



HUMBOLDT BAY MUNICIPAL WATER DISTRICT

Board of Directors Meeting

January 12, 2023



Ruth Lake Spillway

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



**Agenda for Regular Meeting of the Board of
Directors
January 12th, 2023
Meeting Start Time: 9:00 AM**

District Mission

Reliably deliver high-quality drinking water to the communities and customers we serve in the greater Humboldt Bay Area at a reasonable cost. Reliably deliver untreated water to our wholesale industrial customer(s) at a reasonable cost. Protect the long-term water supply and water quality interests of the District in the Mad River watershed.

COVID-19 Notice

The Board room at 828 7th street will be open to the public at reduced capacity to accommodate social distancing. An online option will also be available.

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 pm the day before the Board Meeting by sending comments to office@hbmwd.com. Email comments must identify the agenda item in the subject line of the email. Written comments may also be mailed to 828 7th Street, Eureka, CA 95501. Written comments should identify the agenda item number.

These comments will be read during the meeting. Comments received after the deadline will be included in the record but not read during the meeting. If participating in the meeting, public comments will also be received during the meeting.

Time Set Items:

| | | |
|--------------|---|-----------------|
| 9.1 | Officer and Committee Assignments | 9:05 AM |
| 9.2 | McNamara & Peepe | 9:30 AM |
| 11.2 | Engineering | 11:00 AM |
| 11.1c | CLOSED SESSION – Active Litigation (Van Duzen) | 1:30 PM |

The Board will take a scheduled lunch break from 12:00 pm to 1:30 pm.

1. ROLL CALL

2. FLAG SALUTE

3. ACCEPT AGENDA

4. PUBLIC COMMENT

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

5. **MINUTES**

5.1 December 8th, 2022 Regular Board Meeting Minutes* — discuss and possibly approve

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

6.1 Media articles of local/water interest (Articles A – E)* — possibly approve

7. **CORRESPONDENCE**

7.1 NCRP Proposition 1 IRWM Round 2 Grant Approval* —discuss

7.2 Letter to Planning Clerk with County of Humboldt P & B Dept RE: Northwind Management LLC* —discuss

7.3 R.W. Matthews Dam Emergency Action Plan December 2022 Update* —discuss

8. **CONTINUING BUSINESS**

8.1 Water Resource Planning - status report on water use options under consideration

a. Local Sales

i. Nordic Aquafarms—discuss

ii. Trinidad Rancheria Mainline Extension — discuss

b. Transport — discuss

c. Instream Flow— discuss

8.2 McNamara & Peepe —discuss

(Time set 9:30 AM)

9. **NEW BUSINESS**

9.1 Officer and Committee Assignments* - discuss and possibly approve **(Time Set for 9:05 am)**

a) Election of officers

b) Appointment to committees

9.2 CalOES Resolution for Non-State Agencies – Resolution 2023-01* — discuss and possibly approve

9.3 **CLOSED SESSION**- this will be the last item on the agenda

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

9.4 Diversity, Equity, and Inclusion* —discuss

9.5 Ruth Lake reforestation project*

a. Discuss project and possibly approve

b. Consider and possibly adopt CEQA Exemptions

10. **REPORTS (from STAFF)**

10.1 **Legal**

(Time set 1:30 PM)

a. **CLOSED SESSION** — Conference with Legal Counsel – Existing Litigation: Initiation of litigation pursuant to paragraph (1) of subdivision (d) of § 54956.9 (Van Duzen) Case # CV2201489

10.2 **Engineering**

(Time set 11:00 AM)

a. 12 kV Switchgear Relocation (\$858,332 District match) – status report

b. Collector 2 Rehabilitation Project – status report

c. Collector Mainline Redundancy Project* – status report

d. Essex Onsite Sodium Hypochlorite Generation Project – status report

e. Matthews Dam Advance Assistance Seismic Stability Project– status report

f. Status report re: other engineering work in progress

10.3 Financial

- a. December 2022 Financial Statement & Vendor Detail Report* — discuss and possibly approve

10.4 Operations

- a. December 2022 Operation Report & Graphs* — discuss
- b. Storm Damage —discuss

10.5 Management

- a. Draft letter from RLCSD; RE: Master Lease Extension* —discuss
- b. Presentation to employee.
- c. RLCSD draft Sublease* —discuss

11. DIRECTOR REPORTS & DISCUSSION

11.1 General - comments or reports from Directors

- a. Date for May Board Meeting conflicts with ACWA Conf. Change to May 4th or 18th — discuss and possibly approve

11.2 ACWA

- a. Director report out, if any
- b. CAFWA (California Forest Watershed Alliance) letter to Governor Newsom* — discuss

11.3 ACWA – JPIA

- a. Director report out, if any

11.4 Organizations on which HBMWD Serves

- a. RCEA Board of Directors Meeting Agenda 12-15-22* — report out
- b. RCEA Board of Directors Meeting Minutes for 11-17-22* — discuss
- c. RCEA News and Updates December 2022*— discuss
- d. RREDC— discuss

ADJOURNMENT

ADA compliance statement: In compliance with the Americans with Disability Act, if you need special assistance to participate in this meeting, please contact the District office at (707) 443-5018. Notification 48 hours prior to the meeting will enable the District to make reasonable arrangements to ensure accessibility to this meeting. (Posted and mailed January 6th, 2023.)



HUMBOLDT BAY MUNICIPAL WATER DISTRICT
828 7th Street, Eureka



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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. Protect the long-term water supply and water quality interests of the District in the Mad River watershed.

*

1. ROLL CALL

President Woo called the meeting to order at 9:03 AM. Director Rupp conducted the roll call. Directors Fuller, Lindberg, Rupp, and Woo were present. Director Latt was absent. General Manager John Friedenbach, Superintendent Dale Davidsen, Business Manager Chris Harris, and Board Secretary Angela Smart were present. District Engineer, Nathan Stevens was present for a portion of the meeting.

2. FLAG SALUTE

President Woo led the flag salute.

3. OATH OF OFFICE

President Woo conducted the Oath of Office swearing-in for Director Fuller and Director Rupp.

4. ACCEPT AGENDA

10.1 was continued until the January Board Meeting.
10.4 was deleted from the December Agenda.
The agenda was accepted with these edits on motion by Director Lindberg, seconded by Director Rupp with a Board vote of 4-0.

5. MINUTES

On motion by Director Rupp, seconded by Director Lindberg, the Board voted 4-0 to approve the November 10th, 2022, Regular Meeting Minutes with the edits requested.

6. PUBLIC COMMENT

No comment was received.

7. CONSENT AGENDA

The Board approved the Consent Agenda on motion by Director Rupp, seconded by Director Lindberg, and voted 4-0 in approval.

8. CORRESPONDENCE

8.1 Letter from US Forest Service RE: Mad River August Complex Restoration Project #60286

GM Friedenbach received a reply from Alan Olson (US Forest Service) regarding the District's objection letter related to the USFS Mad River August Complex Restoration Project. In the reply, Mr. Olson stated that he had convened a team to review the objections received. He stated that "While there is some nexus between the project's stated purpose of 'increasing protection for watersheds' and the objector's concerns, fire-related impacts to Ruth Lake are not part of the project's stated purpose". He declared the administrative review was concluded with a decision of "no further action".

8.2 Letter from DWR RE: UWMP requirements met

The District received a letter confirming the Department of Water Resources (DWR) reviewed the 2020 Urban Water Development Management Plan (UWMP) and all requirements have been addressed.



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8.3 HBMWD letter to Ruth Lake CSD

GM Friedenbach presented a letter suggesting possible penalty provisions to the sublease agreements with the lease lot holders for the spring of 2023. He included concerns based on issues experienced recently by HBMWD staff.

8.4 Letter from US Forest Service RE: Cedar Seedlings

The District was granted permission by Kristin Lark, District Ranger of Mad River Ranger District US Forest Service, to collect 50 Incense Cedar seedlings at their Dam Camp location, downstream of Matthews Dam.

8.5 Letter from US Forest Service RE: Blocking access roads

The District was granted permission by Kristin Lark, (US Forest Service) to block illegal lake access roads that have been identified at Ruth Lake.

9. CONTINUING BUSINESS

9.1 Water Resource Planning

a. Local Sales

i. Nordic Aquafarms
No update.

ii. Trinidad Rancheria Mainline Extension
No update.

b. Transport:

GM Friedenbach met with an individual from Central Valley at the ACWA conference. Their water district relies solely on groundwater and is very interested in our transport option. GM Friedenbach referred him to the District's Water Resource Planning webpage.

c. Instream Flow no update.

9.2 McNamara & Peepe – Director Woo recused herself due to a conflict of interest.

a. HBMWD letter to DTSC RE: site visit

GM Friedenbach presented the letter to Nicole Yuen (DTSC Hazardous Substances Engineer) regarding the US EPA and the Regional Water Board's site visit which included several priorities and suggestions for remedies.

b. SHN Work Order No. 1

Enclosed in the Board Packet is a Work Order Approval issued by DTSC to SHN Consulting Engineers and Geologists, Inc. (Contractor to DTSC) for the McNamara and Peepe Lumber Mill Site Investigation. The letter serves as the Contractor's authorization to commence work immediately.



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c. HBMWD letter to DTSC RE: groundwater report

GM Friedenbach presented a draft letter to Nicole Yuen at DTSC regarding the test results of the October Groundwater Monitoring report. Discussed were the results contained in the table of the Groundwater Monitoring report showing inconsistencies between the results of both August '22 and February '21 testing. Also discussed was a suggestion for the placement of monitoring wells to delineate the extent of contamination and migration off-site. Ultimately culminating in the closing statement: "With dioxins detected in surface water flowing into Hall Creek and Mad River, identifying the full extent of contamination off-site is critical.

9.3 CALFIRE Fire Fuels Reduction & Defensible Space Project

The District published the RFP for the project on October 14th and received five responses from companies qualified to perform the project. Although there were less expensive bids on individual phases, the bid received from Greentek Services for the overall cost of the project was 20% lower than the other bids. On motion by Director Rupp, seconded by Director Fuller, the Board voted 4-0 to approve contracting Greentek Services to complete the Fire Fuels Reduction & Defensible Space Project and directed staff to complete the necessary documents to implement the project.

10. NEW BUSINESS

10.1 CLOSED SESSION- this will be the last item on the agenda -continued to January meeting
As noted above, this item was removed from the agenda and continued to the January 2023 Board Meeting.

10.2 Employee Handbook Revision – Holiday Worked Pay

Operations staff requested that the "Holiday Worked Pay" be applicable on the actual calendar day instead of the currently observed preceding Friday or following Monday. Staff recommended the board approve this policy change.

On motion by Director Lindberg, seconded by Director Fuller, the Board approved the adoption of the revised Employee Handbook 4001.2 Holiday Policy by a vote of 4-0.

10.3 Resolution 2022-10 Recognizing and Honoring Bill Wardrip

William (Bill) Wardrip is retiring from the District after 20 years and 4 months of distinguished service. Director Rupp read the resolution. On motion of Director Rupp, seconded by Director Lindberg, Resolution 2022-10 recognizing his service was adopted by the Board, by a vote of 4-0.

11. REPORTS (from Staff)

11.1 Legal

a. Waiver of Conflicts of Interest

GM Friedenbach received correspondence from the law firm Downey Brand requesting the District sign a waiver of Conflict of Interest. The firm also represents the County of Humboldt and is concerned about potential conflicts regarding the Samoa peninsula pipeline maintenance project.

California law prohibits simultaneous representation of clients in adverse action, even if the representation is not related. Downey Brand listed theoretical issues that may arise: A) Duty of Loyalty

B) Client Communication and the Duty of Confidentiality

C) Other Foreseeable and Adverse Consequences.

They have also outlined the typical procedure when faced with similar situations of constructing an ethical wall, which will ensure that teams for either party will not communicate regarding the representations.

On motion of Director Fuller, seconded by Director Lindberg, staff was directed to sign the waiver of Conflicts of Interest by a Board vote of 4-0.



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- b. CLOSED SESSION — Conference with Legal Counsel — Anticipated Litigation: Initiation of litigation pursuant to paragraph (4) of subdivision (d) of § 54956.9 (DTSC) (Time set 11:30 AM)
Closed session was conducted from 11:30 to 11:35. Director Rupp reported out that there was no action taken.
- c. CLOSED SESSION — Conference with Legal Counsel — Existing Litigation: Initiation of litigation pursuant to paragraph (1) of subdivision (d) of § 54956.9 (Van Duzen) Case # CV2201489
District Counsel Ryan Plotz was unable to attend, thus no closed session occurred

11.2 Engineering

- a. 12 kV Switchgear Relocation (\$858,332 District match)
The Arc Flash electrical study comprehensive electrical study of the entire electrical system needs to be completed by the contractor. Changes have been made outside of the 12 kV Switchgear project and need to be taken into the consideration. Mr. Stevens has been working with the manufacturer directly. They are completing the electrical study to get the revision done outside of the 12kV contract.
The District has been anticipating the arrival of a breaker lift. It was expected to arrive in the middle of November but has not arrived. Mr. Stevens now anticipates arrival in mid-December. Once received, the District would potentially be able to close the 12kV contract.
- b. Collector Mainline Redundancy Project
CalOES approved the recent grant deadline extension request to December 2023 submitted by the District. The next step is to issue an RFQ for environmental and engineering services.
- c. TRF Generator Project (\$517,819 District match)
Mr. Stevens is awaiting the Phase I funding approval.
- d. Matthews Dam Advance Assistance Seismic Stability Project
FEMA submitted an additional Request for Information (RFI) regarding the potential for the dam to be registered to the National Register for Historic places (NRH). Initially, this request was posed last April and the District consulted informally with a local Historian who stated that the dam was not eligible for the NRH. At that time, the District forwarded that information to CalOES, however, they are now requesting more specifics including documentation that supports the claim that it does not meet requirements. The District is now awaiting a response to the submittal.
- e. Reservoirs Seismic Retrofit Project
Mr. Stevens provided an update on the FEMA Hazmat Mitigation project for retrofitting the District's three tanks. The District previously received Phase 1 funding and completed 60% of the design. The District completed the CEQA process and the next major milestone will be the receipt of Phase 2 funding. The District recently received an environmental review completed by FEMA which includes some mitigation measures that they are requesting in the bid documents, all of which were expected by the District.



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f. Status report re: other engineering work in progress

GM Friedenbach informed the Board that the NCRP Prop 1 round #2 funding was applied for and received in the amount of \$712,500, out of the \$950k requested. The District's application stated that the project was scalable to facilitate funding to other NCRP applicants.

This funding will allow the District to put the Collector 2 rehabilitation project out for bid in December. The District originally applied for NCRP Prop 1 round #1 funding and received \$600k.

11.3 Financial

a. November 2022 Financial Statement & Vendor Detail Report

Ms. Harris advised the Board that the current general account is \$3.8 million, with various investments at \$7.9 million. Funds allocated to specific projects (advanced charges) are currently \$5.7 million. General reserves are at \$2 million.

On a motion by Director Rupp, seconded by Director Lindberg, the Board voted 4-0 to accept the November 2022 Financial statement and Vendor detail in the amount of \$713,758.29.

b. Caselle Accounts Receivable Module

In December 2017 the Board approved an upgrade of the District's financial software. Based on the success of the transition to Caselle Software and due to upcoming employee retirement, staff is asking for the addition of the Accounts Receivable module to the Caselle Software Suite. Staff has negotiated a one-time cost of \$5,000 for acquisition, set-up, installation, and training.

The Board approved the purchase of the Caselle module on motion by Director Rupp, seconded by Director Fuller, and voted 4-0.

11.4 Operations

a. Monthly report on projects and operations

Mr. Davidsen provided the November 2022 Operational Report. Ruth Hydro produced 148,400 KWh in November. Ruth Lake recorded 4.07" in rain for November. The lake level was 2640.88 feet on November 30th. The lake discharge averaged 16 cfs, with a high of 44 cfs on November 11th. The river at Winzler Control Center had an average flow of 126 cfs with a high of 336 cfs on November 9th.

November 8th Essex conducted the FERC-required Annual EAP Call Down drill. Local agencies, district personnel, and consultants all participated and all went well.

b. Surplus equipment request - 2006 Ford F-550 single cab and AT37G Manlift

The District replaced Unit 4 in the FY 22-23 budget due to emissions compliance. Mr. Davidsen requested to surplus Unit 4, a 2006 Ford F-550 single cab with a utility bed and Altec AT37G manlift.

On motion by Director Lindberg, seconded by Director Fuller, the Board voted 4-0 to approve the surplus of this vehicle.

12. MANAGEMENT

a. ACWA Fall Conference

GM Friedenbach included the agenda for both the ACWA JPIA Fall Conference. JPIA was Monday-Tuesday and ACWA was Tuesday-Thursday. Monday was administrative with Committee & Board of Directors meetings.



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- b. CSDA Board Secretary Conference
Ms. Smart thanked the Board for allowing her to attend the CSDA Board Secretary Conference. She found the information valuable and will begin to implement all she learned immediately. She apologized for her absence at the November board meeting while attending the conference.
- c. Regional Roundtable Listening Session on Infrastructure
GM Friedenbach participated virtually in the Regional Roundtable Listening Session on Monday, October 21st held at the Governor's office for participants in the Humboldt County region. The purpose of these outreach meetings was to get information from different regions of the State on infrastructure needs and challenges in their unique area. GM Friedenbach prepared a 2-page summary of current projects, including the rehabilitation of the industrial system for Nordic (\$5 million project) and how that related to the development of the local economy, and the replacement of the 15" domestic water supply line on the Samoa peninsula (\$10 million project). GM Friedenbach emphasized that having greater than \$15 million in projected projects to facilitate the distribution of quality water to approximately 90k customers is a large burden for ratepayers.
- d. Humboldt County CEDS
GM Friedenbach attended the Community Economic Development Roadshow at the Arcata Community Center on October 27th with the Infrastructure workgroup. The group consisted of consultants, HCAOG, and the Harbor District. The Roadshow was primarily focused on economic development. The CEDS team intends to compile workgroup reports into an analysis document which will be shared with the policy decision-makers.
- e. Humboldt Bay Harbor and Conservation District – Draft Letter
GM Friedenbach presented a draft letter written to the Humboldt Bay Harbor and Conservation District to the Board (HBHCD). By consensus, the Board approved the letter as written. President Woo also suggested the Board reach out to the Board of HBHCD regarding the water supply issue for the Nordic Aquafarms project. The Board decided to also reach out for a follow-up conversation regarding the need and potential next steps that will need to be taken to facilitate the amount of water required for the project.
- f. Education of Wholesale Customer elected officials about the HBMWD system
At a municipal customer meeting, GM Friedenbach suggested that HBMWD host an educational tour of our TRF for our municipal customer elected officials. There are many individuals who have not toured our facilities. The board concurred that a tour of the TRF and education about our operations would be beneficial. The invitations would be sent out in January '23 after the elected are sworn into their new positions. Directors also suggested that meetings be initiated with our state elected officials.

13. DIRECTOR REPORTS & DISCUSSION

13.1 "General - comments or reports from Directors"

Director Rupp spoke briefly about reaching out to our local elected officials with an invitation to meet and discuss issues that we are facing. It was suggested that perhaps President Woo and GM Friedenbach could schedule a time to travel to Sacramento to speak with Legislature. GM Friedenbach reiterated that he is keeping the lines of communication open by involving them in discussions virtually and electronically and appreciates the face-to-face opportunity.



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13.2 ACWA

Director Rupp reported out about his participation in the ACWA conference. The Board also got an opportunity to view the new promotion of outreach Taskforce promoting the importance of infrastructure by the name of Quench, those videos are available on the ACWA website and a selection was played for the Board on the projector screen.

13.3 ACWA – JPIA

ACWA-JPIA Fall Conference - report out

Director Rupp spoke about the property insurance sub-committee meeting he attended. He spoke about insurance being a hard market, expensive, and incredibly active year with disasters. That paired with the stock market underperforming leads to a struggle in the insurance industry.

Director Rupp said that it's probable that we will see up to a 20% rate increase in property insurance premiums happen soon.

Workers' compensation is likely to stay the same, but it may affect employee benefit costs as utilization rates are starting to go up again.

JPIA President's Special Recognition Award Certificate

Every year ACWA JPIA presents an award to districts that stay below 20% in losses annually. The District has, in the past, won all three in Liability, Property, and Workers' Compensation programs. This past year the District received recognition for achieving a low ratio of "Paid Claims and Case Reserves" to "Deposit Premiums" in the Liability Program for the period 10/01/2018 – 09/30/2021.

JPIA Executive Committee Meeting Agenda 11-14-22

Director Rupp spoke briefly about the changes in leadership since Jerry Gladbach passed in July. Melanie McDonald is the new president and David Drake is the new vice president. CEO Andy Sells will be retiring at the end of 2023.

13.4 Organizations on which HBMWD Serves

RCEA Board of Directors Draft Meeting Agenda 11-17-22

Director Fuller attended the Board Meeting in President Woo's place. Director Fuller reported that the meeting was relatively short. Fuller mentioned that the focus of the meeting was their improved financial outlook compared with recent concerns.

President Woo read an email from ED Marshall advising of the bidding for BOME Offshore Wind auction netted over \$750 million in two days and was won by five companies, including RWE, a German-based international energy company, and California North Floating LLC, a Denmark based company. He expressed sadness that RCEA would no longer be working with Mainstream Renewables but was optimistic about future work with the developers who won the decade-long project.

RREDC Special Meeting of 11-28-22 Cancellation

The meeting was canceled.

ADJOURNMENT

The meeting adjourned at 2:41

Attest:

Sheri Woo, President

J. Bruce Rupp, Secretary/Treasurer

Is California's drought over? Water providers still predict shortages next year



BY ALASTAIR BLAND DECEMBER 13, 2022



Oroville, which is one of California's largest reservoirs, is only 59% of capacity as of Dec. 12 — despite recent rains and snow. The reservoir is shown here in May 2022. Photo by Andrew Innerarity, California Department of Water Resources

IN SUMMARY

Despite December storms, water supplies remain low in many areas. Some managers expect to impose severe restrictions on their customers.

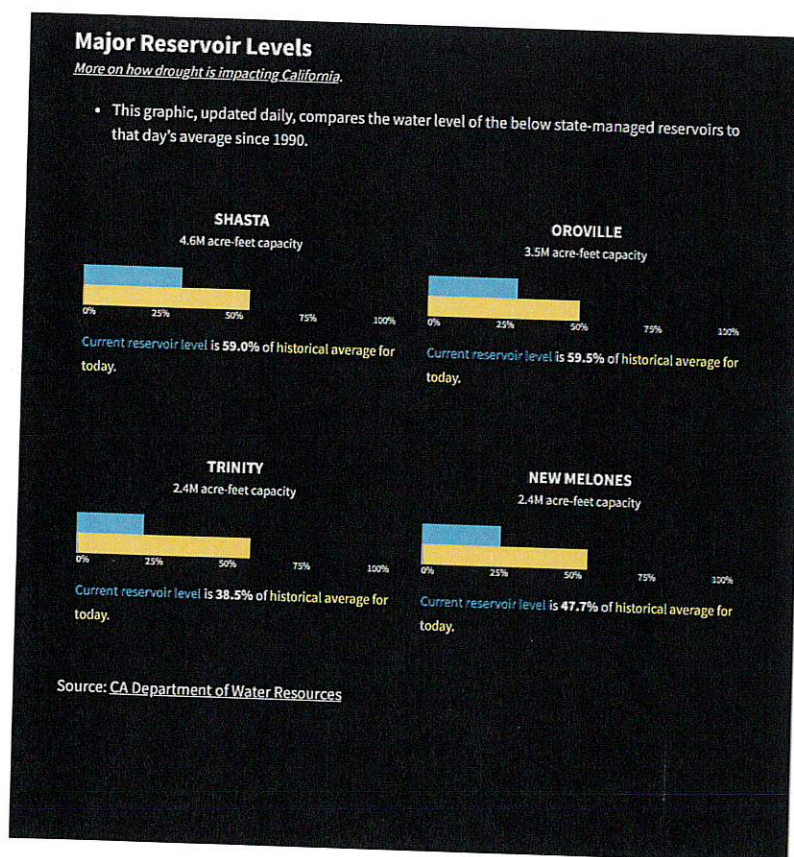
December has delivered a powerful punch of storms to California. But the wet weather comes with a dry dose of reality: The state's largest reservoirs remain [badly depleted](#), [projected water deliveries](#) are low, wells are [drying up](#), and the Colorado River's water, already diminished by a megadrought, is severely overallocated.

Throughout California, urban water managers are bracing for a fourth consecutive drought year. Nearly one out of every five water agencies — 76 out of 414 — in a recent state survey predict that they won't have enough water to meet demand next year. That means they are likely to impose more severe restrictions on customers, with some Southern California providers considering a ban on all outdoor watering.

While December's rain and snow show promise, water managers remember the same thing happened last year — epic early storms followed by the driest January through March in California's recorded history.

"We're not counting any chickens just yet," said Andrea Pook, a spokesperson for the East Bay Municipal Utility District, which delivers water to 1.4 million Bay Area residents. The district's water supply is in relatively good shape, with a 9% water deficit projected through the first half of 2023.

Last week the state announced an emergency regulation extending its ban on "wasteful water practices" through 2023. Included are watering while it's raining, running decorative fountains without recirculating flows and washing vehicles with hoses not fitted with automatic shutoff nozzles, among others.



Some regions of California have more water than they need. Sacramento reported a 173% surplus for 2023 to state officials. City spokesperson Carlos Eliason said Sacramento has a

healthy system of community wells to draw from in addition to the Sacramento and American rivers.

The Humboldt Bay Municipal Water District, serving 90,000 people in and around Eureka, reported an 834% surplus for 2023. Its main reservoir typically fills to the brim every year.

“Unfortunately, our system isn’t connected to other systems, so we can’t do anything to help our neighbors in other parts of the state, but we’d like to,” said General Manager [John Friedenbach](#).

Other areas will probably cruise through the drought with some basic conservation efforts. The San Francisco Public Utilities Commission reported a 5% shortage for 2023 and the Santa Clara Valley Water District, serving the South Bay and Peninsula, has a shortfall of 11%.

Sonoma County’s major reservoir was at just 39% of capacity last week, its lowest level ever recorded, but Don Seymour, the county water agency’s deputy chief engineer, said there is no reason to panic. “That’s still a lot of water,” he said. “We could stretch that out into the spring of 2024.”

Cities dependent on state aqueduct are hit hard

But other regions of the state — mostly in Southern California — aren’t as fortunate. Millions of Southern Californians will likely face outdoor watering restrictions or even bans, with probable exceptions made for the hand-watering of trees.

The [Las Virgenes Municipal Water District](#), for instance, expects a 63% shortage based on average historical demand. The district serves 77,000 people in Agoura Hills, Calabasas and other nearby communities in western Los Angeles County.

“That means that if a household normally uses 100 gallons of water, we’ll be able to deliver 37 gallons,” said Las Virgenes’ public affairs officer Mike McNutt.

The district purchases between 20,000 and 25,000 acre-feet of imported water annually from the region’s wholesaler, the Metropolitan Water District of Southern California. This year that delivery could drop to 11,000 acre-feet, according to John Zhao, the district’s director of facilities and operations.

McNutt said residents have already cut water use by 35% from pre-drought levels, mostly from outdoor conservation. Most homes in the region, he said, are fully outfitted with high-efficiency appliances, toilets and showerheads. That means there is limited room to improve without more drastic action, which the district hopes to avoid.

But if drought conditions continue, Las Virgenes customers could be hit with a total outdoor watering ban in 2023 — a step up from the region’s one-day-per-week allowance implemented last spring by the Metropolitan Water District.



Grass goes dry at a home in Los Angeles County served by the Las Virgenes Municipal Water District, which faces a severe water shortage. Photo provided by the Las Virgenes Municipal Water District.

Las Virgenes has a 10,000-acre-foot reservoir to fall back on, and McNutt said the district may also seek transfers of water from nearby communities with water to spare — arrangements he said would have to be negotiated through the Metropolitan Water District.

Most Southern Californians — 27 million people — rely at least partially on the State Water Project, a system of dams and canals that moves water from the Sacramento Valley to Southern California. On Dec. 1, the Department of Water Resources announced it will initially allocate just 5% of the supply that water districts requested from the state — bad news for those with no other water source.

“We are 100% reliant on the State Water Project,” McNutt said.

The Ventura County communities of Thousand Oaks and Simi Valley face a similar dependency on the State Water Project.

“We wouldn’t exist without that imported water,” said Wanda Moyer, Simi Valley’s water conservation coordinator.

Simi Valley is expecting a 68% shortage in 2023 and will implement a total outdoor watering ban if the state’s delivery projections don’t improve, Moyer said.

In June, when Metropolitan’s once-weekly watering limit for gardens and lawns took effect, “people were angry,” she said.

Breaking the rules triggered a warning the first time, then fines. Next year, Simi Valley’s repeat offenders may face a tactical measure – the use of water restrictors.

These tools are basically washers with a hole in the center. Inserted inside a pipe, a restrictor allows just a trickle of water to pass. Las Virgenes has been using them since June on repeat water-use offenders. The district, which has installed more than 200 restrictors, keeps the device in place for two weeks before removing it, McNutt said. If violations continue, it’s reinstalled for three months, he said.

Moyer said scofflaws whose water pipes are fitted with restrictors “will be taking a military-type shower.”

Water connections serving non-residential sprinklers for lawns and other landscaping could be shut off completely, she said, following multiple violations.

‘Water conservation is a way of life’

Fort Bragg, on California’s North Coast, nearly ran out of water in 2021, forcing management into a [stage 4 “water crisis”](#) mode. A small desalination unit, capable of processing 200 gallons per minute, was revved up to meet basic needs for the 7,500 local residents. Meanwhile, outlying communities, like the seaside bluff town of Mendocino and isolated inns, restaurants and homes, saw wells run dry. Fort Bragg delivery trucks, carrying water provided by the city of Ukiah, brought relief.

Things have improved for Fort Bragg. In 2022, late spring rains recharged its reserves, said John Smith, the city’s director of public works. Its small reservoir is brim-full, and the desalination unit is ready to go if needed.

The city asked residents to use 20% less water, which they did — plus some.

“We asked for 20%, and they conserved 30%,” he said.

Earlier this year, Californians were slow to respond to drought warnings. In fact, their usage went up last spring. Californians emerged from the driest January, February and March on record with the [biggest jump in water use since the drought began](#): a nearly 19% increase in March compared to two years earlier.

But many Californians have stepped up since then. In October, statewide urban water use dropped 12.6% compared to October of 2020.

Still, the cumulative savings (only 5.2% compared to 2020) fall far short of Gov. Gavin Newsom's request for a 15% voluntary cut.



Santa Rosa's water director, Jennifer Burke, said water use in the city of 180,000 is down 18% of average since June of 2021, thanks in part to rules limiting outdoor watering to nighttime hours when evaporative losses are less.

In Sacramento, residents have curbed water use by more than 20% by limiting residents to watering twice weekly from March through October and once per week the rest of the year. This [ordinance](#), Eliason said, is permanent.

"We wanted to make sure water conservation is a way of life," Eliason said.

For many Californians, it already is. The state's residents have streamlined their water use and reduced waste for decades. Daily residential water use statewide in October decreased to 88 gallons per capita, compared to the five-year average of 97.

Jeffrey Mount, a senior fellow with the Public Policy Institute of California, said California's overall water consumption has remained the same since the 1980s even though the population grew from 30 million to 40 million.

"That is a good indication that adjustments can be made as things get drier," Mount said.

An even steeper trend toward conservation has been logged by the East Bay Municipal Utility District. The customer population has grown by 35% since 1970 while overall water use has declined by 45%.

In recent years, residents have increasingly swapped out grassy lawns for drought-smart landscaping, and they are currently limited to watering outdoors no more than three days per week. These measures have reduced water use during the ongoing drought by 14 to 15% — what Pook describes as "conservation on top of conservation."

Lawns go dry but trees are protected

Green grass will go brown next year, and in the long run, vast areas of lawn will probably disappear permanently as Californians adjust to aridification.

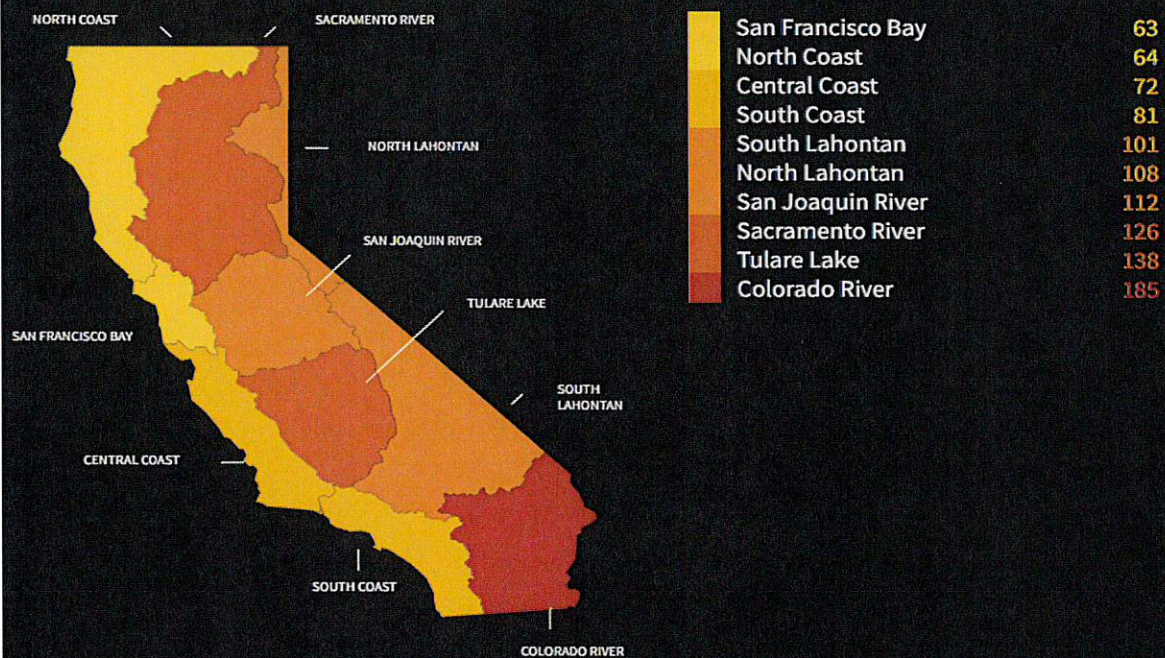
“I see communities prioritizing socially functional turf versus non-functional turf,” said Dan Drugan, a spokesperson for the Calleguas Municipal Water District, which supplies, among other towns, for Thousand Oaks and Simi Valley.

What's going on with residential water use?

More on how drought is impacting California.

- Since October 15, 2014, water suppliers are required to estimate or report the amount of water used for residential purposes. They are required to calculate per capita use monthly.
- This is often reflected as Residential Gallons Per Capita Day, or R-GPCD, a calculation based on the total population served by a water supplier versus the total water produced and used for residential use only over however many days are in that month.

Gallons per capita used daily for residential statewide in October 2022 by hydrological region



For October 2022, the average amount of water used for residential was 88 gallons per capita each day in October.

In October, the Metropolitan Water District passed a [resolution](#) encouraging communities “to reduce or eliminate irrigation of non-functional turf with potable water.” This followed a May,

2022 emergency order from the State Water Resources Control Board banning non-functional turf irrigation with potable water on commercial, institutional and industrial properties statewide. The [Pacific Institute has calculated](#) that such efforts could save California as much as 400,000 acre-feet of water annually.

But no matter how tight the state's water supplies get, keeping urban trees alive will probably be a priority.

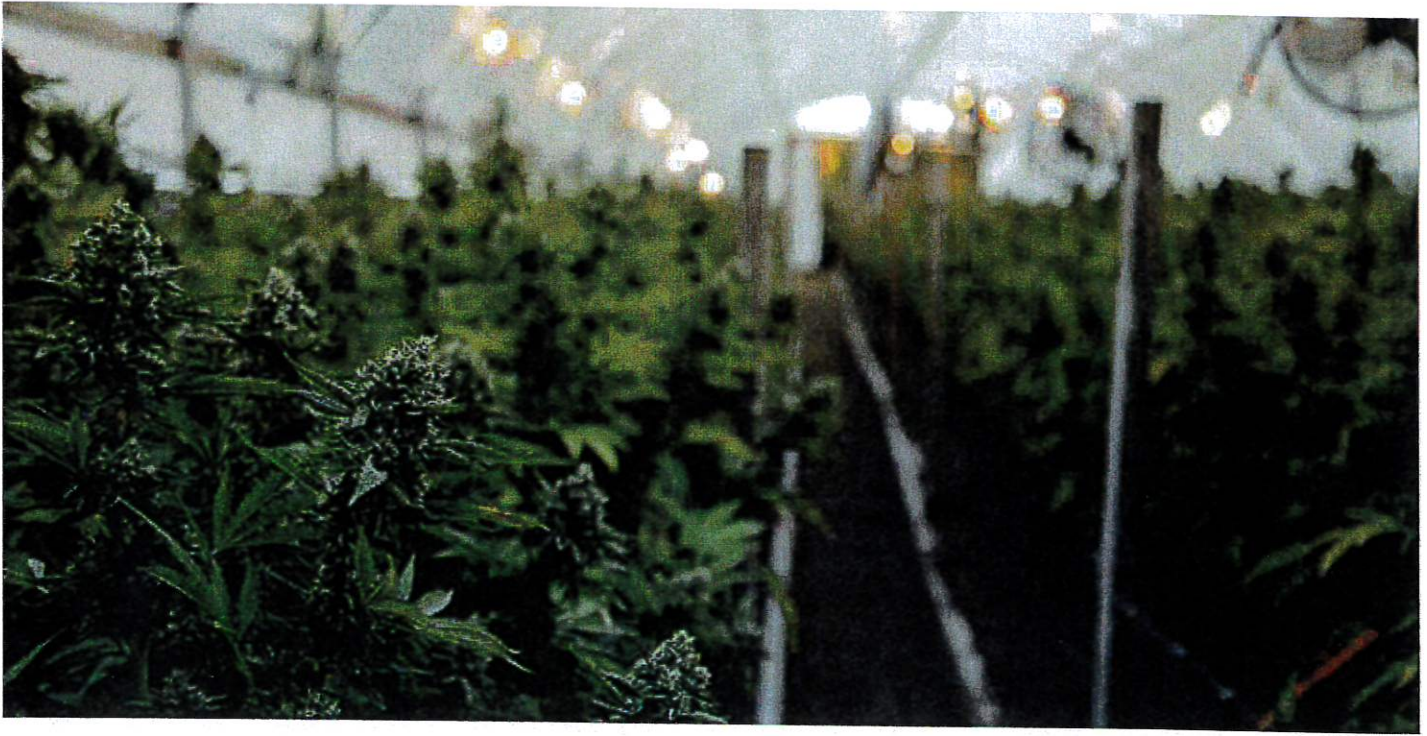
"We're seeing, in all urban areas, a frantic effort to conserve urban forests," Mount said, noting that urban trees provide shade, reduced ground-level temperatures and natural water treatment services.

Even in communities served by Las Virgenes, where much of the water under current restrictions is designated for health and human safety uses, spokesman McNutt expects residents will hand-irrigate with buckets of shower water and pots of kitchen water to keep trees alive.

"The last thing that anybody wants – anybody – is for the trees to die," he said.

Mount, who recently eliminated most of his own backyard turf — sparing just a narrow strip for his dogs — said he takes some solace in the fact that green grass remains a prominent feature of institutional landscaping, for it means there is still room to improve.

"That makes me more sanguine than most about the future," he said.

SPOTLIGHT**Illegal Cannabis Grows Pose Varying Threats to Member Agencies**

At one point, aerial photography and mathematics confirmed Mojave Water Agency's worst fears about the impact of illegal cannabis growing operations within its territory.

Photos showed a landscape littered with hoop houses, the makeshift greenhouses used to grow marijuana by legal and illegal growers alike, the latter in this case. Calculations based on acreage and known water consumption for growing the plants revealed that an estimated 4,000 acre-feet of groundwater had been stolen in one year.

That was just one of many data points generated by Mojave Water during the past two years that illustrate how illegal cannabis growing is impacting the San Bernardino County water agency. Large scale water theft from illegal groundwater pumping is bad enough during the ongoing drought, but contamination from banned pesticides, human waste and garbage dumping at the illegal grows have

magnified the scope of the problem. That doesn't include threats of violence against agency workers, whose names have been removed from Mojave Water's website as a safety precaution.

"This has been a very big issue in our area between the water theft, contamination and illegal cartels," said Mojave Water General Manager Allison Febbo.

Febbo added that loss from water theft alone could drive decisions to import more water, which in turn could lead to increased rates in an area where 65% of the population is considered economically disadvantaged.

Mojave Water may be one of the most severely impacted by illegal cannabis operations, but water agencies throughout the state are contending with challenges from illegal cannabis grows and ACWA has supported legislation to address the problem.

ACWA Advocacy

During the past two years, ACWA has favored or supported six bills in the California Legislature pertaining to illegal cannabis cultivation. All but one died in committee, but AB 1138 (Rubio) was signed into law by Gov. Gavin Newsom in 2021. Now, a civil penalty can be imposed on people aiding and abetting unlicensed commercial cannabis activity up to three times the amount of the license fee for each violation.

For its part, the state is also ramping up enforcement. Newsom recently directed the creation of a new multi-agency, cross-jurisdictional taskforce of enforcement agencies designed to better coordinate operations and transnational criminal organizations, according to an Oct. 5 news release from the California Department of Fish and Wildlife.

If successful, such a task force could help local law enforcement, who water agencies describe as doing all they can, but are often overwhelmed by the sheer numbers of illegal cannabis grows.

Northern California Impacts

As part of the Emerald Triangle, Mendocino County is in the historic heartland of cannabis cultivation. Water theft is also an issue at water agencies such as Brooktrails Township Community Services District, where staff members keep an eye on water users who exceed a 9,000-gallon monthly cap, which can trigger penalty fees.

A recent example of illegal grows included an operation that consumed 38,000 gallons over a month, according to Brooktrails Township General Manager Tamara Alaniz. Varying from month to

month, about 20 illegal grows exceed the cap annually, according to Alaniz, who said local law enforcement handles illegal grows on a triage basis, going after “the worst of the worst.”

In neighboring Lake County, the Hidden Valley Lake Community Services District has experienced some issues with water theft inside the gated community comprising the majority of its service area, said Hannah Davidson, a Water Resources Specialist I with the district. This has included an illegal grower from outside the community with gate access who tapped into a fire hydrant and stole about four to five truck tankers of water. Last year, a vendor was collecting bulk water and redirecting it to an illegal grow, getting away with about 10 to 15 tankers.

“We have never pressed charges and water quality sample results around the times of the incidents have never come back hot. However, we’re always on alert because we are in a prime growing region and there are a number of illegal grows throughout the county,” Davidson stated, by email.

While impacts from illegal cannabis grows vary throughout the state and among water agencies, the issue remains one that ACWA advocacy is ready to engage on as a new legislative session takes shape.

“We’re very aware of this issue as a top concern for a number of ACWA member agencies and will look to support measures that can mitigate the threat illegal cannabis grows pose to water supply and quality,” said ACWA Director of State Relations Adam Quiñonez. ♦

Opposite, an unintended consequence of marijuana legalization included a boom in illegal growing operations that bypass taxes and regulations. The impacts to water agencies range from water theft to contamination and threats of violence against employees.

Below, a photo of an illegal cannabis grow within the Brooktrails Township Community Service District that included an illegal water tank.

Photos courtesy of Brooktrails Township Community Services District



LOCO STAFF / 12/15/22

Estuary Restoration Project on Mad River (Baduwa't) Opens Acres of Fish Habitat, New Public Trail

McKINLEYVILLE, Calif. – Nonprofit research and conservation organization California Trout, McKinleyville Community Services District (MCSD), the Wiyot Tribe, and other partners, have completed an important Baduwa't estuary restoration and reconnection project. The project opens up more than 4 acres of important habitat for imperiled salmon and steelhead while increasing public access to an inspiring coastal viewpoint overlooking the Baduwa't, also known as the Mad River, in Humboldt County.

“Fish habitat is really limited on the lower Baduwa't, so this project is going to make an outsized difference for juvenile salmon and steelhead,” said Mary Burke, CalTrout's North Coast Regional Manager. “We took an unused wastewater facility next to the river and turned it back into healthy habitat, while adding an inspiring new coastal overlook trail. The project is a terrific example of a local government agency, Tribal representatives, a nonprofit, and a suite of local firms that stewards a concept through to construction, working together to benefit the public and wildlife.”

Located in the tidal zone 3 miles from the river mouth, the project is on land owned by MCSD. The restoration project involved decommissioning two outdated, unused wastewater percolation ponds and restoring them to floodplain habitat, removing invasive plant species, revegetating with native plants, and building channels to connect the new wetlands and ponds to the river.

The new public trail begins near the foot of School Road and includes an ADA-accessible loop with two coastal overlooks, outfitted with benches and a picnic table. A kiosk and set of interpretive panels will be added in 2023. Humboldt County constructed ADA parking and three asphalt parking spaces. The site is easy to walk and bike to, as it is connected to the School Road Trail and the regional Hammond Trail – a part of the California Coastal Trail – that is used by local residents, Coastal Trail hikers, and touring cyclists. MCSD wishes to remind the public that the site is open to dogs if they are on a leash, in order to be sure all users are comfortable relaxing at the viewpoints and to protect the local wildlife and newly seeded and planted landscape.

The Wiyot Tribe, whose ancestral territory encompasses the lower Baduwa't, are a critically important partner on this project, working with CalTrout, Redwood Coast Action Agency, and MCSD to develop interpretive signage for the new trails. The signs are being developed collaboratively to include Wiyot perspectives, including the Indigenous language and cultural importance of this landscape. Signs will also provide information about the estuary and will welcome and orient people on many ways to connect to this site.

“The Wiyot Tribe is proud to work with our partners Cal Trout and McKinleyville Community Service District on the Baduwa't Estuary Restoration and Public Access project. We are happy to see it completed” Ted Hernandez, Wiyot Tribal Chairman stated. “This restoration project will help our salmon and steelhead population grow back to what it once was during the time of our ancestors. I am also looking forward to the public being able to use it so they can see why our ancestors called it home. Baduwa't is such a beautiful river and is very majestic. It is one of the Wiyot's lifelines. Baduwa't is just one of the rivers we care about as Wiyot people. We also look forward to caring for Baduwa't sister rivers in Wiyot's ancestral territory in the months and years to come. It is our responsibility that the creator has given us.”

The project increases the amount of overwintering habitat in the Baduwa't estuary for federally threatened Southern Oregon Northern California Coast coho salmon, federally threatened California Coastal Chinook salmon, and federally threatened Northern California steelhead. Improvements in habitat quality and quantity may also benefit other sensitive aquatic species, including tidewater goby, eulachon, and longfin smelt.

The Baduwa't drains 497 square miles over a length of roughly 100 miles to the Pacific Ocean, reaching the coast six miles north of Humboldt Bay. The river offers close to 50 miles of spawning and rearing habitat; however, logging, agriculture, and flood control infrastructure have altered the estuary, severely limiting habitat that is needed to support juvenile salmon and steelhead during winter or on their way out to sea.

"It's one thing to read about this project in the newspaper, but we really hope people will come out and walk or bike the new trail, and we're happy to see that happening already," added Patrick Kaspari, General Manager of the McKinleyville Community Services District. "The intent is to someday have a trail all along this stretch of the river, not only to appreciate the restoration work that's been done here, but to facilitate people's connection to the river and support alternative transportation options. The Mad River/Baduwa't estuary is a special, unique place and anything the District can do to facilitate people's connection to it is a very worthwhile endeavor."

The \$2 million project was funded by California State Coastal Conservancy, Wildlife Conservation Board, US Fish and Wildlife Service, and National Oceanic and Atmospheric Administration (NOAA) Restoration Center, and with design funding from California Department of Fish and Wildlife's Fisheries Restoration Grant Program. It was also supported by increased capacity and funding from the Redwood Community Action Agency, California Conservation Corps, California Alternatives to Toxics and through a Supplemental Environmental Project of the California Department of Transportation; and through the in-kind work of McKinleyville Community Services District and the County of Humboldt. The project benefited from the dedication of local expertise, including Northern Hydrology and Engineering, GHD; McBain Associates, SHN; local professionals who provided trail design, rare plants, and wildlife habitat assessments; Samara Restoration; the CA CCC and the Redwood Community Action Agency; and Cal Poly Humboldt. Also thanks to John Northmore Roberts and Associates for trails design work, and Kernan Construction and Miller Farms, local contractors whose teams moved the earth and installed the new access amenities.

CalTrout and other project partners will hold an opening ceremony for the project on December 21st at 10 a.m., at the new trailhead on School Road in McKinleyville.

About California Trout

California Trout partners with numerous government agencies, Tribes, and conservation groups to conduct research, habitat restoration and advocacy, to restore vibrance and abundance to California's freshwater ecosystems and to keep them that way for years to come. Founded in 1971, CalTrout has been working for more than 50 years to protect salmon and steelhead strongholds, reconnect fish habitat, integrate fish and working lands, steward source water areas, and restore estuaries. Learn more at <https://caltrout.org>.

University of Washington
Civil & Environmental Engineering
December 28, 2022

Snow sleuths

RESEARCHERS AROUND THE WORLD JOIN FORCES TO INVESTIGATE MISSING SNOW, IMPROVE WATER RESOURCES MODELING

By: Brooke Fisher

Photos: Mark Stone/University of Washington

Top image: This winter, Professor Jessica Lundquist is co-leading the Sublimation of Snow (SOS) project in Colorado's Rocky Mountains.

