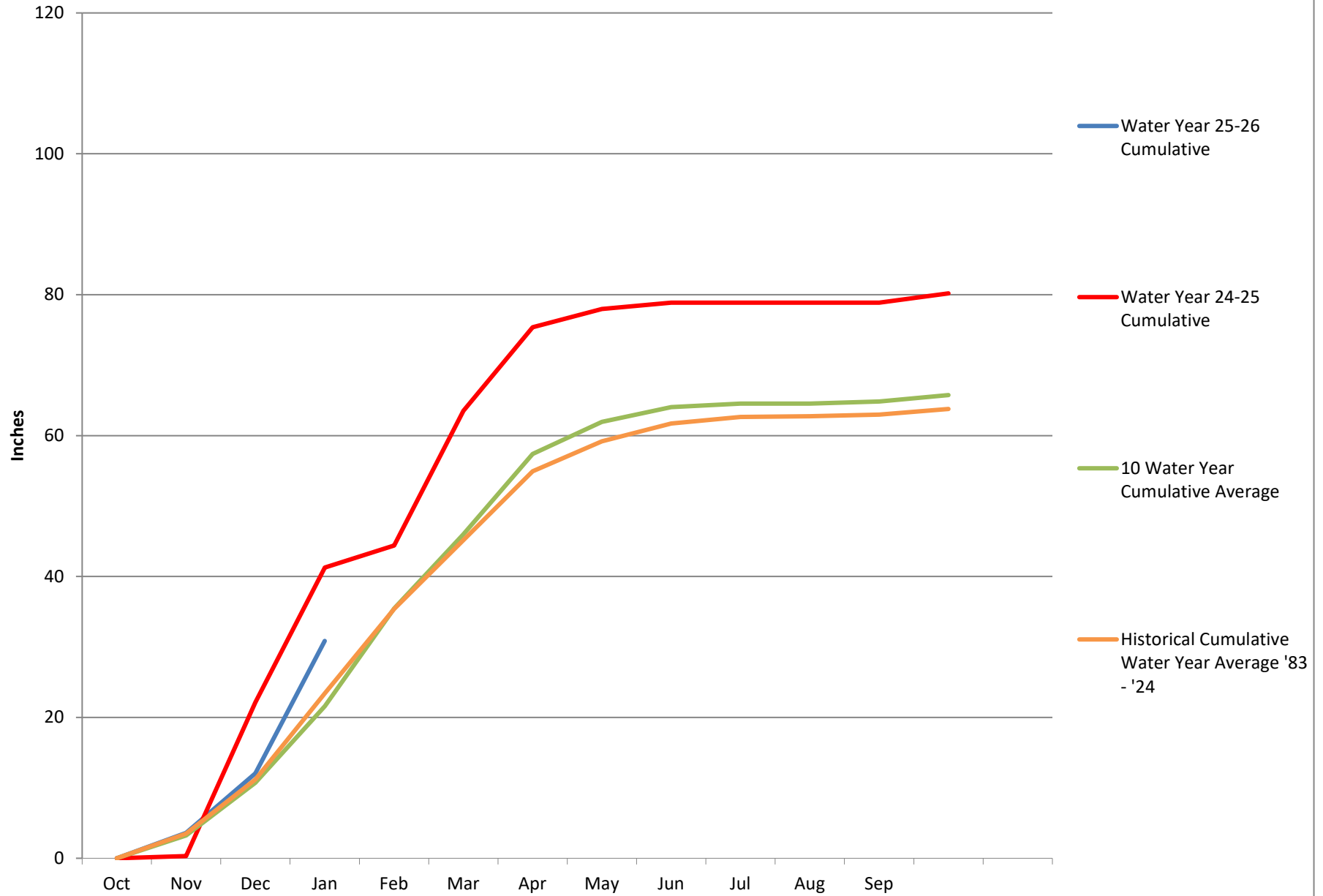
Ruth Lake Elevation

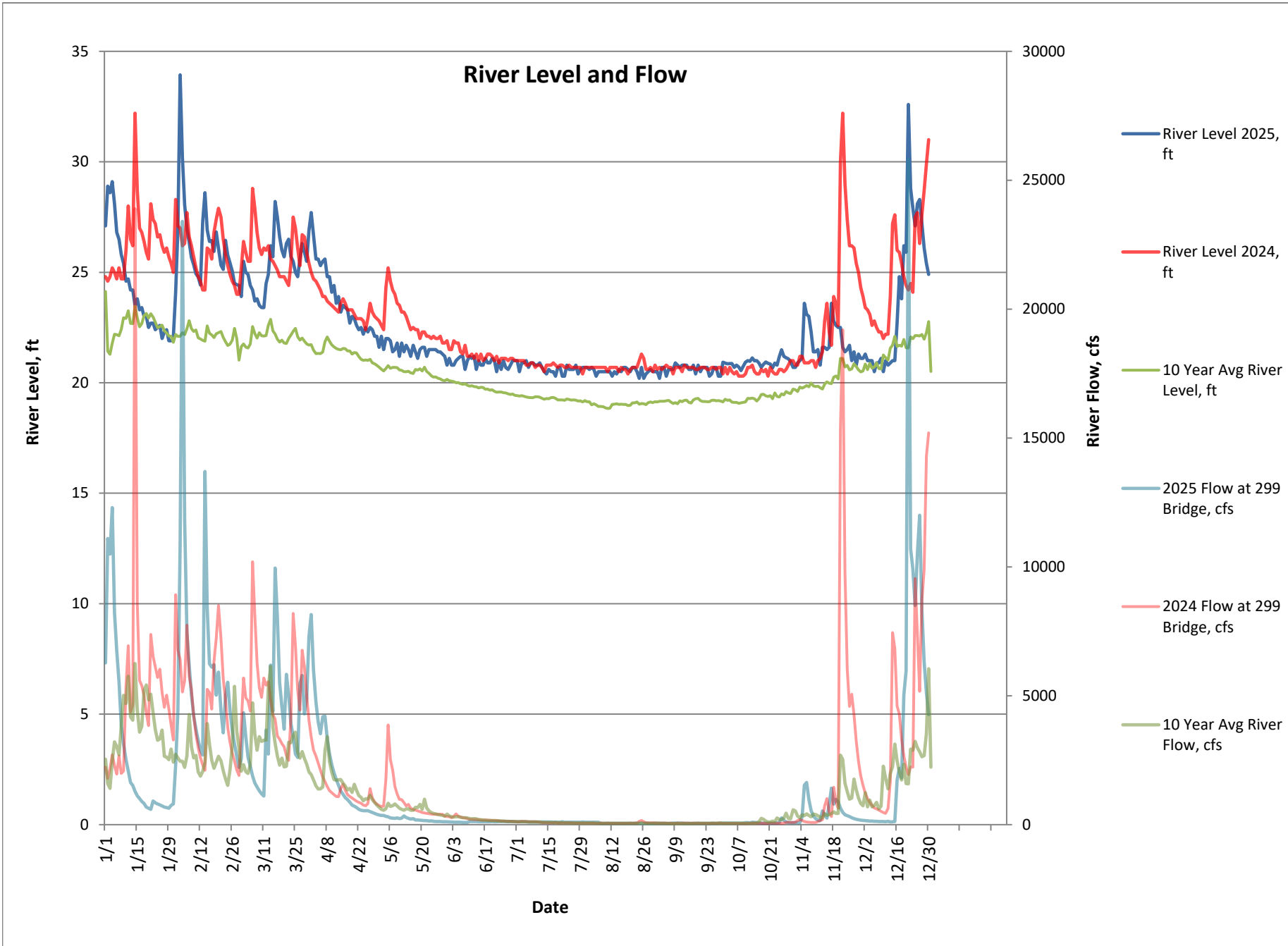


Flow at Zenia Bridge

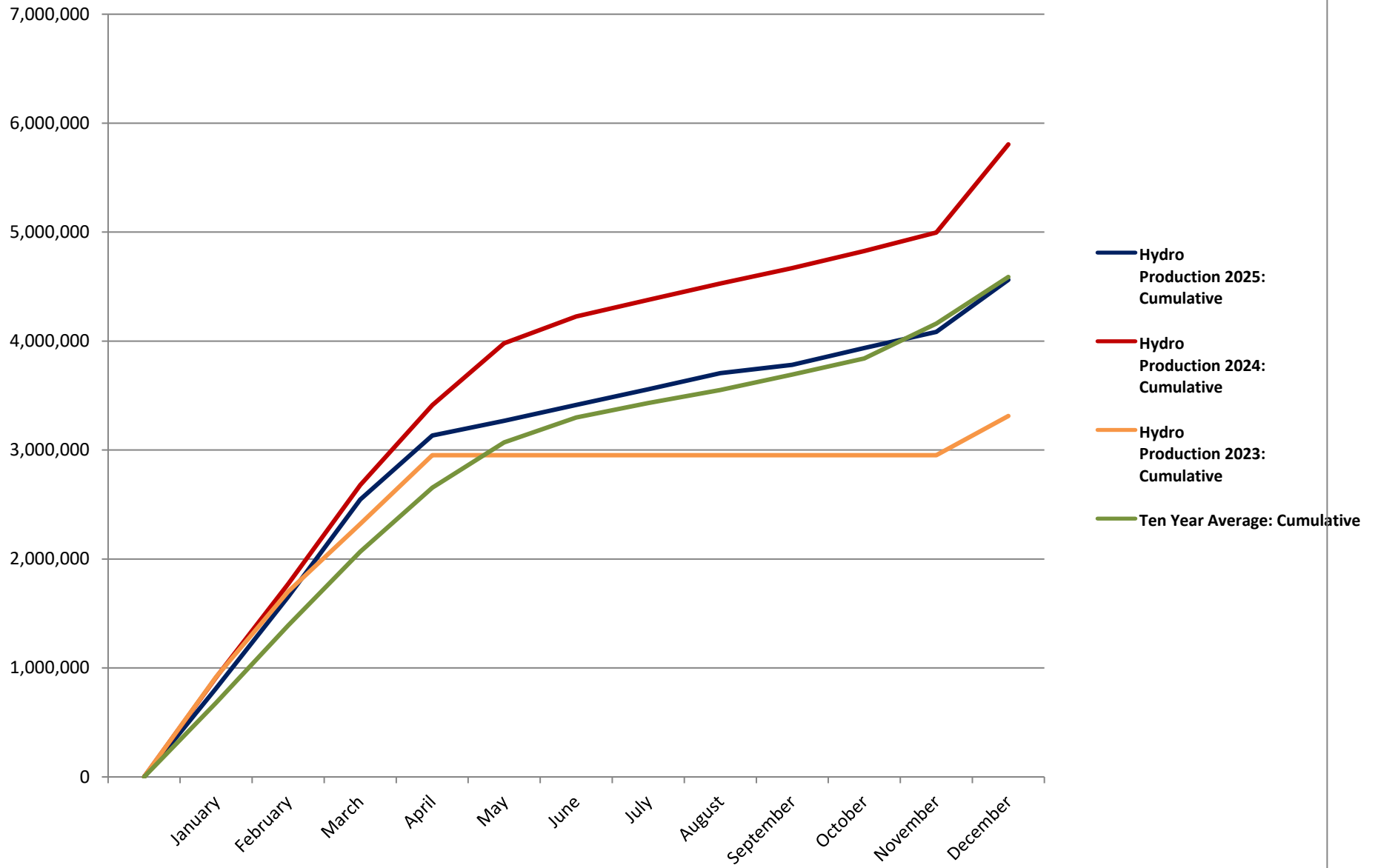


Ruth Rainfall - Water Year 2024-2025





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.

Goal 1- Regulatory Compliance

Workplace Safety. No reportable injuries.

Public Health. Maintained compliance with all state and federal drinking water regulations.

Permitting.