A single snowflake hadn't yet fallen when a team of civil and environmental engineering snow researchers descended on a small town in Colorado's Rocky Mountains this past fall. But that was intentional — they were preparing for the coming winter's mission to answer a longstanding research question: What happens to snow after it falls?

The researchers are investigating a phenomenon known as sublimation, which is the transition of snow directly from a solid state into water vapor, skipping the liquid stage. This is similar to the behavior of dry ice, in which frozen carbon dioxide vaporizes. Currently the largest source of uncertainty in snow modeling, sublimation has the potential to be an important insight for water resources management, especially estimating future water reserves.



Professor Jessica Lundquist and scientist Steve Oncley (MS Atmospheric Sciences '83), who leads NCAR's Earth Observing Laboratory, set-up a sensor to measure blowing snow.

"Sublimation is an extremely hard thing to measure. Lots of people have tried and come to different conclusions," says Professor Jessica Lundquist, who is co-leading the Sublimation of Snow (SOS) project. "This will be the first time it's been looked at with this level of detail in a mountain region."

In one of the largest efforts to date — the combination of three field campaigns, plus additional research organizations — the UW team is collaborating with researchers around the country to leverage expertise and equipment. In early October, Lundquist and graduate students Danny Hogan and Eli Schwat arrived at the Rocky Mountain Biological Laboratory (RMBL), located north of Crested Butte,

Colorado. They deployed equipment and planned for data collection, which the graduate students will conduct on-site this winter.

"It takes this kind of effort to solve something this difficult. It's a question of scale — we need both tiny and big measurements," Lundquist explains. "It's exciting when you see so many different people and agencies come together and say 'We'll work together as a team.'"

Funded by a National Science Foundation grant, the SOS project is led in collaboration with alumna Julie Vano (CEE Ph.D. '13), research director for Aspen Global Change Institute. In addition to SOS, participating field campaigns are the National Oceanic and Atmospheric Administration's SPLASH project and the U.S. Department of Energy's SAIL project. Also involved are the National Center for Atmospheric Research's Earth Observing Laboratory, the Swiss Federal Institute for Forest, Snow and Landscape Research (SLF), and the Swiss Federal Institute of Technology Lausanne (EPFL).

The mystery of the missing snow



The East River Valley, northwest of the historic town of Gothic, home to the Rocky Mountain Biological Laboratory. The mountain with the pointed peak in the distance is Mount Crested Butte.

The Colorado River watershed is an ideal site to study sublimation, as the phenomenon occurs more often in dry climates. In recent years, there have also been unexplainable decreases in the river's flow, which people in seven states depend upon for drinking water. In 2021, the Colorado River snowpack was estimated at 80% of average, but streamflows ended up being only 30% of average. The researchers speculate that the discrepancy may in part be explained by sublimation.

"Twenty million people depend on the Colorado River, and snow is the biggest input in the water resource equation," Hogan says. "We don't really know how much water is being lost from sublimation definitively."

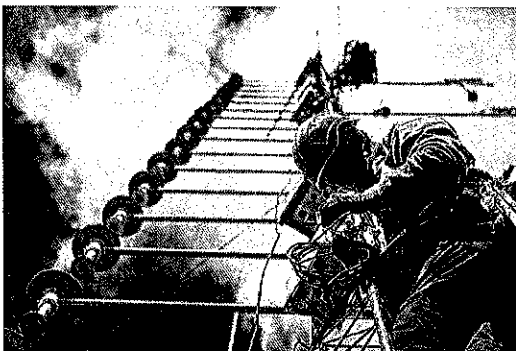
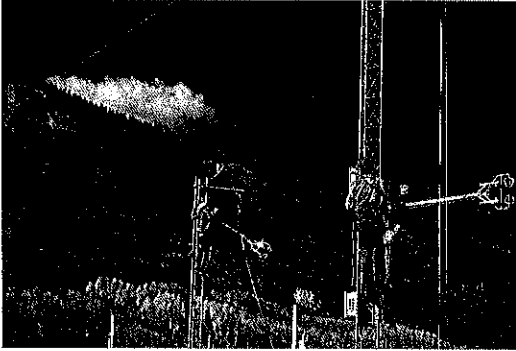
Current models used to predict sublimation rely on a fundamental theory, developed in flat cornfields in Kansas in the 1950s, that has proven to be inaccurate in more complex terrain, such as mountainous regions. Models based on this theory vary widely in terms of how much snow is predicted to sublimate, ranging from 10-90%.

"A simple way to explain why the theory in the prairie doesn't apply in complex terrain is to imagine a river flow — it behaves well over smooth ground, but if you introduce bumps to the river bed, the flow becomes complicated," Schwat says.

To improve future models, the researchers are working to better understand the precise combination of conditions that lead to sublimation, which tends to occur during low temperatures, low humidity and when both strong sunlight and wind are present. Since sublimation impacts snow on the surface and

likely the snowflakes blowing above, the researchers will be paying close attention to the top layer of snow. They'll also be investigating the characteristics of the turbulent air motions above — which can fluctuate widely depending on wind and other conditions.

“Studies show that when snowflakes are picked up by the wind and blown around, they may sublimate, so blowing snow is not necessarily just deposited elsewhere,” Schwat explains.



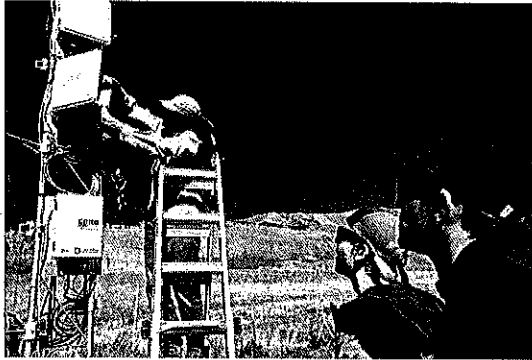
Left: The NCAR's Integrated Surface Flux System team sets up sonic anemometers on two separate towers, which will be used to measure turbulent air motions. Top right: Project leaders, Professor Jessica Lundquist and alumna Julie Vano (CEE Ph.D. '13), from left, set-up a snow pillow. Bottom right: A skyward view of a 65-foot tall tower with Steve Oncley, (MS Atmospheric Sciences '83), who leads NCAR's Earth Observing Laboratory, in the foreground. Oncley is connecting sensors to data loggers.

In a mountain valley located about a mile from RMBL, the UW team deployed an array of sensors, including “snow pillows,” which weigh the snow to monitor the amount of water in the snowpack. Four towers, up to 65 feet tall, were installed by collaborators for meteorological measurements, such as wind speed. Other instrumentation includes X-Band Radar, Doppler Lidar and terrestrial laser scanners to measure and track blowing snow.

“Few studies have the unique combination of instruments that we have here, both in terms of variety and sheer quantity,” Hogan says. “We’ll be able to see how well the theoretical equations and relationships play out when we have measurements at so many levels.”

Winter observations

In January, the graduate students will return to Colorado to oversee field observations through mid-March. They will stay on-site in cabins, as RMBL is only accessible via cross-country skiing during winter months.



NCAR engineer Chris Roden instructs the winter residents, Danny Hogan and Eli Schwat (from left), on how to troubleshoot potential system issues during the winter with the equipment that will be recording meteorological measurements.

“It’s a unique spot where we are staying, about four miles from the town of Crested Butte, so it’s ski in and ski out, which makes for more of an adventure feel to the field work,” Hogan says.

In addition to maintaining the field equipment, the graduate students will gather measurements during various weather conditions. In late January, the students will be joined by Lundquist, Vano and collaborators for two weeks of intensive observations. In addition to better understanding the process that leads to sublimation, the researchers hope to discern what types of measurements and instrumentation can best predict snow sublimation in a mountain valley.

To highlight the importance of the project to people whose water comes from mountain regions, as well as the larger science community, Vano and her team at the Aspen Global Change Institute are already working on outreach. Through the creation of videos and other educational materials, they hope to bring more visibility to the often overlooked topic.

“It’s in this intersecting space between hydrology and atmospheric sciences,” Vano says. “Hopefully through this work there will be a greater awareness of what snow sublimation is and the value and excitement of doing this type of research.”

By Mark W. Schwartz Dec. 20, 2022
Stanford Social Innovation Review SSIR.org

Rethinking Risk and Responsibility in the Western Wildfire Crisis

There are three generalized strategies policy makers may use to drive societal change. But, how are policy makers to decide what combination of these three tools will work to best manage the wildfire challenge?



(Photo by iStock/Attila Adam)

The western United States is beginning to come to grips with the potential magnitude of the wildfire crisis. Increases in forest wildfire size, severity, and elevation have been linked to a 30-year pattern of increasing fuels in coniferous forests. Wildfire management is made even more challenging by changes in climate that have extended the fire season and increased the frequency of days that promote extreme wildfire (i.e., hot late dry season days with strong winds).

Recent media coverage of several large and deadly fires, alongside the federal and state wildlands management response, have focused public concern toward wildfire risks on public lands, and in particular coniferous forested lands. The US Forest Service, for example, has been frequently maligned for not better managing forest fuels on their mostly forested land. California has developed a Wildfire and Forest Resilience Plan that invests heavily in forest management in an effort to reduce fuels in coniferous forests.

Clearly there is broad consensus that society should manage wildlands to avoid severe wildfire impacts. But how else should a society invest in risk reduction? What are the primary drivers of risk? Where are the dominant impacts we are trying to avoid? What are our primary objectives in managing wildfire? How do we create social change to meet those

objectives? These are serious questions that we often get wrong because of our laser focus on public lands forests.

Where Are Wildfire Challenges Most Severe?

Wildland fire risk management has focused on fuels reduction on public lands by thinning and removing fuels from dense coniferous forests. The ecological justification is that reduced timber harvest and fire suppression has led these forests to be “overdense” relative to their historic state, creating the capacity for severe wildfire. The benefit is that reducing fuels does reduce the risk of extreme wildfire. This, in turn, reduces the risk of hazardous smoke exposure for Californians.

The problem with our fascination with this approach is threefold. First, the western ecosystems experiencing increased wildfire (grasslands, shrublands, woodlands, and coniferous forests) are all fire-maintained. We not only expect them to burn, but, in many cases, we need them to burn in order to maintain their ecosystem goods and services. Second, we know from recent studies that most wildfires are caused by humans and spread from private lands to public lands. Third, we know that coniferous forests are, in fact, under-represented in the number of ignitions, burned area, lives lost, and homes damaged relative to the open woodland, shrublands, and grasslands of the region. Finally, we know that most of the highly damaging fires are wind-driven, not fuels driven; to more effectively reduce wildfire risk we would need to manage wind, not fuels.

The November 2018 Camp Fire, as an example, was ignited by a faulty electrical line and traveled rapidly under high winds through mostly lightly forested land to reach the heavily forested town of Paradise. Once in town, both houses and trees were quickly ablaze. The October 2017 Tubbs Fire began in shrublands from powerline and transformer failures. The fire spread rapidly under high winds across grasslands to enter the city of Santa Rosa. These two fires alone destroyed over 20,000 buildings, caused billions of dollars of damage, and cost more than 100 people their lives. Neither of these fires were in locations where we would have managed fuels because woody fuel loads were already low or non-existent. Most of the concern (aside from smoke exposure) about the wildfire crisis is driven by the rapid increase in the number of US residents who live in rural communities in the wildland-urban interface (WUI), which has placed millions more people at wildfire risk. Further, climate models suggest that the likelihood for rapidly moving fire is increasing owing to patterns of delayed fall precipitation. Specifically, high wind events in the western United States are concentrated in the autumn. In turn, autumn weather has become warmer and drier, leading to an extension of the fire season into the windy season. Collectively, these observations lead to three fairly straightforward, albeit unpleasant, conclusions about where society should invest in wildfire management solutions.

First, wildfire will continue to be a societal issue whether or not fuels reduction in coniferous forests succeeds in reducing fire severity on public lands. In August of 2020, a highly unusual lightning storm ignited over 650 fires in California within a few hours. These eventually coalesced and burned over one million acres. In this case, however, those lightning fires ignited mostly on public lands. And, when the August Complex was over, fewer than 1,000 buildings were fire damaged and just one life was lost. To be clear, this fire created a tremendous amount of smoke, to the detriment of human health. My argument

is not that fuels reduction in coniferous forests won't help resolve several components of the wildfire crisis. It will. However, forest fuels management reduction strategies are painstakingly slow. It is estimated that more than 20 million acres need treatment in California alone, and state and federal agencies are targeting an aspirational goal of reaching one million acres per year. With repeated treatment needed, this process will take time.

Second, there is no vegetation management solution for the ecosystems where wildfire is most prevalent and most damaging. Open woodland, grassland, and shrubland systems will catch fire and burn. Fuels within these ecosystems recover within one to five years, allowing them to burn again. Further, fires moving through these ecosystems characterized by light, highly flammable fuels can move very rapidly under high winds. Climate models suggest an increased capacity for late season fires, when strong winds are more prevalent.

Finally, solutions for wildfire damage control are highly dependent on people and their behaviors. The western US has allowed, even encouraged, people to move into incredibly risky environments and not required adequate risk reduction protections. Population growth in rural communities in the WUI escalates wildfire risk in three ways. First, most fires are caused by people. Second, a substantial fraction, if not most, of wildland firefighting effort is dedicated to defending property rather than on fire perimeter containment, resulting in larger fires. Third, most rural homes in vulnerable locations are not fire-hardy, driving higher levels of toxins in smoke and creating dangerous house-to-house fire contagion risks.

Where Should Society Invest in Wildfire Solutions?

Solutions to the western wildfire "problem" begin by closing two key gaps in general social understanding. First and foremost, fires are a natural component of the ecosystem. Ecologically, we should be advocating for more wildfire acreage, albeit at lower burn severity. However, even if we were to find the magic sweet spot of wildfire use and suppression, we will fail to prevent occasional large fires.

Second, those who are most at risk need to better understand that they, collectively, are the generators of risk to each other and to public lands. This is in sharp contrast to the currently widespread public opinion that rural communities are the victims of wildfire problems generated on public lands.

These realizations suggest a more difficult change than reduction of fuels on public lands is needed; we need to foster change in risk attitudes and behaviors by people in rural communities. To begin, we must ask "how we can create an environment that reduces the risk of loss of life and property damage when there are wildfires," rather than "how do we eliminate wildfires." Home hardening, which includes implementing modifications such as fire proof attic vents and fireproof exteriors (e.g., metal roofs, cement siding) is the first strategy. The second major strategy for reducing wildfire is to create defensible space by managing vegetation in communities and near homes so that small fires do not become destructive wildfires. With non-flammable building materials and adequate defensible space, most buildings are resilient to wildfire.

Creating social change may be slow, but we need to work toward that change. To encourage change we need to understand what drivers of change are in place, potentially available, or

socially unappealing. For example, home hardening can be expensive, and maintaining defensible space may reduce the perceived value of the property to the landowners.

Encouraging Adaptation

There are three generalized strategies policy makers may use to drive societal change: *information*, *incentives*, and *penalties*. Agencies are well along in providing informational resources in the hopes that landowners increase fire safety. Advice is available from local, state, and federal governments and university extension services. In California, the major power supplier even has a link to how private landowners can decrease fire risk. These recommendations, though helpful, are not widely adopted.

The second option is to provide financial incentives to encourage landowners to adopt risk-reducing strategies. Incentive monies are available. For example, the California Department of Emergency Services offers grants for home hardening to qualified individuals, but the available funds are not close to matching the scale of the problem. Financial incentives can also work on increased costs of the status quo. For example, it has become expensive and difficult to insure homes that are in high fire risk environments. Homeowners may be rewarded by insurance companies with reduced rates for home hardening. However, it is estimated that there are over 5 million housing units in the California WUI alone. With a rough estimate of \$60,000 per house to replace roofs and siding to be fire resistant, this could cost over \$250 billion. It is costing California nearly a billion dollars annually to meet its wildland fuels reduction goals. Only a small fraction of that budget is targeted toward private landowners. Further, landscaping professionals are not, as a rule, required to be trained in defensible space design, and may not follow best practices. We have a long way to go.

The third choice, obviously, is regulation, making it illegal to be out of compliance with risk reduction standards. States and counties are adopting building code changes to make future building more fire-safe. A recent policy change in California requires state inspection for required fire risk abatement through defensible space for homes sold in very high fire risk areas.

But, how are policy makers to decide what combination of these three tools will work to best manage the wildfire challenge? All three strategies are currently in use, and we are not achieving the changes we envision to resolve the WUI crisis with wildfire. Thus, we might argue that to make progress, levers must be pulled harder and probably more strategically. But we might also consider different sorts of information campaigns to elicit change. Currently, this information is mostly direct: How can you, as a landowner, reduce the risk to yourself and your property?

Part of the solution lies in better knowledge. Emerging fire risk models provide opportunities to identify where adaptation investments, on fuels or communities, are likely to have their highest impacts. Analogously, geographical assessments of infrastructural risks of ignition or fire acceleration can help direct limited resources toward critical locations.

In parallel, however, we need a better understanding of what motivates people. Understanding the home hardening/insurance trade-off that landowners face is a key component of developing strategies to encourage hardening. Striving for policies that balance the roles of utilities, local governments, and the insurance industry in helping homeowners increase fire resilience is also critical. Finally, society must grapple with social

equitability issues when the cost of the challenge exceeds the capacity of many in society to bear.

Rebuilding Community

An economist's approach to our current WUI crisis may be to assess strategies based on costs, benefits, risks, and uncertainties to create policy environments where private actors would choose resilience strategies. This may, for example, be achieved through a real cost insurance market. The challenge with market solutions alone is that they are likely to precipitate economic ruin for many, as people see property values collapse under the cost of compliance. Lack of insurance, the threat of penalties, and requirements to spend tens of thousands of dollars on home hardening is a recipe to reduce home values by a large margin. There may be other opportunities that need exploration. In his 2018 book *The Future of Capitalism*, Paul Collier makes the point that we have lost a sense of community over the past 50 years. We have become more and more like the selfish actors that 20th-century economists assumed, and less like the responsible community members that we previously expected ourselves to be. Collier suggests the way forward for society is to work to rebuild a sense of responsibility to community. In this, there is hope. Just in the past few years, numerous Prescribed Burn Associations have formed to privately manage fuels around vulnerable communities through prescribed fire.

The wildfire crisis may provide the opportunity for such community-building. If we commonly believed that failure to adopt fire resilience adaptation strategies was putting our families, friends, and neighbors at undue risk, we may be more likely to comply and adapt. However, we first need to better understand people's risk perception with wildfire and the risk perceptions of our WUI communities. Only then can we optimize deploying resources to influence landowner and community behaviors through building a sense of responsibility to the common good.

Finally, information and incentives are not likely to be sufficient. Using policy levers that create penalties for non-compliance must be part of the solution. Arson is a crime; letting a campfire get away is criminal negligence. The utility company PG&E may be on the hook for over \$25 billion dollars because of mistakes on their property that led to lives lost. However, we do not penalize landowners if a fire enters their property and, because of failure to comply with fire-safe practices, the fire accelerates and causes damage to other properties. If private property owners were culpable for damage to adjoining properties, we may see very different rates of home hardening and defensible space adoption. We carry high expectations of public landowners and public utilities. We should expect more of private landowners as well.

There is no magic bullet, there is no simple solution. Moving the western US into a condition where rural living is neither a threat to native ecosystems that experience wildfire nor a threat to those living there is a costly endeavor. Information, incentives, and penalties are all needed. How to optimize limited resources to see the biggest gains over the shortest period of time is needed. How to make government incentives more effective as well as looking beyond tax dollars and government financing is needed. However, lagging in this process has been the messaging that informs the public of the degree to which the risk and responsibility lies with private landowners. The western United States is NOT facing a wildfire crisis; we are facing a social crisis in rural communities at the nexus of natural ecosystem processes, climate change, and a legacy of fire suppression.

John Friedenbach

From: Katherine Gledhill <kgledhill@westcoastwatershed.com>
Sent: Thursday, December 15, 2022 12:03 PM
To: Katherine Gledhill
Cc: 'Denise Monday'
Subject: NCRP Proposition 1 IRWM Round 2 Implementation Regional Grant Priority Projects

Hello All,

We are pleased to announce that on Friday, December 9th, during the NCRP Quarterly Meeting, NCRP Leadership Council unanimously approved the Technical Peer Review Committee (TPRC) recommendation described below that includes a list of priority projects for inclusion the NCRP Proposition 1 IRWM Round 2 Implementation Regional Grant to be submitted to the Department of Water Resources on February 1, 2023. The TPRC developed their recommendation during the Project Review meetings on December 1 & 2. All meetings were held via zoom and were open to the public and included multiple public comment periods. The Leadership Council recognizes that all the projects submitted to the NCRP were high quality projects and appreciates the hard work of all the project sponsors. The TPRC review comments are being reviewed by the TPRC members and will soon be posted to the [NCRP Proposition 1 IRWM Round 2 webpage](#).

TPRC RECOMMENDATION

- To approve the following suite of projects and budget amounts for inclusion in the NCRP Proposition 1 IRWM Round 2 Implementation Regional Grant.
- To approve the following contingency list of budget augmentations to the priority projects, (listed in order of priority) should a project drop out of the suite of projects or additional funding becomes available, for any reason.

NCRP 2022 Proposition 1 IRWM Priority Projects

| Final Score | Organization, Project Name | Area Served | Project Cost | Funding Request | Approved Budget |
|-------------|--|-----------------|--------------|-----------------|-----------------|
| 119.55 | Yurok Tribe, McKinney Fire Restoration Project | Tribal Northern | \$1,218,891 | \$1,218,891 | \$1,218,891 |
| 118.15 | Scott River Watershed Council, East Fork Scott River Green Infrastructure Mountain Meadows Project | Siskiyou | \$631,331 | \$488,980 | \$488,980 |
| 108.86 | Humboldt Bay Municipal Water District, Ranney Collector 2 Rehabilitation Project - Round 2 | Humboldt | \$3,810,000 | \$950,000 | \$712,500 |
| 108.30 | Weaverville Sanitary District, Sewer Lining Project | Trinity | \$1,529,988 | \$1,529,988 | \$764,994 |
| 107.26 | City of Weed, Mill Fire Water System Recovery Project | Siskiyou | \$997,500 | \$997,500 | \$748,125 |
| 106.57 | Orick Community Services District, Water Meter Replacement Project | Humboldt | \$237,950 | \$237,950 | \$237,950 |
| 106.03 | Covelo Community Services District, Collection System and WWTP Improvements, Phase 2 | Mendocino | \$1,632,100 | \$869,383 | \$652,037 |

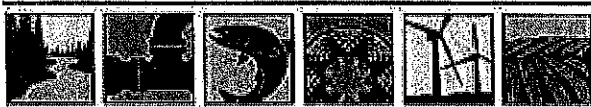
| Final Score | Organization, Project Name | Area Served | Project Cost | Funding Request | Approved Budget |
|-------------|--|----------------|--------------|-----------------|-----------------|
| 103.57 | Mendocino County Resource Conservation District, Rural Tank Program for Water Security and Fire Preparedness in Mendocino County Disadvantaged Communities | Mendocino | \$563,855 | \$499,955 | \$374,967 |
| 103.43 | Shasta Valley Resource Conservation District, Irrigation Ditch Pipeline and Water Efficiency Improvement Project | Siskiyou | \$2,741,965 | \$2,540,430 | \$760,009 |
| 103.35 | McKinleyville Community Services District, 4.5MG Water Storage Tank Construction | Humboldt | \$13,346,941 | \$2,524,272 | \$879,209 |
| 103.09 | Willow County Water District, Water Main Replacement Project | Mendocino | \$1,244,780 | \$1,244,780 | \$503,039 |
| 102.91 | Westhaven Community Services District, Water System Resilience and Watershed Enhancement Project | Humboldt | \$688,440 | \$685,940 | \$0 |
| 101.90 | Salmonid Restoration Federation, Redwood and Sproul Creek, South Fork Eel River Storage and Forbearance Program | Humboldt | \$1,187,450 | \$867,450 | \$0 |
| 101.84 | Blue Lake Rancheria, Smart Water Grid 2.0 | Tribal Central | \$570,000 | \$570,000 | \$130,500 |
| 101.78 | Lewiston Community Services District, Water System Resiliency Project | Trinity | \$233,990 | \$233,990 | \$0 |
| 100.76 | City of Crescent City, Area Regional Water Supply Augmentation | Del Norte | \$1,331,443 | \$1,331,443 | \$500,000 |
| 100.18 | Big Lagoon Community Services District, Water Storage Improvements | Humboldt | \$947,950 | \$947,950 | \$0 |
| 98.79 | City of Willits, Centennial Reservoir Inflatable Spillway Project | Mendocino | \$695,000 | \$641,000 | \$0 |
| 98.19 | Del Norte County Service Area No. 1, Onsite Emergency Power Supply for Sanitary Sewer Lift Stations Phase 2 | Del Norte | \$1,453,323 | \$645,682 | \$0 |
| 97.25 | City of Montague, Water Supply Reliability and Lead Abatement Project | Siskiyou | \$2,728,975 | \$2,728,975 | \$0 |
| 95.88 | Gold Ridge Resource Conservation District, Rainwater Catchment Rebate and Streamflow Enhancement Project - II | Sonoma | \$1,199,616 | \$599,650 | \$0 |
| 93.03 | Junction City Elementary School District, Potable Water Filtration System Replacement | Trinity | \$922,483 | \$915,593 | \$0 |
| 75.86 | Water Climate Trust, Water Accounting & Funding Decision Support Tools | Region | \$555,000 | \$350,000 | \$0 |
| 75.07 | Shelterwood Collective, Water Infrastructure Renovations | Sonoma | \$1,458,650 | \$1,021,650 | \$0 |

| Final Score | Organization, Project Name | Area Served | Project Cost | Funding Request | Approved Budget |
|-------------|----------------------------|-------------|---------------------|---------------------|--------------------|
| | Humboldt County Admin - 6% | Region | | | \$508,800 |
| | TOTALS | | \$41,927,622 | \$24,641,452 | \$8,480,000 |

NCRP 2022 Proposition 1 IRWM Round 2 Priority Projects – Contingency Budget Augmentations

| Final Score | Organization, Project Name | Project Cost | Funding Request | TPRC Recommend Budget | Recommend Contingency Funding |
|-------------|--|--------------|-----------------|-----------------------|-------------------------------|
| 108.30 | Weaverville Sanitary District, Sewer Lining Project | \$1,529,988 | \$1,529,988 | \$764,994 | \$382,497 |
| 103.09 | Willow County Water District, Water Main Replacement Project | \$1,244,780 | \$1,244,780 | \$503,039 | \$430,546 |
| 101.84 | Blue Lake Rancheria, Smart Water Grid 2.0 | \$570,000 | \$570,000 | \$130,500 | \$297,000 |
| 100.76 | City of Crescent City, Area Regional Water Supply Augmentation | \$1,331,443 | \$1,331,443 | \$500,000 | \$498,582 |
| | TOTALS | | | | \$1,608,625 |

My best to all,
Katherine



NORTH COAST RESOURCE PARTNERSHIP

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WEST COAST WATERSHED
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 Healdsburg, CA 95448-0262
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HUMBOLDT BAY MUNICIPAL WATER DISTRICT

828 SEVENTH STREET, PO BOX 95 • EUREKA, CALIFORNIA 95502-0095

OFFICE 707-443-5018 ESSEX 707-822-2918

FAX 707-443-5731 707-822-8245

EMAIL OFFICE@HBMWD.COM

Website: www.hbmwd.com

BOARD OF DIRECTORS

SHERI WOO, PRESIDENT

NEAL LATT, VICE-PRESIDENT

J. BRUCE RUPP, SECRETARY-TREASURER

MICHELLE FULLER, DIRECTOR

DAVID LINDBERG, DIRECTOR

GENERAL MANAGER

JOHN FRIEDENBACH

December 21, 2022

Planning Clerk

Via Email: PlanningClerk@co.humboldt.ca.us

County of Humboldt Planning and Building Department

3015 H Street

Eureka, CA 95501

Re: Case Number PLN 2021-17447, Key Parcel Number 401-112-030

Dear Planning Clerk,

Humboldt Bay Municipal Water District (District or HBMWD) submits this letter as a supplement to our original letter dated October 13, 2021, and supplemental letter dated August 15, 2022, copies of which are on file for this project. The County of Humboldt Planning Department (CHPD) has requested a water supply "will serve" letter from HBMWD.

Because the Harbor District is under a legally recorded obligation to provide water to the Applicant's parcel, we cannot provide the traditional "will serve" letter as the water is currently provided to the Harbor District's meter and subsequently flows through their internal water distribution system to the North Wind Management, LLC parcel. HBMWD can provide assurance to the CHPD that our water district is able to supply the annual water needs of the applicant at 384,000 gallons annually through our domestic water transmission lines to the Harbor District's domestic water six-inch meter.

Down stream of that location, it is the responsibility of the Harbor District to provide water connection and supply to the applicant.

Our previous letter of August 15, 2022 provided two solutions to the current situation that we again urge the CHPD to consider as conditioning on the project to resolve the current circumstances of comingled water infrastructure ownership.

Kindly update our project referral comments to reflect the above information and options.

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

Respectfully,

John Friedenbach,
General Manager

Cc: Megan Acevedo, Humboldt County Planning Department
Larry Oetker, Humboldt Bay Harbor District
Aria Cox, Evergreen Business Services



HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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DAVID LINDBERG, DIRECTOR

GENERAL MANAGER
JOHN FRIEDENBACH

December 27, 2022

Re: R. W. Matthews Dam Emergency Action Plan December 2022 Update

Dear EAP Plan Holder,

An update (included in this mailing) is being issued for the Emergency Action Plan for R.W. Matthews Dam (Project No. 03430-CA, State Dam No. 1013). Your binder currently should have a salmon-colored cover dated June 2019. *This will be replaced with the enclosed bright blue cover dated December 2022.*

Please follow these instructions to update your binder:

Binder Cover

- ❖ Replace the salmon-colored cover with the enclosed bright blue cover dated December 2022

Record of Changes

- ❖ Remove Record of Change and replace with the new version dated December 2022

Inside Cover Sheet and Front Section

- ❖ Replace June 2019 Cover sheet with December 2022 Cover Sheet
- ❖ Dam Contact Information
- ❖ Verification Page
- ❖ Table of Contents'
- ❖ EAP Distribution List

Section 1 – Notification Flowcharts

- ❖ Remove Notification Flowcharts (pages 2 and 3) and replace with the new version dated December 2022

Section 2-Observation Points

- ❖ Remove the Observation Points -these are no longer valid with the new updated maps

Section 2 – HBMWD's Response Plan

- ❖ Replace 2019 version with 2022 update version

Section 2 -Inundation Maps

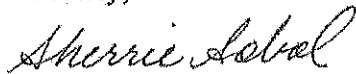
- ❖ Add Rainy Day Scenario Inundation Maps dated 2-3-22 (These go behind Sunny Day maps)

Appendix 1-Project Description

- ❖ Replace Project Description with current enclosed one

If you have any questions or need any additional information, please do not hesitate to contact us.

Sincerely,



Sherrie Sobol
Regulatory Analyst

Encl: December 2022 Update

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

To: Board of Directors
From: John Friedenbach
Date: January 12, 2023
Subject: Water Resource Planning (WRP) – Status Report

.....

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

1) Top-Tier Water Use Options

a) Local Sales

- i) Nordic Aquafarms – The project continues in the permit challenge process.
- ii) Trinidad Rancheria mainline extension. The Rancheria has prepared its RFQ for engineering services for the project.

b) Transport

No update.

c) Instream Flow Dedication

The committee needs to finalize the draft narrative and submit to SWRCB for discussion.

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

To: Board of Directors
 From: Angela Smart
 Date: January 5, 2023
 Subject: Appointment of Officers and Committee Members

At the January Board meeting, the election/appointment of officers and committee members occurs. The following is a summary of required and discretionary actions that will be on the agenda for your January 12, 2023 meeting.

a. Election/Appointment of Officers

Attached for your information is Section 5 of the Board's Governance manual which addresses the internal organization of the District (These requirements were taken from the pertinent sections of the California Water Code).

1. President - The Board must elect from its members a President in January of odd-numbered years. Since this will be an odd-numbered year, an election **is** required.
2. Vice-President – You may elect a Vice-President at any meeting. If the President is absent or unable to act, the Vice-President would exercise the powers of the President.
3. Appointment of Other Officers – The Board may appoint other officers at any time.

b. Appointment of Committee Members

Attached for your information is Appendix E of your Governance manual which lists the officer and committee assignments as they existed last year, as well as the committee charters. Each is briefly discussed below.

1. **Other Appointments:**

- ACWA Region 1 –Director Rupp is on the Board
- ACWA-JPIA Board – Director Rupp is currently on the Board and Director Fuller and General Manager Friedenbach are the alternates.
- Countywide RDA Oversight Board Director Rupp is on the Board
- JPIA Employee Benefits Committee- Director Rupp is on the Committee.
- JPIA Finance Committee- Director Rupp is Committee Vice-Chair
- RCEA Board – Director Woo is on the Board and Director Fuller is the alternate.
- RREDC Board – Director Latt is on the Board and Director Lindberg is the alternate.
- LAFCO – This is an elected position; no Board members are on the commission.
- ACWA-JPIA Executive Committee- Director Rupp was elected to the committee.

2. **HBMWD Committees:**

- Audit Committee – This is a standing committee comprised of the Secretary/Treasurer and one additional Board member. Director Woo is serving as the second Board member.
- Board Policy and Evaluations Committee- This is an ad-hoc committee to review the Board Policy Manual; the evaluation process for the General Manager and Legal Counsel; and assist the Board in making any changes to improve the manual and evaluation process. The committee is composed of the Board President and one additional member who is nominated by the President and approved by the Board. Director Rupp is serving as the second Board member.
- Mad River Policy Committee-This is an ad-hoc advisory committee formed to help protect the District's interest in the Mad River. The committee will be able to attend meetings and report back to Board the outcomes and recommend any actions to ensure the Mad River watershed is protected. The committee is composed of the General Manager, Board President, and one additional Board member who is nominated by the President and approved by the Board, OR two Board members approved by the Board and the General Manager. Directors Fuller and Woo are on the committee.
- Education and Outreach Committee-This is an ad-hoc advisory committee to provide education and outreach to the public on various topics as needed.
- Water Resource Planning Advisory Committee- This is an ad-hoc advisory committee to provide advice and counsel to the Board of Directors regarding the protection of the District's water rights, and additional beneficial use of water pursuant to the District's water rights permits. Directors Rupp and Woo are on the committee.
- Water Resource Planning-Instream Flow Committee – This is an ad-hoc committee to support planning and assessment work to determine the feasibility of an instream flow dedication in the Mad River. The committee is composed of two Board members, appointed by the President (with the consent of the majority of the Board) and the General Manager. Directors Fuller and Woo are on the committee.
- Water Resource Planning-Transport Committee – This is an ad-hoc committee to assist with market research, assessment, and identification of potential agencies/districts which may be viable candidates for a water transfer in accordance with the District's Term Sheet for Transfer of Water. The committee is composed of two Board members, appointed by the President (with the consent of the majority of the Board) and the General Manager. Directors Rupp and Latt are on the committee.

- Water Task Force – This is an ad-hoc committee comprised of one Board/Council member and one management representative from the District and each of the Municipalities and the RLCSD. The Task Force is convened on an as-needed basis to address items of significance for the regional water system. The President has served as our Board representative and the General Manager as our staff representative. Director Latt is currently serving as the alternate Board representative.
- Website and Social Media Committee-this is an ad-hoc committee to provide advice and direction to upgrade the District’s website and on the use of social media. The committee is composed of two Board members appointed by the President and both the General Manager and the Business Manager.
- Trinity County Master Lease Committee -this is an ad-hoc committee comprised of two Board members and the General Manager and the Business Manager. The District holds a lease agreement (Master Lease) with Trinity County and this Committee is advisory in nature. Any action shall be presented to the Board at Board Meeting. Directors Rupp and Latt currently serve on the committee.

Section 5 Internal Organization – Officers and Employees

Section 5.1 - Election of president; vice president

At its first meeting in the month of January of each odd-numbered year, the board must elect one of its members president. The board may at any meeting elect one of its members vice president. If the president is absent or unable to act, the vice president shall exercise the powers of the president.

Section 5.2 - Appointment of officers

The board will appoint, by a majority vote, a secretary, treasurer, attorney, general manager, and auditor, and shall define their duties and fix their compensation. The board may at any meeting appoint a deputy secretary and deputy treasurer. Each of these officers shall serve at the pleasure of the board. The board may consolidate the offices of secretary and treasurer.

Section 5.3 - Employment of employees

The board may employ additional employees as it deems necessary to efficiently maintain and operate the district.

Section 5.4 - President and secretary

The president and secretary, in addition to the duties imposed on them by law, will perform such duties as may be imposed on them by the board.

Section 5.5 - Treasurer

The treasurer, or other persons as may be authorized by the board, will draw checks to pay demands when such demands have been audited and approved in the manner prescribed by the board.

Section 5.6 - General Manager

Subject to the approval of the Board of Directors, the General Manager has:

- (a) full charge and control of the construction, maintenance, and operation, of the water system,
- (b) full power and authority to employ and discharge all employees and assistants (other than the officers referred to in Section 5.2 above) and prescribe their duties, and fix their compensation.

The general manager will also perform other duties as prescribed by the board.

Section 5.7 - Legal advisor

The attorney will be the legal adviser of the district and will perform other duties as may be prescribed by the board.

Section 5.8 – Committees

The Board may create committees, either standing or ad-hoc, and prescribe their duties and authority. Prior to appointment of board members to any committee, the President shall initiate a discussion to answer any questions about the purpose of the committee, and to assess board members' interest and availability to serve on that committee. Following such discussion, the President shall nominate board members to serve on the committee, following which the Board shall approve the nomination(s). No more than two board members may serve on the same committee.

Appendix E contains a listing of the District's current officers, other appointments, and the current committee members and charters.

(Water Code Section 71273 and Section 71340 and following)

Section 6. Board-Staff Relationship

The General Manager serves at the pleasure of the Board. The Board will provide policy direction and instructions to the General Manager on matters within the authority of the Board by majority vote of the Board during duly-convened Board of Directors and Board committee meetings. The General Manager will establish procedures to implement the Board-approved policies, and will manage and direct staff.

Members of the Board will deal with matters within the authority of the General Manager through the General Manager, and not through other District employees. Members of the Board will refrain from making requests directly to District employees (rather than to the General Manager) to undertake analyses, perform other work assignments or change the priority of work assignments. Members of the Board may request non-confidential, factual information regarding District operations from District employees at any time. Members of the Board are encouraged to tour District facilities and see projects in progress to learn about the District's system and operations.

Section 7. Decision Making by the Board

Section 7.1 – Governing Body

The board is the governing body of the District.

Section 7.2 - Quorum

A majority of the board constitutes a quorum for the transaction of business. No ordinance, motion or resolution may be passed to become effective without the affirmative vote of a majority of the members of the board.

Section 7.3 – Action by the Board

The board may only act by ordinance, resolution, or motion. Resolutions and motions may be adopted by voice vote (but on request of any board member, the roll shall be called). On all ordinances, the roll shall be called and the ayes and noes recorded in the minutes of the meeting.

Appendix F contains a list of all Ordinances approved by the Board of Directors since the District was formed. A list of all Resolutions approved since the District was formed is quite lengthy, and as such, has not been included herein. A list of all adopted Resolutions may be obtained from the General Manager or Office Manager at any time.

(Water Code Section 71270 and following)

HUMBOLDT BAY MUNICIPAL WATER DISTRICT Officers and Committee Assignments

| Officers of the District | Incumbent/Member | Term |
|--|--|---|
| President | Sheri Woo | Until new appointment by Board (odd numbered years) |
| Vice President | Neal Latt | Until new appointment by Board |
| Secretary-Treasurer | J. Bruce Rupp | Until new appointment by Board |
| Assistant Secretary Treasurer | Michelle Fuller | Until new appointment by Board |
| General Manager | John Friedenbach | Until new appointment by Board |
| Attorney | Ryan Plotz and Russ Gans of Mitchell, Brisso, Delaney & Vrieze | Until new appointment by Board |
| Auditor | R.J. Ricciardi, Inc. | Until new appointment by Board |
| Other Assignments/Appointments | | |
| ACWA Region 1 Board Member | J. Bruce Rupp | Next Election |
| ACWA-JPIA Board Member | J. Bruce Rupp (regular) John Friedenbach (alternate) Michelle Fuller (alternate) | Until new appointment by Board |
| JPIA Employee Benefits Committee | J. Bruce Rupp | Until new appointment |
| JPIA Executive Committee | J. Bruce Rupp | Until new appointment |
| ACWA Finance Committee, Vice Chair | J. Bruce Rupp | Until new appointment |
| RREDC Board Member | Neal Latt (regular) David Lindberg (alternate) | Until new appointment by Board |
| RCEA Board Member | Sheri Woo (regular) Michelle Fuller (alternate) | Until new appointment by Board |
| Countywide RDA Oversight Board Member | J. Bruce Rupp | Until Next Election Cycle |
| Committee Assignments (Charters Attached) | | |
| Audit Committee | Secretary/Treasurer with David Lindberg (2021) | Secretary/Treasurer is standing member and second Director appointed year-to-year |

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

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

**INACTIVE COMMITTEES
Charters attached**

| Committee | Prior Members | Status |
|--|--|--------------------|
| Ad Hoc Committee for Negotiating Wholesale Contracts | Neal Latt Bruce Rupp | Inactive Committee |
| Joint Agency Aquatic Invasive Species Committee | Sheri Woo Michelle Fuller | Inactive Committee |
| Agenda Review Committee | Board President & Secretary/Treasurer | Inactive Committee |

STATE OF CALIFORNIA
GOVERNOR'S OFFICE OF EMERGENCY SERVICES
Cal OES 130

Cal OES ID No: _____

Resolution 2023-01

**DESIGNATION OF APPLICANT'S AGENT RESOLUTION FOR
NON-STATE AGENCIES**

BE IT RESOLVED BY THE Board of Directors OF THE Humboldt Bay Municipal Water District
(Governing Body) (Name of Applicant)

THAT General Manager, OR
(Title of Authorized Agent)

Business Manager, OR
(Title of Authorized Agent)

Superintendent
(Title of Authorized Agent)

is hereby authorized to execute for and on behalf of the Humboldt Bay Municipal Water District
(Name of Applicant)

a public entity established under the laws of the State of California, this application and to file it with the California Governor's Office of Emergency Services for the purpose of obtaining federal financial assistance for any existing or future grant program, including, but not limited to any of the following:

- **Federally declared Disaster (DR), Fire Mitigation Assistance Grant (FMAG), California State Only Disaster (CDAA), Immediate Services Program (ISP), Hazard Mitigation Grant Program (HMGP), Building Resilient Infrastructure and Communities (BRIC), Legislative Pre-Disaster Mitigation Program (LPDM),** under
- Public Law 93-288 as amended by the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, and/or state financial assistance under the California Disaster Assistance Act.
- **Flood Mitigation Assistance Program (FMA),** under Section 1366 of the National Flood Insurance Act of 1968.
- **National Earthquake Hazards Reduction Program (NEHRP)** 42 U.S. Code 7704 (b) ((2) (A) (ix) and 42 U.S. Code 7704 (b) (2) (B) National Earthquake Hazards Reduction Program, and also The Consolidated Appropriations Act, 2018, Div. F, Department of Homeland Security Appropriations Act, 2018, Pub. L. No. 115-141
- **California Early Earthquake Warning (CEEW)** under CA Gov Code – Gov, Title 2, Div. 1, Chapter 7, Article 5, Sections 8587.8, 8587.11, 8587.12

That the Humboldt Bay Municipal Water District, a public entity established under the
(Name of Applicant)

laws of the State of California, hereby authorizes its agent(s) to provide to the Governor's Office of Emergency Services for all matters pertaining to such state disaster assistance the assurances and agreements required.

STATE OF CALIFORNIA
GOVERNOR'S OFFICE OF EMERGENCY SERVICES
Cal OES 130

Please check the appropriate box below

- This is a universal resolution and is effective for all open and future disasters/grants declared up to three (3) years following the date of approval.
- This is a disaster/grant specific resolution and is effective for only disaster/grant number(s): _____

Passed and approved this 12th day of January, 2023

(Name and Title of Governing Body Representative)

(Name and Title of Governing Body Representative)

(Name and Title of Governing Body Representative)

CERTIFICATION

I, _____, duly appointed and _____ of
(Name) (Title)

Humboldt Bay Municipal Water District, do hereby certify that the above is a true and
(Name of Applicant)

correct copy of a resolution passed and approved by the Board of Directors
(Governing Body)

of the Humboldt Bay Municipal Water District on the 12th day of January, 2023.
(Name of Applicant)

(Signature)

(Title)

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

To: Board of Directors
From: Angela Smart
Date: January 5, 2023
Subject: Diversity, Equity, and Inclusion

The Board has requested staff to research Diversity, Equity, and Inclusion (DEI) for possible areas to improve District policies/procedures.

Definition [wikipedia.org]

- "**Diversity**" describes a wide variety of differences that may exist amongst people in any community, including race, ethnicity, nationality, gender and sexual identity, disability, neurodiversity, and others.
- "**Equity**" is the practice of providing fair opportunities via personalized approaches based on individual needs, thus aiming to "level the playing field" by taking into account the different starting points of different individuals. Therefore, "equity" aims to achieve fairness by considering each individual's trajectory and context, and should not be confused with the notion of "equality" which aims to treat everyone the same.
- "**Inclusion**" specifies the desired outcome, namely, ensuring that individuals find opportunities and spaces to participate, regardless of their differences.

Discussion

Attention regarding DEI has been brought into focus and is a leading topic for many organizations. Many organizations have realized the need for DEI and are proactively building structure around the DEI to supplement their positive and conducive work dynamic.

The past two years have thrust diversity, equity, inclusion, and belonging initiatives to the forefront of the professional landscape. Racial justice movements, a devastating pandemic, fast-changing (and ever-shifting) workplace dynamics, and social/political unrest have required organizational leadership to reassess values.

Leaders everywhere realized the status quo simply was not working. Organizations realized that change was needed – across society, organization, and individual levels. Many leadership teams have rolled out new diversity training programs. Others created space for uncomfortable conversations about DEI in the workplace and the disproportionate impact of external events on marginalized groups.

Possible HBMWD action items might include:

- Craft a Resolution of DEI.
- Create a Policy regarding DEI.
- Board appoint Committee to explore options for incorporating DEI into existing procedures.
- Training/Development for Directors & staff.
- Conversations regarding ways that the District can foster DEI workplace culture.

Staff Direction

Staff requests direction on how the Board would like to proceed, if at all, with this topic.

STAFF REPORT

Humboldt Bay Municipal Water District
January 12, 2023

To: HBMWD Board
From: John Friedenbach, General Manager
Date: January 5, 2023
Re: Approval of the Ruth Lake/Mad River Reforestation Project
and Approval of CEQA

RECOMMENDATION

It is recommended that the HBMWD Board:

- 1.) Approve the Ruth Lake Reforestation Project.
- 2.) Adopt California Environmental Quality Act (CEQA) Exemptions and direct staff to file documents

INTRODUCTION

On September 1, 2021 the HBMWD received a CAL FIRE Forest Health Grant # 8GG20634 to reforest and restore areas burned during the 2020 August Complex Wildfire. The five year project implements post fire recovery and forest health treatments on 1,000 acres of HBMWD land, 1,030 acres of adjacent private lands and 750 acres of federal lands within the upper Mad River watershed that drains to Ruth Lake.

DISCUSSION

The Humboldt Bay Municipal Water District is serving as lead agency for a project that includes lands owned by the District, two adjacent private property ownerships and federal lands upstream from Ruth Lake on the Six Rivers National Forest. The primary goal of this CAL FIRE Forest Health grant funded project is to reforest Mad River watershed areas burned during the 2020 August Complex wildfire. Reforestation work to date has occurred under approved and extended CAL FIRE Emergency Notices that provided CEQA coverage for that activity. The Emergency Notices will expire in 2023. Additional environmental analysis was conducted for locational areas not covered under the approved Emergency Notices and also to provide CEQA coverage on all project areas for the term of the project implementation including lands owned by the HBMWD where post-wildfire salvage logging activity has occurred.

POLICY IMPLICATIONS AND ENVIRONMENTAL REVIEW

The overall project objectives is to reforest burned timberlands and return forests and wildland habitat to a more natural, fire resilient condition and to ensure that the exposure of human assets and communities to wildfire risk has been reduced. The proposed Project will provide post- fire recovery by reforesting forest areas that burned in the August Complex wildfire. The project area has had salvage logging and biomass removal operations conducted. The reforestation and follow up treatments to reduce fuel loads will prepare forests for long-term stewardship through follow up treatments such as mechanical and hand treatments and prescribed fire.

Environmental Review for this project was completed with assistance from Baldwin, Blomstrom Wilkinson & Associates, an Arcata based Forestry consulting firm.

Summary:

Exempt Status: Ministerial (Sec. 21080(b)(1); 15268);
X Declared Emergency (Sec. 21080(b)(3); 15269(a));

Emergency Exemption - 14 CCR 15269 (a) - Projects to maintain, repair, restore, demolish, or replace property or facilities damaged or destroyed as a result of a disaster in a disaster stricken area in which a state of emergency has been proclaimed by the Governor pursuant to the California Emergency Services Act, commencing with Section 8550 of the Government Code.

Emergency Project (Sec. 21080(b)(4); 15269(b)(c));

X Categorical Exemption California Code of Regulations, Title 14 section 15304 Class 4; Minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry and agricultural purposes; 15308 Class 8 consists of actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment. No habitat conversion will result from this project and a query of the California Natural Diversity Database did not reveal the presence of sensitive species within the project area that would be affected by project activities. Field review confirmed that no exceptions apply which would preclude the use of a notice of exemption for this project.

X Categorical Exemption California Code of Regulations, Title 14 Section 15301 Existing Facilities, including subsections (h) Maintenance of existing landscaping, native growth, and water supply reservoirs (excluding the use of pesticides, as defined in Section 12753, Division 7, Chapter 2, Food and Agricultural Code); The reforestation and slash removal site preparation can also be categorized as maintenance of existing native growth in these areas, which have succumbed to wildfire. There will be no expansion of use resulting from the activity.

X Statutory Exemptions. State code number: Statutory Exemption Public Resources Code Section 4799.05(d)(1). The California Environmental Quality Act does not apply to prescribed fire, thinning, or fuel reduction projects undertaken on federal lands to reduce the risk of high-severity wildfire that have been reviewed under the National Environmental Policy Act (NEPA) if the primary role of a state or local agency is providing funding or staffing for those projects.

Reasons why project is exempt: The project involves, minor alteration of vegetation, including reforestation of areas burned in the 2020 August Complex wildfire, follow-up fuel management activities to reduce the volume of flammable post-wildfire biomass and follow up hand-crew brush control treatments. The project will have significant ecological benefits. No healthy, mature, scenic trees will be removed as part of this project. An environmental review was completed concluding that project implementation as designed could not have a significant effect on the environment. Most of the Project area to be reforested was evaluated under CEQA for timber harvest operations under filed Emergency Notices including logging, skidding and slash disposal in 2021, and no significant changes have occurred to the landscape since that analysis was completed. Areas not evaluated under prior Emergency Notices were evaluated by HBMWD consultants and staff. The activities do not result in the taking of endangered, rare, or threatened plant or animal species or significant erosion and sedimentation of surface waters. There will be no impact to historic or cultural resources due to lack of ground disturbance and or avoidance and protection measures for cultural sites has been developed during the CAL FIRE Emergency Notice filing with guidance from the Archaeologist and are consistent with Best Management Practices of the industry. CEQA does not apply to fuel reduction projects undertaken on federal lands to reduce the risk of high severity wildfire that have been reviewed under the NEPA, if the primary role of a state or local agency is providing funding or staffing for those projects. The HBMWD will provide funding for reforestation and fuel reduction on 750 acres of federal land within the Six Rivers National Forest upstream from Ruth Lake. The proposed activities are being reviewed in their entirety under NEPA in the Mad River August Complex Restoration Project Environmental Assessment (EA) and Finding of No Significant Impacts (FONSI). The final Decision Notice for the EA/FONSI project documents was approved on January 5, 2023.

The proposed project qualifies for a Categorical Exemption under CEQA Guidelines Section 15304. Pursuant to Section 15304, Class 4 consists of minor alterations of vegetation which do not involve removal of healthy, mature, or scenic trees on public or private land. This proposed project will reforest areas burned from wildfire,

reduce the volume of flammable vegetation, thereby reducing wildfire risk, and will have significant ecological restoration benefits. Field review by HBMWD staff and consultants confirmed that no exceptions apply which would preclude the use of a Notice of Exemption. The HBMWD has concluded that no significant environmental impact would occur to aesthetics, agriculture and forestland/timberland, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, or to utilities and service systems. Documentation on the environmental review for this project is kept on file at the HBMWD office in Eureka, CA.

Staff recommends the Board adopt exemptions under CEQA Guidelines Sections 15301, 15304, 15269 and Statutory Exemption 4799.05(d)(1), and direct staff to file a notice of exemption. These exemptions incorporate the entire project, regardless of phasing or funding source.

BUDGET/FISCAL IMPACT

The project design and environmental analysis work was funded through a CAL FIRE Forest Health Grant.

Attachments:

1. CEQA Notice of Exemption. *pgs 4-5*
2. Initial Study-Project Memorandum for the Ruth Lake/ Mad River Reforestation Project, Trinity County, CA
pgs 6-110

NOTICE OF EXEMPTION

To: Office of Planning and Research
P.O Box 3044, Rm 113
Sacramento, CA 95812-3044

From: Humboldt Bay Municipal Water District
PO Box 95
Eureka, CA 95502-0095

Project File

County Clerk- County of Trinity
 11 Court Street P.O. Box 1215
 Weaverville, CA 96093

Project Title: Ruth Lake /Mad River Reforestation Project

Project Location - City: Ruth, CA

Project Location - County: Trinity

Project Location Specific: The project area is located 1 mile from Ruth, CA, 70 miles east of Fortuna, CA and 52 miles west of Hayfork, CA in Trinity County California at an elevation of 2,500'-3,800' feet. Location data is as follows: USGS 7.5-minute Quadrangle(s): Shannon Butte, Ruth Reservoir and Forest Glen, Sections 19, 29, 30, 31, 32, 33 of T1S, R7E, HB&M Sections 2; 3, 4, 5, 9, 11, 12, 13, 14, 24 of T2S, R7E, HB&M.

Description of Nature, Purpose, and Beneficiaries of Project: The overall project objectives is to reforest burned timberlands and return forests and wildland habitat to a more natural, fire resilient condition and to ensure that the exposure of human assets and communities to wildfire risk has been reduced. The proposed Project will provide post- fire recovery by reforesting forest areas that burned in the August Complex wildfire. The project area has had salvage logging and biomass removal operations conducted. The reforestation and follow up treatments to reduce fuel loads will prepare forests for long-term stewardship through follow up treatments such as mechanical and hand treatments and prescribed fire.

Name of Public Agency Approving Project: Humboldt Bay Municipal Water District

Exempt Status:

Ministerial (Sec. 21080(b)(1); 15268);

Declared Emergency (Sec. 21080(b)(3); 15269(a));

Emergency Exemption - 14 CCR 15269 (a) - Projects to maintain, repair, restore, demolish, or replace property or facilities damaged or destroyed as a result of a disaster in a disaster stricken area in which a state of emergency has been proclaimed by the Governor pursuant to the California Emergency Services Act, commencing with Section 8550 of the Government Code.

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Categorical Exemption California Code of Regulations, Title 14 section 15304 Class 4; Minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry and agricultural purposes; 15308 Class 8 consists of actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment. No habitat conversion will result from this project and a query of the CNDDDB did not reveal the presence of sensitive species that would be affected by project activities within the project area. Field review confirmed that no exceptions apply which would preclude the use of a notice of exemption for this project.

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Reasons why project is exempt: The project involves, minor alteration of vegetation, including reforestation of areas burned in the 2020 August Complex wildfire, follow-up fuel management activities to reduce the volume of flammable post-wildfire biomass and follow up hand-crew brush control treatments. The project will have significant ecological benefits. No healthy, mature, scenic trees will be removed as part of this project. An environmental review was completed concluding that project implementation as designed could not have a significant effect on the environment. Most of the Project area to be reforested was evaluated under CEQA for timber harvest operations under filed Emergency Notices including logging, skidding and slash disposal in 2021, and no significant changes have occurred to the landscape since that analysis was completed. Areas not evaluated under prior Emergency Notices were evaluated by HBMWD consultants and staff. The activities do not result in the taking of endangered, rare, or threatened plant or animal species or significant erosion and sedimentation of surface waters. There will be no impact to historic or cultural resources due to lack of ground disturbance and or avoidance and protection measures for cultural sites has been developed during the CAL FIRE Emergency Notice filing with guidance from the Archaeologist and are consistent with Best Management Practices of the industry. CEQA does not apply to fuel reduction projects undertaken on federal lands to reduce the risk of high severity wildfire that have been reviewed under the NEPA, if the primary role of a state or local agency is providing funding or staffing for those projects. The HBMWD will provide funding for reforestation and fuel reduction on 750 acres of federal land within the Six Rivers National Forest upstream from Ruth Lake. The proposed activities are being reviewed in their entirety under NEPA in the Mad River August Complex Restoration Project Environmental Assessment (EA) and Finding of No Significant Impacts (FONSI). The final Decision Notice for the EA/FONSI project documents was approved on January 5, 2023.

The proposed project qualifies for a Categorical Exemption under CEQA Guidelines Section 15304. Pursuant to Section 15304, Class 4 consists of minor alterations of vegetation which do not involve removal of healthy, mature, or scenic trees on public or private land. This proposed project will reforest areas burned from wildfire, reduce the volume of flammable vegetation, thereby reducing wildfire risk, and will have significant ecological restoration benefits. Field review by HBMWD staff and consultants confirmed that no exceptions apply which would preclude the use of a Notice of Exemption. The HBMWD has concluded that no significant environmental impact would occur to aesthetics, agriculture and forestland/timberland, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, or to utilities and service systems. Documentation on the environmental review for this project is kept on file at the HBMWD office in Eureka, CA.

Contact Person:**Area Code/Telephone/Extension:**

John Friedenbach-General Manager

707) 443-5018

Date: _____ 2023 _____

Signature: _____

Title: General Manager

If filed by applicant:

1. Attach certified document of exemption finding.

2. Has a Notice of Exemption been filed by the public agency approving the project? Yes No

Signed by : _____ Lead Agency _____ Signed by Applicant

Authority cited: Sections 21089 and 21110, Public Resources Code.

Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: _____

**Initial Study – Project Memorandum and Notice of Exemption
For the proposed
Ruth Lake /Mad River Reforestation Project Trinity County, California
State Clearinghouse Number**



The project area is located 1 mile from Ruth, CA, 70 miles east of Fortuna, CA and 52 miles west of Hayfork, CA in Trinity California at an elevation of 2,500'-3,800' feet. Location data is as follows: USGS 7.5-minute Quadrangle, Sections 19, 29, 30, 31, 32, 33 of T1S, R7E, HB&M Sections 2; 3, 4, 5, 9, 11, 12, 13, 14, 24 of T2S, R7E, HB&M,



Prepared for: Humboldt Bay Municipal Water District- Lead Agency

Prepared by:

BBW & Associates PO Box 702 Arcata, CA. 95518



October 2022

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DRAFT

Summary of Findings

This Initial Study (IS) has been prepared to assess the project's potential effects on the environment and an appraisal of the significance of those effects. Based on this IS, it has been determined that the proposed project will not have any significant effects on the environment after implementation of the project description and Best Management Practices (BMP's). This conclusion is supported by the following findings:

1. The proposed project will have no impact related to energy, land use planning, mineral resources, population and housing, public services, transportation and traffic, utilities and service systems and wildfire.
2. The proposed project will have a less than significant impact on aesthetics, agriculture and forestry resources, air quality, geology, recreation and soils, greenhouse gas emissions, hydrology and water quality, hazards, hazardous materials, and noise.
3. The proposed project will have a less than significant impact on biological, hydrological, cultural resources and tribal cultural resources.

This Initial Study revealed that no significant environmental effects are expected to result from the proposed project as described with project description specifications and BMP's adhered to. The Humboldt Bay Municipal Water District has found, in consideration of the entire record, that there is no substantial evidence that the proposed project, as currently proposed, would result in a significant effect upon the environment. This IS provides the appropriate environmental documentation for the project for CEQA compliance.

INITIAL STUDY-

| | |
|---|--|
| 1. Project Title | Ruth Lake /Mad River Reforestation Project |
| 2. Lead agency name and address: | Humboldt Bay Municipal Water District |
| 3. Contact person and phone number: | John Friedenbach, General Manager (707) 443-5018 |
| 4. Project Location: | The project area is located 1 mile from Ruth, CA, 70 miles east of Fortuna, CA and 52 miles west of Hayfork, CA in Trinity County California at an elevation of 2,500'-3,800' feet. Location data is as follows: Ruth, Shannon Butte and Forest Glen USGS 7.5-minute Quadrangle(s), Section(s) 19, 29, 30, 31, 32, 33 of T1S, R7E, HB&M Sections 2; 3, 4, 5, 9, 11, 12, 13, 14, 24 of T2S, R7E, MDB&M, GPS Coordinates: <u>123°23'17.636"W 39°42'13.409"N</u> |
| 5. Project sponsor's name and address: | Humboldt Bay Municipal Water District PO 95 Eureka, CA 95502-0095 |

| | |
|--|---|
| 6. County General plan description: | Agriculture General Timber; Agriculture Exclusive; Public |
| 7. Zoning: | Timber Production Zone; Unclassified, Public Lands |

Non-Federal Lands Cal Watershed units ID : 1109.400302 Hetton Creek
1109.400202 Deep Hollow Creek
1109.400105 Armstrong Creek

This Initial Study- has been prepared to evaluate potential environmental effects of the proposed Ruth Lake/ Mad River Reforestation Project near the community of Ruth, California. This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations [CCR] Section 15000 et seq.).

Project Description

The project implements post fire recovery and forest health treatments on 1,000 acres of HBMWD land, 1,030 acres of adjacent private lands and 750 acres of federal lands within the upper Mad River watershed that drains to Ruth Lake. Ruth Lake is a source water system for 94,000 municipal customers in Humboldt County.

Description of Nature, Purpose, and Beneficiaries of Project: The overall project objectives is to reforest burned timberlands and return forests and wildland habitat to a more natural, fire resilient condition and to ensure that the exposure of human assets and communities to wildfire risk has been reduced. The proposed Project will provide post-fire recovery by reforesting forest areas that burned in the lighting caused August Complex wildfire in 2020. Pre-planting site preparation work includes chipping, hand piling and burning, mastication, and biomass removal of competing vegetation (mostly brush and small diameter standing dead trees). Most of the non-federal land project area has had recent salvage logging and biomass removal operations conducted. The reforestation mechanical and slash pile burning treatments to reduce fuel loads will prepare forests for long-term stewardship. Additionally oak woodland restoration will include: post-fire oak sprout saplings thinning to one or two dominant sprout stems, replanting native oaks in areas of high mortality, removal of some dead stems for local firewood use and invasive plant hand removal in oak woodland habitat types. These treatments will reduce wildfire risks to local resources, protect water quality for a water services district drinking water source, promote native plant and wildlife species, and improve forest resiliency.

The Humboldt Bay Municipal Water District is serving as lead agency for a project that includes lands owned by the District, two adjacent private property ownerships and federal lands upstream from Ruth Lake on the Six Rivers National Forest. The primary goal of this CAL FIRE Forest Health grant funded project is to reforest Mad River watershed areas burned during the 2020 August Complex wildfire

A total of 1,032,648 acres burned in the August Complex, with approximately 118,053 acres on private lands, 612,634 acres on the Mendocino National Forest (MNF), 162,201 acres on the Six Rivers National Forest (SRF), and 139,760 acres on the Shasta-Trinity National Forest (SHF).

Areas burned on HBMWD lands within the Mad River watershed include the entire range of burn severity (low, moderate, high severity) with most affected acres within the moderate severity category.

Project Components

Restoring the ecosystem health within the various project sites will re-establish forestlands that were significantly impacted by fire, and post-fire pests. This project will prevent conversion of forests to shrub and non-native invasives and increase carbon storage capacity. Pre-fire vegetation throughout

the project area consisted of mixed conifer forest stands and oak woodlands along with a few grassy glades. The understory was a mix of conifer, oak and brush species.

Vegetation was burned, some areas so severely that the original vegetation seed sources were lost. Without any treatment, the post-fire pioneering brush species will continue to establish a significantly increased risk of fire ignition, fire spread, and continuing negative impacts to diverse and balanced vegetation, water quality and other habitat and landscape components.

Pos- fire organic debris will be removed by chipping, piling and burning and mastication. Some areas will also require invasive plant removal and impacted oak woodland areas will be restored.

Treatments: slashing dead material, hand-piling portions of slashed material, burning of hand-piles, hand-planting of native mixed-conifer species, and hand-release (grubbing) as needed to promote seedling survival and to remove invasive plants.

Reforestation and Site Preparation

Conifer seedlings from the appropriate seed zone 340 will be planted generally at a rate of approximately 175-225 trees per acre. Planting density will be highest in stands within drainages and riparian areas, then decrease in those on midslope and become lowest in those near and on ridge tops. Tree density in all three slope positions would be higher in the northeast compared to southwest aspects. They would be higher on gentle slopes and more open on steep slopes as much as feasible with common management activities. Tree densities would be managed to provide resilience to drought, desired tree vigor, and desired levels of bark beetle and other density dependent mortality. Planting spots generally will require a hand scalp of sod and weeds 18" in diameter to bare mineral soil. Approximately 240 acres of the HBMWD and private lands has had initial reforestation planting done on post-fire salvage units. Follow-up planting on these sites is expected during the project implementation period. Some areas that will be reforested have not had post wildfire timber salvage operations and are not located where vehicle access can allow for burned material to be treated by piling, burning or mastication. Those areas will be reforested by hand crews within the burned standing timber.

Fuels Reduction and Site Preparation Treatments

Mastication: Masticators are typically low ground pressure tracked vehicles, such as a skid steer with a forward mounted drum-like attachment with external masticating teeth, used to cut and shred woody material and live vegetation. Excavators may also be employed, utilizing a smaller masticating head (drum or rotary), which attaches to the boom. Limited mastication within some treatment units would occur on slopes less than ~50 percent and where previous salvage logging has occurred. Cutting brush and small trees within road prisms cut and fill slopes greater than 35 percent may be accomplished by an excavator masticator (while positioned in the road) in lieu of cutting and chipping. Dead standing vegetation generally less than 12-inch dbh may be masticated to reduce ladder fuel and achieve desired tree spacing. Similarly, mastication may be applied to treat re-sprouting brush, regrowth and fallen debris to maintain desired conditions.

Chipping: Roadside mechanical cutting and shredding of existing surface fuels and slash created from tree felling and yarding. Existing surface fuels, thinning and pruning residue, and cut brush would be pulled to forest roads and chipped into small pieces using a chipper. Chipping residue would be distributed back into the treatment unit, utilized for biomass, or utilized as a cover to reduce the risk of invasive plant establishment at landings and roads.

Hand pile: Down fuel accumulations and concentrations are physically broken up (with chainsaws and hand labor) and manually piled in concentrations of 3 to 7 feet in diameter. Excessive existing forest debris, along with woody debris (slash) from dead tree felling and shrub cutting, would be manually gathered into small piles.

Pile Burning: Hand and machine/tractor/grapple piles are typically covered with paper to allow woody debris to remain dry prior to ignition, promoting rapid consumption of debris to meet resource objectives and minimize smoke production. Piles are usually burned after the area has received sufficient rainfall so that fire does not spread independently beyond the heat influence of individual piles. Pile burning operations occur when site conditions including, onsite fuel moisture levels, current and forecasted weather elements, meet specific prescription parameters set forth in an appropriate agency approved burn plan and smoke management plan. Burning would only be conducted on days approved by the North Coast Unified Air Quality Management District (NCUAQMD) in compliance with the Clean Air Act.

Fuel reduction treatments will be accomplished according to following guidelines:

All slash produced (branches, limbs, and treatment debris less than four inches in diameter) will be treated using one of the following methods:

- Chip or masticate adjacent to roads, landings, building pads and other accessible portions of the treatment areas. Equipment includes power chippers whereby material would be hand fed and chips would be blown onto the ground. Chippers have little or no potential to impact cultural resources. Mastication involves reducing the size of residual down and dead material by grinding shredding or chopping material and leaving it on-site as mulch.
- Pile and burn: slash piles for burning should be located away from residual trees and structures. Pile and burn operations would occur where vehicle access is available along existing public and private roads and seasonal logging roads. Roads utilizing existing openings and compacted ground as feasible. Piles will be created using hand crews.
- Lop and scatter: lopping is the severing and spreading of slash so that no part of it remains more than 18 inches above the ground. Lop and scatter will be implemented by hand crews on steeper slopes and areas with limited access where chipping, mastication, and burning piles is not feasible.
- The project is within an area that the Board of Forestry and Fire Protection has declared a Zone of Infestation or Infection for sudden oak death (SOD) pursuant to Public Resources Code § 4716. SOD host material (Douglas-fir (*Pseudotsuga menziesii*), bay laurel (*Umbellularia californica*), huckleberry (*Vaccinium ovatum*), big leaf maple (*Acer macrophyllum*)), will not be removed from the regulated area unless appropriate state and federal permits are obtained.

Hand Piling and Burning Specifications

Piling is placing, laying, heaping or stacking of slash into piles for later burning during appropriate wet season conditions. This is a high use recreation area, all piles need to stay out of paths, trails, road ways, camp sites, and any other place that may hinder visitor use of recreation areas.

- All piles need to stay within the boundaries of the treatment units and out of roadways (including the edge of the road) to avoid disruption to travelers.
- Slash to be piled generally constitutes material from 1" diameter up to and including 10" in diameter.
- All piles must be kept outside the drip line of desired leave trees unless unavoidable.
- No piles will be placed within 15 feet of control areas.
- No piles will be placed within 15 feet of standing snags.
- No piles will be placed within 15 feet of downed logs greater than 20 inches in diameter.

- No piles will be placed within 15 feet of the private property boundaries.
- No piles will be placed underneath or within 20 feet of power lines.
- No piles will be constructed in stream exclusion zones.
- Cover at least 3/4 of each pile with District provided waxed paper tarps Kraft* slash paper. Tarps will be placed on top of the pile and readily visible. Kraft paper tarps must be sufficiently anchored with some slash or brush so that it will not blow off in high winds. This should be just enough to anchor the paper tarps and should not bury it in the pile.
- All piles shall be built and compacted by laying limbs, stems, cut boles, and other slash so there are minimal air spaces.
- All material will be contained within the general contour of the pile and any material protruding out 2 feet or more will be sawed off and placed back on the pile.
- The minimum distance between piles will be one and a half times the pile height.
- The Kraft paper tarps shall cover a minimum of 1/3 of the pile surface area. Covering with tarps will be done at the time of piling.
- Power/Phone Lines: Power or phone lines may exist within or adjacent to units. Avoid cutting any trees that may pose a risk to contacting any phone or power lines.

Control Areas

Botanical (noxious weeds): Noxious weeds will be flagged with orange "noxious weed" flagging. There will be no driving, parking, cutting, piling, or any other physical disturbance within these areas. Botanical (sensitive plants): Sensitive plants will be flagged in yellow and black flagging. There will be no thinning, piling or other physical disturbance within these areas. Sensitive Resources: Known sites with sensitive resources will be flagged in "Special Treatment Area" labeled flagging care will be taken to limit physical disturbance within these areas.

The environmental analysis for this project focused primarily on physical changes in the environment including but not limited to:

- Cutting dead trees, brush, limbs.
- Hand planting native conifer seedlings and native riparian tree species using hand tools such as hoedads.
- Using heavy equipment off-road.
- Creating dust, smoke or noise.
- Exposing mineral soil.
- Pile burning and hand fire line construction.
- Disturbing species or reducing habitat.
- Changing aesthetics.
- Nuisance smoke.

A large portion of the project area was evaluated under a CEQA equivalent process for timber harvest operations under CAL FIRE Emergency Notices per PRC § 4592 and 14 CCR §§ 1052-1052.3 including salvage logging, skidding, slash disposal in 2020 and 2021 and no significant changes have occurred to the landscape since that analysis was completed.

The project description incorporates project design parameters that include project Best Management Practices that are listed under Appendix A in this document.

Reasons why project is exempt: The project involves, minor alteration of vegetation, including reforestation of areas burned in the 2020 August Complex wildfire, follow-up fuel management activities to reduce the volume of flammable post-wildfire biomass and follow up hand-crew brush control treatments. No healthy, mature, scenic trees will be removed as part of this project. An environmental review was completed concluding that project implementation as designed could not

have a significant effect on the environment. Areas to be reforested were evaluated under CEQA for timber harvest operations under filed Emergency Notices including logging, skidding and slash disposal in 2021 and no significant changes have occurred to the landscape since that analysis was completed. The activities do not result in the taking of endangered, rare, or threatened plant or animal species or significant erosion and sedimentation of surface waters. There will be no impact to historic or cultural resources due to minimal ground disturbance and or avoidance and protection measures for cultural sites has been developed during the CAL FIRE Emergency Notice filing with guidance from the project Archaeologist and are consistent with Best Management Practices of the industry.

Statutory Exemption Public Resources Code Section 4799.05(d)(1). The California Environmental Quality Act does not apply to prescribed fire, thinning, or fuel reduction projects undertaken on federal lands to reduce the risk of high-severity wildfire that have been reviewed under the National Environmental Policy Act (NEPA) if the primary role of a state or local agency is providing funding or staffing for those projects. On February 7, 2020, the Secretary of the California Natural Resources Agency certified that the exemption in Public Resources Code Section 4799.05 should remain in effect. The HBMWD will provide funding for reforestation and fuel reduction on 750 acres of federal land within the Six Rivers National Forest upstream from Ruth Lake. The proposed federal land activities are being reviewed in their entirety under NEPA in the Mad River August Complex Restoration Project Environmental Assessment (EA) and Finding of No Significant Impacts (FONSI). The final Decision Notice and Finding of No Significant Impact for the EA/FONSI project documents was approved on January 5, 2023. Once the US Forest Service reviews the NEPA documents and certifies that the NEPA analysis adequately addresses current site conditions and the environmental impacts of the project as currently proposed.

Surrounding Land Uses and Setting

Surrounding land uses include USFS lands, large private ranchlands and private smaller timberlands in some cases hosting residential structures. Much of the landscape is steep and bisected by watercourses. Elevations range from 2,500' to 3,400'.

Sawyer, Keeler-Wolf and Evans (2009) describe the mixed coniferous forest community as the *Pseudotsuga menziesii* Forest Alliance, which exhibits greater than 50% relative cover of Douglas-fir in the tree canopy. Other commonly encountered species consistent to the mixed coniferous forest community type are tanoak, canyon live oak, and Pacific madrone.

Riparian areas can be found along the margins of Hetton Creek, Mad River, Hobart Creek, Deep Hollow Creek and Upper Mad River on the USFS lands within the proposed action project area. Conifer tree species in riparian forest include Douglas-fir, ponderosa pine and incense cedar and Pacific yew (*Taxus brevifolia*). Hardwood species include black oak, white oak, red alder, Oregon ash, big leaf maple and *Salix spp.* Understory species indicative of more mesic conditions are thimbleberry (*Rubus parviflorus*), coltsfoot (*Petasites frigidus*), coastal brookfoam (*Boykinia occidentalis*), giant chainfern (*Woodwardia fimbriata*), Whipplevine (*Whipplea modesta*) and horsetail fern (*Equisetum spp.*)

CAL FIRE is concurrently conducting a Ruth Lake Fire Reduction Project (SCH # 2022060469) that involves approximately 1,400 acres of HBMWD property. This project is primarily in the unburned areas of the ownership, but there is overlap in some areas.

This project is described by CAL FIRE:

"The project will create a fire safe community reducing fire hazard through removal of excess vegetation in the Wildland Urban Interface around Ruth Lake, California. With the recent drought years in California, communities like Ruth Lake, have numerous dead hazard trees throughout their area. There are summer cabins and roadways with hazard trees that pose a fire and safety threat to the

summer cabins on property owned by the Humboldt Bay Municipal Water District. The dead trees identified as a hazard tree around structures and roadways will be felled by a professional tree falling contractor to assure no damage will be done to the cabins and infrastructure. None of the material from the treated trees or brush species will be used for commercial purposes. The larger trees will be limbed and bucked with the material chipped or left on site. The cut brush will be chipped on-site and spread over the ground to help prevent erosion in the future. Vegetation along roads will be treated using a masticator head affixed to an excavator. This equipment will only operate on existing road prisms to assure no ground disturbance will occur. These fuel management activities will reduce the volume of flammable vegetation in the area surrounding Ruth Lake thereby reducing the chance for wildfire spread into communities around the lake or for a fire within the communities to spread to adjacent wildlands while also providing safer ingress/egress for fire crews and control features to aid in firefighting efforts”.

Other Public Agency Approvals

Other agencies with jurisdiction over the project include California Department of Fish and Wildlife, and the State Water Quality Control Board. On areas not covered by the approved CAL FIRE Emergency Notices, a Categorical Waiver of Waste Discharge Requirements (Order No. RI-2014-0011 Category F) may be required from the Regional Water Quality Control Board North Coast Region. The waiver will be obtained prior to commencement of operations that were not previously covered on the CAL FIRE Emergency Notices, and the project will adhere to all of the stipulations in the waiver including implementation of an erosion control plan.

Categorical Waiver F: Applies to Non-federal lands in the project. The General and Specific Conditions of this Categorical Waiver limit the scope of impacts from Timber Harvest Plans approved by CAL FIRE and other CEQA compliant timber harvesting activities so that the threatened discharges of waste will be minimized. Further, Regional Water Board staff participation in the CEQA functional equivalent THP review process ensures site-specific mitigation and appropriate project planning to protect water quality. As such, projects that meet the eligibility criteria for Category F are not expected to pose a significant threat to water quality, and therefore, it is appropriate to conditionally waive Waste Discharge Requirements.

Order No. R1-2015-0029 Waiver of Waste Discharge Requirements for Nonpoint Source Discharges Related to Certain Federal Land Management Activities on National Forest System Lands. Order No. R1-2015-0029 Fire Recovery: Fire recovery operations include various management measures including timber harvesting, vegetation management and restoration activities

A CDFW 1600 Agreement is not required for this project as no project elements affect a bed, bank or channel of a watercourse. Appropriate Air District burn permits will need to be renewed and updated from the North Coast Unified Air Quality Management District.

By implementing all permit requirements, and standard best management practices (BMPs), the project will not conflict with applicable local, federal, or state plans, policies, or regulations, and therefore impacts will be less than significant.

The proposed federal lands activities are being reviewed in their entirety under NEPA in the Mad River August Complex Restoration Project Environmental Assessment (EA) and Finding of No Significant Impacts (FONSI). The final Decision Notice and Finding of No Significant Impact for the EA/FONSI project was approved on January 5, 2023.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project

| | | | | | |
|-------------------------------------|------------|-------------------------------------|--------------------------|-------------------------------------|-------------|
| <input checked="" type="checkbox"/> | Aesthetics | <input checked="" type="checkbox"/> | Agriculture and Forestry | <input checked="" type="checkbox"/> | Air Quality |
|-------------------------------------|------------|-------------------------------------|--------------------------|-------------------------------------|-------------|

| | | | | | |
|-------------------------------------|---------------------------|-------------------------------------|--------------------------|-------------------------------------|------------------------------------|
| <input checked="" type="checkbox"/> | Biological Resources | <input checked="" type="checkbox"/> | Cultural Resources | <input type="checkbox"/> | Energy |
| <input checked="" type="checkbox"/> | Geology/Soils | <input checked="" type="checkbox"/> | Greenhouse Gas Emissions | <input checked="" type="checkbox"/> | Hazards and Hazardous Materials |
| <input checked="" type="checkbox"/> | Hydrology/Water Quality | <input type="checkbox"/> | Land Use/Planning | <input type="checkbox"/> | Mineral Resources |
| <input checked="" type="checkbox"/> | Noise | <input type="checkbox"/> | Population/Housing | <input type="checkbox"/> | Public Services |
| <input checked="" type="checkbox"/> | Recreation | <input type="checkbox"/> | Transportation/Traffic | <input checked="" type="checkbox"/> | Tribal Cultural Resources |
| <input type="checkbox"/> | Utilities/Service Systems | <input type="checkbox"/> | Wildfire | <input checked="" type="checkbox"/> | Mandatory Findings of Significance |

DETERMINATION

On the basis of this initial evaluation:

| | | | |
|---|--|-------------------|--|
| <input checked="" type="checkbox"/> | I find that the proposed project COULD NOT have a significant effect on the environment, and is exempt from environmental review pursuant to statutory and categorical exemptions. | | |
| <input type="checkbox"/> | I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. | | |
| <input type="checkbox"/> | I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. | | |
| <input type="checkbox"/> | I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. | | |
| <input type="checkbox"/> | I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. | | |
| <input type="checkbox"/> | I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required | | |
| Signature: | | Date: | |
| Printed Name: John Friedenbach - General Manager | | For: HBMWD | |

EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each questions. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less Than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The analysis of each issue should identify:
 - a) the significance criteria or threshold used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significant.

| I. Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| AESTHETICS: Would the project: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | | | X | |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | X | |
| c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). | | | | X |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | | | X |

| I. Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| AESTHETICS: Would the project: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | | | | |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | | |

a-c) **Less than Significant Impact.** The project will not cause a long-term alteration or not result in a permanent adverse change to physical, vegetative, or scenic resources.

Reforestation efforts will lead to long term improvement of views and it is unlikely that any project work will substantially affect views or degrade the existing visible character and quality of the project site and its surroundings.

d) **No Impact.** The project will not create a new source of substantial light or glare. The proposed project will be completed during daylight hours, does not require lighting or the use of reflective materials, and will not contribute to night lighting or glare.

| II. Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| AGRICULTURE AND FOREST RESOURCES: Would the project: | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the | | | | X |

| | | | | |
|---|--|--|--|---|
| Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | | | | |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | | X |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by PRC section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | | | | X |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | | | | X |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use? | | | | X |

a, e) **No Impact.** The Farmland Mapping and Monitoring Program has not mapped Trinity County. Thus, there will be no conversion of "Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland)," as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. Farmlands of Statewide Importance are defined by the California General Plan Glossary as, "Land other than Prime Farmland which has a good combination of physical and chemical characteristics for the production of crops. It must have been used for the production of irrigated crops within the last three years." The project is located on a Timberland Production Zone and Agricultural Exclusive and public lands that in part are currently grazed, however are not irrigated. As such, it is not considered Farmland of Statewide Importance. "Unique Farmland" is defined as land that is currently used for the production of specific high economic value crops which does not meet the criteria for Prime Farmland or Farmland of Statewide Importance. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality or high yields of a specific crop when treated and managed according to current farming methods. Examples of such crops may include oranges, olives, avocados, rice, grapes, and cut flowers. The project is also not located on a parcel considered Unique Farmland. Therefore, there will be no conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

b) **No Impact.** Because the project activities are allowable uses within the zoned area and do not involve a change to the land use or zoning designation, it will not conflict with the existing zoning for agricultural use. The project is not within a property that is under a Williamson Act contract and therefore will not be in conflict. As such, there will be no impact.

c, d) **No Impact.** Project work would not change land use within the project area or on surrounding lands and thus would not conflict with existing zoning for agricultural activities or Williamson Act contracts. The project will not result in the loss of forest land or conversion of forest land to non-forest use.

e) **No Impact** The project does not involve changes to the environment that could result in a conversion of Farmland to non-agricultural use or conversion of forestland to non-forest use.

References

California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program. Accessed July 1, 2022 at <https://www.conservation.ca.gov/dlrp/fmmp>.

California Department of Food and Agriculture (CDFA). 2012. *California County Agricultural Commissioner's Reports*. 2012.

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| III. Air Quality Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | |
| a) Conflict with or obstruct Implementation of the applicable air quality plan? | | | X | |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. | | | X | |
| c) Expose sensitive receptors to substantial pollutant concentrations? | | | X | |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | | | X | |

a-b) **Less than Significant Impact.** The North Coast Unified Air Quality Management District's (NCUAQMD) attainment plan established goals to reduce PM-10 emissions and eliminate the number of days in which standards are exceeded. The plan includes three areas of recommended control strategies to meet these goals: transportation, land use, and burning. Control measures for these areas are included in the attainment plan and have also been incorporated in the Trinity County General Plan.

Particulate matter less than 10 microns in size (PM10 and PM2.5) is the pollutant of greatest concern with respect to construction activities. PM10 and PM2.5 emissions can result from a variety of construction activities, including excavation, grading, vehicle travel on paved and unpaved roads, and vehicle and equipment exhaust. Particulate emissions can lead to adverse health effects as well as nuisance concerns, such as reduced visibility and soiling of exposed surfaces. Construction-related dust emissions typically vary from day to day, depending on the level and type of activity, silt content of construction site soil, and weather conditions. Larger dust particles settle out of the atmosphere close to the construction site resulting in a potential soiling nuisance for adjacent uses.

The NCUAQMD's Regulation 1 prohibits nuisance dust generation, such as that generated by road construction activity. Although the NCUAQMD is in nonattainment for PM10, the temporary nature (approximately three months) of project activities combined with implementation of standard dust reduction measures during activities (e.g., watering of access roads, landing sites, etc.) would avoid significant impacts. Biomass burning will be done in conformance with local and state air district standards and should not conflict with air quality plans. The proposed project would not obstruct implementation of the NCUAQMD Particulate Matter Attainment Plan, violate air quality standards, or contribute substantially to an existing or projected air quality violation. Therefore, operation of the proposed project will not violate any air quality standard or contribute to an existing or projected air quality violation nor result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

c-d) **Less than Significant Impact.** The Air District will be consulted on pile burns before the expected burn date.

All implementation would comply with Occupational Safety and Health Administration regulations, Forest Service direction, regional air quality standards, Clean Air Act, and other applicable laws and guidance. While short-term impacts to air quality from prescribed burning may occur, these effects will be minimized by burning under appropriate climatic conditions approved by NCUAQMD.

Sensitive receptors are typically defined as the segment of the population most susceptible to air quality effects including children, the elderly, and the sick, as well as land uses such as schools, hospitals, parks, and residential communities. There are no schools or hospitals located adjacent to the sites. During project activities there will be localized air emissions of criteria constituents from heavy equipment, chain saws, vehicles and equipment powered by internal combustion engines. With air movement common to the area, project-related emissions should disperse quickly and avoid concentrations or still-air pools. Therefore, activities will not expose sensitive receptors to substantial pollutant concentrations. The work will not create new exposure to any sensitive receptors located in the immediate area.

Execution of project work will result in minor releases of diesel smoke related to equipment operation as well as from smoke released from the limited amount of burning to occur. Due to the fact that project operations will occur in a very remote location, any odors or minor pollutants generated in connection with project work will not affect substantial numbers of people.

BMP Air-1

To minimize dust during treatment activities, the project proponent shall implement the following measures: Limit the speed of vehicles and equipment traveling on unpaved areas to 20 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board Fugitive Dust protocol. If road use creates excessive dust, the project proponent will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions. Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board. The project proponent will not over-water exposed areas such that the water results in runoff. The type of dust suppression method will be selected by the project proponent based on soil, traffic, site-specific conditions, and air quality regulations. Remove visible dust, silt, or mud tracked-out onto public paved roadways where sufficient water supplies and access to water is available. The project proponent will remove dust, silt, and mud from vehicles at the conclusion of each workday, or at a minimum of every 24 hours for continuous treatment activities, in accordance with Vehicle Code Section 23113, suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport (particulate pollution) outside the treatment boundary, if the particulate emissions may "cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property," per Health and Safety Code Section 41700

References

North Coast Unified Air Quality Management District (NCUAQMD). 2019. Accessed on line on June 4, 2022, at <http://www.ncuaqmd.org/index.php?page=district.info>

| IV. Biological Resources Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| BIOLOGICAL RESOURCES: Would the project: | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | | | X | |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | | | X | |
| c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | | | X |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | | | | X |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | | X |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | | | | X |

General

All project activities would occur in previously disturbed areas (moderate to high intensity wildfire and salvage logging) that do not contain suitable habitat for most listed species. Pre-project surveys were limited because the project activities would occur on previously disturbed ground and not involve habitat disturbing actions.

a & b) Less than Significant. Although short term impacts may occur during project activities , these impacts will be minimized through implementation of BMPs, and adherence to regulatory permit requirements. While temporary project impacts may affect habitat usage, they will not interfere substantially with the movement of any native resident or migratory fish or wildlife species; have a substantial adverse effect on riparian habitat; with established native resident or migratory wildlife corridors; or impede the use of native wildlife nursery sites. Such attributes are important for wildlife species and can provide for needs such as forage and cover. It is also reasonable to expect an increase in the quality and quantity of browse availability following project activities. Due to the light intensity of the post fire slash treatments and the restorative reforestation focus of the proposed project, project BMPs and the fact that the project area for the most part had recently burned and been salvaged logged under CAL FIRE Emergency Notices, it is not expected that any candidate, sensitive, or special status species would be significantly impacted by this project.

A HBMWD representative, registered professional forester or their designee will be sufficiently present onsite during operations to evaluate the presence of biological resources and ensure biological resource protection through avoidance. If any wildlife is encountered during project activities, said wildlife will be allowed to leave the area unharmed and if any listed wildlife is encountered and cannot leave the project site on its own the registered professional forester or project manager should contact California Department of Fish and Wildlife immediately consult regarding species relocation protocol.

Scoping

Scoping for potential presence of special status animal species, plant species and communities was undertaken in order to determine whether the proposed project could have significant negative impacts on those species and communities. After reviewing several reference data sources, a list was compiled for species whose ranges include the project and surrounding area. California Department of Fish and Wildlife Natural Diversity DataBase (CNDDDB) was consulted (March and Feb. 2022 utilizing the following search parameters: 1) nine-quad search centered on the Ruth Lake, Shannon Butte and Forest Glen 7.5' quadrangles.

A general habitat assessment was made for the project area, and nearby unique habitats (e.g. late-seral forest stands, large streams, lakes, rock outcroppings, meadows, unique soil types such as serpentine, etc.) were noted based upon aerial photo interpretation, familiarity with the area, and consultation with adjacent or nearby projects. Also, specific habitat and range information was obtained by using previously published listings of endangered, threatened or rare species by the Six Rivers National Forest several past Timber Harvest Plans on adjacent private lands in the area.

The CNDDDB and CNPS queries found one occurrence for a special status plant community, the Upland Douglas-fir Forest, mapped near the northeastern part of the project area. Since no live trees >10" DBH will be removed from the proposed project, the treatments will likely have no adverse effects on the Upland Douglas-fir Forest associated with this project. The removal of post wildfire of biomass and reforestation efforts will likely benefit this nearby special status community.

Plants

The non-federal portions of the project area were traversed by field botanists with a focus on ecotones and habitat types likely to host special status species listed in the Natural Diversity Database query. (*See BMP Bio-2) The USFS conducted a complete botanical survey of the federal portion of the project area.

Rare Plant Survey Results

The SRNF Forest Botanist determined that federal land areas that burned at high severity within the August Fire Complex are not considered suitable habitat for Survey and Manage species. Fire severity was determined using Geographic Information System (GIS) and Rapid Assessment of Vegetation Condition after Wildfire (RAVG) data. Areas not identified as high severity via RAVG mapping were field visited on March 26, 2021 and no additional habitat was found to be suitable due to being burned at high severity or they were no mid to late seral stands which represents suitable habitat. According to USFS Botanist Hoh McRae, two existing Survey and Manage lichen locations of *Dendrocollybia racemosa* were consumed by fire and are no longer considered to be known locations or suitable for the species. The mountain lady's slipper orchid (*Cypripedium montanum*) is a category C Survey and Manage and a Forest Service Sensitive plant species found within the USFS project area but not known to be present in areas proposed for commercial salvage harvest or hazard tree removal and suitable habitat is not present where actions are proposed as a result of severe fire effects. A subpopulation of Tracy's sanicle, *Sanicula tracyi*, which is a Forest Service Sensitive plant species and protected by the Tracy's sanicle Conservation Strategy, occurs adjacent to 27N34. The subpopulation burned at high severity and as a result the species has been extirpated from this location and the habitat is no longer suitable.

The project is not expected to result in a significant adverse effect to botanical resources.

Tracy's sanicle (*Sanicula tracyi*)

Rare Plant Rank: 1B.2

CA Rank 4.2

Global Rank G4

State Rank S4

USFS Sensitive

Elevation 330 - 5200 feet

Blooms: April – July

Habitat is primarily white oak woodlands but also black oak "patches" nested in Douglas-fir-Black oak stands. Individuals grow in the spaces between clumps of California fescue. Plants are observed on previously disturbed ground (i.e., road banks, old skid trails). Habitat is not overly specific nor fragile. This species is documented on the CNDDDB pre wildfire in one location close to the County Rd at Ruth Reservoir, and on the USFS portion of the project area. If the Ruth Location can be relocated, it will be protected from project related activities. Surveys of known locations of Tracy's sanicle within the project area, in areas of light to moderate burn severity, will avoid pile and burn and mastication on known plant locations.

White-Flowered Rein Orchid (*Piperia candida*)

Rare Plant Rank: 1B.2

Elevation: 0-1200 m

Blooms: May – September

The white-flowered rein orchid is a perennial herb in the orchid family (Orchidaceae). It grows in broadleaved upland forests, lower montane and north coast coniferous forests with an affinity to serpentine soil. Within these habitats it can be found growing in the forest duff, mossy banks, rock outcrops and muskeg.

This species was documented pre-fire within one location near the Mad River Road inside of the project boundaries. This location has been mapped and will be surveyed prior to work and if detections are located a 50' buffer from ground disturbing activities will be implemented to ensure that impacts to the plants are avoided.



Sanicula tracyi

Mountain lady's slipper (*Cypripedium montanum*)

Habitat is extremely variable. Populations most often occur in open mixed conifer or mixed conifer hardwood forests but are also documented in forest openings, shrub thickets and alpine meadows. Moisture regimes vary from dry to moist. Elevation ranges from approximately 500 to 2100 meters (1600 to 6900 feet). Associated tree species include Douglas-fir (*Pseudotsuga menziesii*), various species of fir (*Abies*), lodgepole pine (*Pinus contorta*), Ponderosa pine (*Pinus ponderosa*), quaking aspen (*Populus tremuloides*) and oak (*Quercus* spp.). The mountain lady's slipper orchid is a USFS category C Survey and Manage and a Forest Service Sensitive plant species found within the USFS project area but not known to be present in areas proposed for commercial salvage harvest, reforestation or hazard tree removal and suitable habitat is not present where actions are proposed as a result of severe fire effects. This species is not likely to occur in the project area due to wildfire impacts. Project work will not affect this species.

Long beard lichen (*Usnea longissima*), a CNPS List 4 and USFS Sensitive species. Long beard lichen is a pendulant, fruticose lichen whose main branches are up to 3 meters long. It occurs in old-growth and late-successional conifer stands, hardwood stands, and riparian areas, particularly in coastal climates or on fog-swept mountains where humidity is high (USDI 2006). This species is not likely to occur in the project area due to wildfire impacts. Project work will not affect this species.

Animals**Occupied Nest Site Protection**

In review of CDFW range maps, and existing habitat within the project area, the following Board of Forestry Sensitive Species have the potential to occur within the project area. Bald Eagle, Northern Goshawk, Osprey, and Peregrine Falcon. In the instance an active or occupied nest site is documented within 0.25 mile of the project area or if any occupied nest sites of a listed bird species are detected during the preparation or implementation of the project, the Department of Fish & Wildlife and per California Fish and Game Code (Section 3503), and appropriate protection will be provided. This requirement applies to active nests (breeding effort within the last 2-5 years, depending on the species), and not just "occupied nests".

Cooper's Hawk (*Accipiter cooperii*)

Listing Status: California Department of Fish and Wildlife 'Watch List'

Reported in Project area: No

Habitat: Cismontane woodland, riparian forest, riparian woodland & upper montane coniferous forest. Woodland, chiefly of open, interrupted or marginal type.

The Cooper's hawk is an uncommon resident, breeding sparingly throughout the region. No nests were located during fieldwork and no Cooper's hawks were observed. If a Cooper's hawk nest is identified, operations shall be suspended within 100 feet of the nest tree and the contractors/operators shall immediately notify the California Department of Fish and Wildlife to determine species-specific protection measures. * **See BMP Bio-10.** Significant impacts to Cooper's hawk are not expected as a result of this project.

Golden Eagle (*Aquila chrysaetos*)

Listing Status: California Department of Fish and Wildlife 'Fully Protected' & 'Watch List'

Reported in Project area: No

Habitat: Broadleaved upland forest, cismontane woodland, coastal prairie, Great Basin grassland & scrub, upper & lower montane coniferous forest, pinon & juniper woodlands, and valley & foothill

grassland habitats. General habitat includes rolling foothills, mountain areas, sage-juniper flats and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.

The golden eagle is a large bird (30" to 41" tall) that lives primarily in mountain forest and open grasslands. The golden eagle preys mainly on medium-sized birds and mammals but will also feed on carrion. Nests are built on rock ledges or in tall trees. Golden eagles require large openings and large trees in open areas as habitat.

This species was detected at Marshall Rock 2,500' feet horizontal distance from any portion of the project area. During the preparatory stages, the project area was surveyed for nest structures; none were found. The surrounding forests could provide possible structure for roosting and nesting and the grasslands located adjacent to the project area could be used for foraging. Since the project does not involve any significant alterations to habitat and the historic bald eagle nest site at Marshall Rock is ½ mile from potential project noise generation, no significant impacts to eagles are expected as a result of this project. This species is typically afforded a ¼ mile radius buffer.

Peregrine Falcon (*Falco peregrinus anatum*)

Listing Status: State Delisted & 'Fully Protected', Federal Delisted in 1999.

Reported on CNDDDB in the project: No

Range: Most of the state except a portion of southeastern California.

Habitat: Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures.

Uncommon, breeds mostly in wooded, forest, and coastal habitats. Decline associated with DDT contamination. Swoops from flight into flying prey, chases in flight, and rarely hunts from perches. Preys on a number of birds occasionally taking mammals, insects and fish. Requires protected cliffs and ledges for cover. Nests in a scarp on a depression or ledge in an open site. Will nest on human-made structures, and occasionally uses tree or snag cavities or old nests of other raptors. The plan amendment area is within the range of the peregrine falcon. No sightings have been reported to the CNDDDB for the project. No nests were observed within the project area. This project will not have a significant negative impact on peregrine falcons.