Federal Energy Regulatory Commission (FERC). Staff and Consultant finalized the Drilling Program Plan for the spillway investigation for the R.W. Matthews Dam Seismic Stability Project and received FERC approval. Staff is continuing to work with the Consultant on addressing FERC comments on the Drilling Program Plan for the embankment investigation.

Division of Safety of Dams (DSOD). Staff and Consultant finalized the Drilling Program Plan for the spillway investigation for the R.W. Matthews Dam Seismic Stability Project and received DSOD approval. Staff is continuing to work with the Consultant on addressing DSOD comments on the Drilling Program Plan for the embankment investigation.

Humboldt County Public Works. Renewed yearly encroachment permit for 2026.

Reporting.

Monthly SAFER Reports. Staff completed all current and past due monthly SAFER (Drought Conservation and Monitoring) reports for the HBMWD and Fieldbrook Glendale systems (except for 2023). Staff is working with Operations and the SWRCB to obtain the data needed to complete the 2023 SAFER reports.

North Coast RWQCB Annual Report- Ruth. Staff worked with Consultant to complete and submit the annual monitoring report required under the District's Section 401 Water Quality Certification to document the instream activities conducted by the District in 2025 at Ruth Lake.

North Coast RWQCB Annual Report- Essex. Staff worked with Consultant to complete and submit the annual monitoring report required under the District’s Section 401 Water Quality Certification to document the instream activities conducted by the District in 2025 at Essex.

National Marine Fisheries Service (NMFS) Annual Report. Staff is working with Consultant to prepare the annual monitoring report required under the Endangered Species Act/Biological Opinion to document the instream activities conducted by the District in 2025 and the effects of instream construction and fish relocation.

California Air Resources Board (CARB) Clean Truck Check Vehicle Inspection (CTC-VIS). Staff completed the semi-annual Onboard Diagnostic Test on one of the heavy-duty diesel fleet trucks to maintain CARB compliance .

Goal 3 – System Operation and Maintenance

Infrastructure Reliability.

Reservoirs Seismic Retrofit. Site restoration is complete. Remaining punchlist items are underway and anticipated to be complete by the end of January.

Service Interruptions. None.

Goal 4- Customer, Community, and Governmental Partnerships

Governmental Partnerships. Met with Humboldt County Planning and Building Department on December 18 to discuss a Regional GIS strategy for underground assets.

Community Engagement.

Trucker’s Parade. Submitted float in Trucker’s Parade and hosted Open House to employees.

Water Quality Emergency Notification Plan. Developed a draft water quality emergency notification plan to reach customers and the community in the event a Boil-Water-Notice is required due to power outages.

Goal 5 – Future Positioning

Natural Resources Protection.

Aquatic Invasive Species at Ruth Lake. CDFW requested revision to the Joint Aquatic Invasive Species Prevention Plan. Staff anticipate bringing the Plan to the Board for approval in February.

Capital Improvement Plan

Contract Status Report. Refer to Attachment 1, Contract Status Report, for a detailed summary of current contracts.

Organizational Development. Developed Regulatory Compliance SharePoint site to manage data, permits, reports, and correspondence with local, state and federal regulatory agencies.

Emergency Preparedness.

Operational Area. Attended Humboldt County Operational Area meeting in Fortuna on December 12, 2025.

Strategic Planning Initiative. Interviews with the facilitator and Board members will be scheduled for the month of January.

Goal 6 – Leadership Competencies

Employee Development. Hosted Winter Employee Recognition Celebration with over 285 years of staff experience!

GM Performance Appraisal. Informal GM Performance Appraisal will be completed by the President of the Board during the month of January.

Goal 7- Professional Development

Professional Licensure. Renewed professional engineer's license.

Attachments

Attachment 1 – Contract Status Report

NO ATTACHMENT FOR THIS ITEM

- The In-stream Flow Dedication Committee met 12/10/25
- The Board Policy Committee met 12/17/25

Directors Report

NO ATTACHMENT FOR THIS ITEM

ACWA-ACWA/JPIA

NO ATTACHMENT FOR THIS ITEM

RRDEC Link to Agenda

Meeting Canceled Due to Lack of
Quorum

RCEA Link to Agenda

Meeting Canceled