Northern Goshawk (*Accipiter gentilis*)

Goshawks appear to select habitat by forest structure rather than by tree species (Greenwald et al. 2005). Goshawks prefer mature and old-growth forests that are at middle to high elevations, have relatively dense canopy closures (>40%), have usually little understory vegetation, are in close proximity to riparian corridors, and have flat or moderately sloping terrain (Crocker-Bedford and Chaney 1988; Moore and Henny 1983; Saunders 1982; Zeiner et al. 1990). Adequate canopy cover appears to be critical for occupancy and productivity of nest sites. Canopy cover is likely used to protect chicks from predation and for thermoregulation. Goshawks are known to use mature forest habitats for nesting and foraging. Nesting stands are typically in dense pockets of large trees, often on north-facing, bench slopes near water. Foraging habitats are often more open to allow for the aerial ambush foraging strategy of the goshawk. Historically, there have been numerous sightings of goshawks on the Mad River District, with reproductive territories known to occur. Historically there are 2 known nest sites (prefire) within the Three Forks Fire Salvage Project which is adjacent to the 41 Cattle Co. reforestation units. These 2 known nest sites were burned with high severity (75-100% BAK). These areas no longer meet suitable >40% canopy cover needed for goshawk habitat. The CAL FIRE Forest Health project does not occur in suitable goshawk habitat.

Osprey (*Pandion haliaetus*)

Listing Status: CDFW 'Watch List'

Reported on CNDDDB in project area: yes

Range: Breeds in northern California from Cascade Ranges south to Lake Tahoe and along the coast south to Marin County.

Habitat: Riparian Forest habitats. General habitats include ocean shores, bays, fresh-water lakes and larger streams.

Breeding takes place along major rivers, lakes, and estuaries. Breeding population estimated in 1975 at 350 - 400 pairs in northern California, numbers apparently increasing in recent years. Associated strictly with large fish bearing waters. Preys mostly on fish. Ospreys require open and clear waters for foraging. Swoops from flight, hovers or perches to catch fish near surface of the water. Uses large trees, snags, and dead-topped trees in open forest habitat for cover and nesting, within 15 miles of a good fish-producing body of water. Also uses large platform nests on cliffs or human-made structures such as power poles. Nests as high as 250 feet above the ground. Needs tall open branched perch trees for landing before approaching nest and for flight practice for young.

There are several historic osprey nests around Ruth Lake. Sightings of this species have been confirmed by BBWA staff during this project scoping, field work and reconnaissance.

Known nest trees will be avoided and noise generation will be avoided within 375' of an osprey nest tree during the breeding and rearing period. Retention of over-story conifers and snags will provide future nesting habitat for ospreys., Significant impacts to ospreys are not expected as a result of this project implementation.

California Condor (*Gymnogyps californianus*)

Reported on NDDB in area: No

Reported on NDDB in Biological Assessment Area: No

The California Condor is listed as endangered under the federal Endangered Species Act and the California Endangered Species Act, as well as a California Board of Forestry Sensitive Species and Fully Protected under the California Fish and Game Code.

Historically, the range of California Condor ran from British Columbia to Baja California. Their main population rings the southern mountain boundary of the Central Valley, from the Los Padres National Forest to Sequoia National Forest. A stable population has been established in the Ventana Wilderness and Pinnacles National Park.

Nesting habitat is generally characterized by steep, rugged terrain with nests in rock crevices with overhanging ledges or broken-topped large trees, like sequoia or coast redwood. They are known to roost on rocky outcrops, tall trees, or snags near foraging, nesting, and water. Condors need large areas to allow for take-off and landing, where winds provide thermals for flight. Foraging habitat needs to have high productivity for obligate scavenging. Sparse vegetation provides higher visibility of carrion and thermals keep them in the air long enough to find carrion, without expending large amounts of energy. Condors can cover large distances in the course of a day as they forage; sometimes flying up to 150 miles for food.

Language in the state listing final rule states that take of condor is allowed, provided the "take is not intentional or due to negligent conduct." Additionally, the Final rule states "Habitat alteration (e.g., removing trees, . . . altering the nest structure or perches near the nest) or significant visual or noise disturbance (e.g., chippers, chainsaws, within 656-ft (200 m) of an occupied nest are prohibited.

Excluded from this prohibition are emergency fuels treatment activities by Federal, State, and local agencies and Tribes to reduce the risk of catastrophic wildfire and emergency response services.

Activities such as ranching and use of existing roads and trails within the 656-ft (200 m) buffer area around an occupied nest would not be considered a significant visual or noise disturbance. For the purposes of this rule, an occupied California condor nest is defined as a nest that is: (1) attended by a

breeding pair of condors, (2) occupied by a condor egg, or (3) occupied or attended by a <1-year-old condor. To minimize the potential of take in the instance an active or occupied California Condor nest site is discovered within 200 meters of the property, no noise, smoke or habitat altering operations will be conducted within the 200 meter zone. If a nest site is discovered during active project operations, operations will cease within 200 meters and CDFW will be consulted to provide guidance for protection of this species.

Sonoma Red Tree Vole (*Arborimus pomio*)

Listing Status: California Department of Fish and Wildlife 'Species of Special Concern'

Reported on CNDDDB in project area: No

Range: Sonoma County north to Humboldt and western Trinity counties to the South Fork of the Smith River, Del Norte County.

Habitat: North Coast coniferous forest, old-growth and redwood habitats

The Sonoma red tree vole primarily inhabits coniferous forests dominated by Douglas-fir, but they also live where Douglas-fir co-occurs with other species. The species is most abundant in mature stands though can also inhabit pole and young stands (Thompson & Diller 2002). Arboreal voles that exhibit some terrestrial activity, nests are 2-65 m above the ground, in trees of any size, often in Douglas-fir, generally in the largest available trees. They feed almost exclusively on Douglas-fir needles, though will occasionally take needles of grand fir, hemlock or spruce. Commonly in the lower third of the live crown; several nests may be built in large whorls of branches provide support for nests in young trees; large branches of old-growth trees can support large maternal nests or nurseries; nests are sometimes built in cavities and hollows in trees or under the moss covering large branches of old trees. There is likely red tree vole habitat within the project area but they were not observed during the biological field review. Any Sonoma red tree vole eating platforms or resin ducts observed during project activities will be recorded. Since no green trees are proposed for removal under this project, it should not cause a significant negative impact to this species.

Pacific Tailed Frog (*Ascaphus truei*)

Listing Status: California Department of Fish and Wildlife 'Species of Special Concern'

Reported on CNDDDB in project area: No

Range: The range in California extends from Del Norte County south to central Sonoma County and eastward to Shasta and Tehama Counties.

Habitat: Occur in aquatic, Klamath and north coast flowing waters, lower montane coniferous forest, north coast coniferous forest, redwood and riparian forest habitats. The general habitats of this species are flowing waters in montane hardwood-conifer, redwood, Douglas-fir and ponderosa pine forests. They are restricted to perennial montane streams. In California, the range of this species is from sea level to approximately 6,500' above sea level. A rocky streambed is important in providing hiding places for larvae, sites for attaching eggs and cover for adults. Tadpoles require water below 15 °C. This species is mostly aquatic, though the adult is known to forage on land during cool and wet conditions. Stream characteristics seem to be a better predictor of *A. truei* abundance than landscape characteristics (Bull and Carter 1996). This suggests the possibility that other factors of habitat suitability, such as water temperature, may be more important than forest age and observations of this species in suitable habitat in young growth stands corroborates this. This species has also been found in suitable habitat in the Turwar Creek drainage (tributary of the Klamath River) following intense fires which removed essentially all stream side vegetation and woody instream cover. It was also able to quickly reestablish itself on the treeless terrain created by the Mt. St. Helen eruption (Hawkins *et al.* 1988).

Presence of this species will be assumed in aquatic habitats within the project area. Tailed frogs are presumed to exist in the larger watercourses having substrates of consolidated parent material.

Considering protection provided to watercourses and the project area in its entirety, it is reasonable to conclude that this project will not create a significant adverse impact to tailed frog populations.

Marbled Murrelet (*Brachyramphus marmoratus*)

Listing Status: State Endangered, Federal Threatened

Reported on CNDDDB in project area: No

Range: Nests inland along coast from Eureka to the Oregon border & from Half Moon Bay to Santa Cruz.

Habitat: Lower montane coniferous forest, old-growth and redwood habitats. Nests in old-growth, redwood-dominated forests, often in Douglas-fir. Non-breeding season occurs in pelagic habitats. The marbled murrelet is a small seabird that nests in old-growth trees within 60 km of the coast or, less frequently, on the ground in areas where trees are absent. Specific nesting habitat of this species in this part of its range is large, sometimes decadent trees with large limbs (>10 cm) for nesting platforms (Hamer and Nelson 1995). The marbled murrelet will lay one egg on these platforms within natural accumulations of lichens and moss. It feeds in near-shore habitats up to 1.4 km offshore, in bays, lagoons and sometimes inland lakes. In California the species ranges from the Oregon border south to Santa Cruz County. Throughout most of the year this species is found in small groupings in near-shore coastal waters where they feed on small baitfish. Cutting of nest trees, gillnetting, and catastrophic events such as oil spills and wildfires are potential threats to this species. The project area is within the range of the marbled murrelet, however specific habitat elements do not exist within or adjacent to the project area. No sightings have been reported to the CNDDDB for the project area and Ruth Lake is likely situated too far from the coast for this species. Considering the location of the project area and the lack of available habitat, no formal surveys were deemed necessary. This project should not have a significant negative impact on nor result in take of marbled murrelets.

Northern Spotted Owl (*Strix occidentalis caurina*)

Listing Status: State & Federally Threatened, California Department of Fish and Wildlife 'Species of Special Concern'

Reported on CNDDDB in project area: Yes

Range: Northern California, Oregon, Washington and southern British Columbia.

Habitat: North Coast coniferous forest, old-growth and redwood habitats. Habitat: The northern spotted owl (NSO) is a medium to large raptor, which primarily preys on small mammals. Usually found in stands of larger multi-storied timber, they nest in large trees, snags and cliffs, and they often use abandoned raptor nests.

Requiring mature forest patches with permanent water and suitable nesting trees and snags (Zeiner 1990a), this species was initially believed to be old growth obligate. Post listing it became evident that NSOs that were common in younger forest types of northern California. In their seminal work, "Climate, habitat quality, and fitness in northern spotted owl populations in northwestern California" (2000), Franklin, Anderson, Burnham and Gutierrez suggested that a mosaic of older forest types interspersed with other vegetation types promoted the highest NSO fitness.

NSO habitat exists within and out to a 0.7-mile NSO radius surrounding the project area. CNDDDB was run in preparation for this project area and out to a 0.7-mile radius. The project area had six recorded NSO activity centers (ACs) at the time of the 2022 database query within 0.7 miles of the project area treatment units. TRI0310 (last observation 2011); TRI0122 (last observation 2011); TRI0509 (last observation 2009); TRI0504 (last observation 2015); TRI0452 (last observation 2009); TRI;506 (last observation 2028). There are no historic activity centers within 0.25 miles of project treatment areas. Based upon air photo review, most of the ACs burned during the August Complex Fire.

No NSO habitat will be degraded as a result of operations. There will be no reduction or nest/roost habitat from project activities. Pile burning operations will occur after the breeding season (post Aug. 1st). This project should not have a significant negative impact on nor result in take of northern spotted owls.

Pacific Fisher (*Pekania pennanti*) (Northern California Evolutionarily Significant Unit)

Listing Status: Federally Proposed Threatened, California Department of Fish and Wildlife 'Species of Special Concern'

Reported on CNDDDB in project area: No

Range: The West Coast Distinct Population Segment includes the states of Washington, Oregon, and California. Fishers were reintroduced into the Olympic Peninsula of Washington in January & March of 2008.

Habitat: North Coast coniferous forest, old-growth and riparian forest habitats.

Fishers use large areas of primarily coniferous forest with fairly dense canopies and large trees, snags and down logs. The fisher dens in rotting logs, hollow trees, and rocky crevices of old growth forests. They are specialized animals that frequently travel along waterways and rest in or on live trees, snags, or downed logs with cavities. These characteristics are usually only found in large tracts of old forests. Although fishers use a variety of protected cavities, brush piles, logs, or upturned trees, hollow logs, trees and snags are especially important (Zeiner *et al.* 1990b). Douglas-fir is the most common species used for resting in northern California, whereas the general oak species, white fir, and red fir are commonly used in the Sierra. The diameter of trees used by fishers for resting and denning is consistently large. Rest sites are widely distributed throughout fisher habitat. The average home range of fishers vary between coastal and Sierra populations. In addition, the home range for males is greater than females. In a Zielinski *et al.* (2004) study, home range size for the coastal population was estimated at 3,702 acres for females and 14,334 acres for males. The Sierra population home ranges were smaller with females at 1,286 acres and 7,408 acres for males. This study also found that there were no obvious differences between the sexes with respect to proportion of different size classes of trees within the home ranges. Average stand sizes of 11-24" in dbh with canopy closures 61-100% occupied the highest proportion of home ranges. For the coastal population, Douglas-fir and true fir were the most prevalent species. Sierra mixed conifer and ponderosa pine were the most prevalent species types for the Sierra Nevada study area. Resting structures were among the largest diameter trees available and resting site locations had high levels of canopy cover. Additionally, the Sierra Nevada study area resting sites were more frequently noted within 100 meters of water and with a hardwood component (Zielinski *et al.* 2004, Purcell *et al.* 2009, Zhao *et al.* 2012). Structural elements used by the fisher include: live tree cavities, broken tops, mistletoe platforms, large down logs, stumps and ground cavities. Other stand characteristics selected by fisher include high levels of canopy cover (>60%) and relative greater height and average diameter of the stand in relation to the surrounding areas (Zhao *et al.* 2012). Reportedly extirpated from 48% of its historical range, the California Department of Fish and Wildlife considers potential threats to the fisher to include timber harvest that excessively reduces late seral forest and/or does not retain late seral elements (California Department of Fish and Wildlife 2010). Rather than the range map provided by California Department of Fish and Wildlife this analysis utilizes CEQA appropriate fisher range map offered by CAL FIRE that more closely corresponds to expert opinion (Zielinski *et al.* 2004). Fisher habitat exists within and adjacent to the project boundary, though no resting or denning structures were identified during the preparatory stages of this project. No large stature trees are to be removed for this project. There have not been sightings of fisher within this part of the Mad River watershed. This project should not have a significant negative impact on or result in take of Pacific fishers.

Pacific Marten (*Martes caurina*) The subspecies of American marten that occurs on the Forest is the Humboldt marten (*Martes c. humboldtensis*). Humboldt martens utilize old growth Douglas fir stands on non-serpentine soils and late seral stage mixed-conifer (Douglas fir, sugar pine, western white pine and lodgepole pine) on serpentine soils (Slauson et al. 2007). Martens require a dense shrub layer (>60%) in both habitat types for foraging and concealment from predators. Dominant shrub layer species include: salal (*Gaultheria shallon*), evergreen huckleberry (*Vaccinium ovatum*), Pacific rhododendron (*Rhododendron macrophyllum*), huckleberry oak (*Quercus vaccinifolia*), and bush tanoak (*Lithocarpus densiflorus* var. *echinoides*) (Slauson and Zielinski, 2009). The current known distribution of the Pacific marten includes the northern districts of the SRNF. Martens are not known to be present in the upper Mad River watershed.

Townsend's Big-eared Bat (*Corynorhinus townsendii*) The Townsend's big-eared bat occurs in a variety of habitats, and is strongly correlated with the availability of caves or cave-like roosting habitat. It has been found from sea level to 8700 ft. elevation (Humphrey and Kunz 1976, Kunz and Martin 1982, Pierson and Rainey 1994) and occurs in xeric to mesic habitats, although throughout much of its range it occurs in mesic habitats characterized by deciduous and coniferous forests (Kunz and Martin 1982). The species tends to avoid open grassland when foraging and flying to and from roost sites. In coastal California, they prefer riparian habitats near streams and small tributaries, foraging along the edge of the forest (Fellers and Pierson, 2002). The Townsend's big-eared bat occurs in a variety of habitats, and is strongly correlated with the availability of caves or cave-like roosting habitat. It has been found from sea level to 8700 ft. elevation and occurs in xeric to mesic habitats, although throughout much of its range it occurs in mesic habitats characterized by deciduous and coniferous forests. Because of this, it is difficult to define measurable habitat variables. The most limiting factor appears to be availability of suitable roost sites. Little is known on the species abundance and distribution, although potentially suitable roost sites exist within the project area. This species is known to roost in caves, mine shafts and abandoned buildings. There are no detections of this species in the project area. The project does not occur in suitable habitat for this species.

Pallid bat (*Antrozous pallidus*) Pallid bats are most common in open, dry habitats near water that contain rocky areas for roosting. Occasional forays may be made in winter for food and water (Philpott 1997). Pallid bats are unusual in that most of their food consists of large insects captured on the ground (Verts and Carraway 1998). Open areas such as forest roads and canyon mouths are used for foraging. Day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods and giant sequoias, bole cavities of oaks, exfoliating Ponderosa pine and valley oak bark, deciduous trees in riparian areas, and fruit trees in orchards), and various human structures such as bridges (especially wooden and concrete girder designs), barns, porches, bat boxes, and human-occupied as well as vacant buildings (Sherwin & Rambaldini, 2005). Cavities in broken branches of black oak are very important and there is a strong association with black oak for roosting (Klamath National Forest 2002). Roosting sites are usually selected near the entrance to the roost in twilight rather than total darkness. The site must protect bats from high temperatures, as this species is intolerant of roosts in excess of 104 degrees Fahrenheit. Pallid bats are also very sensitive to roost site disturbance (Zeiner et al. 1990; Philpott 1997). Night roosts are usually more open sites and may include trees or snags, open buildings, porches, mines, caves, and under bridges (Philpott 1997; Klamath National Forest 2002; Pierson 1996). There are no detections of this species in the project area. The project does not occur in suitable habitat for this species.

Western bumblebee (*Bombus occidentalis*) The western bumblebee is a generalist forager and does not depend on any one flower type. *Bombus occidentalis* visits a wide variety of wildflowers. Since bumble bee colonies obtain all their nutrition from pollen and nectar, they need a constant supply of flowers in bloom. It performs "buzz pollination" and has been used as a commercial pollinator for greenhouse tomatoes, field berry crops, alfalfa, avocado, apples, cherries and almonds (Evans et al

2008). The Western bumble bee requires habitats with rich supplies of floral resources with continuous blooming from spring to autumn. Landscape level habitat quality has been shown to influence bumble bee species richness and abundance, indicating that isolated patches of habitat are not sufficient to fully support bumble bee populations (Hatfield and LeBuhn 2007; Öckinger and Smith 2007). Western bumble bees require open meadows with rich supplies of floral resources with continuous blooming from spring to autumn. Western bumble bees have been observed taking nectar from a variety of flowering plants. There is little information regarding the western bumblebee on the Forest. Until recently, the nearest confirmed detections were of two workers in 1997 in the Marbled Mountain Wilderness on Klamath National Forest. In September 2014, one, possibly 2, western bumble bees were detected on Route 1 near Horse Mountain on the Lower Trinity Ranger District. There are no detections of this species on the Mad River District. The project does not occur in suitable habitat for this species

Gray Wolf (*Canis lupus*)

Listing Status: & State Endangered, federally delisted Jan. 4, 2021. Federally re-listed as endangered on 2-10-22.

Reported on CNDDDB in Project area: No

Reported on CNDDDB in Biological Assessment Area: No

Range: Historically throughout most of North America except southeastern U.S. Current range includes Canada, Alaska, the Great Lakes, northern Rockies and the Pacific Northwest.

Habitat: Habitat generalists, historically occupying diverse habitats including tundra, forests, grasslands and deserts. Primary habitat requirements are the presence of adequate ungulate prey, water and low human contact.

The gray wolf was listed as endangered under the California Endangered Species Act (CESA) by the California Fish and Game Commission on June 4, 2014. This species is also listed as a Species of Greatest Conservation Need in the State Wildlife Action Plan. The "take" of a gray wolf in the state is prohibited, including to hunt, pursue, catch, capture, or kill. This recovering species is in the early stages of establishing itself in California. Although historical abundance and distribution of gray wolves in California is poorly understood and reliable records are rare, wolves are considered to have occurred in the Sierra Nevada, southern Cascades, Modoc Plateau, and Klamath Mountains. Gray wolves are large (usually >100 lbs., about 5 ft. long, and 2.5 ft. at shoulder height) and highly mobile (movements of up to 30 miles/day) habitat generalists and are most likely to occur in areas with a significant prey base (ungulates) and low densities of humans. Given that gray wolves have been reestablished in southern Oregon and northern California, public and private timberlands and ranchlands in northern California are the most likely areas in which wolves may begin to become reestablished in California. On November 3, 2020, the United States Fish & Wildlife Service ("Service") published a final rule removing the gray wolf (*Canis lupus*) from the federal list of Endangered and Threatened Species in the lower 48 United States and Mexico. The rule took effect on January 4, 2021. Gray wolves were re-listed as federally endangered again on February 10, 2022.

Gray wolves have not been observed in or near the project area but habitat and prey base does potentially exist. The plan area is in close proximity to a significant amount of inhabited smaller parcel residentially zoned lands. If a gray wolf, or den/rendezvous site, is observed in the project area the protection measures include a protection buffer to 0.25 mile.

Foothill Yellow-legged Frog (*Rana boylei*)

Listing Status: State 'Candidate Threatened', California Department of Fish and Wildlife 'Species of Special Concern'

Reported on CNDDDB in project area: No

Range: Present in most of northern California west of the Cascade crest from sea level to 7,000 feet, occurring in the coast ranges from the Oregon border to Los Angeles County, east to the western flank of the Sierra Nevada and south to Kern County.

Habitat: Aquatic, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, meadow & seep, riparian forest, riparian woodland, Sacramento and San Joaquin flowing water habitats. General habitats include partly-shaded, shallow streams & riffles with a rocky substrate in a variety of habitats. Confined to the immediate vicinity of permanent streams, most common along streams having rocky, gravelly, or sandy bottoms but may occur in those with muddy bottoms. In all habitats, the species is seldom found far from small, permanent streams with banks that can provide sunning sites. They need at least some cobble-sized substrate for egg-laying. They need at least 15 weeks to attain metamorphosis. Declines in the number of this species in the foothills of the Sierra Nevada and San Joaquin Valley are believed to be the result of habitat alteration, predation and competition by introduced bullfrogs. The Mad River watershed is not an area where this species has had notable declines.

Western Pond Turtle (*Emys marmorata*)

Listing Status: California Department of Fish and Wildlife 'Species of Special Concern'

Reported on NDDDB in project area: No

Habitat: Aquatic, artificial flowing water, Klamath and north coast flowing and standing water, marsh & swamp, Sacramento and San Joaquin flowing and standing waters, south coast flowing and standing waters, and wetland habitats. This species needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg laying.

The western pond turtle is a diurnal and aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000' elevation. This turtle is often seen basking above the water but will quickly slide into the water when it feels threatened. Active from around February to November; may be active during warm periods in winter. It hibernates underwater, often in the muddy bottom of a pool. The western pond turtle is in decline in 75 – 80% of its range (Stebbins 2003). This species is noted on the CNDDDB along the mainstem Mad River within the Shannon Butte Quadrangle.

c) **Less than Significant**. Pursuant to Clean Water Act Section 404, a Section 404 Permit is required for any fill or dredging within jurisdictional wetlands or waters of the Army Corps of Engineers has jurisdiction over wetlands which meet the three-parameter wetland criteria (hydrology, soils, and vegetation) defined in the COE Wetlands Delineation. No wetland fill is associated with this project therefore no impacts expected to federally protected wetlands.

d.) *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

No impact: The project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species, will not interfere with any wildlife corridors, and will not impede the use of native wildlife nursery sites. The project includes reforestation, hand thinning, pile burning, and prescribed fire. These treatments would not result in a conversion of forested to non-forested land, or otherwise result in conditions that would impede the local or regional movements of wildlife or impede the use of native wildlife nursery sites. Therefore, the project would not substantially interfere with the use of nursery sites or the movement of migratory birds or other wildlife species. The impact would be less than significant.

e) *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

No Impact: The project will not conflict with any local policies or ordinances protecting biological resources, including tree preservation policies or ordinances. As discussed in a) above, the project would not conflict with these policies. However, the project BMPs that are part of the project description would ensure that project activities comply with County policies. The impact would be less-than-significant.

f) *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

No Impact: The project will not conflict with a Habitat Conservation Plan, Natural Community Conservation Plan, Safe Harbor Agreement or other approved local, regional, or state habitat conservation plan.

Biological Resources Project BMPs

BMP Bio -1

Invasive plants removed shall be deposited on the edge of treated areas, out of the way of operations to avoid retrieval on equipment. Pile treated plants and burn where treated or if plant numbers are few, incorporate plant material into a nearby burn pile. Where operations cannot avoid yellow star-thistle infested areas, either manual treatment would be implemented prior to use, or as part of slash/fuels reduction operations, equipment would be used to blade plants away from work sites and cover with soil and 6 inches of weed free mulch.

BMP Bio-2

*If any federal or state listed threatened or endangered plant species are detected in the project area that may be impacted by the project work, then all project related activities will immediately stop within that area which will be flagged with a 50' "No Treatment Zone". All sightings will be documented using the California Natural Diversity DataBase (CNDDDB) field survey form a copy of which will be submitted to the CNDDDB. 50' avoidance buffers will be flagged for any observations of *Piperia* spp. that are detected in the area previously mapped on the CNDDDB.*

BMP Bio-3

*The project is within an area that the Board of Forestry and Fire Protection has declared a Zone of Infestation or Infection for sudden oak death (SOD) pursuant to Public Resources Code § 4716. SOD host material including but not limited to (Douglas-fir (*Pseudotsuga menziesii*), bay laurel (*Umbellularia californica*), huckleberry (*Vaccinium ovatum*), big leaf maple (*Acer macrophyllum*)), shall not be removed from the regulated area unless appropriate state and federal permits are obtained.*

BMP Bio-4

If an arboreal nest is discovered, operations shall be suspended within 100 feet and CDFW will be consulted for species-specific protections. Furthermore, if an occupied nest of a listed species, sensitive species, species of special concern, or a raptor is discovered, nest tree(s), designated perch tree(s), screening tree(s), and replacement tree(s), shall be left standing and unharmed.

BMP Bio-5

Daytime stand searches for northern spotted owl (NSO) will be conducted in activity centers that are within 0.25 mi of flight paths prior to operations by qualified biologists. If a NSO is found then follow-up searches will be conducted to determine nesting status or activity center status. If a nest tree is located, then a 300 foot noise buffer will be implemented, and no chipping or mastication project activity will occur within 300' of the nest tree during the critical nesting period.

BMP Bio-6

In order to prevent the spread of invasive plant species, all heavy equipment not already on project site, to be used in the execution of project work will be cleaned off site prior to use within the project area. The project manager and/or trained staff will assure and document equipment cleaning. Contractors shall disclose where equipment had been operating prior to hauling to the project site.

BMP Bio-7

A registered professional forester or designee will be sufficiently present onsite during operations to evaluate the presence of biological resources and ensure biological resource protection through avoidance. If any wildlife is encountered during project activities, said wildlife will be allowed to leave the area unharmed and if any listed wildlife is encountered and cannot leave the project site on its own, the registered professional forester or project manager should contact California Department of Fish and Wildlife immediately and consult regarding species relocation protocol.

BMP Bio-8

To avoid impacting nesting birds and/or raptors: All temporary flagging, fencing, trash, debris, and/or barriers will be removed from the project site upon completion of project activities.

BMP Bio-9

Habitat elements (nest trees, downed logs and woody debris, cavities and tree hollows, snags, large dead branches, etc.) that provide valuable habitat will be identified by an RPF or qualified biologist and retained.

BMP Bio-10

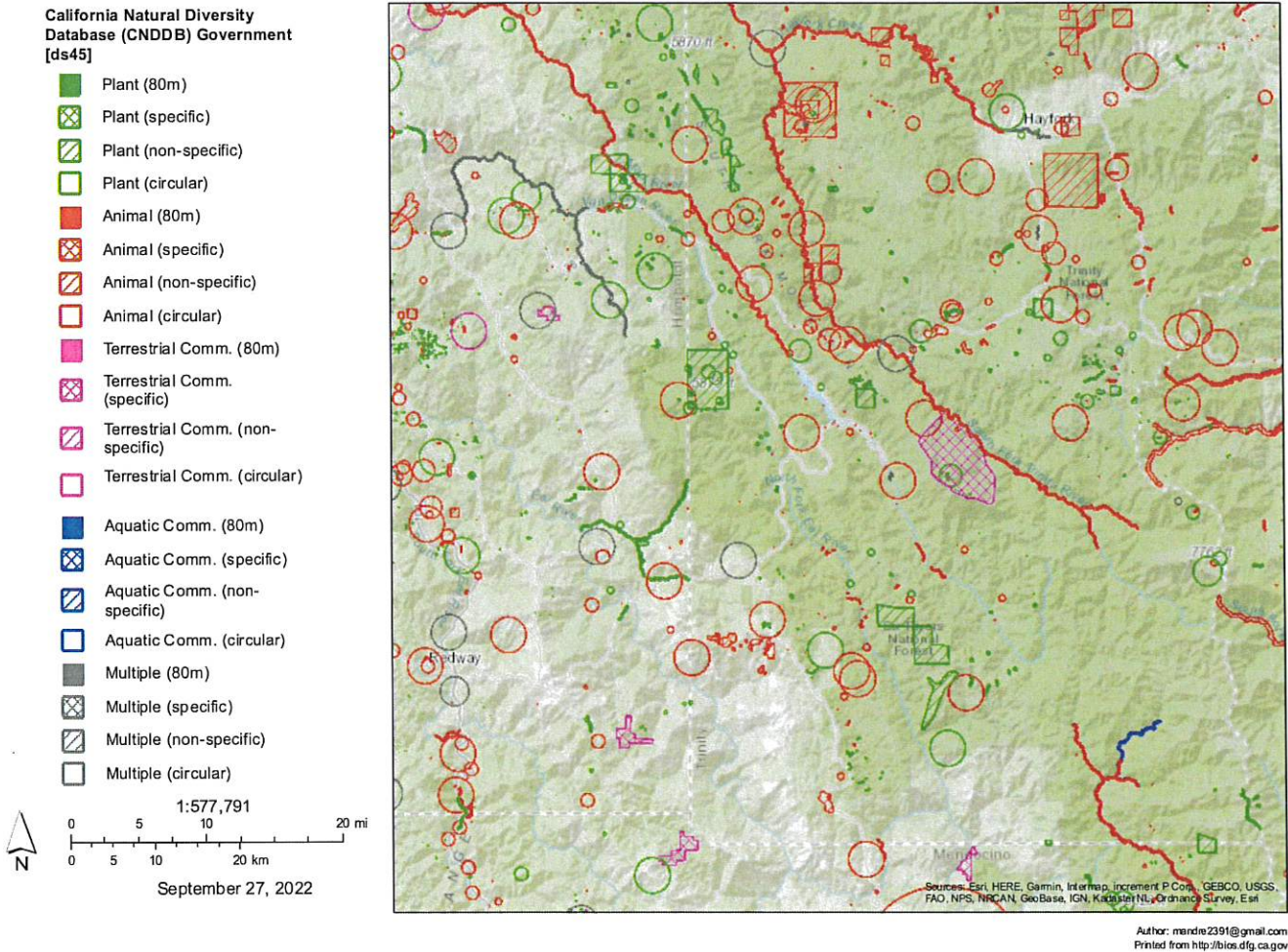
In order to protect any species covered by the Migratory Bird Treaty Act (MBTA), no fuels treatment work will occur between March 1st to August 31st, unless the following is implemented: 1. A survey is conducted by a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA and it is determined that there are no occupied nests within the proposed activity area. 2. If an occupied nest is found, then a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA will determine if the birds present are those protected by the MBTA. 3. If an MBTA species is located then no noise or smoke producing activities will occur within 100 feet of the nest during the breeding season (March 1st-August 31st).

TABLE 1 - Potential Threatened or Endangered Animal Species Impacts

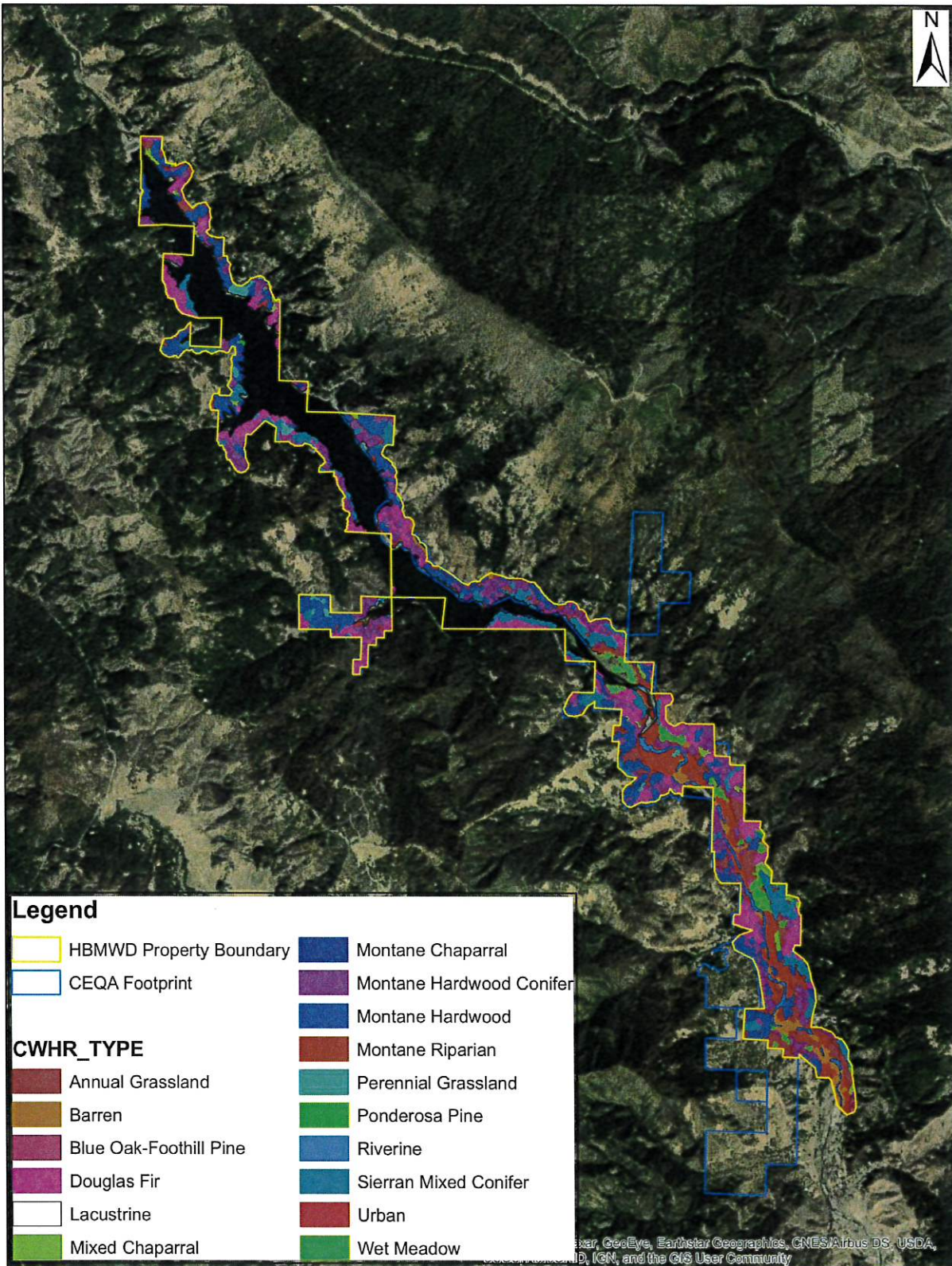
| NAME | STATUS | SHORT & LONG-TERM PROJECT IMPACTS/BENEFITS |
|--|--|--|
| Coho Salmon – Southern Oregon / Northern California ESU <i>Oncorhynchus kisutch</i> | Federal Threatened (06/05/97) State Threatened (02/25/04) | <u>NO IMPACT</u> -- Work will occur above anadromy above Ruth Dam. |
| Chinook Salmon O. <i>tshawytscha</i> | Federal Threatened (11/15/99) | <u>NO IMPACT</u> -- Work will occur above anadromy above Ruth Dam. |
| Steelhead – Northern California ESU <i>Oncorhynchus mykiss</i> | Federal Threatened (08/07/00) | <u>NO IMPACT</u> -- Work will occur above anadromy above Ruth Dam. |
| Marbled Murrelet <i>Brachyramphus marmoratus</i> | Federal Threatened (09/30/92) State Endangered (03/12/92) | <u>Habitat for this species will be benefitted by reforestation actions.</u> |
| Foothill Yellow-legged Frog <i>Rana boylei</i> | State Candidate Threatened (S3) | <u>NO IMPACT</u> <i>Rana boylei</i> requires shallow, flowing water, apparently preferentially in small to moderate-sized streams situations with at least some cobble-sized substrate. No equipment operations are proposed within streams, ponded areas, springs or watercourses and no downstream effects are anticipated. |
| Fisher (West Coast DPS) <i>Pekania pennanti</i> | State Threatened (S2S3) | <u>NO IMPACT</u> Fishers require large areas of mature conifer forest habitat. High quality habitat exists surrounding the project site and Nesting and denning sites have not been located in the project site. No large stature trees or diameter, snags or special habitat features will be impacted. The natal den period for fisher is March-May 15. The maternal den period is May 16-July 31 st . If work occurs during this period and a fisher is encountered near the project site, a consultation with California Department of Fish and Wildlife will be conducted. |
| <u>Gray Wolf</u> <u>(<i>Canis lupus</i>)</u> | | <u>If a gray wolf, or den/rendezvous site, is observed in the project area the protection measures include a protection buffer to 0.25 mile.</u> |

| NAME | STATUS | SHORT & LONG-TERM PROJECT IMPACTS/BENEFITS |
|--|--------|--|
| <u>Northern Spotted Owl</u> <i>(Strix occidentalis caurina)</i> | | <u>Habitat for this species will be benefitted by reforestation actions.</u> |

Ruth Lake Project Area

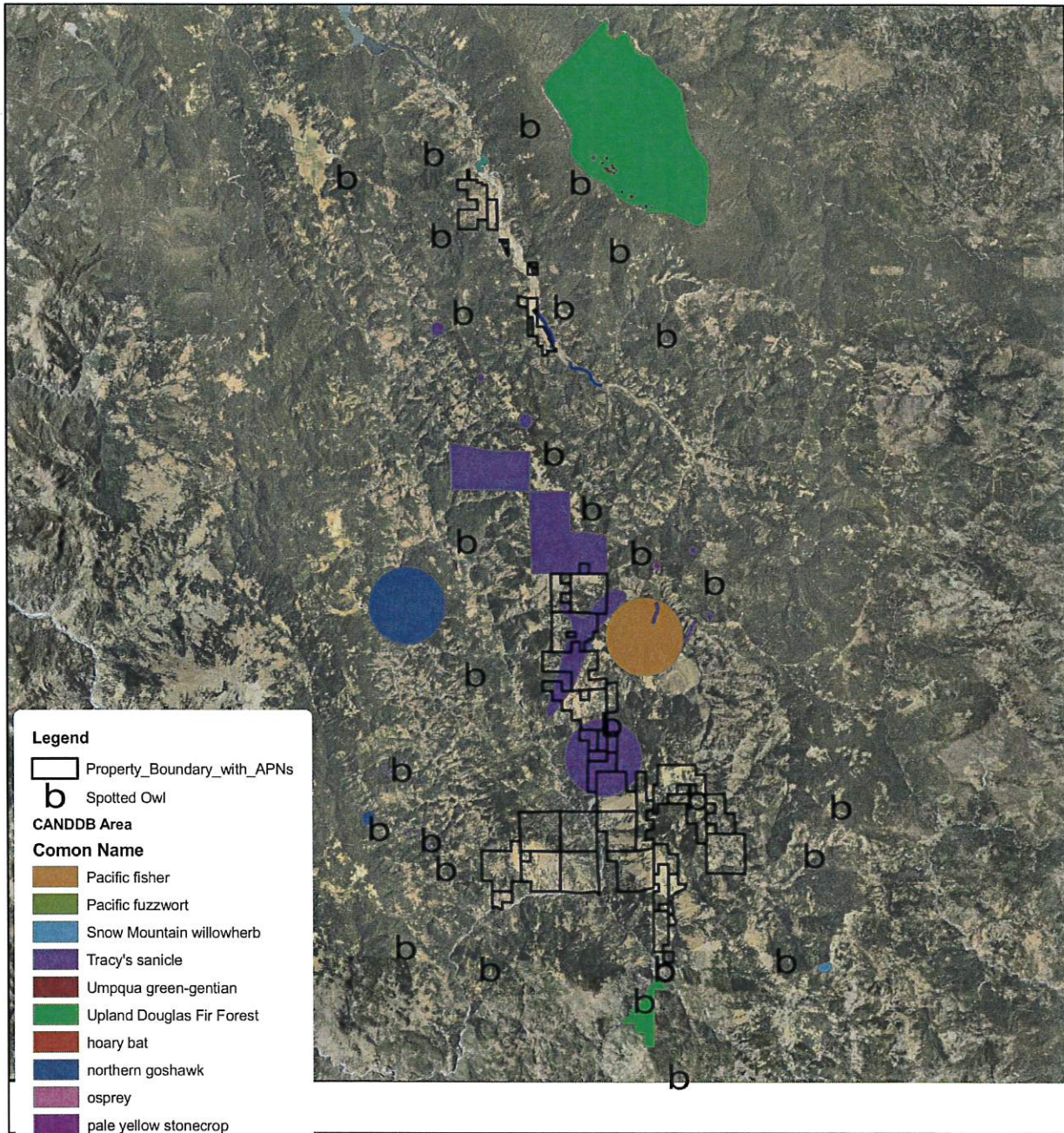


Note: CNDDDB mapped locations of special status species on a scale greater than 1:350,000 are not included in the Initial Study but are on file with the CEQA lead agency and project consultants.



Customer: Browns Investments
 Approx. Acres: 11,806
 T., R., Sec. Meridian
 7.5 min. USGS Quad

USDA-Natural Resources Conservation Service
 Weaverville Field Office
 Phone: 530-623-3991
 Web Site: www.ca.nrcs.gov

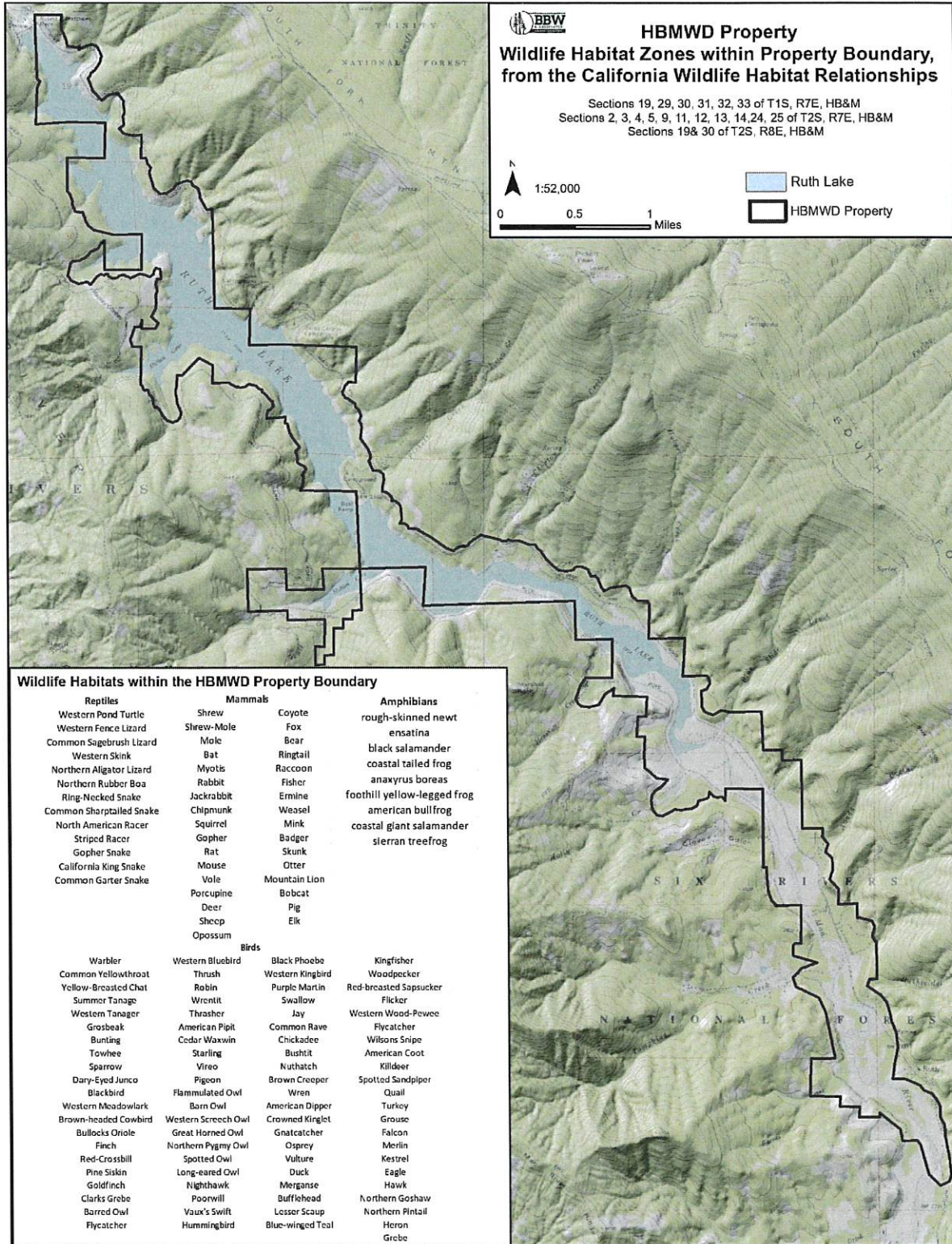


Legend

- Property_Boundary_with_APNs
- Spotted Owl
- CANDDB Area**
- Comon Name**
- Pacific fisher
- Pacific fuzzwort
- Snow Mountain willowherb
- Tracy's sanicle
- Umpqua green-gentian
- Upland Douglas Fir Forest
- hoary bat
- northern goshawk
- osprey
- pale yellow stonecrop
- silver-haired bat
- western pond turtle

0 6,500 13,000 26,000 39,000 52,000
 Feet





Field Office: Weaverville
 Agency: USDA-NRCS
 Trinity County, CA
 Assisted By: Tiffany Perez
 Date: 10/27/2021

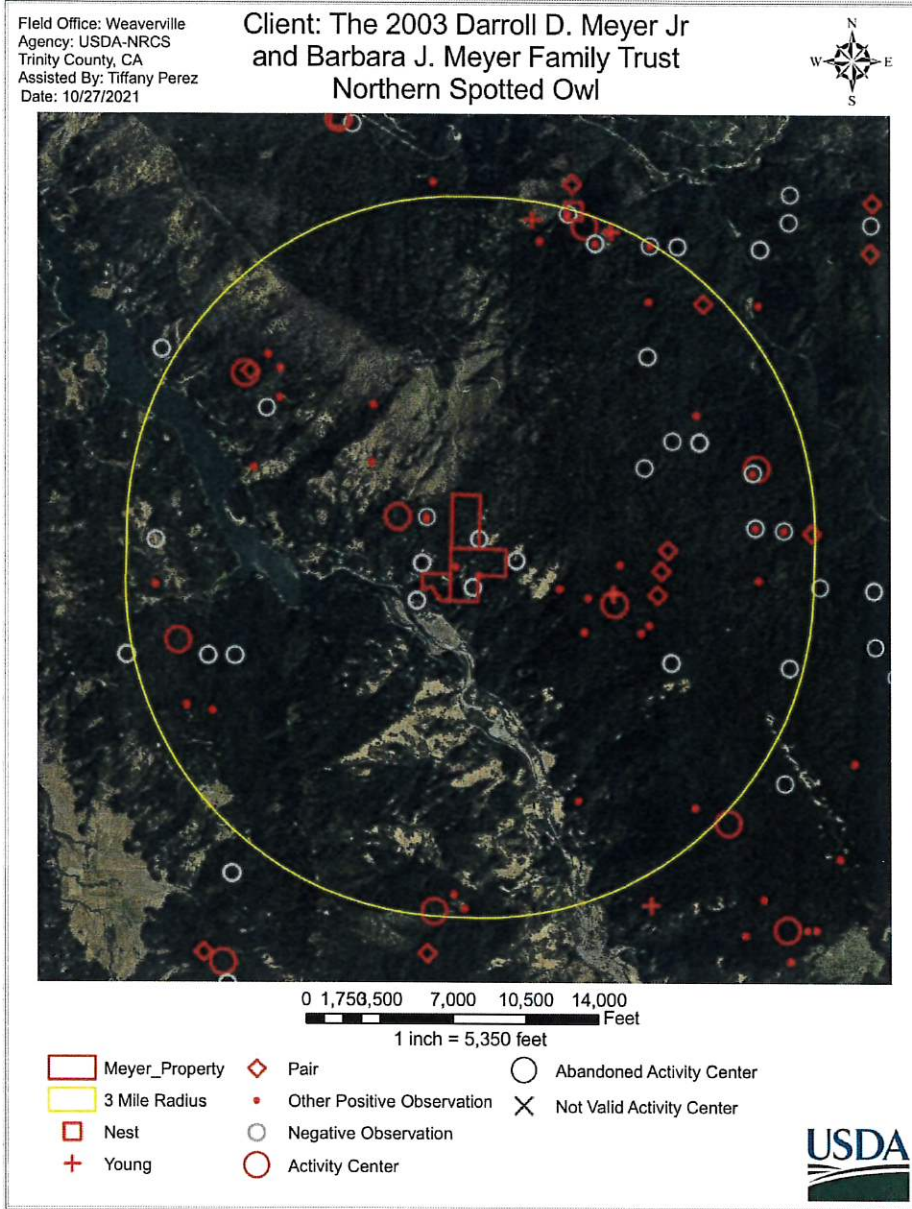
Client: The 2003 Darroll D. Meyer Jr
 and Barbara J. Meyer Family Trust
 CNDDDB CDFW Status



0 1,750 5,000 7,000 10,500 14,000 Feet
 1 inch = 5,350 feet

- | | | |
|--------------------|--|----------------------------------|
| Meyer_Property | CNAME, CDFWSTATUS | foothill yellow-legged frog, SSC |
| 3 Mile Radius | Fisher, SSC | summer-run steelhead trout, SSC |
| <all other values> | bald eagle, FP | western bumble bee, |
| | chinook salmon - upper Klamath and Trinity Rivers ESU, SSC | |





References:

Able Forestry Consultants- pers. Communication with Eric C. Taft, RPF #3036
 James L. Able Forestry Consultants, Inc. regarding botanical and biological aspects on THP 1-17-100
 TRI APN 020-330-06-00

California Department of Fish and Wildlife, Natural Diversity Database (CNDDDB). 2022. *Rarefind 5* including the Northern Spotted Owl Observations Database accessed August 18, 2022 and January 14, 2022. <https://www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>.

CAL FIRE Timber Harvest Plan 1-17-100-TRI for Jeff Meyer property 62 acres adjacent to HBMWD.

Hoover, L.D. 1999. Conservation Strategy for *Sanicula tracyi* Shan & Constance. On file at Six Rivers National Forest Supervisor's Office. Eureka, CA.

USFWS Wetlands Mapper accessed 1-14-22

USFS Three Forks Fire Salvage Project - Botany Report April 28, 2021 John McRae, Forest Botanist

USFS Wildlife Report Management Indicator Species Migratory Birds Survey and Manage Species Mad River August Complex Restoration Project Six Rivers National Forest January 6, 2022

USFS Biological Assessment/Evaluation Threatened, Endangered, and Forest Service Sensitive Species Mad River Ranger District Three Forks Salvage CE Klamath Province Six Rivers National Forest April 22, 2021

USFS Mad River August Complex Restoration Project Preliminary Environmental Assessment Finding of No Significant Impact 6-25-21

USFWS Information for Planning and Conservation (IPaC) Species list. 2020. Accessed June 2020 from <https://ecos.fws.gov/ipac/location/index>

| V. Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| CULTURAL RESOURCES: Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 | | | X | |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | | | X | |
| c) Disturb any human remains, including those interred outside of formal cemeteries? | | | X | |

The upper Mad River watershed was home to three different groups whose languages are related to the Athabaskan family, the Whilkut, Nongatl and Lassik (Baumhoff 1958). "The Lassik inhabited the drainage of the main Eel River between the mouths of Dobbyn and Kekawaka Creeks along with lands to the east including the headwaters of the North Fork Eel River and on the site that the former Ruth Store occupied in the 1920's (Baumhoff 1958:179). Kroeber (1925:143) places the Lassik as far north as Lassik Peak. It is possible, however, that a Nongatl group may have claimed this area; the southern Athapskan groups are among the least known in California, and accounts of their territorial holdings are approximations'. According to Kroeber (1925:144), the Lassik were terribly persecuted by white settlers in their lands. They may have been exploited by Mexican slave traders from Sonoma County prior to the American white invasion. Members of all southern Athabaskan tribes and many of their neighbors were forcibly removed to reservations.

a&b) Less than Significant. As such, there will be no impact that causes a substantial adverse change in the significance of a historical resource. Historic resources, as distinguished from archaeological resources, include antiques, buildings, structures, and sites generally from the past two centuries. The historic period brought with it large-scale changes to the landscape, with logging, clearing of the land for agriculture, importation of livestock, and fire suppression leading to alterations in the vegetation and habitat types on the project area and the surrounding area. For much of the historic period, the project area was used for timber operations and livestock ranching.

The Northeast Information Center (NEIC) at Chico State was contacted to conduct a records search. The NEIC base maps show that there are no previously recorded Native American archaeological resources within or adjacent to the project area. But, based on the environmental setting that there is a moderate to high potential for unrecorded Native American resources as well as historic period cultural resources. To date all known archeological sites have been mapped and will be avoided by project activities. Notification letters were sent to the Native American Contacts, Tribal Heritage Preservation Officers (THPOS) per AB52 on the list provided by the Naive American Heritage Commission (NAHC). That included the Wintu Tribe of Northern California, Wintun Educational and Cultural Council, Wailaki Tribe, Tsnungwe Council, Round Valley Reservation / Covelo Indian Community, Nor-Rel-Muk Nation, Hoopa Valley Tribe and Redding Rancheria. No responses were received from the notification letters.

A USFS archaeologist surveyed the USFS portion of the project area. On the 200 acre Darroll Meyer private land, a registered professional forester who is a Certified Archaeological Surveyor through the California State Board of Forestry and Fire Protection (14 CCR Section 929 *et seq.*) surveyed the private lands portion of the project along as part of filed and extended CAL FIRE Emergency Notices. The filed and extended Emergency Notices are listed below:

1-21EM-00054-TRI
1-21EM-00050-TRI
1-21EM-00146-TRI
1-21EM-00050-TRI

1-21EM-00055-TRI
CAL for HBMWD Area 1 Emergency Notice
CAL for HBMWD Area 2 Emergency Notice

Per the Cultural Resource Review Procedures for CAL FIRE Projects (2010), many aspects of the Ruth Lake Reforestation Project fall under the "List of Exempt Practices" (page #8). The following are examples of CAL FIRE projects that, because they are unlikely to impact cultural resources, do not require archaeological survey, investigation, and reporting:

- Reforestation: Tree planting after harvest or other natural disturbances
- Follow-up (Release): Practices necessary to promote the survival of seed or seedlings within 36 months of planting. Generally, such work is intended to control insects, diseases, rodents, weeds or brush competition and may include the use of herbicide, chain saw, weed-eater, or hand-grubbing. This work will usually be done by crews using hand tools. If other equipment is used, archaeological surveys may be needed.
- Timber Stand Improvement: Activities designed to improve timber stands include pre- commercial thinning of young commercial tree species to reduce the number of stems per acre, release of commercial tree species by removing competing noncommercial species of trees and shrubs, and pruning of young trees by removing lower branches from commercial tree species. This work will usually be done by crews using hand tools and the slash is just left on the ground, typically lopped and scattered. If the slash will be piled and burned, or mechanically collected and removed for biomass utilization, archaeological surveys may be recommended.
- Shaded Fuel Breaks: Thinning and pruning of trees, generally along both sides of a road or along the crest of a ridgetop, to create an effective fuel break to potentially stop a wildfire. To be exempt such projects must involve the chipping and removal of woody material or the chipping and scattering of woody material. Shaded fuel break projects involving mechanical methods or the piling and burning of slash will likely require archaeological survey.
- Timber Stand Improvement: Activities designed to improve timber stands include pre- commercial thinning of young commercial tree species to reduce the number of stems per acre, release of commercial tree species by removing competing noncommercial species of trees and shrubs, and pruning of young trees by removing lower branches from commercial tree species. This work will usually be done by crews using hand tools and the slash is just left on the ground, typically lopped and scattered. If the slash will be piled and burned, or mechanically collected and removed for biomass utilization, archaeological surveys may be recommended.
- Fire-Safe Projects: Treatment of vegetation surrounding communities to reduce the risk of catastrophic wildfires through thinning and/or removal of vegetation by crews using hand tools or non- ground disturbing equipment. To be exempt such projects must involve the chipping and removal of woody material or the chipping and scattering of woody material.
- Disturbed Areas: Those activities or projects where the area of potential effect is entirely within obviously disturbed contexts, and the disturbance is such that the presence of cultural resources is considered highly unlikely.
- Fuelwood and Christmas Trees: The collection and personal use of fuelwood.
- Handlines: The creation of narrow handlines using hand tools to establish a burn perimeter.

- Handlines are often used to keep prescribed fire from entering a cultural resource. This includes hand grubbing around trees or near cultural resources to prevent fire from entering or damaging such resources. Such activities are limited to light brushing of vegetation to expose mineral soil using hand tools.
- Hazard Tree Removal: The felling of hazardous trees within recreation areas or other areas for health and safety reasons.

BBWA RPF's who are Certified Archeological Surveyors traversed and flagged all areas for forest health treatments (pile and burn, biomass chipping and reforestation).

In August 2022, DCZ Archeologists surveyed the part of the project area that includes the 41 Cattle Co lands and a portion of the HBMWD lands not covered by previous archeological surveys. Based upon the notification letters and communication with Native Americans, the responses received did not indicate that they wanted to consult on this project and that no information concerning archaeological or cultural sites within the project area was disclosed.

1. Pre-field research including other archeological surveys in the region, historic maps, interviews with the property owner, aerial photos and area historic literature.
2. A NEIC Chico State archaeological records search.
3. A field survey and reconnaissance covered the 41 Cattle Co. project area and HBMWD areas not covered by previous Archeological Surveys pertinent to CAL FIRE Emergency Notices in August 2022.
4. BMP Cultural-1 requires a flagged 50' buffer to be established.

There is the potential for inadvertently discovering cultural/paleontological resources during project activities. As such, appropriate project BMPs have been described should any resources be discovered, impacts to cultural resources will be less than significant.

There are few if any sites within California that have not been burned at one time or another. Most cultural sites have been subject to low-intensity fires many times in the past and whatever damage is possible under these conditions has already occurred. The least impact to sites has been to those that have been burned prior to 1930. Archaeological sites that have not been exposed to fire in the last 60 to 100 years are in peril. Significant changes to surface and below ground artifacts will occur if they are burned by high intensity wildfires. Prescribed fire projects afford the opportunity for the archeologist and the prescribed fire manager to work together and provide long term protection to our cultural resources.

a & b.

c) **Less than Significant.** No human remains have been documented within the project area during any of the previous and recent cultural resource surveys. However, ground disturbing activities related to mastication and pile burning treatments and hand fire lines could potentially disturb previously undocumented buried human remains. These activities could therefore have a potentially significant impact on human remains. Should human remains be uncovered, State law requires that the County Coroner be contacted immediately. Should the Coroner determine that the remains are likely those of a Native American, the California Native Heritage Commission must be contacted. The Heritage Commission consults with the most likely Native American descendants to determine the appropriate treatment of the remains. **BMP Cultural-2**, procedures for encountering human remains, would reduce impacts on human remains to a less-than-significant level by requiring the implementation of standard procedures if human remains are encountered.

BMP Cultural-1

All new and previously recorded archeological sites identified during field surveys completed in connection with the preparation of this IS and documented in the archeological report for the project shall be protected through

following the protective measures contained in the project Archaeological Survey Report. Flagged 50' buffers shall be established around each artifacts or sites by the project manager or registered professional forester prior to implementation of any project work. Within areas of ground or vegetation disturbing activities, if project work appears to expose any previously unknown archeological, prehistoric, historic or paleontological resource sites within 100 feet beyond the project boundary, the site shall be avoided. Work may continue elsewhere within the overall project area. Exposed cultural or paleontological resources shall be appropriately flagged in order to immediately establish an exclusion buffer of at least 100-feet. Any discoveries of previously unidentified cultural resources that are made during operations shall be dealt with in accordance with the Procedures for Post-Approval Discovery of Cultural Resources (pp. 17 and 18, *Archaeological Procedures for CAL FIRE Projects*). In general, slash piles will be placed at least 50 feet from any archaeological features or artifacts.

BMP Cultural-2

Should human remains be inadvertently discovered during ground-disturbing activities, work at the discovery locale shall be halted immediately, CAL FIRE, the project manager, Trinity County Coroner, Native American Heritage Commission (NAHC), and the relevant Native American representative(s) shall be notified immediately, and the remains shall be treated in accordance with NAHC treatment and disposition requirements and relevant state law.

BMP Cultural-3

Prior to ground disturbing projects, project managers shall receive training on the location of cultural resources and measures necessary to protect them. Upon completion of project activities, markings designating the location of cultural resources shall be removed.

References:

Allen, Craig (editor)

1996 Fire Effects in Southwest Forest: Proceedings of the Second La Mesa Fire Symposium, 1994. General Technical Report RM-GTR-286. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, Colorado.

Biswell, Harold, 1989 Prescribed Burning in California Wildlands Vegetation Management. University of California Press, Berkeley, California.

Clark, Bob, and Melanie Miller, 1994 Fire Effects Guide. USDA National Wildfire Coordination Group.
Lewis, Henry 1973 Patterns of Indian Burning in California: Ecology and Ethnohistory. Anthropological Papers No. 1. Ballena Press, Ramona, California.

California Historical Reference System, Northeast Information Center IC File # K21-127 dated 10-5-2021.

California Historical Reference System, Northeast Information Center IC File # K2254 dated 7-1-2022.

Dann, William/Gerald Garvey Confidential Archaeological Letter Emergency Notice Humboldt Bay Municipal Water District – Area #2 Trinity County, CA 2-15-2021

Dann, William/Gerald Garvey Confidential Archaeological Letter Emergency Notice Humboldt Bay Municipal Water District – Area #1 Trinity County, CA 1-25-2021

DCZ Archeology Report for Ruth Lake Reforestation Project 2022

Northeast Information Center (Chico State) File(s) # K-21-127 (Oct. 2021); K-22-54 (July 2022).

Pieper, J., 2004 Archeological Survey Report for Hobart Creek Timber Harvest Plan

Taft, Eric RPF #3036 Able Forestry Consultants pers. communication regarding Archeological Survey for THP 2-27-200-TRI"Ruth Lake THP" for APN 020-330-06.

USDA NRCS Cultural Resource Survey Report #15FY53-0003 for 41 Cattle Company 2015

VI. Energy

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|-------------------------------------|--|------------------------------|-------------------------------------|
| a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

a) **No Impact.** Implementation of project activities would not result in the development or ongoing use of electricity or natural gas utility services. Therefore, project-level activities would result in no environmental impact due to wasteful, inefficient, or unnecessary consumption of electricity and natural gas resources. Forest resilience projects would require the use of trucks and power equipment and would therefore result in the consumption of petroleum-based fuels. Additionally, project-level prescribed pile burn fire activities in the project area would require the use of small amounts of petroleum-based fuels for ignition, as well as for vehicles and support equipment.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-------------------------------------|
| b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

b) **No Impact.** Project-level activities proposed project would not increase the use of electricity or natural gas utilities and would result in only a minor increase in the consumption of petroleum-based fuels for vehicles and equipment. These activities would not conflict with or obstruct any renewable energy or energy efficiency plan. There would be no impact.

| VII. Geology and Soils | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| Issues and Supporting Information | | | | |
| GEOLOGY AND SOILS: Would the project: | | | | |
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | X |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | | | | X |

| VII. Geology and Soils Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| ii) Strong seismic ground shaking? | | | | X |
| iii) Seismic-related ground failure, including liquefaction? | | | | X |
| iv) Landslides? | | | | X |
| b) Result in substantial soil erosion or the loss of topsoil? | | | X | |
| c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse? | | | | X |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | | | | X |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | | | | X |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | | X | |

The predominant soils of the area include:

- Clallam family, 35 to 75% slopes.
- Clallam-Hugo-Holland families, 35 to 70% slopes.
- Deadwood family-Clallam family, 45 to 85% slopes.
- Doty-Hecker families, 25 to 70% slopes.
- Holland-Goldridge families, 5 to 35% slopes.
- Oxalis-Hecker-Doty families association, 25 to 70% slopes.
- Skalan-Kristirn-Holland families association, 35 to 70% slopes.
- Typic Xerofluvents-Riverwash association, 2 to 10% slopes

The soils within the project area are underlain by Franciscan Assemblage parent material, located within the California Coast Range physiographic province. Soil parent materials include sedimentary, metasedimentary, and meta-igneous substrates. Typically, Franciscan sediments and meta-sediments in this area are primarily derived from Late Jurassic greywacke, and small amounts of shale or schist, as well as 6 metamorphosed basic igneous rocks. Soil depths range within the project area from moderately deep to very deep (20 to greater than 60 inches). Surface soils are generally loams to very gravelly loams with very gravelly loams and clay loams in the subsoil. Permeability varies from moderately slow to rapid, and soils are well to somewhat excessively drained. Their general ability to infiltrate water flow is likely attributable in part to the relatively high content of large particle size classes, such as gravel, in the soil.

Overly drained, rocky soils are part of the reason that the site index found during the timber inventory was not very high (III and IV). The erosion hazard rating (EHR) for the property varies with the slope class but

an overall average for the property is 50-65 (CDF technical guidelines) that translates to a "moderate" erosion hazard and a low soil compaction rating. Generally, land disturbing activities should not take place during wet periods as soil disturbance associated with wet weather greatly increases the chance of erosion and soil damage through compaction.

a) *i-iv) No Impact.* The project is not located within the Alquist-Priolo Earthquake fault hazard area but is located within a seismically active region with active fault zones and land sliding. The project site is susceptible to strong seismic ground shaking common to the north coast region of California. The proposed project does not involve construction of any roads or habitable structures, and therefore will not expose people or structures to potential adverse effects including risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic induced ground failure, or landslides. The project will not cause rupture of a known earthquake fault, will not cause seismic ground shaking, will not cause seismic-related ground failure, including liquefaction, and will not cause any landslides or increase landslide potential.

b) *Less than Significant Impact.* The proposed project will not result in substantial soil erosion or the loss of topsoil. This project is not expected to generate significant soil erosion and will not deliver sediment into watercourses. Reforestation will establish native vegetation on the project area. Adequate mulch will cover areas masticated or chipped. Heavy equipment will not be conducted on slopes over 50%. Prescribed burn piles are expected to revegetate quickly with on-site seed banks.

BMP Geo-1

For the fuel treatment work adjacent to the existing road network, any newly-exposed soil of over 100 square feet in area will be mulched to minimize the potential for erosion. Hand water bars will be installed to divert water onto stable vegetation and away from watercourses, as needed. Verification of proper installation and sufficiency of both mulching and waterbars will be made by the project manager prior to and following the season's first precipitation event and recorded in the project file.

c) *No Impact.* Tractor or heavy equipment operation will not be conducted on known slides or unstable areas.

d) *No Impact.* Expansive soil occurs when clay particles interact with water causing volume changes in the clay soil. The clay soil may swell when saturated and shrink when dried, destabilizing any structures in the proximity. The proposed project will not create risks to life and property because it does not involve erection of any structures and is not located in the proximity of any structures such that it could impact their stability.

e) *No Impact.* The project does not involve the construction or use of septic systems or an onsite wastewater disposal system.

f) *Less than Significant.* (BMP Cultural-1) will insure that unique paleontological resource or site or unique geologic features are not impacted.

Paleontological resources are the remains or traces of prehistoric animals and plants. Paleontological resources, which include fossil remains and geologic sites with fossil-bearing strata are non-renewable and scarce and are a sensitive resource afforded protection under environmental legislation in California. Under California PRC Section 5097.5, unauthorized disturbance or removal of a fossil locality or remains on public land is a misdemeanor. State law also requires reasonable mitigation of adverse environmental impacts that result from development of public land and affect paleontological resources (CPR Section 30244). Although it is unlikely that project activities would impact potentially significant unique paleontological or geologic resources, it cannot be ruled out altogether. The published geologic mapping of the region (CDMG 1984) indicates that sediments underlying the project area are associated with the Franciscan Formation. There is no evidence to suggest that the project will directly or indirectly destroy a unique paleontological resource or

site or unique geologic feature. Paleontological resources were not surveyed or encountered during field environmental review for this project.

References:

USFS Soil Resource Report for the Three Forks Fire Salvage Project Six Rivers National Forest, Mad River Ranger District Prepared by Scott Hagerty - Soil Scientist Northern California Resource Center April 28, 2021

NRCS Web Soil Survey accessed 2022.

| VIII. Greenhouse Gas Emissions Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | | X | |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | | | X |

a) **Less than Significant Impact.** The area for assessment of GHG impacts is statewide. Under CEQA guidelines developed by the Office of Planning & Research, lead agencies must determine if a project will emit GHGs, determine the significance of the emission and develop mitigations. CEQA Guidelines define greenhouse gases to include CO₂, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

Carbon from this project material will be stored as large woody debris or chipped biomass until they decompose or are burned, ultimately releasing the carbon back to the atmosphere. Additional activity generated fuels may be left in the woods and would slowly emit carbon back to the atmosphere. Other emissions include smoke, dust, and greenhouse gases from prescribed fire, pile burning, and vehicle and equipment use during implementation. Overall the project will increase long-term storage of carbon through reforestation treatments, and the stability of the existing stores would be increased by reducing the risk of large wildfires. Burning has been found to be a large source of emissions, as compared to only mechanical treatment, but was still small compared to high severity wildfire which converted most live carbon stores into decomposing carbon sources (North and Hurteau 2011). Treatments which reduce densities of small diameter trees as well as some intermediate, fire-sensitive trees were found to be most effective in reducing losses during burning and enabling rapid carbon recovery (Millar et al. 2007, Hurteau and North 2010).

The track chipper uses approximately 10 gallons of diesel per an eight hour work day. A total of approximately 20 days of chipper usage will be necessary.

About 6 gallons of diesel and one of gasoline for the use of drip torches will be used for 20 days.

The skid steer uses approximately 25 gallons of diesel per an eight hour work day worth of mastication. A total of approximately 20 days of mastication will be necessary.

Two contractor crew transports (reforestation and chipping etc.) will be traveling on average 140 miles round trip for 50 days, using a total of 20 gallons of gasoline per day.

Admin vehicles are estimated to travel to project area 10 times with a 100 mi round trip, using a total of 125 gallons of gasoline.

Chainsaw crew Net Gasoline Fuel= 2 gallons: $2 \text{ gal} * 8.18 \text{ (conversion factor)} = 8.18 \text{ KG}/1000 = 0.01636$ metric tons CO2 emissions Total= 0.01636 metric tons of CO2 emissions per day X 50 days= 0.0818 metric tons CO2 emissions

Crew Pile burn Net Gasoline Fuel= 1 gallon: $1 \text{ gal} * 8.18 \text{ (conversion factor)} = 8.18 \text{ KG}/1000 = 0.00818$ metric tons CO2 emissions Total= 0.00818 metric tons of CO2 emissions per day X 20 days= 0.1636 metric tons CO2 emissions.

Net Diesel Fuel= 6 gallons: $6 \text{ gal} * 10.15 \text{ (conversion factor)} = 60.9 \text{ KG}/1000 = 0.0609$ metric tons CO2 emissions Total= 0.0609 metric tons of CO2 emissions per day X 20 days = 1.218 metric tons CO2 emissions.

Total emissions= 14.881 metric tons CO2 emissions

Most of the biomass will be piled and burned or chipped and left on site allowing a slow decay and release of sequestered carbon. Emission from the decomposition of treated material is expected to be re-sequestered by the remaining vegetation and planted trees as the project site revegetates. The project is intended to reduce the risk of uncontrolled wildfire which would result in a rapid release of carbon and other greenhouse gasses at a higher rate.

The short term increase in GHG release is not considered significant and if it contributes to high intensity fires or larger fires, it can significantly reduce GHG releases compared to high intensity fire in the same locations. No mitigation is required for GHG emissions. Using the Air Resources Board Carbon Calculator, this project has an overall GHG benefit by reforesting thousands of acres of burned timberland.

| | |
|---|---------|
| GHG benefit from reforestation activity District and Private Lands (MT CO ₂ e) | 280,522 |
| On-site carbon storage and project emissions in reforestation project scenario (MT CO ₂ e) | 360,510 |
| On-site carbon storage in baseline scenario (MT CO ₂ e) | 79,988 |

| | |
|---|---------|
| GHG benefit from reforestation Federal Lands (MT CO ₂ e) | 420,271 |
| On-site carbon storage and project emissions in reforestation project scenario (MT CO ₂ e) | 526,922 |
| On-site carbon storage in baseline scenario (MT CO ₂ e) | 106,651 |

Trinity County and the NCUAQMD currently do not have local plans, policies or regulations adopted to reduce GHG emissions. As a result, it is anticipated that the limited amount of greenhouse gas emissions generated through the development of this project will be sequestered along with those generated offsite by area traffic and other activities. Based upon a negligible contribution to overall emissions, consistency

with adopted air quality regulations for vehicle emissions and the positive impacts the reduction of wildland fuels will have on forest sequestration of greenhouse gas emissions, it is anticipated that this project will have a **less than significant impact** on greenhouse gas emissions.

b) No Impact. Project activities would be temporary and minor, and therefore have minimal effects on AB 32 greenhouse gas emission reduction goals. As mentioned above, the proposed project would likely reduce long-term greenhouse gases region-wide from uncharacteristic large wildfire and therefore would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing long-term greenhouse gases. The California Air Resources Board adopted a Climate Change Scoping Plan Update in 2017, which contains strategies for reducing GHGs. The scoping plan recognizes the role of California's natural and working lands in meeting California's reduction goals. One of the key sectors is forestry, where the emphasis is on preparing for increased wildfire hazards, including treatment of hazardous fuels, and improving forest management approaches in a changing climate (CNRA 2017). The scoping plan recognizes that some actions taken to address ecosystem health may result in temporary, short-term reduction in sequestration or emissions, but are necessary for forest resilience for reducing larger carbon losses due to wildfire. Additionally, the proposed project is consistent with the California Forest Carbon Plan (2018). Trinity County and the NCUAQMD currently do not have local plans, policies or regulations adopted to reduce GHG emissions. As a result, it is anticipated that the limited amount of greenhouse gas emissions generated through the development of this project will be sequestered along with those generated offsite by area traffic and other activities. Based upon a negligible contribution to overall emissions, consistency with adopted air quality regulations for vehicle emissions and the positive impacts the reduction of wildland fuels will have on forest sequestration of greenhouse gas emissions, it is anticipated that this project will have no impact on greenhouse gas emissions.

References:

Air Resources Board, Forest Restoration and Management Benefits Calculator Tool 2019
 California Forest Carbon Plan, May 2018

| IX. Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| HAZARDS AND HAZARDOUS MATERIALS: Would the project: | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | X | |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | | | | X |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | | X |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | | | X |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a | | | | X |

| IX. Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| safety hazard or excessive noise for people residing or working in the project area? | | | | |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | X |
| g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires. | | | X | |

The following databases were reviewed to locate "Cortese List" sites:

- List of Hazardous Waste and Substances sites from the Department of Toxic Substances Control (DTSC) EnviroStor database.
- SWRCB GeoTracker Database.
- list of solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside the waste management unit.
- List of active Cease and Desist Orders and Clean-Up and Abatement Orders from the SWRCB. The records search revealed that the project is not located on a known hazardous waste site. There are no active clean-up sites or known hazardous waste sites within a one-mile radius of the project area.

a) Less than Significant. Refueling staging areas will be situated away from waterways, dry or wet, and equipment will be stored and maintained within properly cleared areas. The existing 41 Cattle Co. ranch road system includes a low water ford of the Mad River. With the exception of the low water ford, diesel fuel will not be transported across a live stream, except for that in the fuel tank of equipment being operated. Contractors providing operations equipment (masticators, excavators, etc.) will make daily inspection of equipment for leaks, correcting and repairing any such leaks prior to crossing of live streams. Drip torch fuel will be transported to the project area in containers designed for that use. Based upon implementation of project BMPs Haz-1 and Haz-2, there will be a less than significant impact pertaining to hazards to the public and environment through transport of hazardous materials.

b) No Impact. No hazardous materials other than those listed in a), above, are to be used on the project site; therefore, no release of hazardous materials is foreseen. Spill kits will be onsite to clean up any small spills that could occur, therefore preventing the release of hazardous materials into the environment. As such, there will be no impact involving the release of hazardous materials.

c) No Impact. The project site is not located within a quarter of a mile from an existing or proposed school. Therefore, there will be no impact.

d) No Impact. California Government Code Section 65962.5(a)(1) requires the California Department of Toxic Substances to compile and update, as appropriate, a list of all hazardous waste facilities subject to corrective action, all land designated as hazardous waste property or border zone property, all information received by the Department of Toxic Substances Control pursuant to Section 25242 of the Health and Safety Code on hazardous waste disposals on public land, all sites listed pursuant to Section 25356 of the Health and Safety Code, and all sites included in the Abandoned Site Assessment Program. These lists are commonly referred to as the Cortese List. The project site is not listed on any of the individual lists that comprise the Cortese List; none of the lands bordering the site are on any of the Cortese List. The proposed project is not located on a site that is included on the list of hazardous materials sites compiled pursuant to

Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment.

e) **No Impact.** The project site is not located within an airport land use plan. The 41 Cattle Co portion of the project area has areas that is 6,700 feet from the Ruth Airport and the USFS lands are within 2 miles of the Ruth Airport (Airport code T42). This airport receives very low volume use with private small craft. There is one small portion of the 41 Cattle Co lands within 1600 feet of the airport.

f) **No Impact.** The project is in a remote location and will not impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project will not include development that would increase the number of people exposed to emergencies and would not include uses that would require an amendment of a locally adopted emergency plan. Therefore, no impacts are anticipated.

g) **Less than Significant Impact.** The execution of the project work has the potential to ignite a fire within a wildland area. The risk to people and structures will be reduced as project work will be conducted when fuel moisture and humidity are at adequate levels as determined by CAL FIRE or other local firefighting authorities. In addition, firefighting equipment, fire extinguishers and firefighting tools will be made available at work sites per **BMP Haz-3**. Long-term, the project will reduce risks of loss, injury or death from large re-burn wildfires through the removal of excess dead vegetative fuels. Therefore, exposure to people or structures directly or indirectly from a significant risk of loss, injury or death involving wildland fire during the implementation of the project or over the long-term will be less than significant by using **BMPs Haz-4** and **Haz-5**.

BMP Haz-1

Standard Public Notifications: Approximately two weeks prior to the commencement of pile burning operations, the project coordinator will: 1) post signs along the closest major road way to the area describing the activity, timing, and requesting for smoke-sensitive persons in the area to contact the project coordinator; 2) publish a public interest notification in a local newspapers, District Facebook page or other widely distributed media source describing the activity, timing, and requesting for smoke sensitive persons in the area to contact the HBMWD and 3) develop a list of smoke sensitive persons in the area and contact them prior to burning.

BMP Haz-2

To reduce impacts associated with exposure of people or structures to wildland fires, the project manager or registered professional forester shall ensure that adequate fire protection equipment is available at work sites. This shall include fire extinguishers attached to all mechanized equipment. In addition, firefighting hand tools shall be made available at all areas where equipment is operated. The project manager, or registered professional forester, and any other workers shall comply with all applicable fire safe standards as found in Public Resources Code Division 4, Chapter 6, (Public Resources Code §§ 4427, 4428, 4429, 4431, 4442, list not all inclusive). Vehicles shall not be parked in tall grass or any other location where heat from the exhaust system could ignite a fire.

BMP Haz-3

- *Hot work areas shall not contain combustibles or shall be provided with appropriate shielding to prevent sparks, slag or heat from igniting exposed combustibles (Section 3504, California Code of Regulations, Title 24, Part 9.*
- *A fire watch shall be provided during hot work activities and shall continue for a minimum of 30 minutes after the conclusion of the work.*
- *Individuals assigned to fire watch duty shall have fire-extinguisher equipment readily available and shall be trained in the use of such equipment.*

- Where fire hoses are required, they shall be connected, charged, and ready for operation utilizing a portable water truck if needed.
- A minimum of one portable fire extinguisher complying with Section 906 California Code of Regulations, Title 24, Part 9 and with a minimum 2-A:20-B:C rating shall be readily accessible within 30 feet (9144 mm) of the location where hot work is performed
- There shall be no hot work, chainsaw work, heavy equipment work, chipping or masticating on red flag days declared by the North Coast Air Quality District.

| X. Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| HYDROLOGY AND WATER QUALITY: Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | | | | X |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. | | | | X |
| c) Substantially alter the existing drainage pattern of the site or area, including through stream or river or through the addition of impervious surfaces in a manner which would: | | | | X |
| i) result in substantial erosion or siltation onsite or offsite? | | | | X |
| ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; | | | | X |
| iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | | | | X |
| iv) impede or redirect flood flows? | | | | X |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | | | | X |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | | | | X |

Runoff from burned areas often contains ash, which may have significant effects on the chemistry of receiving waters such as lakes, wetlands, reservoirs, rivers and streams. Runoff from burned areas also produces higher nitrate, organic carbon, and sediment levels, warmer temperatures, and flashier stream flows. The reforestation focus of this project will revegetate and stabilize exposed soils and ash.

a) **No Impact.** The project proponent will comply with all applicable water quality requirements adopted by the appropriate Regional Water Quality Control Board and approved by the SWRCB (i.e., Basin Plan). In general, GWDR and waivers of waste discharge requirements for fuel reduction and forest health activities require that wastes, including but not limited to petroleum products, soil, silt, sand, clay, rock, felled trees, slash, sawdust, bark, ash, and pesticides must not be discharged to surface waters or placed where it may

be carried into surface waters; and that water board staff must be allowed reasonable access to the property in order to determine compliance with the waiver conditions. Through the implementation of project BMPs, and permit requirements from the Regional Water Quality Control Board that require that no significant sediment discharge occur from project activities and because the project will not generate or discharge wastewater or industrial flows to wetlands, creeks or waters of the U.S., the project will not violate any water quality standards or waste discharge requirements and therefore impacts will have no impact

BMP Hydro-1

Prior to any project activities, provide the Initial Study-NOE and an erosion control plan (ECP) to the California Regional Water Quality Control Board and comply with the Categorical Waiver of Waste Discharge Requirements (Order No. RI-2014-0011 Category F.

b) **No Impact.** No wells or structures that would remove groundwater are proposed in the project. No project-level activities would interfere with groundwater recharge. Therefore, there would be no impact.

c) i. **No Impact.** Significant vegetation including forest vegetation will buffer any watercourses from stormwater impacts associated with fuel break and prescribed fire treatments. Storm water runoff will follow the same flow patterns as the existing site configuration. The existing drainage pattern of the site will not be altered and therefore impacts will be less than significant with the incorporation of BMP Hydro-2. The project will not alter the existing drainage pattern of the area or increase the rate or amount of surface runoff in a manner which would result in off-site flooding.

ii. **No Impact** Project activities will not create new impervious surfaces or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. Broadcast burning will be implemented using low-intensity burn prescriptions that will not be hot enough to cause hydrophobic soil conditions which could affect runoff rates. Hand and mechanized fuel treatment on the shaded fuel breaks will leave sufficient mulch on the ground to prevent surface erosion.

iii. **No Impact** The project would not create or contribute runoff in amounts that would exceed the capacity of existing stormwater drainage systems or provide substantial additional sources of polluted runoff. The area is rural and lacks stormwater and flood control facilities. The existing road systems have drainage facilities that include structures such as culverts, dips and waterbars that will not receive increased flow as a result of this project. The existing road system will be improved to correct existing controllable erosion sites prior the end of the project per the Erosion Control Plan (ECP) as part of the Regional Water Quality Control Board Discharge Waiver Category "F" under BMP Hydro-1. Implementation of BMPs Hydro-1 and Hydro-2 will assure that there will not be significant impacts to stormwater systems including introduction of polluted runoff into those systems.

iv. **No Impact:** No work to be conducted within stream protection buffers except for riparian tree planting by hand crews.

BMP Hydro-2

- *Tractor or heavy equipment (masticators) operation will not be conducted on known slides or unstable areas.*
- *Heavy equipment will not be used within the standard watercourse and lake protection zones (14 CCR 916.9).*
- *Equipment maintenance and refueling will occur outside the standard watercourse and lake protection zones (14 CCR 914.5).*
- *Heavy equipment operations will not be conducted on slopes greater than 50%.*
- *Ignition will occur outside of the standard Forest Practice Rule defined Watercourse and Lake Protection Zone (14 CCR 916.9).*

d) **No Impact.** The project does not involve housing construction and will not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map. The project does not involve construction of any structures and

therefore will not place any structures within a 100-year flood hazard area, which would impede or redirect flood flows. The project will not expose people or structures to a significant risk or loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. The project is not located in an area that would be affected by a seiche, or tsunami, or mudflow.

e) **No Impact.** The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. BMP Hydro-1 will require compliance with the Regional Water Quality Control Board requirements. There is no known sustainable groundwater plan for the area.

BMP Hydro-3

In order to buffer watercourses, riparian habitats and beneficial uses of water from the potential impacts of prescribed fire or fuel treatments, all wet stream courses (Class I and Class II) will be protected by a 75' horizontal distance "No Treatment Zone." Buffers will be established on both sides of stream channels. All wetlands and springs will be encircled by a 50' "No Treatment Zone." "No Treatment Zones" will be established and flagged as directed by the project manager prior to the implementation of any project work. No prescribed fire or fuel treatment will occur within the "no treatment zones." Seasonal watercourses or Class III watercourses, shall be protected with a 25' equipment exclusion zone.

BMP Hydro-4

The project manager will select refueling and maintenance areas for heavy equipment, chainsaws and other combustion-powered hand tools on flat sites that are away from dry or wet waterways as well as areas that could potentially flow into a stream in the event of an accidental spill. Fuel containment equipment (i.e., absorbent sheets and waddles) will be made available and used at refueling and maintenance areas. Fuel spillage will be minimized by conducting these operations in flat areas. Equipment will be stored and maintained within properly cleared areas. The project manager will inspect refueling areas to assure compliance with this BMP. These inspections will also verify the sites' adequacy in protecting riparian and terrestrial resources as well as the use and availability of containment equipment.

BMP Hydro-5

Hand piles should be placed in a checkerboard pattern whenever possible (not piled directly above one another), located outside of areas that may receive runoff from nearby roads and existing landings.

| XI. Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| LAND USE AND PLANNING: Would the project: | | | | |
| a) Physically divide an established community? | | | | X |
| b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | | | | X |

a) **No Impact.** The proposed project is to restore forestland including conifer dominated stands and oak woodland forested habitat. It will not physically divide an established community; therefore there will be no impact.

b) **No Impact.** This project does not conflict with land use policies, plans or regulations by the County of Trinity. The project is consistent with allowable uses on resource lands such as Timberland Production Zone and Agriculture and therefore there will be no impact. The project is consistent with the goals of the

California Department of Fish and Wildlife's Recovery Strategy for California Coho Salmon, and will enhance riparian habitat in all project-area creeks. The project does not conflict with any applicable habitat conservation plan or natural community conservation plan.

| XII. Mineral Resources Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| MINERAL RESOURCES: Would the project: | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | | | | X |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | | | | X |

a & b) No Impact. There are no known valuable or locally-important mineral resources on the site. The Division of Mines and Geology has noted that the 'Classification and Designation of Mineral Lands' per Surface Mining and Reclamation Act Section 2790 'Minerals of Regional Significance' and associated mapping has not occurred for Trinity County and other than in-stream gravel resources and rock quarries, have not identified any mineral resources needing protection from incompatible land uses. Therefore the project will not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Based on the project description and its location, the proposed project will not result in any mineral resource-related impacts.

| XIII. Noise Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| NOISE: Would the project: | | | | |
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | | X | |
| b) Generation of excessive ground borne noise levels? | | | | X |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | | | | X |

a) Less than Significant Impact. The project area is located in a remote forested area with low background or ambient noise levels. Although there are residential structures in close proximity to some of the treatment areas, project-related activities will result in short term increases in noise levels primarily

associated with chipper use. The noise levels from the mastication, chain saws, and chippers will vary during the different activity periods, depending upon the number and types of equipment being used. The exact complement of noise producing equipment in use during any particular period is difficult to predict. However, the noise levels from construction activity during various phases of a typical construction project were evaluated by the Environmental Protection Agency in 1971. Although these studies were done 30 years ago, they remain the industry standards for estimated base noise emissions from construction and demolition equipment. Use of this data is considered conservative since newer construction equipment has incorporated quieter designs to protect both operators and the public from exposure to high noise levels. Project construction noise based on typical noise level emissions from public works projects, as developed by the United States Environmental Protection Agency Office of Noise Abatement and Control (1971), show noise from typical construction equipment usually ranging between 70 to 95 dB at 50 feet from the source. A chain saw is typically 85 decibels at 50 feet. Note that these typical noise levels at distances away from the equipment item (beyond 50 feet) are conservative since the only attenuating mechanism considered was divergence of the sound waves in open air. Attenuation from air absorption, ground effects, and shielding from intervening topography, structures and vegetation are not included in these tabled calculations. Noise will also vary throughout the project according to specific activities, location, orientation of the activities, and changing equipment operations.

Noise-sensitive land uses, or sensitive receptors, are generally defined as locations where people reside or locations where the presence of unwanted sound could adversely affect the use of the land. Noise-sensitive land uses typically include residences, hospitals, schools, libraries, and certain types of recreational uses. Project related activities will be limited to Monday through Saturday, and between 6 a.m. to 7 p.m. No heavy equipment related activities shall be allowed on Sundays or federally recognized holidays. The project noise will be temporary over the course of the project's duration. Within that portion of the project area immediately adjacent to mastication, chippers and chainsaw operations, ambient noise levels will be increased above existing levels but only for a short period of time. Once project work has been completed, ambient noise levels will return to their pre-project levels. Impacts to temporary ambient noise levels will be less than significant. Therefore the proposed project's impact is less than significant.

b) No Impact. During construction activities, equipment may generate a small amount of ground-borne vibration or ground-borne noise; the level of vibration or noise would typically be minor. No pile driving or other substantial ground-borne vibration generators will be used. Vibration levels associated with the project's level of land form modification should not be perceptible at the nearest residential unit and would not result in cosmetic or structural damage to buildings. Therefore, impacts associated with ground-borne noise levels will be less than significant. Following completion of project construction there would be no noise generated by the project that would differ from current conditions. Therefore, operation of the proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

c) No Impact Although portions of the area are located within two miles of a public/private landing strip, excessive noise impacts to that airport function will not occur.

| XIV. Population and Housing Issues and Supporting Information | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| POPULATION AND HOUSING: Would the project: | | | | |
| a) Induce substantial population growth in the area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | | | | X |

| | | | | |
|---|--|--|--|---|
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | | | | X |
|---|--|--|--|---|

a-b) **No Impact.** The project will not directly or indirectly induce substantial population growth, would not displace existing people or housing or people, and would not necessitate the construction of replacement housing. Therefore, there will be no impacts associated with population and housing.

| XV. Public Services | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| PUBLIC SERVICES: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| a) Fire protection? | | | | X |
| b) Police protection? | | | | X |
| c) Schools? | | | | X |
| d) Parks? | | | | X |
| e) Other public facilities? | | | | X |

a-e) **No Impact.** The primary purpose of the proposed project is to reforest burned timberland and reduce fire hazard. It will not result in an increase in population that requires an increase in service ratios, response times or other performance objectives for any of the public services. Therefore, it will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts. Service ratios, response times and other public service performance objectives will not change due to the implementation of this project.

| XVI. | Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|------|---|--------------------------------|--|------------------------------|-----------|
| a) | Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | | | | X |
| b) | Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | | | | X |

a-b) **No Impact.** The primary purpose of the proposed project is to reforest burned timberlands and reduce fire hazards. The proposed project will not induce population growth or result in any demographic changes in the community. The project will not increase the use of existing neighborhood and regional parks or other recreational facilities, therefore there would be no impact on recreation. The project does not require the

construction or expansion of existing recreational facilities. The proposed project does not include the construction of recreational facilities.

| XVII. Transportation Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| TRANSPORTATION: Would the project: | | | | |
| a) Conflict with a program, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | | | X | |
| b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? Criteria for Analyzing Transportation Impacts | | | | X |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | | X |
| d) Result in inadequate emergency access? | | | | X |

a) **Less than Significant Impact.** As the project is of short-term duration, the project will not cause a long-term increase in vehicle trips or cause a significant long term increase in traffic, or conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. The project will not conflict with any policies, plans or programs regarding public transit, bicycle or pedestrian facilities, as it only involves forest restoration and enhancement.

b) **No Impact.** The project is of relatively short duration and will not cause a permanent transportation impact in terms of vehicle miles traveled compared to the baseline situation. Therefore impacts to transportation and traffic are expected to be less than significant. There are no impacted roads with limited levels of service or problematic travel demand measures.

c) **No Impact.** Hazards will not be increased due to design features or incompatible uses because no new development is proposed. Temporary and intermittent use of Wilder Ridge Road during the 3 to 4 month seasonal activities of the project may cause a temporary increase in traffic, but this would not be a substantial increase.

d) **No Impact.** The contractors and crews are required to keep access roads open at all times for emergency access. No impacts to emergency access will result.

| XVIII. Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| TRIBAL CULTURAL RESOURCES | | | | |
| Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of | | | | X |

| XVIII. Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| historical resources as defined in Public Resources Code section 5020.1(k), or | | | | |
| b). A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | | | X | |

Starting July 1, 2015, Lead Agencies are to consult with Tribes and initiate consultation prior to the release of a negative declaration, mitigated negative declaration or environmental impact report under CEQA. More specifically, AB 52 creates a new category of resources in CEQA called "tribal cultural resources" and seeks to engage the expertise of Native American tribes in the protection and preservation of those resources. To fulfill that purpose, the new law requires the lead agency to consult with a local Native American tribe as part of the environmental review process. The law also requires that the details of the tribal cultural resource be kept confidential and provides examples of mitigation measures that focus on preserving tribal cultural resources.

Tribal notification letters were sent on August 2, 2022. No responses were received for this project from contacted tribal representatives on the list provided by The Native American Heritage Commission.

The NEIC of the California Historic Resources Information System was contacted and two separate records searches were conducted, K22-54 (6-20-22) and K21-127 (10-5-21). The purpose of the file search was to determine if cultural resources surveys were conducted on or adjacent to the project site. Tribal responses to consultations per 21080.3.1, did not result in a request to consult for this project.

a) **No Impact.** There are no tribal cultural resources located on the project site that are either listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resource Code section 5020.1(k). Therefore, there will be no impact.

b) **Less than Significant.** Prior to the start of operations, (historical) resource sites that were identified in the archaeological report(s) within the activity area, will be appropriately marked and locations communicated to operating contractors to ensure protection and avoidance. Confidentiality of cultural resources sites must be maintained with a minimal disclosure of site locations. If additional cultural resources are encountered during operations, all ground-disturbing work to be temporarily halted. Work on site shall not be resumed until a qualified archeologist has evaluated the materials and offered recommendations for further action. Should human remains be uncovered, State law requires that the County Coroner be contacted immediately. Should the Coroner determine that the remains are likely those of a Native American, the California Native Heritage Commission must be contacted. The Heritage Commission consults with the most likely Native American descendants to determine the appropriate treatment of the remains. The California Office of Historic Preservation, California Historic Information Center's archeological database has been searched for sensitive cultural resources in the project area.

BMP Tribal-1

In the event that any Native American archaeological remains are discovered during implementation of management activities, local tribes will be contacted and consulted who have traditional and cultural affiliation with the Project area. If the tribe(s) considers the resource to be a tribal resource, appropriate mitigation measures will be developed in accordance with Public Resources Code 21080.3.2.

Other BMPs to protect cultural resources in the project area have been outlined in Section V. Cultural Resources.

| XIX. Utilities and Service Systems Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| UTILITIES AND SERVICE SYSTEMS: Would the project: | | | | |
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities the construction or relocation of which could cause significant environmental effects? | | | | X |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | | | | X |
| c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | | | | X |
| d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | | | | X |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | | | | X |

a) **No Impact.** The project will not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas or telecommunications facilities the construction or relocation of which could cause significant environmental effects.

b) **No Impact.** The project involves forest restoration and enhancement. The project has sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? Therefore no impact is expected.

c.) **No Impact.** A reforestation project would not create an increased demand for wastewater treatment capacity; therefore, no new construction of wastewater treatment facilities would be required.

d-e.) **No impact.** Materials that cannot be recycled will be disposed of through Trinity County Disposal in an appropriate approved landfill. Therefore, the project work will not result in the need for a landfill and no impact will result.

XX. Wildfire

| | | | | |
|--|--|--|--|--|
| a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan? | Potentially Significant Impact <input type="checkbox"/> | Less Than Significant with Mitigation Incorporated <input type="checkbox"/> | Less Than Significant Impact <input type="checkbox"/> | No Impact <input checked="" type="checkbox"/> |
| b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | Potentially Significant Impact <input type="checkbox"/> | Less Than Significant with Mitigation Incorporated <input type="checkbox"/> | Less Than Significant Impact <input type="checkbox"/> | No Impact <input checked="" type="checkbox"/> |
| c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | Potentially Significant Impact <input type="checkbox"/> | Less Than Significant with Mitigation Incorporated <input type="checkbox"/> | Less Than Significant Impact <input type="checkbox"/> | No Impact <input checked="" type="checkbox"/> |
| d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | Potentially Significant Impact <input type="checkbox"/> | Less Than Significant with Mitigation Incorporated <input type="checkbox"/> | Less Than Significant Impact <input type="checkbox"/> | No Impact <input checked="" type="checkbox"/> |

The project is located in the State Responsibility Area (HBMWD and private lands) and the federal lands are within the Federal Responsibility Area (FRA). The project area is rated as having high fire hazard severity. Policy documents and plans for addressing wildfire risks in Trinity County include the Trinity County General Plan Public Safety Element, the Trinity County Hazard Mitigation Plan, the Trinity County Community Wildfire Protection Plan (2019), and Strategic Fire Plan for the Humboldt-Del Norte Unit (CAL FIRE 2018). The site's setting amid mature trees and forest understory provides a setting conducive to the ignition and spread of a wildland fire if appropriate measures are not taken during work. Chapter 26 of the California Fire Code (California Code of Regulations, Title 24, Part 9) establishes provisions for safety and care during construction activities defined as hot work. In brief, the code requires that specific measures be taken during construction to minimize the potential ignition of a wildland fire in areas susceptible to such events, which include the project site and surrounding lands. Personnel carrying out the pile prescribed burns will be highly trained with prescribed burning and wildland firefighting and will take all safety precautions necessary to avoid an escaped fire. Site watering and adherence to the California Fire Code will ensure that the proposed project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

a) **No Impact.** The proposed project would not require the closure of public roadways or otherwise interfere with emergency evacuation plans for the surrounding area. Pile burning work activities could result in temporary road closures within the project boundaries but would not impact roadways outside of the project area. Prescribed burning could lead to increased smoke on nearby roadways and temporarily decreased visibility. However, smoke would be carefully managed in accordance with an approved smoke management plan and measures such as public notification of burn days and smoke warning signage would be implemented. These activities could cause a slight increase in vehicle use during construction

activities and potential short-term reduced visibility from prescribed fire but would not impair emergency response plans or evacuation plans. Therefore, there would be no impact on emergency response or evacuation plans.

b) **No Impact.** The project is designed to reduce fire hazard reburn severity impacts associated with wildfire. Therefore the project is not likely to exacerbate wildfire risks, and expose people to pollutant concentrations from a wildfire. No new housing units or business will be constructed under this project. Therefore, no impact should result from implementation of the proposed project.

c) **No Impact.** The project will not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk. Therefore no impact should result from implementation of the proposed project.

d) **No Impact.** The project is designed to reduce reforest upland areas impacted by wildfire area and no downslope or downstream flooding or landslides should result from project activities.

References:

- CAL FIRE FRAP Fire Severity Hazard Maps
- 2005 Trinity County Community Wildfire Protection Plan
- 2019 CAL FIRE Humboldt-Del Norte Unit Strategic Fire Plan
- 2022 Ruth Lake Fire Reduction Project SCH Number 2022060469 Portions of T1S R7E Sec 19, 29, 32 & 33; T2S R7E Sec 2, 3, 4, 5, 9, 11, 12, 13, 14 & 24 HB&M

| XXI. Issues and Supporting Information | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| MANDATORY FINDINGS OF SIGNIFICANCE: | | | | |
| a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | | | X | |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | | | X | |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | | | | X |

Certain mandatory findings of significance must be made to comply with CEQA Guidelines §15065. The proposed project has been analyzed, and it has been determined that with implementation of the project as described in this initial study, it would not:

- Substantially degrade environmental quality.
- Substantially reduce fish or wildlife habitat.
- Cause a fish or wildlife population to fall below self-sustaining levels.
- Threaten to eliminate a plant or animal community.
- Reduce the numbers or range of a rare, threatened, or endangered species.
- Eliminate important examples of the major periods of California history or prehistory.
- Achieve short term goals to the disadvantage of long term goals.
- Have environmental effects that will directly or indirectly cause substantial adverse effects on human beings.
- Have possible environmental effects that are individually limited but cumulatively considerable when viewed in connection with past, current, and reasonably anticipated future projects.

a) **Less than Significant.** The project is a reforestation and restoration project designed to benefit water quality, aquatic habitat and upland forest resilience. It will result in a long term benefit to terrestrial carbon storage, fish, amphibians, and forest upland species by improving habitat. Through the implementation of BMPs the project will have a less than significant impact. Through avoidance, minimization and project BMPs, the project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or eliminate important examples of the major periods of California history or prehistory.

b) **Less than Significant Impact.** The incremental effects of a project are cumulatively considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. Implementation of forest health treatments under the proposed action will lead to an improvement in the health of the forest landscape in the general vicinity of the project area. Forest health treatments and fuels reduction activities, combined with similar efforts being planned and implemented on adjacent private lands, will result in reduced wildfire activity which will reduce the risk of fire across the landscape. No Impact: The project will not have impacts that are individually limited, but cumulatively considerable.

The project will not incrementally contribute to future population growth and development in the area as it does not result in a change in land use or zoning or involve development of any habitable structures or initiation of new uses. Many of the items reviewed as part of this initial study would result in no impact or were considered to have less than significant impacts, and where appropriate, findings were made with reference made to prevent cumulative impacts resulting from individual projects.

c) **No Impact.** The proposed project would not displace existing residents or employees, generate substantial pollution, or generate a substantial demand for public services or utilities. With implementation of BMPs the project activities proposed in this remote area project do not have the potential to, either directly or indirectly, cause a substantial adverse effect on human beings. The project area is very remote and given the low intensity nature of project work, no direct or indirect impacts to human beings are anticipated.

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6. CAL FIRE Cultural Resources Review Procedures for CAL FIRE Projects Rev 2020
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20. USFS Decision Notice and Finding of No Significant Impact - Three Forks Fire Salvage Project USDA Forest Services Mad River Ranger District 2022.
21. USFS Scoping and Preliminary Environmental Assessment and Finding of No Significant Impact for the August Complex Restoration Project 2022 www.fs.usda.gov/project/?project=60286
22. 41 Cattle Company CAL FIRE Exemption # 1-20EX-00825-TRI (< 10% Dead and dying Exemption).

DRAFT

APPENDIX A

PROJECT GENERAL BEST MANAGEMENT PRACTICES THAT ARE PART OF THE PROJECT DESCRIPTION

Fuels Reduction Treatments

Fuel reduction treatments will be accomplished according to following guidelines:

- All slash produced (branches, limbs, and treatment debris less than four inches in diameter) will be treated using one of the following methods:
 - Chip or masticate adjacent to roads and other accessible portions of the treatment areas.
 - Pile and burn: slash piles for burning should be located away from residual trees and structures.
 - Lop and scatter: lopping is the severing and spreading of slash so that no part of it remains more than 18 inches above the ground. Lop and scatter would be implemented on steeper slopes and areas with limited access where chipping, mastication, and burning piles is difficult.
 - Pile and burn operations would occur where vehicle access is available along existing ranch roads utilizing existing openings and compacted ground as feasible. Piles may be created by mechanized equipment such as crawler tractors equipped with a brush rake, or excavators equipped with a grapple. Piles will also be created by hand.
 - Limit ground-based equipment (masticators) to less than 50% slopes unless a soil scientist evaluates soil conditions and disturbance patterns to determine operability on steeper slopes.

Burning will likely take place in the fall to early winter depending on fuel moisture levels and weather conditions, except where resource issues can be avoided. The burn plan will also be coordinated with the Northcoast Unified Air Quality Management District. HBMWD and Project Cooperators will coordinate with the District to identify a permissible burn day.

Resource objectives and public notification for the prescribed fire as described in the plan are to:

- Reduce fuel loading to reduce risk of high intensity fires in the next decade.
- Burn Prescription: The prescribed fire burn prescription will be designed to initiate a surface fire of sufficient intensity that will only consume surface and ladder fuels while protecting soil resources from direct soil heating impacts. Burn periods will consider predicted wind speeds and direction for the 7 days following completion of burning. Example of sources for predicted winds include <https://gacc.nifc.gov/oncc/predictive/weather/index.htm> and <https://www.wunderground.com/forecast/us/ca/weed/96094>
- Ignition will occur outside of the Watercourse and Lake Protection Zone buffer areas.
- Where feasible, existing roads, trails, and natural fuel breaks will be utilized for fire lines.
- Air Quality: Prescribed fire should comply with all local, state, and federal air quality regulations and ordinances. The local Air Pollution Control District or Air Quality Management District will be contacted to determine local requirements.
- Standard Public Notifications: Prior to the commencement of prescribed burning operations, the project coordinator will develop a site specific notification plan.

Burn Plan Communications: Prior to the start of operations, CAL FIRE personnel should meet with the project coordinator onsite to discuss resource protection measures, if feasible. Additionally, the project coordinator should specify the resource protection measures and details of the burn plan in the incident action plan if one is prepared and should attend the pre-operation briefing to provide further information.

Biological

A search of the CNDDDB will be conducted of the project area to determine if there have been documented special status species located.

Upland Habitat Protection

- To avoid impacting nesting birds and/or raptors through habitat modification:
- For vegetation management activities, Limited Operating Period of February 1-September 15 depending upon target species shall be established unless surveying for nesting, roosting, and/or denning is completed and CDFW or USFWS approves an alternative LOP period for the year surveying was completed if feasible.
- In order to protect any species covered by the Migratory Bird Treaty Act (MBTA), no fuels treatment work will occur between March 1st to August 31st, unless the following is implemented: 1. A survey is conducted by a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA and it is determined that there are no occupied nests within the proposed activity area. 2. If an occupied nest is found, then a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA will determine if the birds present are those protected by the MBTA. 3. If an MBTA species is located then no activities will occur within 100 feet of the nest during the breeding season (March 1st-August 31st).
- All temporary flagging, fencing, trash, debris, and/or barriers will be removed from the project site upon completion of project activities;
- Habitat elements (nest trees) that provide valuable habitat will be identified by a qualified person and retained where no immediate risk to infrastructure exists;
- Where practical and feasible other habitat elements (downed large logs, snags with cavities and tree hollows, and other suitable snags) will be identified by a qualified person and retained where no immediate risk to infrastructure exists.
- Where habitat elements are identified, a minimum 2' wide fire line will be cut around the habitat element and ladder fuels within 10' will be thinned.
- If any federal or state listed threatened or endangered species are detected in the project area that may be impacted by the project work, then all project related activities will immediately stop within that area which will be flagged with a 50' "No Treatment Zone". All sightings will be documented using the California Natural Diversity Database (CNDDB) field survey form a copy of which will be submitted to the CNDDB.
- No fire ignition (nor use of associated accelerants) will occur within the special-status plant buffer.

Watercourse/Aquatic Habitat/Water Quality/Sediment Protection:

Depending upon the resource situation, the following BMPs may be used on a project site specific basis:

- Fire lines, brushing or ground disturbing operations not be placed in sensitive hydrologic areas unless need to protect the resources from impacts of the burning;
- No manual line construction will occur within the 75' slope distance core zone of Class I watercourse, 50' slope distance of a Class II watercourse and within 30' slope distance of the channel of Class III watercourse, except where necessary at designated equipment crossings;
- Prescribed fire will not be applied directly on the ground within 75' slope distance of a Class I watercourse, 50' slope distance of a Class II watercourse, or 30' slope distance of a Class III watercourse.
- No fire ignition (nor use of associated accelerants) will occur within a watercourse buffer zone, however low intensity backing fires may be allowed to enter or spread into WLPZs.
- Watercourse buffers of at least 75' slope distance core zone of Class I stream, 50' of a Class II stream and 30' slope distance for Class III streams shall be established where the following BMPs shall apply.
- Construct hand lines within 75' slope distance of Class I or Class II watercourses and 30' slope distance of Class III watercourses only where necessary to minimize undesired fire effects;
- Petroleum products would be stored at roads or landings outside of watercourse protection zones wherever possible and a minimum 200' horizontal distance or greater distance from streams, ponds, and wet areas such that fuels and other harmful materials would not reach any waterbody.

Appropriate spill containment measures would be on site and would be employed as needed (for example, absorbent pads, drip pans and containment trays). Containers of fuel and oil are removed daily off-site.

- All roads and landings used by vehicles (other than 4x4 motorcycles, quad cycles, or other low ground pressure vehicles) for prescribed fire and mop up operations shall have adequate drainage upon completion of use for the year or by October 15, whichever is earlier. An exception is that drainage facilities and drainage structures do not need to be constructed on roads and landings in use during the extended wet weather period provided that all such drainage facilities and drainage structures are installed prior to the start of rain that generates overland flow;
- No vehicle operations (other than 4x4 motorcycles, quad cycles, or other low ground pressure vehicles) shall occur during saturated soil conditions. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur);
- Vehicle use (other than 4x4 motorcycles quad cycles, or other low ground pressure vehicles) use shall be limited to dry, rainless periods where saturated soil conditions are not present or to roads and landings where a stable operating surface exists;
- Access roads and landings used by vehicles shall not be used during any time of the year when operations may result in significant sediment discharge to watercourse or lakes, except in emergencies to protect the road, to reduce erosion, to protect water quality, or in response to public safety needs.
- During the extended wet weather period (October 15-May 1) vehicle uses (other than 4x4 motorcycles, quad cycles, or other low ground pressure vehicles) shall be limited to roads and landings that exhibit a stable operating surface. Routine use of roads and landings shall not occur when equipment cannot operate under its own power;
- Roads and landings used by vehicles (other than 4x4 motorcycles, quad cycles, or other low ground pressure vehicles) during the winter period shall occur on a stable operating surface. Use is prohibited on roads that are not hydrologically disconnected and exhibit saturated soil conditions.

Cultural Protection

- The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers will be trained to halt work if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance). This BMP applies to all treatment activities and treatment types.
- No burn piles should be placed within 10' of known ground stones, historical features and similar features
- Work should be halted within a reasonable buffer if cultural materials are found during implementation. Examples would include ground stone, flaked or chipped stone, historic debris, building foundations, or non-human bone.
- A qualified archaeologist should be consulted to assess the discovery. Appropriate avoidance or mitigation measures should be reached in consultation with the Tribes that claim an interest in this site, as set out at 36 CFR 800
- Should inadvertent effects to or unanticipated discoveries of human remains be made, the County Coroner [California Health and Safety Code 7050.5(b)] shall be notified immediately. If the remains are determined to be Native American, or if Native American (Indian) funerary objects, or items of cultural patrimony subject to NAGPRA are uncovered, the provisions of NAGPRA Section 3 [25 U.S.C. 3002 a-e] may apply, and its regulations at 43 CFR 10 and the provisions of ARPA at 43 CFR 7 shall be followed.

Air Resources:

Dust- To minimize dust during treatment activities, the project proponent will implement the following measures: Limit the speed of vehicles and equipment traveling on unpaved areas to 20 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board (CARB) Fugitive Dust protocol. If road use creates excessive dust, the project proponent will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions. Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board (SWRCB). The project proponent will not over-water exposed areas such that the water results in runoff.

Project Description BMP List and Monitoring Guidance

BMP Air-1

To minimize dust during treatment activities, the project proponent shall implement the following standards: Limit the speed of vehicles and equipment traveling on unpaved areas to 20 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board Fugitive Dust protocol. If road use creates excessive dust, the project proponent will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions. Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board. The project proponent will not over-water exposed areas such that the water results in runoff. The type of dust suppression method will be selected by the project proponent based on soil, traffic, site-specific conditions, and air quality regulations. Remove visible dust, silt, or mud tracked-out onto public paved roadways where sufficient water supplies and access to water is available. The project proponent will remove dust, silt, and mud from vehicles at the conclusion of each workday, or at a minimum of every 24 hours for continuous treatment activities, in accordance with Vehicle Code Section 23113, suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport (particulate pollution) outside the treatment boundary, if the particulate emissions may "cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property," per Health and Safety Code Section 41700.

Monitoring: Evidence of Compliance: Field survey and field notes to be added to project log.

Schedule: Prior to project start date.

Responsible Party: Project Manager/HBMWD.

Verification of Compliance: Project work logbook.

Monitoring Party: HBMWD

Initials: _____

Date: _____

BMP Bio -1

Invasive plants removed shall be deposited on the edge of treated areas, out of the way of operations to avoid retrieval on equipment. Pile treated plants and burn where treated or if plant numbers are few, incorporate plant material into a nearby burn pile. Where operations cannot avoid yellow star-thistle infested areas, either manual treatment would be implemented prior to use, or as part of slash/fuels reduction operations, equipment would be used to blade plants away from work sites and cover with soil and 6 inches of weed free mulch.

BMP Bio-11

If any foothill yellow-legged frogs, tailed frogs, southern torrent salamanders or western pond turtles are encountered during project activities, operations in the vicinity shall cease until appropriate corrective measures have been implemented or it has been determined that the species will not be harmed. This includes relocating these species to an appropriate habitat adjacent to the work area. Any sensitive reptile or amphibian species that are trapped, injured, or killed, shall be reported immediately to California Department of Fish and Wildlife.

Monitoring: Project Manager shall document and record surveys and communication with California Department of Fish and Wildlife in the project log book.

Schedule: Prior to work in or adjacent to flowing watercourses.

BMP Bio-2

If any federal or state listed threatened or endangered plant on List 1, List 2 and List 3 species are detected in the project area that may be impacted by the project work, then all project related activities will immediately stop within that area which will be flagged with a 50' "No Treatment Zone". All sightings will be documented using the California Natural Diversity Database (CNDDDB) field survey form a copy of which will be submitted to the CNDDDB. Personnel specifically trained in the identification of List 1, List 2 and List 3 species or a professional botanist will flag 50' avoidance buffers for locations of *Piperia* spp. and Tracey's sanicle.

BMP Bio-3

The project is within an area that the Board of Forestry and Fire Protection has declared a Zone of Infestation or Infection for sudden oak death (SOD) pursuant to Public Resources Code § 4716. SOD host material Douglas-fir (*Pseudotsuga menziesii*), bay laurel (*Umbellularia californica*), huckleberry (*Vaccinium ovatum*), big leaf maple (*Acer acrophyllum*), shall not be removed from the regulated area unless appropriate state and federal permits are obtained.

Monitoring: Project Manager and or registered professional forester shall document that no biomass is removed from the declared zone of infestation.

BMP Bio-4

If an arboreal nest is discovered, operations shall be suspended within 100 feet and CDFW will be consulted for species-specific protections. Furthermore, if an occupied nest of a listed species, sensitive species, species of special concern, or a raptor is discovered, nest tree(s), designated perch tree(s), screening tree(s), and replacement tree(s), shall be left standing and unharmed.

BMP Bio-5

Daytime stand searches for northern spotted owl (NSO) will be conducted in activity centers that are within 0.25 mi of flight paths prior to operations by qualified biologists. If a NSO is found then follow-up searches will be conducted to determine nesting status or activity center status. If a nest tree is located, then a 300 foot noise buffer will be implemented, and no chipping or mastication project activity will occur within 300' of the nest tree during the critical nesting period.

BMP Bio-6

In order to prevent the spread of invasive plant species, all heavy equipment not already on project site, to be used in the execution of project work will be cleaned off site prior to use within the project area. The project manager and/or trained staff will assure and document equipment cleaning. Contractors shall disclose where equipment had been operating prior to hauling to the project site.

Monitoring: The Project Manager will document in the project log book with photos and notes of any vehicle cleaning to avoid invasive plant species.

Schedule: At the time of equipment mobilization.

Responsible Party: Project Manager/HBMWD.

Verification of Compliance:

Monitoring Party: HBMWD
Initials: _____
Date: _____

BMP Bio-7

A registered professional forester or designee will be sufficiently present onsite during operations to evaluate the presence of biological resources and ensure biological resource protection through avoidance. If any wildlife is encountered during project activities, said wildlife will be allowed to leave the area unharmed and if any listed wildlife is encountered and cannot leave the project site on its own the registered professional forester or project manager should contact California Department of Fish and Wildlife immediately consult regarding species relocation protocol.

Monitoring: Project Manager shall contact California Department of Fish and Wildlife or registered professional forester and flag nest trees and document nest trees with GPS coordinates.

Schedule:

Responsible Party: Project Manager/HBMWD.

Verification of Compliance: Field survey and field notes.

Monitoring Party: California Department of Fish and Wildlife
Initials: _____
Date: _____

BMP Bio-8

To avoid impacting nesting birds and/or raptors: All temporary flagging, fencing, trash, debris, and/or barriers will be removed from the project site upon completion of project activities.

Monitoring:

Schedule: At the conclusion of project activities.

Responsible Party: Project Manager/HBMWD.

Verification of Compliance: Project logbook

Monitoring Party: Project Manager/HBMWD
Initials: _____
Date: _____

BMP Bio-9

Habitat elements (nest trees, downed logs and woody debris, cavities and tree hollows, snags, large dead branches, etc.) that provide valuable habitat will be identified by an RPF or qualified biologist and retained.

Monitoring: GPS mapped location of features

Schedule: As necessary prior to work start up each year.

Responsible Party: Project Manager/HBMWD.

Verification of Compliance: Project logbook

Monitoring Party: Registered Professional Forester or HBMWD
Initials: _____
Date: _____

BMP Bio-10

In order to protect any species covered by the Migratory Bird Treaty Act (MBTA), no fuels treatment work will occur between March 1st to August 31st, unless the following is implemented: 1. A survey is conducted by a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA and it is determined that there are no occupied nests within the proposed activity area. 2. If an occupied nest is found, then a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA will determine if the birds present are those protected by the MBTA. 3. If an MBTA species is located then no activities will occur within 100 feet of the nest during the breeding season (March 1st- August 31st).

Monitoring: Evidence of Compliance: Field survey and field notes to be added to project log.

Schedule: Prior to fuel treatment operations.

Responsible Party: Project Manager/HBMWD.

Verification of Compliance: Project logbook and survey datasheets.

Monitoring Party: HBMWD

Initials: _____

Date: _____

BMP Bio-11

If any foothill yellow-legged frogs, tailed frogs, southern torrent salamanders or western pond turtles are encountered during project activities, operations in the vicinity shall cease until appropriate corrective measures have been implemented or it has been determined that the species will not be harmed. This includes relocating these species to an appropriate habitat adjacent to the work area. Any sensitive reptile or amphibian species that are trapped, injured, or killed, shall be reported immediately to California Department of Fish and Wildlife.

Monitoring: : Project Manager shall document and record surveys and communication with California Department of Fish and Wildlife in the project log book.

Schedule: Prior to work in or adjacent to flowing watercourses.

BMP Hydro-1

Prior to any ground disturbing project activities, provide the Initial Study Mitigated NOE and BMP Monitoring Plan to the California Regional Water Quality Control Board and comply with the Categorical Waiver of Waste Discharge Requirements (Order No. RI-2014-0011-44 Category F waiver).

Monitoring:

Schedule: During project implementation period.

Responsible Party: Project Manager/HBMWD.

Verification of Compliance: Project log (photos and description) including completion of Erosion Control Plan (ECP).

Monitoring Party: HBMWD and Regional Water Quality Control Board.

Initials: _____

Date: _____

BMP Hydro-2

- Heavy equipment (Masticators) operation will not be conducted on known slides or unstable areas.
- Masticator equipment will not be used within the standard watercourse and lake protection zones (14 CCR 916.9).
- Equipment maintenance and refueling will occur outside the standard watercourse and lake protection zones (14 CCR 914.5).
- Heavy equipment operations (masticators) will not be conducted on slopes greater than 50%.
- Ignition will occur outside of the standard Forest Practice Rule defined Watercourse and Lake Protection Zone (14 CCR 916.9).

Monitoring: Project manager shall document that all five bullet points are adhered to in the Project Log and notify the CAL FIRE Grant representative of any exceptions or non-conformances.

Schedule: Prior to project initiation and during spot checks of activities.

Responsible Party: Project Manager/HBMWD.

Verification of Compliance:

Monitoring Party: HBMWD

Initials: _____

Date: _____

BMP Hydro-3

In order to buffer watercourses, riparian habitats and beneficial uses of water from the potential impacts of pile burning or fuel treatments, all wet stream courses (Class I and Class II) will be protected by a 75' horizontal distance "No Treatment Zone." Buffers will be established on both sides of stream channels. All wetlands and springs will be encircled by a 50' "No Treatment Zone." "No Treatment Zones" will be established and flagged as directed by the project manager prior to the implementation of any ground disturbing project work. No prescribed fire or fuel treatment will occur within the "no treatment zones." Seasonal watercourses or Class III watercourses, shall be protected with a 25' equipment exclusion zone. This BMP does not apply to reforestation work within riparian zones.

Monitoring: Representative photographs of all wet and dry stream courses within the project footprint shall be taken (with location labels added) by the Project Manager or trained staff, before any project work, indicating that flagging of "No Treatment Zones" has been completed, in order to document pre-project conditions.

Schedule: Photos to be taken of riparian areas prior to and during work.

Responsible Party: Project Manager/HBMWD.

Verification of Compliance: Project logbook field notes.

Monitoring Party: HBMWD

Initials: _____

Date: _____

BMP Hydro-4

The project manager will select refueling and maintenance areas for heavy equipment, chainsaws and other combustion-powered hand tools on flat sites that are away from dry or wet waterways as well as areas that could potentially flow into a stream in the event of an accidental spill. Fuel containment equipment (i.e., absorbent sheets and waddles) will be made available and used at refueling and maintenance areas. Fuel spillage will be minimized by conducting these operations in flat areas. Equipment will be stored and maintained within properly cleared areas. The project manager will inspect refueling areas to assure compliance with this BMP. These inspections will also verify the sites' adequacy in protecting riparian and terrestrial resources as well as the use and availability of containment equipment.

Monitoring: The documentation process detailed in Monitoring of BMP Hydro #1 shall be implemented to document that selected refueling and maintenance areas have been provided and that fuel containment equipment has been made available and used at refueling and maintenance areas, in compliance with BMP Hydro -4

Responsible Party: Project Manager/HBMWD.

Verification of Compliance: Photographs and project log book.

Monitoring Party: HBMWD

Initials: _____

Date: _____

BMP Cultural-1

All new and previously recorded archeological sites identified during field surveys completed in connection with the preparation of this IS and documented in the archeological report for the project shall be protected through following the protective measures contained in the project Archaeological Survey Report. Flagged 50' buffers shall be established around each artifacts or sites by the project manager or registered professional forester prior to implementation of any project work. An "archaeologically trained resource professional," or a designee of either shall shield the historic artifacts or sites with a temporary protective fire-resistant material.

Within areas of ground or vegetation disturbing activities, if project work appears to expose any previously unknown archeological, prehistoric, historic or paleontological resource sites along the path of the fuel break or within 100 feet beyond the project boundary, the site shall be avoided. Work may continue elsewhere within the overall project area. Exposed cultural or paleontological resources shall be appropriately flagged in order to immediately establish an exclusion buffer of at least 100-feet. Any discoveries of previously unidentified cultural resources that are made during operations shall be dealt with

in accordance with the Procedures for Post-Approval Discovery of Cultural Resources (pp. 17 and 18, *Archaeological Procedures for CAL FIRE Projects*).

Monitoring: A copy of any such findings including site photos shall be sent to the CAL FIRE Archaeologist

Responsible Party: Project Manager HBMWD

Verification of Compliance:

Monitoring Party: CAL FIRE Archaeologist

Initials: _____

Date: _____

BMP Cultural-2

Should human remains be inadvertently discovered during ground-disturbing activities, work at the discovery locale shall be halted immediately, CAL FIRE, the project manager, Trinity County Coroner, Native American Heritage Commission (NAHC), and the relevant Native American representative(s) shall be notified immediately, and the remains shall be treated in accordance with NAHC treatment and disposition requirements and relevant state law.

Monitoring: A copy of any such findings shall be sent to the CAL FIRE Archaeologist.

Schedule: Continuous

Responsible Party: Project Manager/HBMWD.

Verification of Compliance:

Monitoring Party: HBMWD

Initials: _____

Date: _____

BMP Cultural-3

Prior to conducting a prescribed burn, wildland fire officials shall receive training on the location of cultural resources and measures necessary to protect them. Upon completion of burning activities, markings designating the location of cultural resources shall be removed.

Monitoring: A copy of training records and post project marker removals shall be sent to the CAL FIRE Project Manager.

Schedule: As necessary.

Responsible Party: Project Manager/HBMWD.

Verification of Compliance:

Monitoring Party: HBMWD

Initials: _____

Date: _____

BMP Tribal-1

In the event that any Native American archaeological remains are discovered during implementation of management activities, local tribes will be contacted and consulted who have traditional and cultural affiliation with the Project area. If the tribe(s) considers the resource to be a tribal resource, appropriate BMPs will be developed in accordance with Public Resources Code 21080.3.2.

Monitoring: A copy of any such findings shall be sent to the CAL FIRE Archaeologist.

Schedule: As necessary.

Responsible Party: Project Manager HBMWD.

Verification of Compliance:

Monitoring Party: CAL FIRE Archaeologist

Initials: _____

Date: _____

BMP Haz-1

Standard Public Notifications: Approximately two weeks prior to the commencement of prescribed pile burning operations, the project coordinator will: 1) post signs along the closest major road way to the area describing the activity, timing, and requesting for smoke-sensitive persons in the area to contact the project

coordinator; 2) publish a public interest notification in a local newspapers, HBMWD and Ruth Lake CSD Facebook or other widely distributed media source describing the activity, timing, and requesting for smoke sensitive persons in the area to contact the HBMWD; and 3) develop a list of smoke sensitive persons in the area and contact them prior to burning.

Monitoring: Evidence of Compliance: Project Manager Field survey and field notes.

Responsible Party: Project Manager/HBMWD

Verification of Compliance: Photos, published notices.

Monitoring Party: HBMWD

Initials: _____

Date: _____

BMP Haz-2

To reduce impacts associated with exposure of people or structures to wildland fires, the project manager or registered professional forester shall ensure that adequate fire protection equipment is available at work sites. This shall include fire extinguishers attached to all mechanized equipment. In addition, firefighting hand tools shall be made available at all areas where equipment is operated. The project manager, or registered professional forester, and any other workers shall comply with all applicable fire safe standards as found in Public Resources Code Division 4, Chapter 6, (Public Resources Code §§ 4427, 4428, 4429, 4431, 4442, list not all inclusive). Vehicles shall not be parked in tall grass or any other location where heat from the exhaust system could ignite a fire.

Monitoring: A Project Work Log shall be maintained which documents that contractors and/or landowners have provided equipment for adequate fire protection prior to the start of any project work by that contractor and/or landowners, and that fire-fighting hand tools have been made available at all areas where equipment is operated.

Schedule: Prior to start of work where equipment is in use.

Responsible Party: Project Manager/HBMWD

Verification of Compliance:

Monitoring Party: HBMWD

Initials: _____

Date: _____

BMP Haz-3

- Hot work areas shall not contain combustibles or shall be provided with appropriate shielding to prevent sparks, slag or heat from igniting exposed combustibles (Section 3504, California Code of Regulations, Title 24, Part 9). A fire watch shall be provided during hot work activities and shall continue for a minimum of 30 minutes after the conclusion of the work.
- Individuals assigned to fire watch duty shall have fire-extinguisher equipment readily available and shall be trained in the use of such equipment.
- Where fire hoses are required, they shall be connected, charged, and ready for operation utilizing a portable water truck if needed.
- A minimum of one portable fire extinguisher complying with Section 906 California Code of Regulations, Title 24, Part 9 and with a minimum 2-A:20-B:C rating shall be readily accessible within 30 feet (9144 mm) of the location where hot work is performed.
- There shall be no hot work, chainsaw work, heavy equipment work, chipping or masticating on red flag days declared by the North Coast Air Quality District.

Monitoring: A Project Work Log shall be maintained which documents that contractors and/or landowners have provided equipment for adequate fire protection prior to the start of any project work by that contractor and/or landowners, and that fire-fighting hand tools have been made available at all areas where equipment is operated.

Schedule: When hot work activities are conducted.

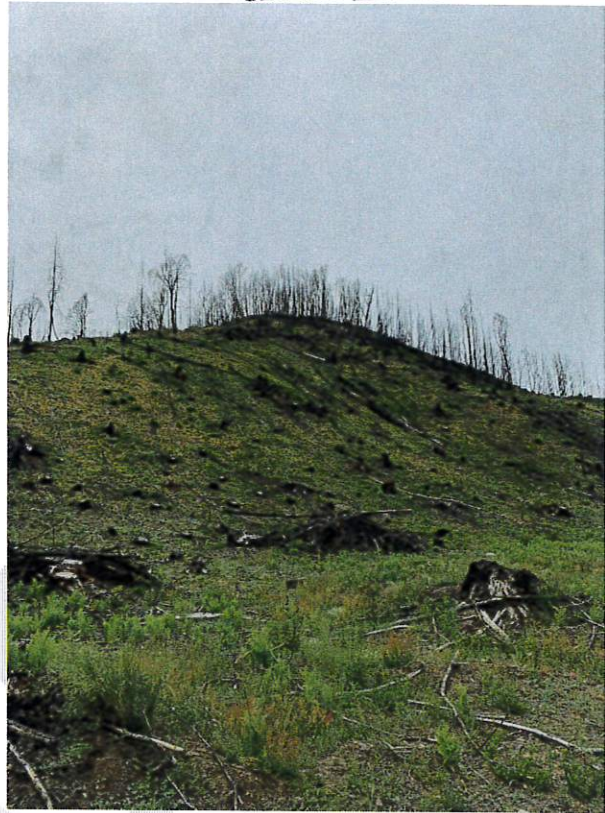
Responsible Party: Project Manager/HBMWD.

Verification of Compliance: Project Work Log

Monitoring Party: HBMWD

Initials: _____
Date: _____

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Appendix B Project Area Photos



41 Cattle Co. Reforestation unit. Armstrong Creek



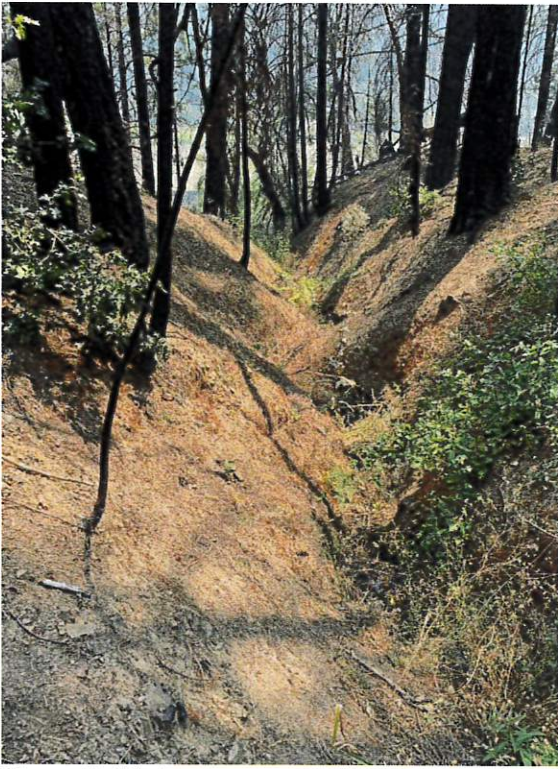
Meyer property late spring 2022



Meyer property winter 2022.



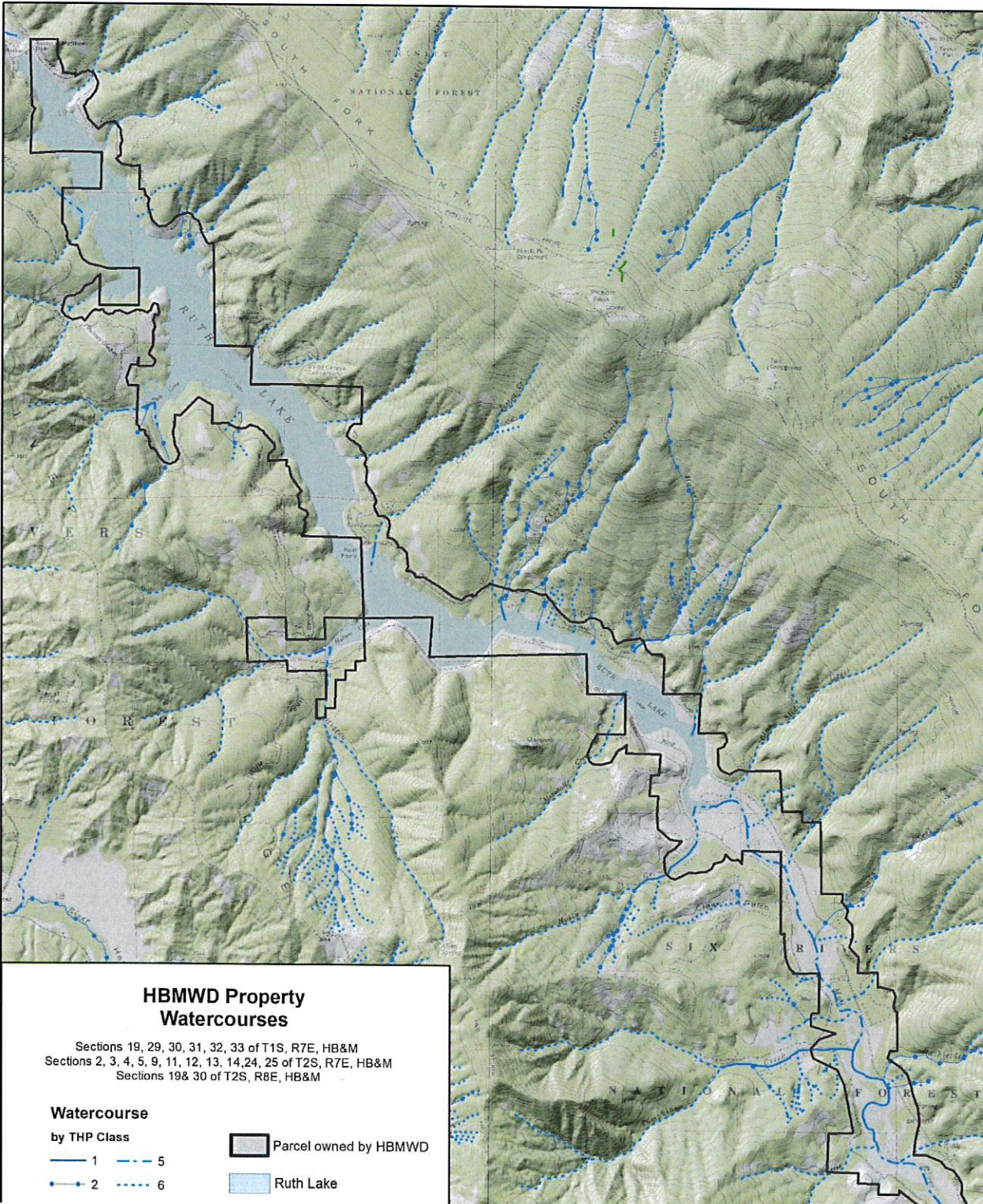
Example of HBMWD reforestation units on lands that had been salvaged logged post-fire.

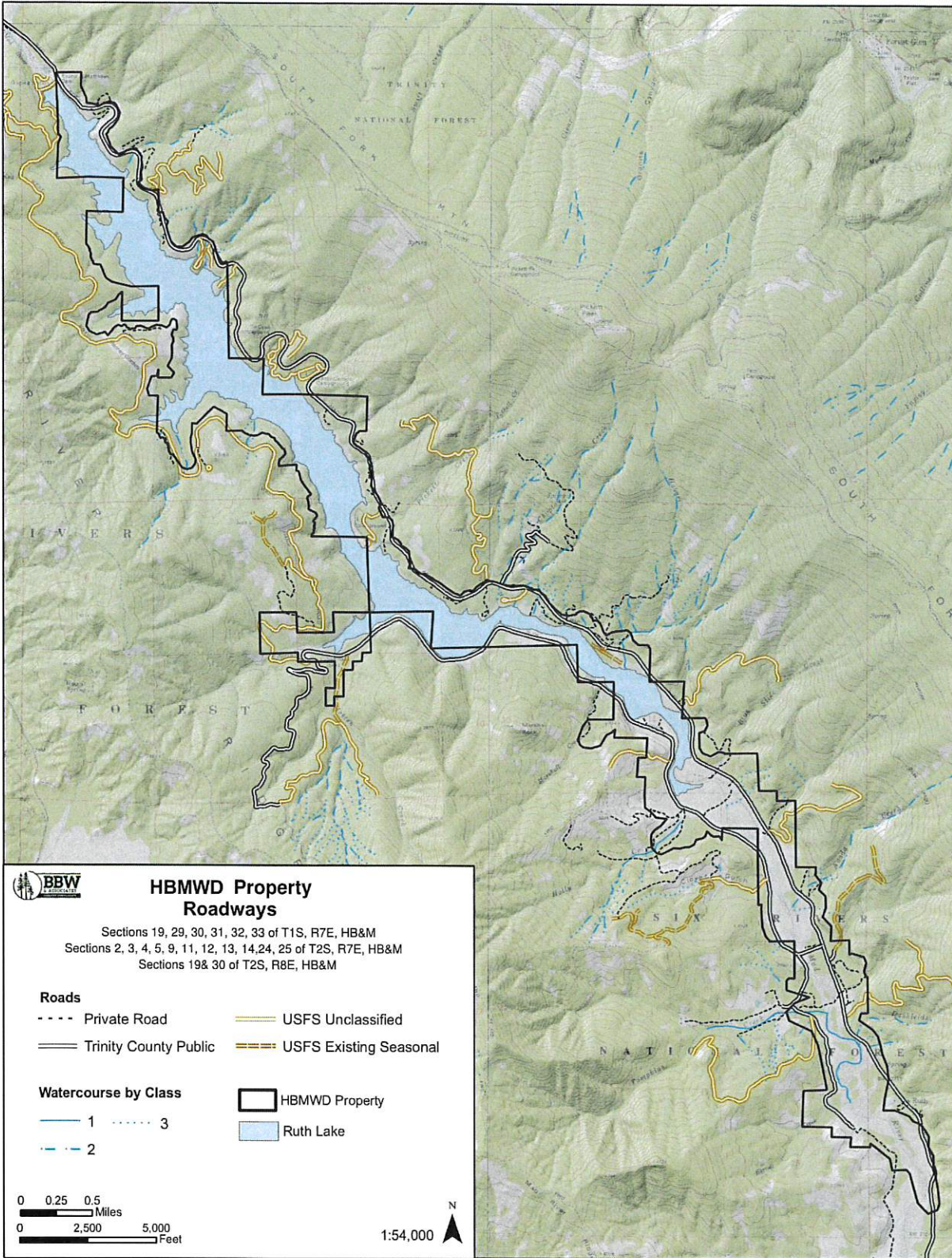


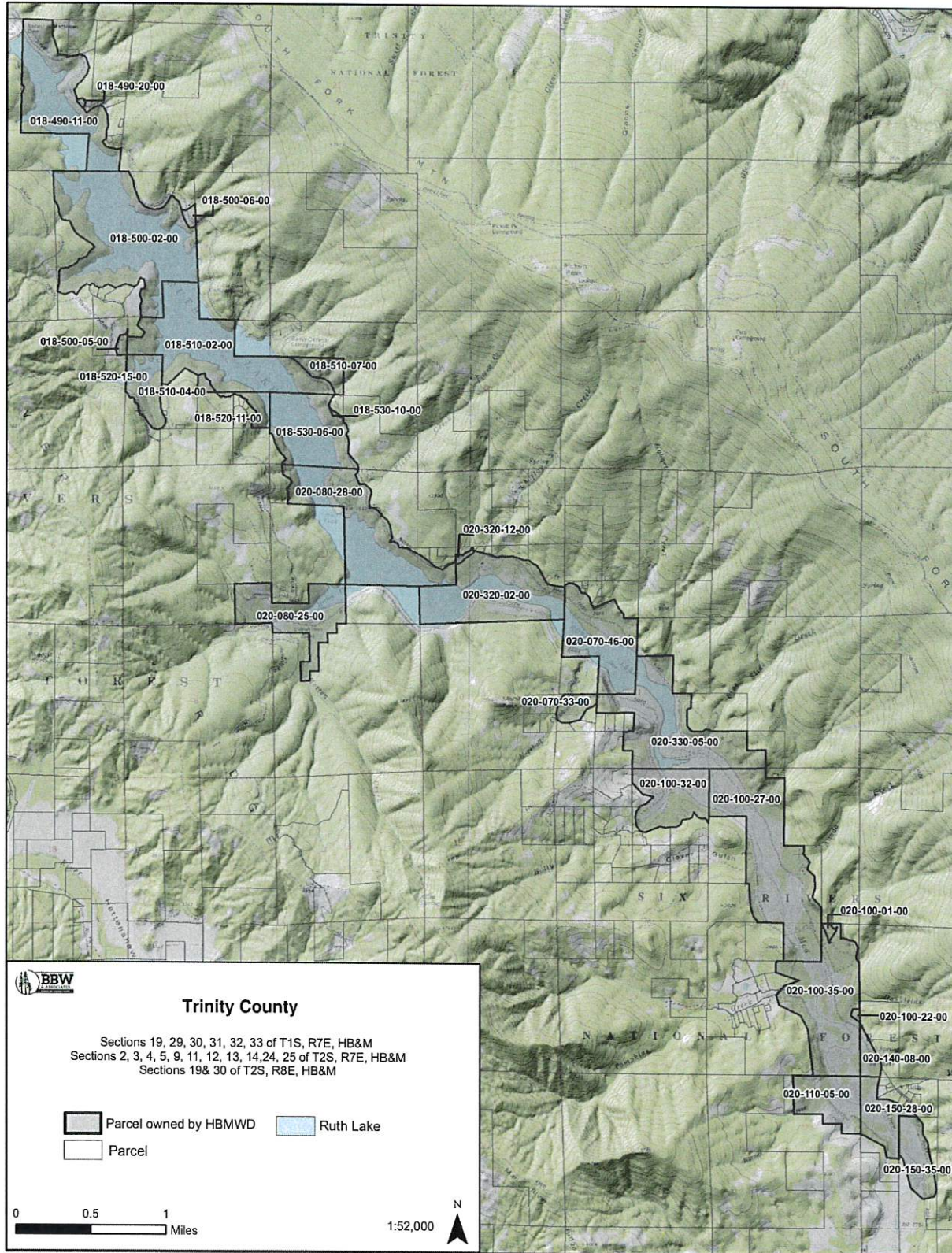
Class III Watercourse on HBMWD Lands

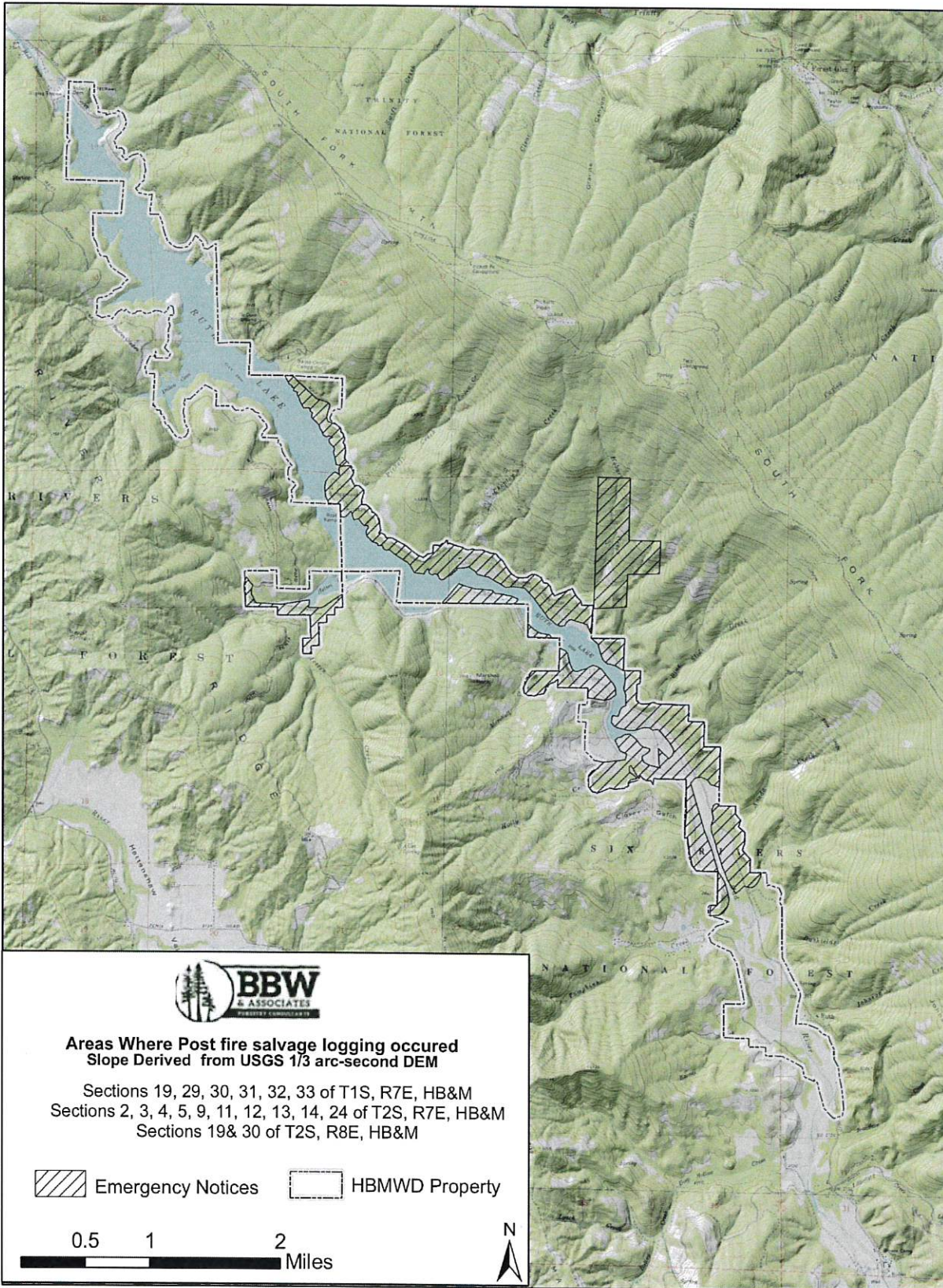
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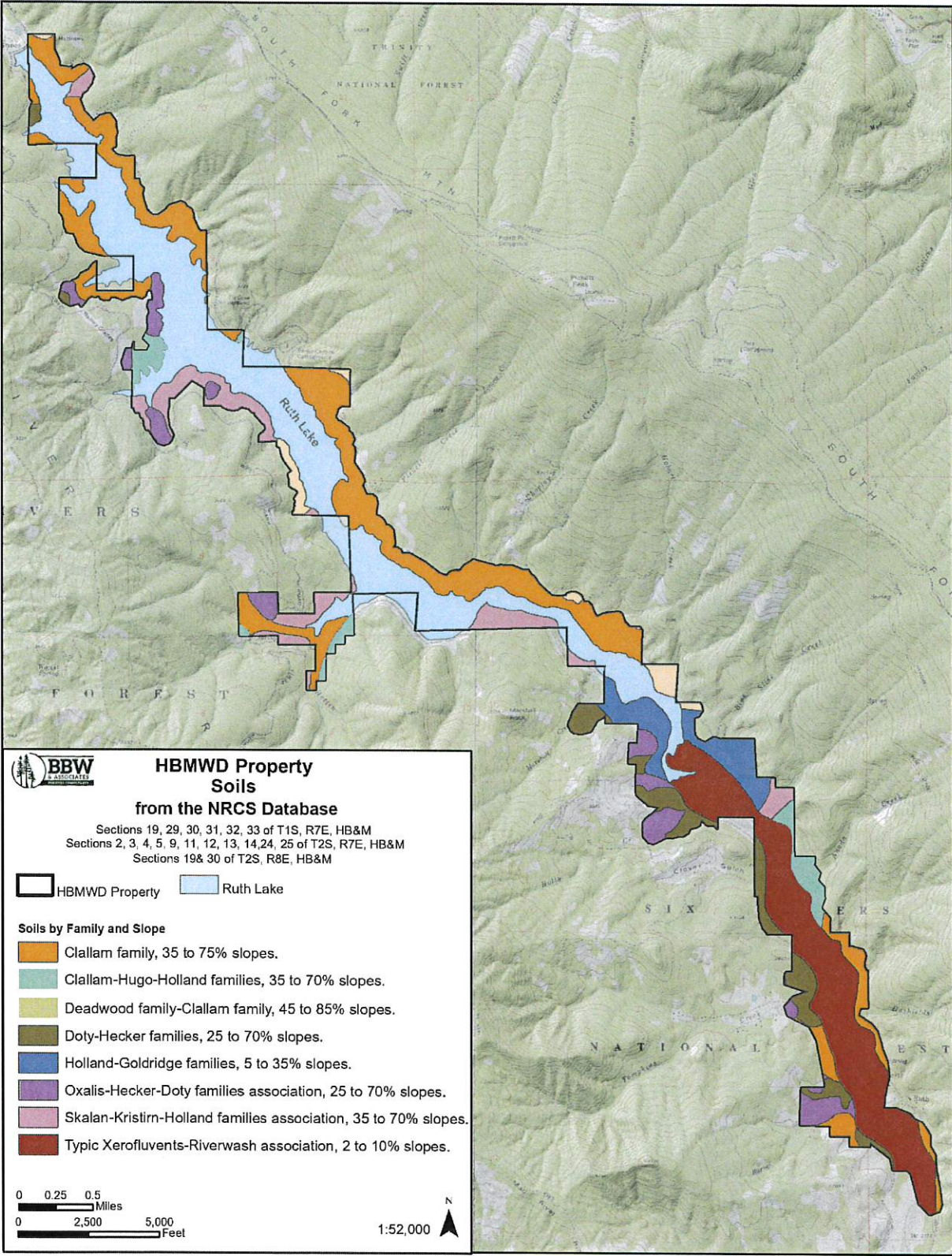
Appendix C- Project Area Maps

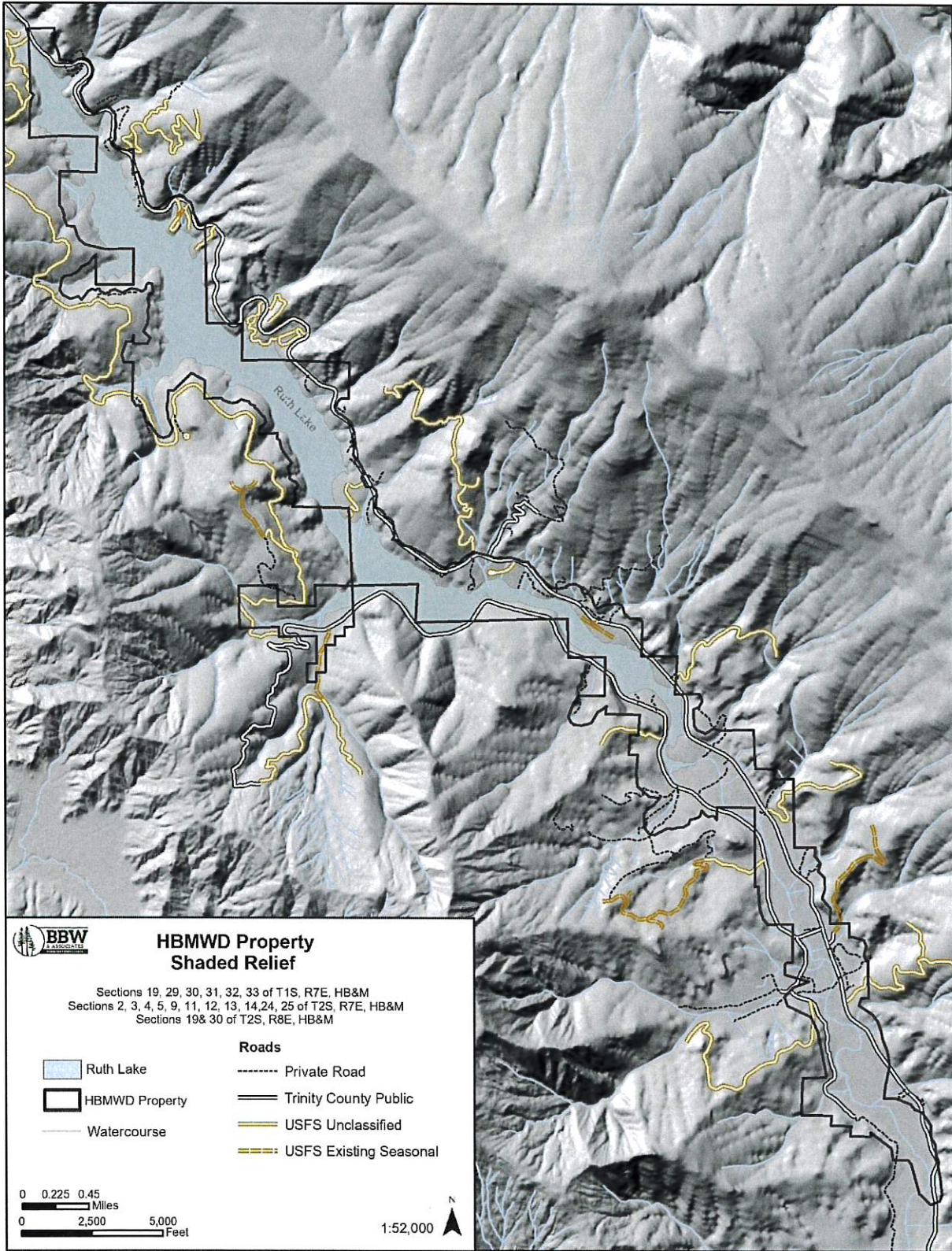


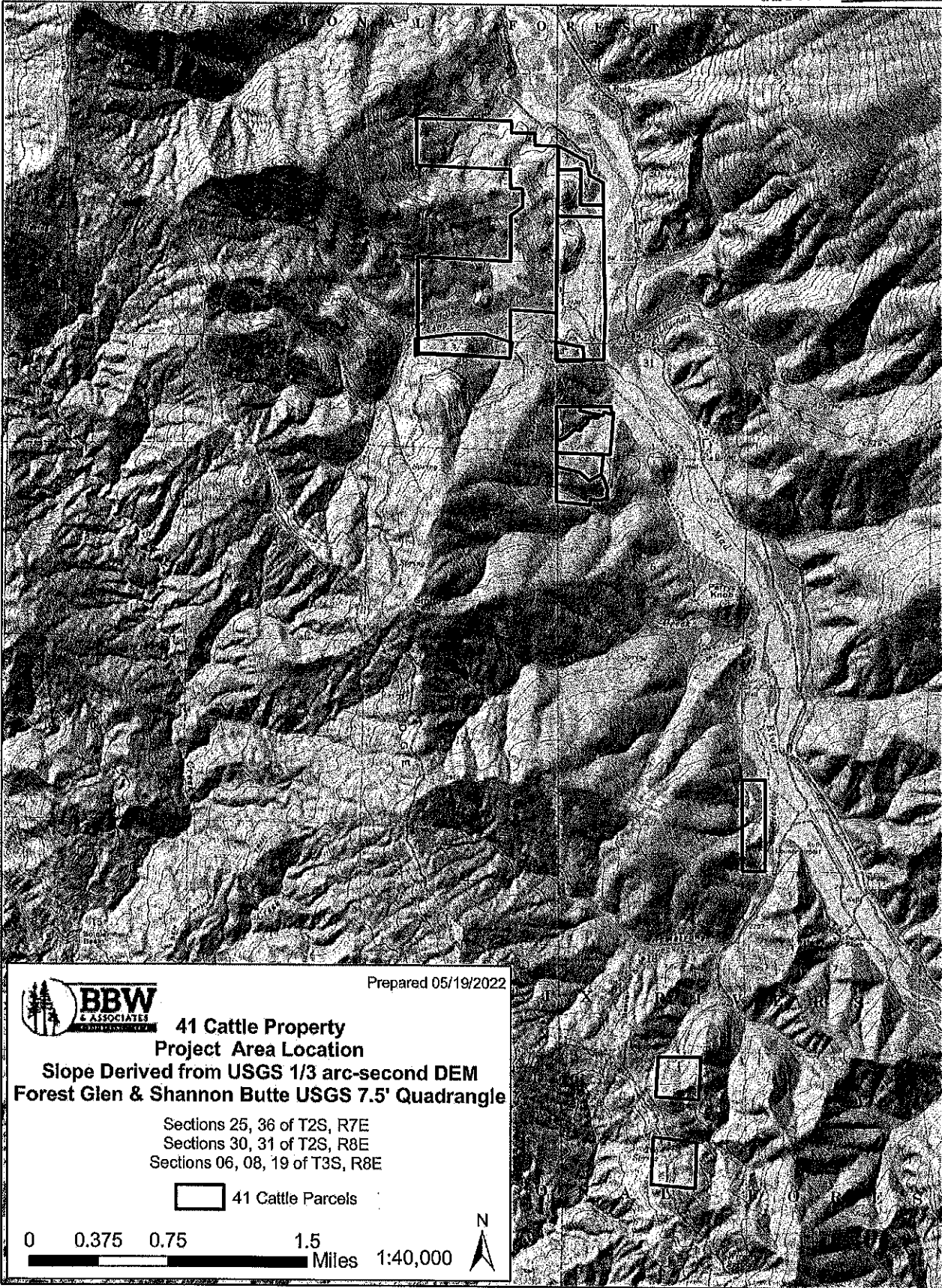


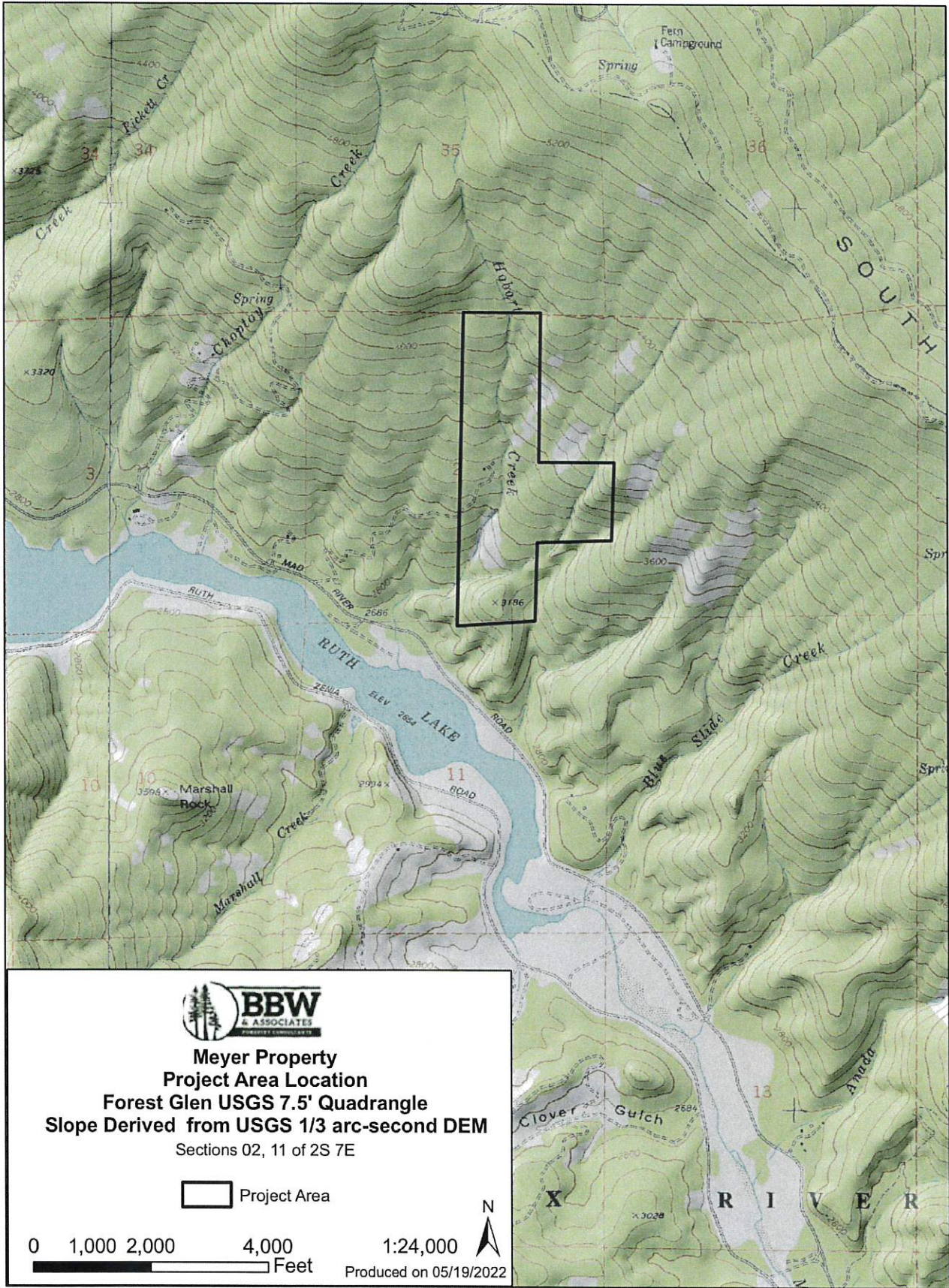








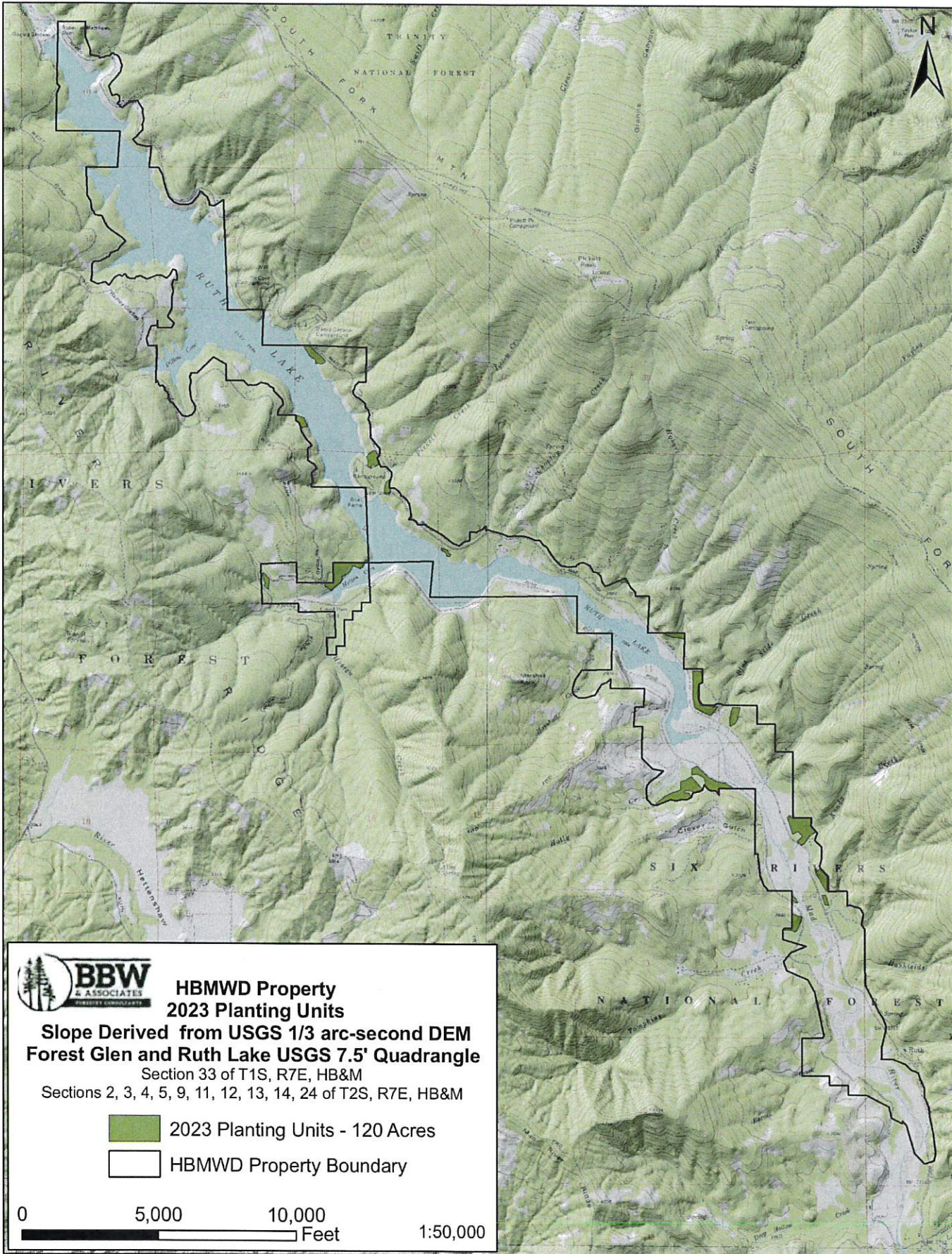


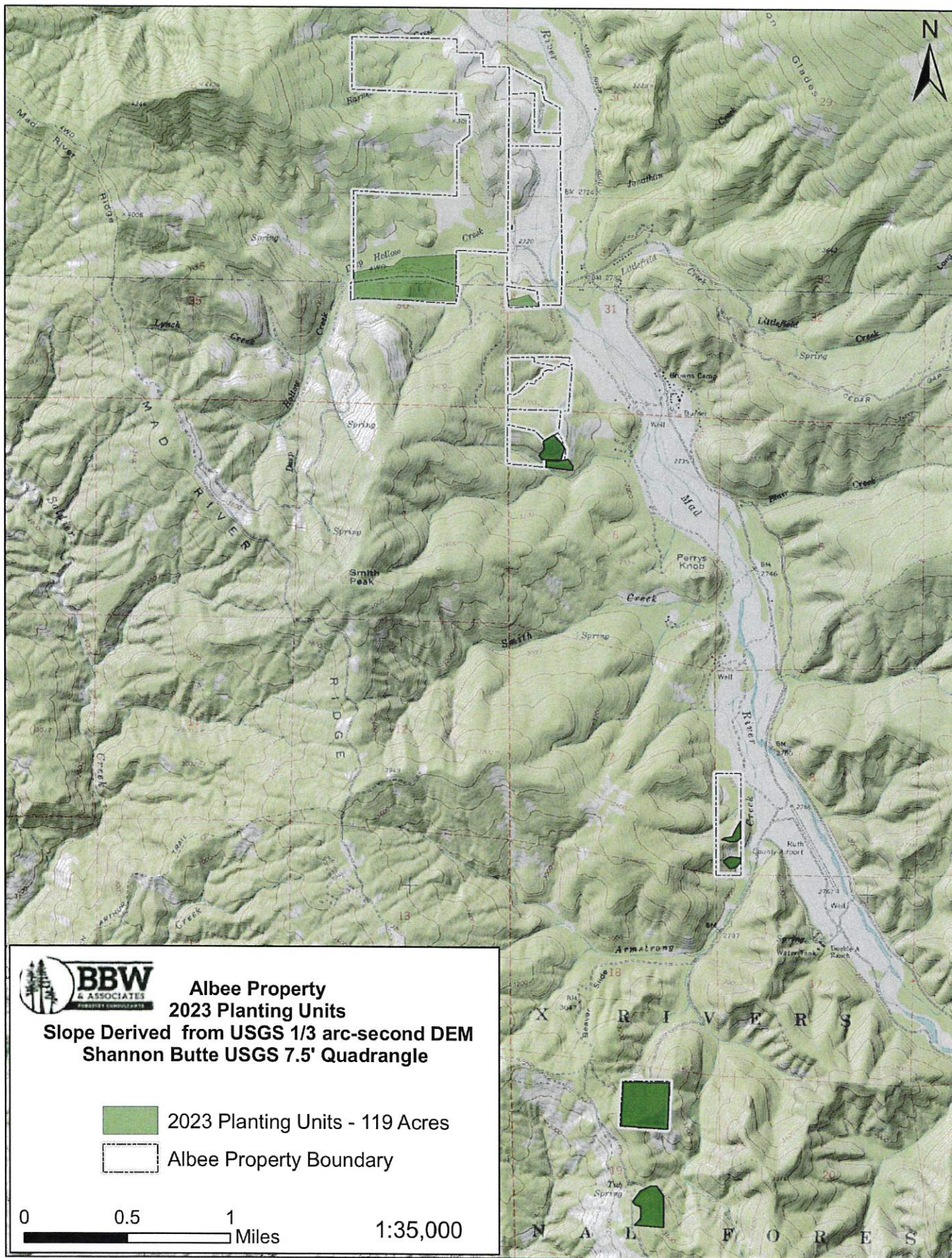


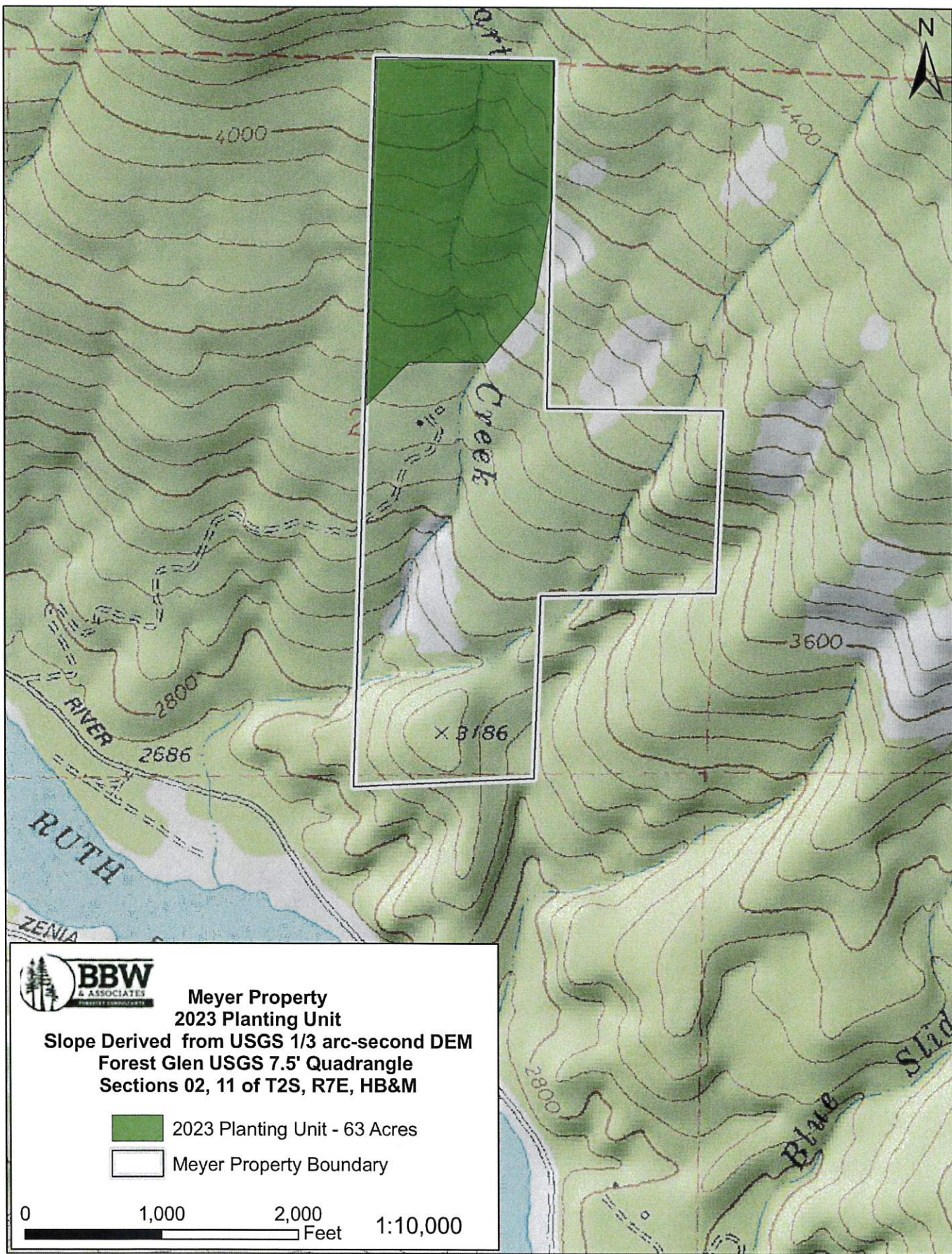
Meyer Property
Project Area Location
Forest Glen USGS 7.5' Quadrangle
Slope Derived from USGS 1/3 arc-second DEM
Sections 02, 11 of 2S 7E

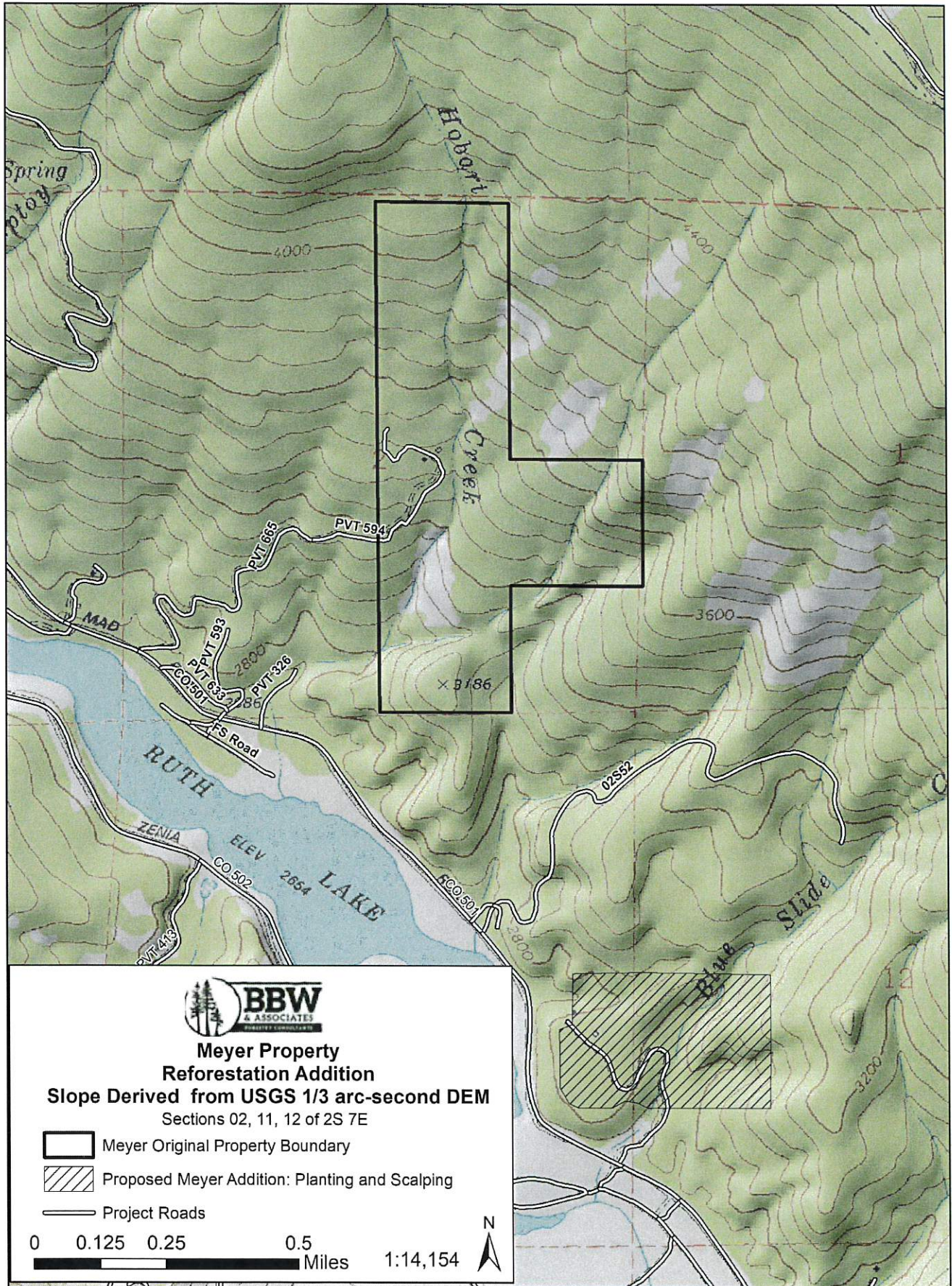
 Project Area

0 1,000 2,000 4,000 Feet
1:24,000
Produced on 05/19/2022

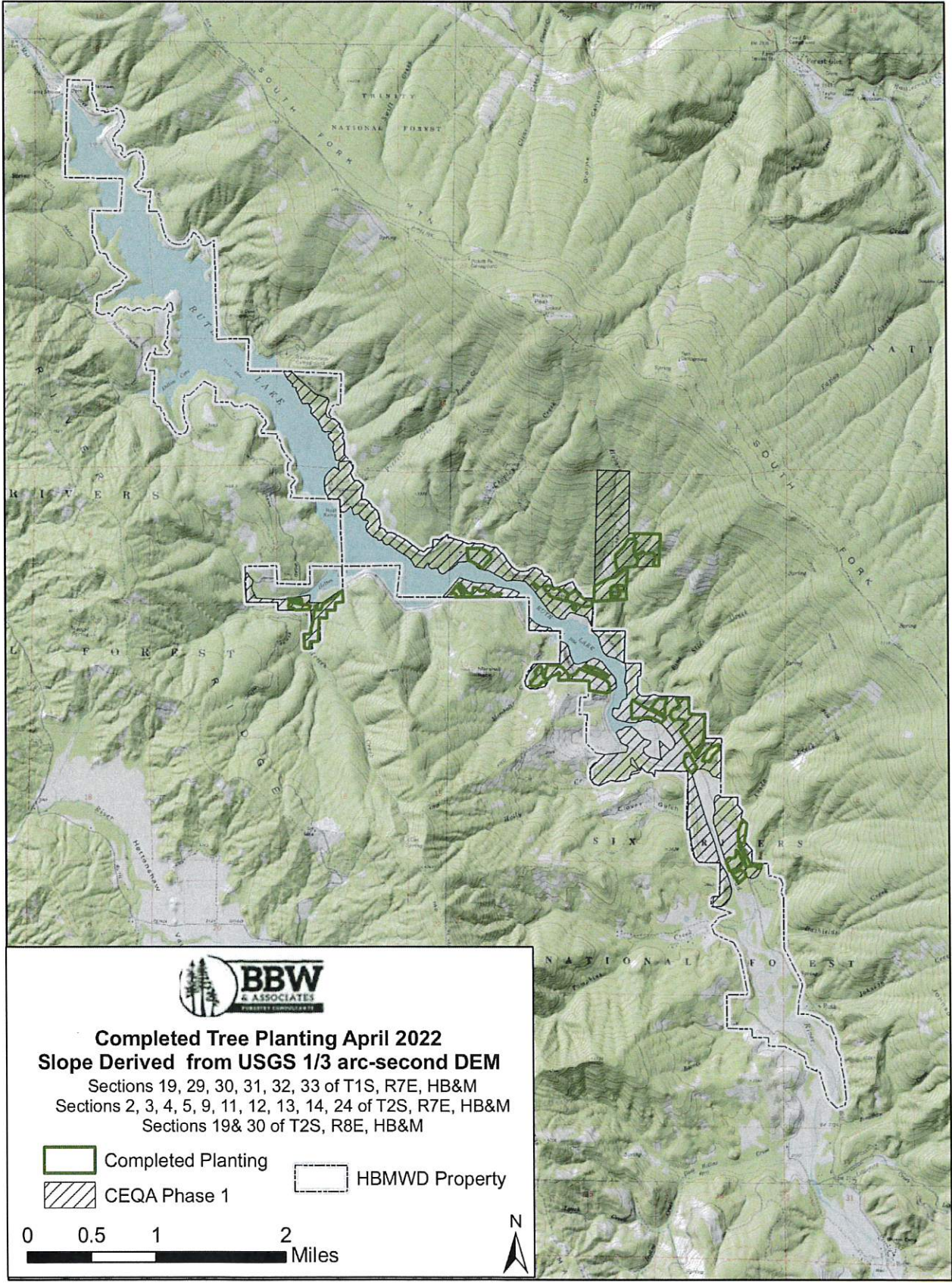


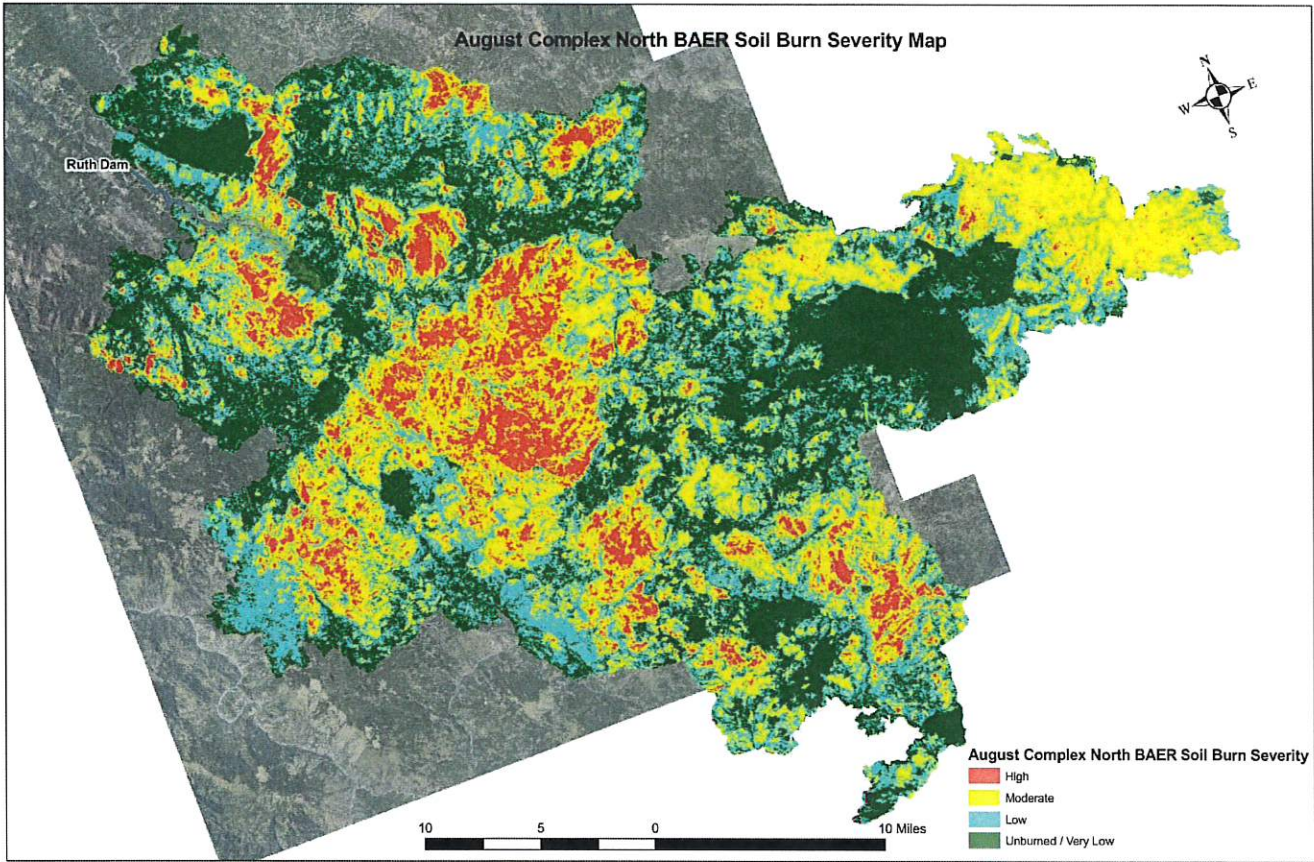






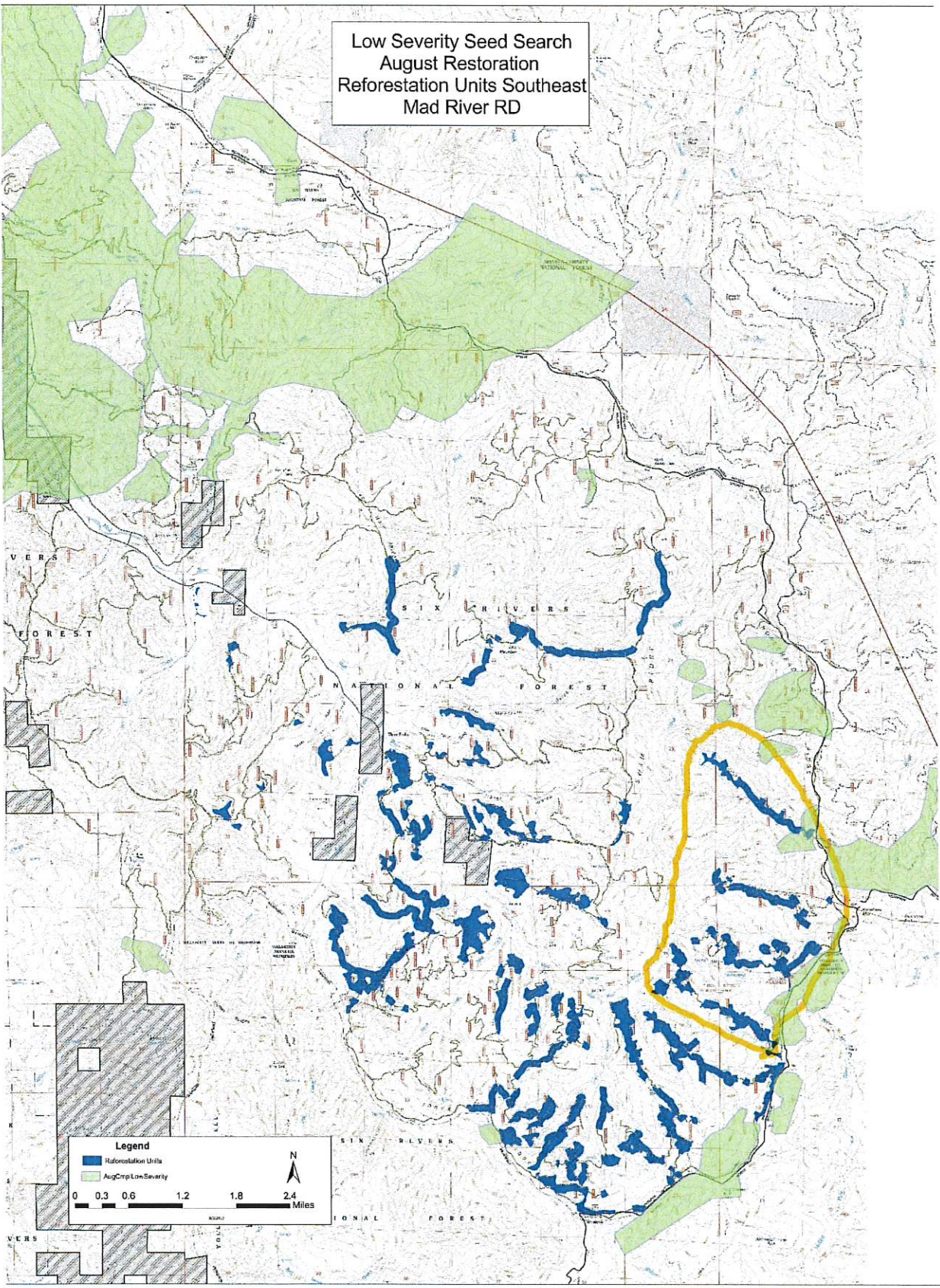
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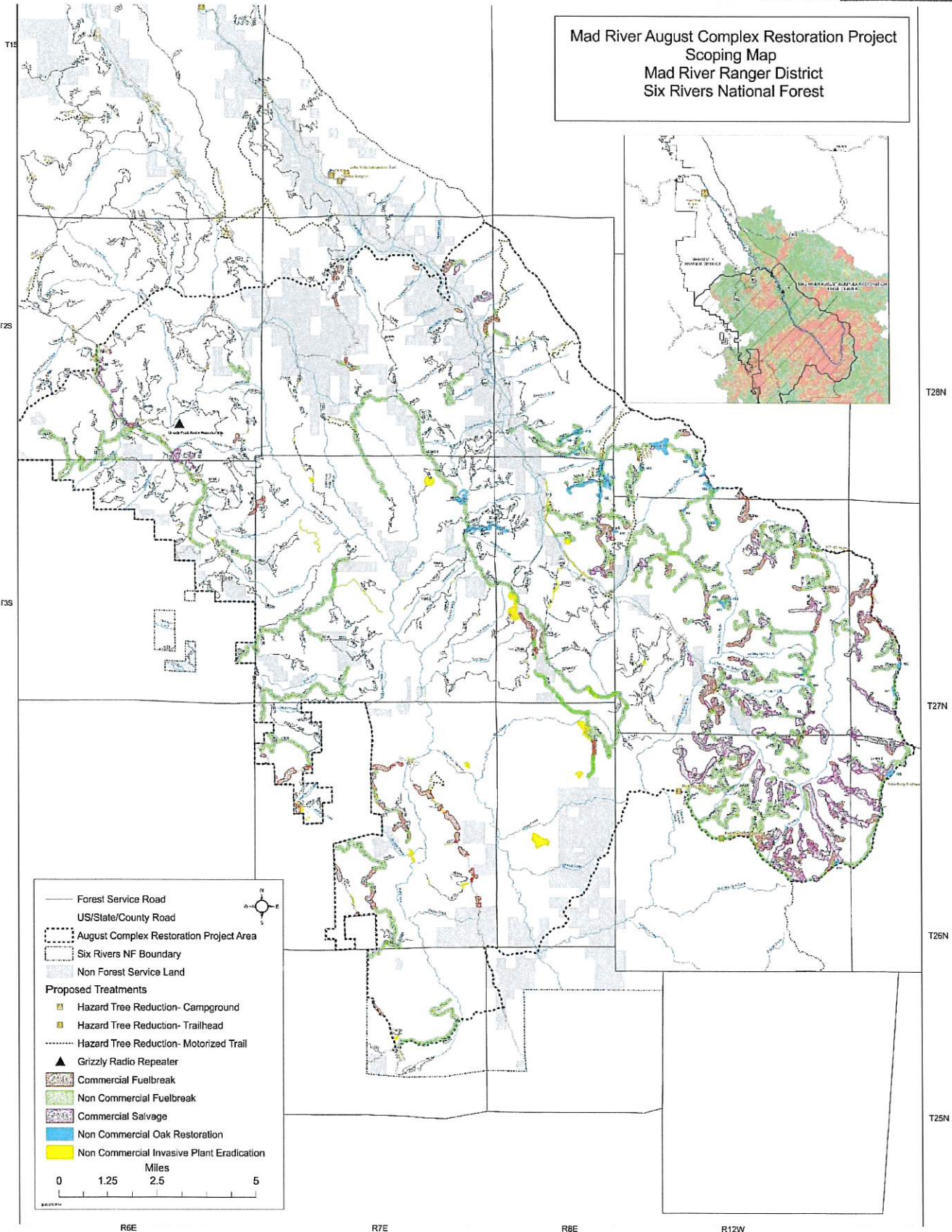


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Low Severity Seed Search
August Restoration
Reforestation Units Southeast
Mad River RD



Mad River August Complex Restoration Project
 Scoping Map
 Mad River Ranger District
 Six Rivers National Forest



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Appendix D- Other Attachments

California Natural Diversity Database Summaries
Erosion Hazard Rating Analysis

CALIFORNIA DEPARTMENT OF
FISH and WILDLIFE RareFind

Query Summary:
Quad IS (Forest Glen (4012333))

CNDDDB Element Query Results

| Scientific Name | Common Name | Taxonomic Group | Element Code | Total Occs | Returned Occs | Federal Status | State Status | Global Rank | State Rank | CA Rare Plant Rank | Other Status | Habitats |
|--------------------------|---------------------------------------|-----------------|--------------|------------|---------------|----------------|--------------|-------------|------------|--------------------|--|---|
| Ancotrema voyanum | hooded lance-tooth | Mollusks | IMGAS36130 | 173 | 3 | None | None | G1G2 | S1S2 | null | null | Oldgrowth, Riparian forest, Talus slope |
| Bombus caliginosus | obscure bumble bee | Insects | IHYM24380 | 181 | 1 | None | None | G2G3 | S1S2 | null | IUCN_VU-Vulnerable | null |
| Bombus occidentalis | western bumble bee | Insects | IHYM24250 | 306 | 1 | None | None | G2G3 | S1 | null | USFS_S-Sensitive | null |
| Cuscuta jepsonii | Jepson's dodder | Dicots | PDCUS01170 | 28 | 1 | None | None | G3 | S3 | 1B.2 | null | Broadleaved upland forest, Lower montane coniferous forest, Upper montane coniferous forest |
| Emys marmorata | western pond turtle | Reptiles | ARAAD02030 | 1404 | 2 | None | None | G3G4 | S3 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive | Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland |
| Epilobium oregonum | Oregon fireweed | Dicots | PDONAO60P0 | 62 | 1 | None | None | G2 | S2 | 1B.2 | USFS_S-Sensitive | Bog & fen, Lower montane coniferous forest, Meadow & seep, Ultramafic, Upper montane coniferous forest, Wetland |
| Frasera umpquaensis | Umpqua green-gentian | Dicots | PDGEN060F0 | 6 | 6 | None | None | G3 | S1 | 2B.2 | USFS_S-Sensitive | Chaparral, Lower montane coniferous forest, Meadow & seep, North coast coniferous forest |
| Haliaeetus leucocapillus | bald eagle | Birds | ABNKC10010 | 332 | 1 | Delisted | Endangered | G5 | S3 | null | BLM_S-Sensitive, CDF_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern, USFS_S-Sensitive | Lower montane coniferous forest, Oldgrowth |
| Hosackia yollabollensis | Yolla Bolly Mtns. bird's-foot trefoil | Dicots | PDFAB2A1F0 | 11 | 1 | None | None | G2 | S2 | 1B.2 | null | Meadow & seep, Upper montane coniferous forest |
| Miamna latibracteata | California globe mallow | Dicots | PDMALCK040 | 40 | 1 | None | None | G2G3 | S2 | 1B.2 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic | Chaparral, Lower montane coniferous |

| | | | | | | | | | | | | |
|-------------------------------------|---|------------|------------|------|---|-----------|----------------------|-------|------|------|---|---|
| | | | | | | | | | | | Garden, USFS_S-Sensitive | forest, North coast coniferous forest, Riparian scrub |
| Lasionycteris noctivagans | silver-haired bat | Mammals | AMACC02010 | 139 | 1 | None | None | G3G4 | S3S4 | null | IUCN_LC-Least Concern, WBWG_M-Medium Priority | Lower montane coniferous forest, Oldgrowth, Riparian forest |
| Lasiurus cinereus | hoary bat | Mammals | AMACC05030 | 238 | 1 | None | None | G3G4 | S4 | null | IUCN_LC-Least Concern, WBWG_M-Medium Priority | Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North coast coniferous forest |
| Lupinus elmeri | South Fork Mountain lupine | Dicots | PDFAB2B1G0 | 15 | 3 | None | None | G2 | S2 | 1B,2 | null | Lower montane coniferous forest |
| Oncorhynchus mykiss irideus pop. 36 | summer-run steelhead trout | Fish | AFCHA0213B | 20 | 1 | None | Candidate Endangered | G5T4Q | S2 | null | CDFW_SSC-Species of Special Concern | Aquatic, Klamath/North coast flowing waters, Sacramento/San Joaquin flowing waters |
| Oncorhynchus tshawytscha pop. 30 | chinook salmon - upper Klamath and Trinity Rivers ESU | Fish | AFCHA02056 | 6 | 1 | Candidate | Threatened | G5T2Q | S2 | null | CDFW_SSC-Species of Special Concern, USFS_S-Sensitive | Aquatic, Klamath/North coast flowing waters |
| Pandion haliaetus | osprey | Birds | ABNKC01010 | 504 | 3 | None | None | G5 | S4 | null | CDF_S-Sensitive, CDFW_WL-Watch List, IUCN_LC-Least Concern | Riparian forest |
| Pekania pennanti | Fisher | Mammals | AMAJF01020 | 655 | 2 | None | None | G5 | S2S3 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, USFS_S-Sensitive | North coast coniferous forest, Oldgrowth, Riparian forest |
| Piperia candida | white-flowered rein orchid | Monocots | PMORC1X050 | 222 | 2 | None | None | G3? | S3 | 1B,2 | null | Broadleaved upland forest, Lower montane coniferous forest, North coast coniferous forest, Ultramafic |
| Pillidium californicum | Pacific fuzzwort | Bryophytes | NBHEP2U010 | 177 | 1 | None | None | G4G5 | S3S4 | 4.3 | BLM_S-Sensitive | Lower montane coniferous forest, Upper montane coniferous forest |
| Rana boylei | foothill yellow-legged frog | Amphibians | AAABH01050 | 2478 | 4 | None | Endangered | G3 | S3 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened, USFS_S-Sensitive | Aquatic, Chaparral, Cismontane woodland, Coastal scrub, Klamath/North coast flowing waters, Lower montane coniferous forest, Meadow & seep, Riparian forest, Riparian woodland, Sacramento/San Joaquin flowing waters |
| Sanicula tracyi | Tracy's sanicle | Dicots | PDAP11Z0K0 | 80 | 1 | None | None | G4 | S4 | 4.2 | USFS_S-Sensitive | Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest |
| Sedum | pale | Dicots | PDCRA0A0L2 | 67 | 2 | None | None | G3 | S3 | 4.3 | null | Broadleaved |

CALIFORNIA DEPARTMENT OF
FISH and WILDLIFE **RareFind**

Query Summary:
Qued IS (Ruth Reservoir (4012334))

CNDDB Element Query Results

| Scientific Name | Common Name | Taxonomic Group | Element Code | Total Occs | Returned Occs | Federal Status | State Status | Global Rank | State Rank | CA Rare Plant Rank | Other Status | Habitats |
|-------------------------------------|-----------------------------|-----------------|--------------|------------|---------------|----------------|----------------------|-------------|------------|--------------------|---|---|
| Bombus caliginosus | obscure bumble bee | Insects | IIHYM24380 | 181 | 1 | None | None | G2G3 | S1S2 | null | IUCN_VU-Vulnerable | null |
| Emys marmorata | western pond turtle | Reptiles | ARAAD02030 | 1404 | 1 | None | None | G3G4 | S3 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive | Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland |
| Erethizon dorsatum | North American porcupine | Mammals | AMAFJ01010 | 523 | 2 | None | None | G5 | S3 | null | IUCN_LC-Least Concern | Broadleaved upland forest, Cismontane woodland, Closed-cone coniferous forest, Lower montane coniferous forest, North coast coniferous forest, Upper montane coniferous forest |
| Oncorhynchus mykiss irideus pop. 36 | summer-run steelhead trout | Fish | AFCHA0213B | 20 | 1 | None | Candidate Endangered | G5T4Q | S2 | null | CDFW_SSC-Species of Special Concern | Aquatic, Klamath/North coast flowing waters, Sacramento/San Joaquin flowing waters |
| Pandion haliaetus | osprey | Birds | ABNKC01010 | 504 | 9 | None | None | G5 | S4 | null | CDF_S-Sensitive, CDFW_WL-Watch List, IUCN_LC-Least Concern | Riparian forest |
| Pekania pennanti | Fisher | Mammals | AMAJF01020 | 555 | 2 | None | None | G5 | S2S3 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, USFS_S-Sensitive | North coast coniferous forest, Oldgrowth, Riparian forest |
| Rana boylei | foolhill yellow-legged frog | Amphibians | AAABH01050 | 2478 | 3 | None | Endangered | G3 | S3 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened, USFS_S-Sensitive | Aquatic, Chaparral, Cismontane woodland, Coastal scrub, Klamath/North coast flowing waters, Lower montane coniferous forest, Meadow & seep, Riparian forest, Riparian woodland, Sacramento/San Joaquin flowing waters |
| Sanicula tracyi | Tracy's sanicle | Dicots | PDAFH20K0 | 80 | 8 | None | None | G4 | S4 | 4.2 | USFS_S-Sensitive | Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest |
| Silene bolanderi | Bolander's catchfly | Dicots | PDCAR0U2L0 | 30 | 1 | None | None | G2 | S2 | 1B.2 | null | Chaparral, Cismontane woodland, Lower montane coniferous forest, Meadow & seep, |

CALIFORNIA DEPARTMENT OF
FISH and WILDLIFE RareFind

Query Summary:
 Quad IS (Shannon Butte (4012323))

CNDDDB Element Query Results

| Scientific Name | Common Name | Taxonomic Group | Element Code | Total Occs | Returned Occs | Federal Status | State Status | Global Rank | State Rank | CA Rare Plant Rank | Other Status | Habitats |
|-------------------------------|-----------------------------|-----------------|--------------|------------|---------------|----------------|--------------|-------------|------------|--------------------|--|---|
| <i>Accipiter gentilis</i> | northern goshawk | Birds | ABNKC12060 | 433 | 1 | None | None | G5 | S3 | null | BLM_S-Sensitive, CDF_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive | North coast coniferous forest, Subalpine coniferous forest, Upper montane coniferous forest |
| <i>Emys marmorata</i> | western pond turtle | Reptiles | ARAAD02030 | 1404 | 3 | None | None | G3G4 | S3 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive | Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland |
| <i>Ptilidium californicum</i> | Pacific fuzzwort | Bryophytes | NBHEP2U010 | 177 | 1 | None | None | G4G5 | S3S4 | 4.3 | BLM_S-Sensitive | Lower montane coniferous forest, Upper montane coniferous forest |
| <i>Rana boylei</i> | foothill yellow-legged frog | Amphibians | AAABH01050 | 2478 | 7 | None | Endangered | G3 | S3 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened, USFS_S-Sensitive | Aquatic, Chaparral, Cismontane woodland, Coastal scrub, Klamath/North coast flowing waters, Lower montane coniferous forest, Meadow & seep, Riparian forest, Riparian woodland, Sacramento/San Joaquin flowing waters |
| <i>Sanicula tracyi</i> | Tracy's sanicle | Dicots | PDAP11Z0K0 | 80 | 5 | None | None | G4 | S4 | 4.2 | USFS_S-Sensitive | Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest |
| <i>Tribolopsis tehamana</i> | Tehama chaparral | Mollusks | IMGASA2040 | 12 | 1 | None | None | G2 | S1 | null | USFS_S-Sensitive | null |

| | | | | | | | | | | | | | |
|---------------------------|---------------------------|--------|------------|----|---|------|------|----|------|------|------|--|---|
| flavidum | yellow stonecrop | | | | | | | | | | | | upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Ultramafic, Upper montane coniferous forest |
| Silene hookeri | Hooker's catchfly | Dicots | PDCAR0J2M0 | 31 | 3 | None | None | G4 | S2 | 2B.2 | null | | Chaparral, Cismontane woodland, Lower montane coniferous forest, Ultramafic |
| Upland Douglas Fir Forest | Upland Douglas Fir Forest | Forest | CTT82420CA | 15 | 1 | None | None | G4 | S3.1 | null | null | | North coast coniferous forest |

ESTIMATED SURFACE SOIL EROSION HAZARD

| | |
|-----------------|-----------------------|
| I. SOIL FACTORS | FACTOR RATING BY AREA |
|-----------------|-----------------------|

| | Shallow | Moderate | Deep | | | |
|--------|---------|----------|------------|---|---|---|
| | 1"-19" | 20"-39" | 40"-60"(+) | | | |
| Rating | 15-9 | 8-4 | 3-1 | 1 | 1 | 1 |

C. PERCENT SURFACE COARSE FRAGMENTS GREATER THAN 2MM IN SIZE INCLUDING ROCKS OR STONES

AVERAGE EROSION HAZARD RATING FOR THE PROJECT AREA

| Rating | Low | Moderate | High | 1 | 1 | 2 | FACTOR RATING BY AREA | | |
|----------|------------|----------|---------|---|---|---|-----------------------|----|----|
| | (-) 10-39% | 40-70% | 71-100% | | | | | | |
| | 10-6 | 5-3 | 2-1 | | | | A | B | C |
| SUBTOTAL | | | | | | | 23 | 28 | 24 |

II. SLOPE FACTOR

| Slope | 5-15% | 16-30% | 31-40% | 41-50% | 51-70% | 71-80%(+) | | | |
|--------|-------|--------|--------|--------|--------|-----------|---|----|---|
| Rating | 1-3 | 4-6 | 7-10 | 11-15 | 16-25 | 26-35 | 6 | 10 | 6 |

III. PROTECTIVE VEGETATIVE COVER REMAINING AFTER DISTURBANCE

| | Low | Moderate | High | 12 | 12 | 8 |
|--------|-------|----------|---------|----|----|---|
| | 0-40% | 41-80% | 81-100% | | | |
| Rating | 15-8 | 7-4 | 3-1 | | | |

IV. TWO YEAR, ONE-HOUR RAINFALL INTENSITY (Hundredths Inch)

| | Low | Moderate | High | Extreme | 6 | 6 | 6 |
|----------------------|-----------|----------|-------|-----------|----|----|----|
| | (-) 30-39 | 40-59 | 60-69 | 70-80 (+) | | | |
| Rating | 1-3 | 4-7 | 8-11 | 12-15 | | | |
| TOTAL SUM OF FACTORS | | | | | 47 | 56 | 44 |

EROSION HAZARD RATING

| | | | | | | | |
|----------------------|---------|----------|----------|-------------|---|---|---|
| | <50 | 50-65 | 66-75 | >75 | | | |
| | LOW (L) | MODERATE | HIGH (H) | EXTREME (E) | | | |
| THE DETERMINATION IS | | | | | L | M | L |

DRAFT



HUMBOLDT BAY MUNICIPAL WATER DISTRICT

Request for Qualifications

Collector Mainline Redundancy Project, Humboldt County, California

Engineering, Environmental Review and Compliance,
Permitting, Construction Management, and
Grant Program Management

A. Invitation

The Humboldt Bay Municipal Water District (District) is inviting qualified consultants to submit a Statement of Qualifications (SOQ) and other materials, in accordance with the outline below, to be considered for selection by the District to perform the following services:

- 1) Complete a variety of engineering, environmental, permitting, construction management, and other services as described herein for the District's Collector Mainline Redundancy Project.
- 2) Assist the District with the administration and management of the FEMA Hazard Mitigation grant that will fund this project.

[2 C.F.R. § 200.32 (b) (2)]

The deadline to submit an SOQ is 3:00 p.m. on Friday February 3, 2023.

Questions regarding this RFQ must be submitted via email to: friedenbach@hbmwd.com. Answers will be posted on HBMWD.com in a Question & Answer format. Deadline for submitting any questions is: 5:00 p.m. on January 17, 2023.

B. Funding Sources and SOQ Submission Restrictions

Funding for this project will be provided in part by the Federal Emergency Management Agency (FEMA) and the California Office of Emergency Services (Cal OES) via the Robert T. Stafford Emergency Assistance and Disaster Relief Act for a FEMA Hazard Mitigation Grant Program (HMGP) project.

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

The project will be executed in two phases as described in more detail in Section D – Project Overview. Currently, funding is only awarded for Phase One services. The result of this RFQ process is that the District will contract with the selected firm to perform Phase One and Phase Two services. Performance of Phase Two services are conditioned and contingent upon the

District receiving Phase 2 funding from FEMA for the project. Upon receiving Phase Two funding, the District reserves the right to award Phase Two contract services to the consulting firm/team that is selected as a result of this RFQ process. However, the execution of a contract for Phase One services does not guarantee the award of a contract for Phase Two services.

C. Categories of Services

The District is seeking a consultant firm or team to provide services necessary to facilitate construction of a new redundant pipeline from West End Road up to the District's Turbidity Reduction Facility (TRF), as well as other related project components. A single consultant firm or team will be selected encompassing all the required engineering and environmental disciplines. The disciplines that are required include, but are not limited to, the following:

1. Project planning and preliminary engineering.
2. Engineering economic and technical analyses.
3. Surveying, topographic mapping, and land/right-of-way documentation and research.
4. Geotechnical evaluation and engineering.
5. Engineering design of new pipeline up to the TRF and other project components.
6. Environmental – completion of special studies, preparation and circulation of appropriate California Environmental Quality Act (CEQA) document, and support of FEMA's National Environmental Protection Act (NEPA) process.
7. Permitting – preparation of all required permit applications and related work to secure required permits.
8. Preparation of plans, specifications, cost estimates, and bid documents for project construction.
9. Engineering and construction management services during bid process and project construction.

D. Project Overview

The District provides wholesale water to several communities in Humboldt County. The District's source water comes from radial collector wells on the Mad River. The source water from these collectors ultimately comes together into one common pipeline (collector mainline) that traverses from the District's operation facilities at Essex up to the District's TRF on Korblex hill near Arcata, California for treatment and storage.

The proposed Project consists of geotechnical, surveying, design, environmental, permitting, bidding, and construction management services for the installation of the following:

1. A redundant pipeline to the TRF that will provide the District with an alternate means for getting water to its customers in the event of a seismic event that caused a failure of the sole existing collector mainline.
2. A rerouting of the 24-inch pipeline that runs under the Essex Control Building, thereby eliminating the risk of the existing line rupturing beneath the building, which could render the District's Control Center and main SCADA servers inoperable.

The existing collector mainline follows Pipeline Road, which wraps around to the north/west end of the TRF. Under this project (see the grant application figures in Attachment C.4 and the Focused Engineering Study in Attachment E), it is anticipated that a new redundant collector mainline will tie into the existing line approximately 150 feet east of Pipeline Road on West End Road. It will then veer to the west off West End Road. The new pipeline will then traverse westward, approach the TRF from the south, and connect back up to the existing mainline at the TRF. The construction of the redundant pipeline will provide an alternate pipeline alignment for getting water to the TRF for treatment, storage, and distribution to the District's customers.

There is potential for a portion of the new collector mainline to be installed via horizontal directional drilling (HDD). This potential shall be analyzed further during the design phase, with considerations for both cost and environmental implications of installing the new pipeline via HDD or standard open-cut trenching methods.

The proposed project also includes rerouting the existing 24-inch pipeline that runs under the District's Essex Control Building, thereby eliminating the potential risk of the pipeline under the building failing, damaging the District's main SCADA servers, and rendering the main control center inoperable.

This project will be accomplished with a two-phased approach. Phase One will include a geotechnical investigation and topographic surveying to facilitate preliminary engineering design, which will be used to determine project boundaries to perform special studies sufficient for FEMA to complete the National Environmental Protection Act (NEPA) process. Phase One will also include preliminary land/right-of-way (ROW) documentation and research. Phase One funding has been awarded (see the Phase One Grant Award Letter in Attachment D). The award of Phase Two funding is contingent upon FEMA's review of the Phase One deliverables and their completion of the NEPA process. If Phase Two funding is awarded, tasks will include finalizing the land/ROW documentation research (if required), finalizing the design, permitting and developing a CEQA document, and construction of the project with associated construction management.

E. Selection Process

The District will establish a Selection Committee to review the SOQ submittals received. The Selection Committee will request a price proposal from the most qualified firm/team that is subject to negotiation of a fair and reasonable price. The District's board of directors will approve the final proposal.

F. Work to be Completed

The Consultant shall perform the following required tasks:

Phase One – Preliminary Design and Investigations

1. Project Management

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

2. Quality Control and Quality Assurance of all work products**3. Grant Administration**

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

4. Geotechnical Investigation

- 4.1 Install borings sufficient to gather enough data to allow for pipeline design.
- 4.2 Prepare a final geotechnical report detailing the findings of the investigation and providing conclusions and recommendations, with an analysis of feasibility for horizontal directional drilling based on subsurface conditions.

5. Topographic Surveying

- 5.1 Take ground shots sufficient to create a digital terrain model with elevation contours.
- 5.2 Provide locations of property lines, roads, structures, underground utilities, fences, trees, and other topographic items.

6. Preliminary Land/Right-of-Way Research and Documentation

- 6.1 Conduct research to determine the status of easements, rights-of-way, and ownership along the proposed pipeline alignment.

7. Preliminary Engineering Design

- 7.1 Review utility records and surveys, geotechnical data, and relevant reports to support project scoping and preliminary engineering.
- 7.2 Hydraulic calculations verifying the appropriate system components, configurations, and pipe sizing.
- 7.3 Determine the most feasible, constructible, cost-effective, environmentally superior pipeline alignment and construction methods that will meet the intent of the grant.
- 7.4 Develop 30% design drawings sufficient for establishing a project study boundary / area of potential effects for performing NEPA and CEQA special studies.
- 7.5 Prepare an opinion of probable construction cost based on the 30% design.
- 7.6 Document basis of design.

8. Environmental Special Studies

- 8.1 Conduct site-specific botanical, biological, sensitive communities, wetlands, and cultural/archaeological resources studies during calendar year 2023 sufficient to allow for the completion of the NEPA and CEQA processes and other permits that may be required for the project. Note that NEPA will be completed by FEMA after Phase One tasks are completed, and CEQA and other permitting will be completed during Phase Two.
- 8.2 Phase I Investigation (if required) – Complete a limited Phase I investigation, if required, to assess whether it is likely that any hazardous materials or impacted soil or groundwater will be encountered during the construction of the proposed project.
- 8.3 Complete any other studies required by permitting agencies, FEMA, or Cal OES.

Phase Two (award not guaranteed) – Final Analyses, Design, and Construction**9. Project Management**

- 9.1 Attend and document design meetings
- 9.2 Prepare correspondence
- 9.3 Manage subcontractors
- 9.4 Maintain project files
- 9.5 Manage and direct overall design and environmental teams

10. Quality Control and Quality Assurance of all work products**11. Grant Administration**

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

12. Final Land/Right-of-Way Research and Documentation

- 12.1 If required, finalize research and documentation that is begun as described in Task 6 under Phase One.

13. CEQA and Permitting

- 13.1 Prepare an appropriate CEQA document for the project, which is assumed to be a Mitigated Negative Declaration.
- 13.2 Prepare permit applications, coordinate with and respond to requests of the permitting or regulatory agencies, and acquire all necessary permits
- 13.3 The following permits may be required depending on the final design and regulatory jurisdiction:
 - U.S. Army Corps of Engineers Section 404 permit
 - CA North Coast Regional Water Quality Control Board Section 401 Certification and NPDES Construction permit
 - Humboldt County Encroachment Permit

14. Final Engineering Design

- 14.1 Develop design documents including plans, specifications, other necessary bid and contract documents, and opinion of probable construction cost at three stages of completion - 60%, 90%, and 100%.

15. Bid Assistance

- 15.1 Distribute and advertise plans and specifications for a competitive sealed bid process for project construction.
- 15.2 Review and evaluate construction bids for compliance with project specifications. Ensure the low-cost bidder is responsible and responsive (per CA state law), meets the project bond requirements, holds a valid contractor license, is registered with the California Department of Industrial Relations, and is not ineligible for participation in federal assistance programs.
- 15.3 Following review, provide to District staff and board of directors a recommendation for award.

16. Inspection and Construction Management Services

- 16.1 Provide inspection and construction observation services to confirm whether contractor meets obligations of the contract documents.
- 16.2 Develop agendas and minutes for project construction coordination meetings.
- 16.3 Respond to contractor's requests for information.
- 16.4 Review and assist District with processing legitimate change orders.
- 16.5 Review and assist District with processing pay requests.
- 16.6 Review contractor red line drawings for adequacy and accuracy.
- 16.7 Prepare complete Record Drawings in AutoCAD format.
- 16.8 Prepare contract closeout documents and file Notice of Completion. All documents to be provided in hard copy as well as electronic formats. All electronic formats to be in pdf and native file formats.

G. Consultant Selection Schedule

| Event | Date |
|--|------------------------------|
| Issue Request for Qualifications | December 29, 2022 |
| Deadline to submit questions | January 17, 2023 (5:00 p.m.) |
| Deadline for addenda to be issued | January 20, 2023 |
| Deadline to submit SOQ | February 3, 2023 (3:00 p.m.) |
| Selection Committee review completed | February 8, 2023 |
| Most qualified firm/team submits scope/fee | February 15, 2023 |
| Contract negotiation complete | February 22, 2023 |
| District Board approves award | February 23, 2023 |

H. Statement of Qualifications

Firms or teams who are interested in providing the consultant services described above are to submit a Statement of Qualifications (SOQ) **not exceeding 30 pages in length** (not including cover letter and table of contents) that includes the following:

1. Identification of prime and subconsultants: include key personnel (those who will provide the majority of the labor hours) and lead persons to be assigned to the project. Please be specific about education and background of the key staff as well as current and past participation directly with the primary applicant. Short resumes of key participants must be included.
2. Demonstration of firm/team technical competency and firm/team capacity to complete the required work.
3. A minimum of two project descriptions of projects that were completed within the last ten years by the proposed staff similar to the Collector Mainline Redundancy Project. Please cross reference key team members to the listed projects. Please provide a reference name and contact information for the project owner.
4. Demonstration of knowledge of Federal, State and local laws, rules, regulations or ordinances relevant to this project.
5. Demonstration of knowledge of FEMA's Hazard Mitigation Grant program as it relates to this project. Identification of Cal OES or FEMA grant administration staff with whom firm/team has worked.
6. Conceptual approach.

7. Schedule for services requested.
8. Present workload and staff availability.
9. List any potential conflicts of interest and a strategy for negating them.

Applicants shall submit two bound copies of their SOQ, one unbound copy, and one electronic pdf copy on a CD or flash drive.

I. Selection Criteria

The District's Selection Committee will evaluate all submitted SOQs in accordance with the criteria stated below. The District reserves the right to request interviews of the top-ranked firms. The Selection Committee may also elect to select a consultant team based upon the SOQ submittals alone. Evaluation and selection criteria will include the following:

1. Consultant firm or team's qualifications and experience on similar projects, including transmission-level water infrastructure – 20 points
2. Qualifications and experience of the project manager and key personnel – 20 points
3. Consultant's understanding of the project and conceptual approach – 20 points
4. Consultant's experience with FEMA Hazard Mitigation Grant Program, including working successfully with grant administration staff – 20 points
5. Consultant Team's present workload and staff availability – 5 points
6. Consultant Team's ability to meet established project schedule – 5 points
7. References for prime and key subconsultants – 5 points
8. Consultant Team's ability to negate any identified conflicts of interest – 5 points

J. Submittal Deadline

Applicants who are interested in providing the services for this project are required to submit a Statement of Qualifications no later than **3:00 pm on February 3, 2023**. All SOQs and materials submitted in response to this RFQ will become the property of the District and will not be returned. The District is not responsible for any costs incurred in the preparation of a response to this RFQ. Please submit the SOQ to:

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

Receipt in the above office must be by the deadline regardless of postmark.

K. Attachments use web link to obtain documents:

<https://www.hbmwd.com/current-construction-projects-and-other-rfps>

- A. RFQ Distribution List
- B. Example Professional Services Agreement plus applicable required contract provisions under 2 CFR §200
- C. Relevant Documents from Hazard Mitigation Grant Application
 - 1) Grant Subapplication Form
 - 2) Problem Description
 - 3) Scope of Work
 - 4) Figures
 - 5) Cost Estimate
- D. Phase One Grant Award Letter
- E. Collector Mainline Redundancy Focused Engineering Study (GHD, October 2016)

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

| <u>BANK ACCOUNT BALANCES AT MONTH-END</u> | December 31, 2022 | December 31, 2021 |
|---|----------------------|----------------------|
| GENERAL ACCOUNTS | | |
| 1. US Bank - General Account | 3,880,510.55 | 3,047,768.71 |
| 2. US Bank - Xpress BillPay/Electronic Payments Account | 5,117.33 | 3,159.25 |
| <i>Subtotal</i> | 3,885,627.88 | 3,050,927.96 |
| INVESTMENT & INTEREST BEARING ACCOUNTS | | |
| 3. US Bank - DWR/SRF Money Markey Acctn | 303,421.18 | 166,547.15 |
| 4. US Bank - DWR/SRF Reserve CD Account | 547,336.94 | 547,336.94 |
| 5. US Bank - PARS Investment Account | 928,792.93 | 1,044,373.66 |
| <i>Contributions = \$800,000 Earnings = \$128,793</i> | | |
| 6. L. A. I. F Account - MSRA Reserve Account | 447,094.05 | 444,139.37 |
| 7. CalTRUST - Restricted Inv. Account (Medium Term) | 1,329,638.18 | 1,329,638.18 |
| 8. CalTRUST - Unrestricted Inv. Account (Medium Term) | 352,474.87 | 411,496.08 |
| 9. CalTRUST - DWFP Reserve Account (FedFund) | 244,362.75 | 240,712.64 |
| 10. CalTRUST - ReMat Account (LEAF Fund) | 1,162,426.45 | 853,707.08 |
| 11. CalTRUST - General Reserve Account (Short-Term) | 2,392,163.51 | 2,379,828.84 |
| <i>Total CalTRUST Accounts</i> | <i>5,481,065.76</i> | <i>5,215,382.82</i> |
| 12. Humboldt County - SRF Loan Payment Account | 280,861.90 | 7,193.32 |
| 13. Humboldt County - 1% Tax Account | (18,048.38) | - |
| 14. Principle Investment Account | 44,813.25 | 38,506.74 |
| <i>Subtotal</i> | 8,015,337.63 | 7,463,480.00 |
| OTHER ACCOUNTS | | |
| 15. ReMat Deposit - Mellon Bank | 27,000.00 | 27,000.00 |
| 16. Cash on Hand | 650.00 | 650.00 |
| <i>Subtotal</i> | 27,650.00 | 27,650.00 |
| TOTAL CASH | 11,928,615.51 | 10,542,057.96 |

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



FUND BALANCES AT MONTH-END

December 31, 2022

December 31, 2021

RESTRICTED FUNDS - ENCUMBERED

| | | |
|---|----------------|----------------|
| 1. Prior-Year Price Factor 2 Rebate | (14,560.10) | (1,794.52) |
| 2. Prior-Year Restricted AP Encumbrances | (375,144.00) | (343,017.00) |
| 3. Advanced Charges - 12Kv Relocation | - | (821,879.67) |
| 4. Advanced Charges - 3x Tank Seismic Retrofit | (1,269,146.62) | (1,056,440.67) |
| 5. Advanced Charges - Cathodic Protection Project | (124,999.96) | (112,499.98) |
| 6. Advanced Charges - Collector 2 Rehabilitation | (997,238.62) | (1,210,004.00) |
| 7. Advanced Charges - On-Site Generation of Chlorine | (1,097,466.45) | (823,096.52) |
| 8. Advanced Charges - Redundant Pipeline | (311,792.49) | (185,003.98) |
| 9. Advanced Charges - TRF Emergency Generator | (375,000.00) | (337,500.00) |
| 10. 3AC Collected Funds - TRF Emergency Generator | (312,858.62) | (313,374.06) |
| 11. Advanced Funding - Community Power Resiliency | - | (215,000.00) |
| 12. Advanced Funding - FEMA, Shoreline Debris Removal | (37,075.62) | - |
| 13. Advanced Funding - August Complex-Ruth Paving | (112,456.22) | - |
| 14. Advanced Charges - Assist. Spillway Seismic Grant | (23,333.32) | (12,499.98) |
| 15. Advanced Funding - Eureka Cyber Security | (19,597.72) | - |
| 16. Advanced Charges - Essex Facility Expansion | (105,400.00) | - |
| 17. Advanced Charges - Capital Financing/Debt Service | (162,200.02) | - |
| <i>Subtotal</i> | (5,338,269.76) | (5,432,110.38) |

RESTRICTED FUNDS - OTHER

| | | |
|--|----------------|----------------|
| 18. 1% Tax Credit to Muni's | 18,048.38 | - |
| 19. DWR Reserve for SRF Payment | (303,421.18) | (166,547.15) |
| 20. DWR Reserve for SRF Loan | (547,336.94) | (547,336.94) |
| 21. Pension Trust Reserves | (928,792.93) | (1,044,373.66) |
| 22. ReMat Deposit | (27,000.00) | (27,000.00) |
| 23. HB Retail Capital Replacement Reserves | (151,414.69) | (102,019.61) |
| <i>Subtotal</i> | (1,939,917.36) | (1,887,277.36) |

UNRESTRICTED FUNDS

BOARD RESTRICTED

| | | |
|--|----------------|----------------|
| 24. MSRA Reserves | (447,094.05) | (444,139.37) |
| 25. DWFP Reserves | (244,362.75) | (240,712.64) |
| 26. ReMat Reserves | (1,162,426.45) | (853,707.08) |
| 27. Paik-Nicely Development | (4,158.00) | (4,158.00) |
| 28. Principle Investment Reserves | (44,813.25) | (38,506.74) |
| 29. Northern Mainline Extension Study Prepayment | 56.40 | (3,464.73) |
| <i>Subtotal</i> | (1,902,798.10) | (1,584,688.56) |

UNRESTRICTED RESERVES

| | | |
|---|----------------|----------------|
| 30. Accumulation for SRF Payment | (280,861.90) | (7,193.32) |
| 31. Accumulation for Ranney/Techite Payment | - | 43,899.92 |
| 32. General Fund Reserves | (2,466,768.39) | (1,680,320.70) |
| <i>Subtotal</i> | (2,747,630.29) | (1,637,981.66) |

TOTAL NET POSITION

(11,928,615.51) (10,542,057.96)

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
 REVENUE REPORT
 December 31, 2022

A. REVENUE RETURNED TO CUSTOMERS VIA PF2

| | MTD RECEIPTS | YTD RECEIPTS | PRIOR YEAR | BUDGET | % OF BUDGET |
|--------------------------------------|-----------------|-----------------|----------------|------------------|----------------|
| 1. Humboldt Bay Retail Water Revenue | 26,453 | 159,388 | 157,877 | 375,000 | 43% |
| General Revenue | | | | | |
| Interest | 0 | 0 | 0 | 0 | 0% |
| FCSD Contract (Maint. & Operations) | 27,580 | 100,736 | 139,368 | 225,000 | 45% |
| Power Sales (Net ReMat) | 4,502 | 33,746 | 51,433 | 125,000 | 27% |
| Tax Receipts (1% Taxes) | 0 | 0 | 0 | 975,000 | 0% |
| 2. Miscellaneous Revenue* | 2,510 | 41,662 | 0 | 50,000 | 83% |
| <i>*Detail on following page</i> | | | | | |
| TOTAL PF2 REVENUE CREDITS | 61,045 | 335,532 | 348,678 | 1,750,000 | 19% |

B. DISTRICT REVENUE

| | MTD RECEIPTS | YTD RECEIPTS | PRIOR YEAR | BUDGET | % OF BUDGET |
|---|-----------------|------------------|------------------|------------------|----------------|
| 3. Industrial Water Revenue | | | | | |
| Harbor District | 0 | 200 | 207 | 0 | 0 |
| <i>Subtotal Industrial Water Revenue</i> | 0 | 200 | 207 | 0 | 0 |
| 4. Municipal Water Revenue | | | | | |
| City of Arcata | 123,200 | 751,339 | 799,991 | 1,500,885 | 50% |
| City of Blue Lake | 16,177 | 98,409 | 108,018 | 200,616 | 49% |
| City of Eureka | 284,968 | 1,744,595 | 1,862,817 | 3,509,333 | 50% |
| Fieldbrook CSD | 31,973 | 94,390 | 103,863 | 196,170 | 48% |
| Humboldt CSD | 88,468 | 530,532 | 592,902 | 1,087,062 | 49% |
| Manila CSD | 6,828 | 43,188 | 43,984 | 85,315 | 51% |
| McKinleyville CSD | 99,853 | 613,984 | 650,900 | 1,225,845 | 50% |
| <i>Subtotal Municipal Water Revenue</i> | 651,467 | 3,876,437 | 4,162,475 | 7,805,226 | 50% |
| TOTAL INDUSTRIAL & WHOLESALE REVENUE | 651,467 | 3,876,637 | 4,162,682 | 7,805,226 | 50% |
| 5. Power Sales | | | | | |
| Power Sales (ReMat Revenue) | 10,193 | 69,877 | 112,883 | 300,000 | 23% |
| Interest (ReMat Revenue) | 0 | 0 | 0 | 0 | |
| TOTAL REMAT REVENUE | 10,193 | 69,877 | 112,883 | 300,000 | 23% |
| 6. Other Revenue and Grant Reimbursement | | | | | |
| HB Retail Capital Replacement Rev. | 4,131 | 21,201 | 22,954 | | |
| FCSD Contract (Admin & Overhead) | 16,537 | 58,237 | 50,117 | | |
| FEMA/CalOES Grant Revenue | 56,348 | 376,395 | 203,251 | | |
| SWRCB In-Stream Flow Grant Revenue | 0 | 0 | 13,103 | | |
| Quagga Grant Revenue | 6,345 | 6,345 | 0 | | |
| Misc. Grant Revenue | 0 | 986 | 986 | | |
| August Complex Fire Recovery | 0 | 5,637 | 0 | | |
| Interest - Muni PF2 Retained | 4 | 2,368 | 673 | | |
| Net Increase/(Decrease) Investment Accounts | 13,420 | (27,353) | (10,836) | | |
| TOTAL OTHER/GRANT REVENUE | 96,785 | 443,816 | 280,249 | | |
| GRAND TOTAL REVENUE | 819,491 | 4,725,861 | 4,904,491 | 9,855,226 | 48% |



HUMBOLDT BAY MUNICIPAL WATER DISTRICT
 MISCELANEOUS REVENUE - DETAIL REPORT
 December 31, 2022

B. MISCELLANEOUS RECEIPTS (RETURNED TO CUSTOMERS VIA PF2)

| | MTD RECEIPTS | YTD RECEIPTS |
|---|-----------------|-----------------|
| <u>Miscellaneous Revenue</u> | | |
| Dividend - Principal Life | 342 | 1,025 |
| Fees - Park Use | 100 | 2,450 |
| Rebate - CALCard | 385 | 997 |
| Refund - Diesel Fuel Tax | - | 43 |
| Refunds - Miscellaneous | 11 | 6,588 |
| Reimb - Blue Lake SCADA/Internet Monthly Fees | 51 | 306 |
| Reimb. - Copies & Postage | 11 | 67 |
| Reimb. - Gas | - | - |
| Reimb. - Misc. Employee | - | 41 |
| Reimb. - Telephone | - | - |
| UB - Water Processing Fees | 30 | 180 |
| UB - Hydrant Rental Deposit/Use | 921 | 3,418 |
| Sale of Scrap Metal/Equipment/Gravel | 660 | 20,670 |
| State Water Arrearages Administration Rev. | - | - |
| ACWA/JPIA HR LaBounty Safety Award | - | - |
| <u>Ruth Area</u> | | |
| Lease - Don Bridge | - | - |
| Rent - Ruth Cabin | - | 1,520 |
| August Complex Wildfire FEMA Reimbursement | - | 4,257 |
| Ruth Annual Lessee Water Fees | - | 100 |
| TOTAL MISCELANEOUS REVENUE | 2,510 | 41,662 |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
 ALL - MONTHLY EXPENDITURE REPORT - PAGE 1 OF 3
 December 31, 2022

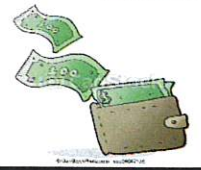


SALARY AND EMPLOYEE BENEFIT EXPENDITURES (S. E. B.)

| | Month-to-Date | Year-to-Date | Prior Year | Budget | % of Budget |
|----------------------------------|-------------------|---------------------|---------------------|------------------|-------------|
| Compensation | | | | | |
| 1. Wages - Regular | 200,543.60 | 1,170,765.66 | 1,100,309.16 | 2,619,326 | 52% |
| 1a. COVID Essential Service Pay* | - | - | (45,991.96) | - | |
| 2. Wages - Sick | 27,070.55 | 71,724.14 | 36,413.61 | | |
| 3. Wages - Vacation | 16,620.49 | 121,056.45 | 95,937.93 | | |
| <i>Subtotal</i> | 244,234.64 | 1,363,546.25 | 1,186,668.74 | 2,619,326 | 52% |
| 4. Wages - Overtime | 1,885.62 | 7,257.85 | 5,129.66 | 15,000 | |
| 5. Wages - Holiday (Worked) | 1,897.60 | 4,797.58 | 4,484.12 | 15,850 | |
| <i>Subtotal</i> | 3,783.22 | 12,055.43 | 9,613.78 | 30,850 | 39% |
| 6. Wages - Part-Time | 4,640.84 | 26,677.80 | 7,303.09 | 114,455 | 23% |
| 7. Wages - Shift Differential | 875.76 | 5,644.65 | 5,173.45 | 11,000 | 51% |
| 8. Wages - Standby | 7,192.55 | 45,122.01 | 42,521.61 | 88,000 | 51% |
| 9. Director Compensation | 2,480.00 | 13,520.00 | 12,160.00 | 26,000 | 52% |
| 10. Secretarial Fees | 262.50 | 1,575.00 | 1,575.00 | 3,200 | 49% |
| 11. Payroll Tax Expenses | 18,390.03 | 108,163.95 | 97,824.56 | 222,144 | 49% |
| 11a. COVID Ess. P/R Tax* | - | - | (3,518.38) | - | |
| <i>Subtotal</i> | 33,841.68 | 200,703.41 | 166,557.71 | 464,799 | 43% |
| Employee Benefits | | | | | |
| 12. Health, Life, & LTD Ins. | 48,412.61 | 333,948.95 | 338,646.47 | 749,711 | 45% |
| 13. Air Medical Insurance | 65.00 | 1,950.00 | 2,019.00 | 1,885 | 103% |
| 14. Retiree Medical Insurance | 9,064.68 | 55,360.48 | 64,019.51 | 91,200 | 61% |
| 14a. Retiree Medical Reimb. | (2,507.34) | (18,348.22) | (32,177.00) | | |
| 15. Employee Dental Insurance | 3,071.16 | 17,972.80 | 16,979.35 | 41,261 | 44% |
| 16. Employee Vision Insurance | 649.60 | 3,879.04 | 3,616.93 | 7,573 | 51% |
| 17. Employee EAP | 84.42 | 498.73 | 463.83 | 1,116 | 45% |
| 18. 457b District Contribution | 2,950.00 | 13,919.04 | 15,975.00 | 31,800 | 44% |
| 19. CalPERS Expenses | 34,160.05 | 476,010.13 | 411,801.33 | 570,447 | 83% |
| 20. Workers Comp Insurance | (1,406.78) | 60,210.92 | 49,808.17 | 137,181 | 44% |
| <i>Subtotal</i> | 94,543.40 | 945,401.87 | 871,152.59 | 1,632,174 | 58% |
| TOTAL S.E.B | 376,402.94 | 2,521,706.96 | 2,233,992.82 | 4,747,149 | 53% |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
MONTHLY EXPENDITURE REPORT - PAGE 2 OF 3
December 31, 2022

50%
Of Budget Year



SERVICE & SUPPLY EXPENDITURES (S & S)

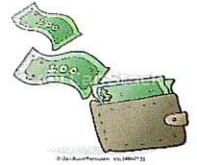
| | Month-to-Date | Year-to-Date | Prior Year | Budget | % of Budget |
|-------------------------------------|------------------|-------------------|-------------------|----------------|-------------|
| <i>Operations & Maintenance</i> | | | | | |
| 1. Auto Maintenance | 6,503.35 | 28,642.03 | 28,397.32 | 39,200 | 73% |
| 2. Engineering | 1,326.52 | 34,182.87 | 17,821.25 | 75,000 | 46% |
| 3. Lab Expenses | 2,910.00 | 12,835.00 | 5,373.00 | 13,000 | 99% |
| 4. Maintenance & Repairs | | | | | |
| General | 3,477.03 | 22,220.40 | 14,638.36 | 47,000 | 47% |
| TRF | 50.49 | 8,352.86 | 8,791.70 | 17,000 | 49% |
| <i>Subtotal</i> | <i>3,527.52</i> | <i>30,573.26</i> | <i>23,430.06</i> | <i>64,000</i> | <i>48%</i> |
| 5. Materials & Supplies | | | | | |
| General | 1,863.60 | 27,020.42 | 28,214.53 | 42,000 | 64% |
| TRF | 32.77 | 9,316.73 | 18,928.69 | 35,000 | 27% |
| <i>Subtotal</i> | <i>1,896.37</i> | <i>36,337.15</i> | <i>47,143.22</i> | <i>77,000</i> | <i>47%</i> |
| 6. Radio Maintenance | 565.76 | 3,582.06 | 4,022.60 | 8,500 | 42% |
| 7. Ruth Lake License | - | - | 1,500.00 | 1,500 | 0% |
| 8. Safety Equip./Training | | | | | |
| General | 3,629.48 | 10,513.14 | 10,903.20 | 22,000 | 48% |
| TRF | - | 144.00 | 377.98 | 2,000 | 7% |
| <i>Subtotal</i> | <i>3,629.48</i> | <i>10,657.14</i> | <i>11,281.18</i> | <i>24,000</i> | <i>44%</i> |
| 9. Tools & Equipment | 54.61 | 1,031.24 | 2,328.65 | 5,000 | 21% |
| 10. USGS Meter Station | - | 8,220.00 | - | 9,000 | 91% |
| <i>Operations Subtotal</i> | <i>20,413.61</i> | <i>166,060.75</i> | <i>141,297.28</i> | <i>316,200</i> | <i>53%</i> |

General & Administration

| | | | | | |
|-------------------------------|----------|------------|-----------|---------|------|
| 11. Accounting Services | - | 24,215.00 | 14,667.50 | 29,000 | 84% |
| 12. Bad Debt Expense | - | - | - | - | 0 |
| 13. Dues & Subscriptions | 226.00 | 30,617.95 | 36,776.98 | 38,000 | 81% |
| 14. IT & Software Maintenance | 1,628.61 | 33,742.53 | 12,809.77 | 33,000 | 102% |
| 15. Insurance | - | 107,309.77 | 85,684.62 | 111,000 | 97% |
| 16. Internet | 2,174.35 | 6,757.26 | 5,900.28 | 10,000 | 68% |
| 17. Legal Services | 617.91 | 11,447.41 | 8,723.00 | 35,000 | 33% |
| 18. Miscellaneous | 660.45 | 5,015.73 | 1,717.74 | 10,000 | 50% |
| 19. Office Building Maint. | 1,254.60 | 11,257.25 | 7,494.73 | 15,000 | 75% |
| 20. Office Expense | 4,212.73 | 19,992.80 | 17,934.57 | 40,000 | 50% |
| 21. Professional Services | 2,466.90 | 6,675.88 | 4,246.00 | 20,000 | 33% |
| 22. Property Tax | - | 2,764.00 | 2,006.00 | 2,000 | 138% |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
MONTHLY EXPENDITURE REPORT - PAGE 3 OF 3
December 31, 2022

50%
Of Budget Year



SERVICE & SUPPLY EXPENDITURES (con't)

| | Month-to-Date | Year-to-Date | Prior Year | Budget | % of Budget |
|-----------------------------------|------------------|-------------------|-------------------|-------------------|-------------|
| 23. Regulatory Agency Fees | 45,209.23 | 50,938.51 | 93,165.12 | 190,500 | 27% |
| 24. Ruth Lake Programs | - | - | - | 5,000 | 0% |
| 25. Safety Apparel | - | 2,647.49 | (31.00) | 3,000 | 88% |
| 26. Technical Training | - | 101.36 | 1,529.36 | 14,000 | 1% |
| 27. Telephone | 1,098.40 | 7,734.28 | 18,588.34 | 40,000 | 19% |
| 28. Travel & Conference | 873.28 | 6,106.00 | 1,972.92 | 22,000 | 28% |
| <i>Gen. & Admin. Subtotal</i> | <i>60,422.46</i> | <i>327,323.22</i> | <i>313,185.93</i> | <i>617,500</i> | <i>53%</i> |
| TOTAL SERVICE & SUPPLY | 80,836.07 | 493,383.97 | 454,483.21 | 933,700.42 | 53% |

Power

| | | | | | |
|---|-------------------|-------------------|-------------------|------------------|------------|
| 29. Essex - PG & E | 61,617.81 | 416,505.23 | 420,288.43 | | |
| 30. 2Mw Generator Fuel | - | 8,561.05 | 2,274.57 | | |
| <i>Subtotal Essex Pumping</i> | <i>61,617.81</i> | <i>425,066.28</i> | <i>422,563.00</i> | | |
| 31. All other PG & E | 10,263.59 | 36,094.86 | 42,267.52 | | |
| <i>Subtotal All Power</i> | <i>71,881.40</i> | <i>461,161.14</i> | <i>464,830.52</i> | <i>907,000</i> | <i>51%</i> |
| Total Service and Supplies incl. Power | 152,717.47 | 954,545.11 | 919,313.73 | 1,840,700 | 52% |

PROJECTS, FIXED ASSETS & CONSULTING SERVICES

| | Month-to-Date | Year-to-Date | Budget | % of Budget |
|--|---------------|--------------|------------|-------------|
| | 168,708.00 | 1,020,534.00 | 19,840,575 | 5% |

| | | | | | |
|-----------------------------|-------------------|---------------------|---------------------|-------------------|------------|
| GRAND TOTAL EXPENSES | 697,828.41 | 4,496,786.07 | 3,153,306.55 | 26,428,424 | 17% |
|-----------------------------|-------------------|---------------------|---------------------|-------------------|------------|

| | | | | | |
|-----------------------------|---|---|---|---------|----|
| 32. Debt Service - SRF Loan | - | - | - | 547,337 | 0% |
|-----------------------------|---|---|---|---------|----|

TOTAL EXPENSES WITH DEBT SERVICE

| | | | | | |
|--|------------|--------------|--------------|---------------|--|
| | 698,690.29 | 4,506,503.09 | 3,159,953.95 | 26,975,761.38 | |
|--|------------|--------------|--------------|---------------|--|

OTHER EXPENSES

| | | | | | |
|------------------------------|--------|----------|----------|--|--|
| 33. ReMat Consultant Exp. | 861.88 | 9,717.02 | 6,647.40 | | |
| 34. Capital Replacement Exp. | - | - | - | | |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
PROJECT PROGRESS REPORT
December 31, 2022

50% Of Budget Year

**A. CAPITAL PROJECTS**

| | MTD | YTD | | % OF |
|--|--------------|----------------|-------------------|-----------|
| GRANT FUNDED CAPITAL PROJECTS | EXPENSES | TOTAL | BUDGET | BUDGET |
| 1 Grant - 12kV Switchgear Relocation <i>(\$3.4M - FEMA, Approved)</i> | 0 | 184,685 | 723,991 | 26% |
| 2 Grant - Collector 2 Rehabilitation <i>(Est. \$1.6M - NCRP Prop 1 \$600k, Approved)</i> | 5,227 | 5,227 | 1,600,000 | 0% |
| 3 Grant - 3x Tank Seismic Retro <i>(Est. \$5.7M - FEMA, Phase 1 Approved)</i> | 0 | 142 | 5,435,506 | 0% |
| 4 Grant - Collector Mainline Redundancy Pipeline <i>(Treatment/Base Facility Project, Est. \$3.1M - FEMA, Approved)</i> | 0 | 0 | 3,100,000 | 0% |
| 5 Grant - TRF Generator <i>(Treatment Facility Project, Est. \$1.9M - FEMA, In Process)</i> | 0 | 284 | 0 | 0% |
| 5A Grant - Adv. Assistance Spillway Seismic | 0 | 190 | 0 | 0% |
| TOTAL GRANT FUNDED CAPITAL PROJECTS | 5,227 | 190,528 | 10,859,497 | 2% |

NON-GRANT FUNDED CAPITAL PROJECTS

| | | | | |
|--|---------------|---------------|----------------|------------|
| 6 Cathodic Protection Project | 0 | 0 | 0 | 0 |
| 7 Underground Power to Collector 2 - Phase 3 | 0 | 0 | 250,000 | 0% |
| 8 Mainline Valve Replacement Program | 0 | 0 | 60,000 | 0% |
| 9 Retaining Wall for Valve Access <i>(Treatment Facility Project)</i> | 0 | 0 | 40,000 | 0% |
| 10 Main Office Roof Replacement | 40,881 | 41,342 | 69,000 | 60% |
| TOTAL NON-GRANT FUNDED CAPITAL PROJECTS | 40,881 | 41,342 | 419,000 | 10% |

B. EQUIPMENT AND FIXED ASSET PROJECTS

| | MTD | YTD | | % OF |
|--|----------|---------|---------|--------|
| | EXPENSES | TOTAL | BUDGET | BUDGET |
| 11 FY23 Replace ESSEX Administrative Computers | 0 | 0 | 7,000 | 0% |
| 12 FY23 Replace Control Computers | 0 | 0 | 5,250 | 0% |
| 13 Electrical PPE | 4,690 | 5,745 | 6,000 | 96% |
| 14 Essex Stand Alone Security and Fire Monitoring | 0 | 0 | 1,750 | 0% |
| 15 PBX Upgrade | 0 | 0 | 3,000 | 0% |
| 16 Upgrade Admin Routers | 0 | 3,403 | 4,000 | 85% |
| 18 Replace Bucket Truck (Unit 4) | 15,130 | 185,258 | 127,000 | 146% |
| 19 Electrical Shop Offices | 0 | 0 | 31,750 | 0% |
| 20 Fleet Back-Up Cameras | 0 | 1,190 | 2,250 | 53% |
| 21 Upgrade Admin Switches | 0 | 0 | 10,500 | 0% |
| 22 Handheld Lights | 0 | 3,158 | 3,500 | 90% |
| 23 Ergonomic Mop Basins <i>(Treatment Facility Project)</i> | 0 | 0 | 2,000 | 0% |
| 24 TRF EOC Office Furniture <i>(Treatment Facility Project)</i> | 0 | 3,201 | 3,750 | 85% |



HUMBOLDT BAY MUNICIPAL WATER DISTRICT
PROJECT PROGRESS REPORT - PAGE 2 OF 5
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B. EQUIPMENT AND FIXED ASSET PROJECTS (con't)

| | MTD EXPENSES | YTD TOTAL | BUDGET | % OF BUDGET |
|---|-----------------|----------------|----------------|----------------|
| 25 FY22 Replace EUREKA Administrative Computers | 536 | 2,002 | 3,800 | 53% |
| 26 Hydro Plant PRV Internal Belzona Repairs | 0 | 0 | 4,750 | 0% |
| 27 Hydro Plant Neutral Overvoltage Relay | 0 | 5,794 | 14,750 | 39% |
| 28 Hydro Plant Wicket Gate & HBV Signal Upgrade | 0 | 0 | 8,500 | 0% |
| 29 Ruth Fire Response Trailer & Equipment | 0 | 0 | 3,500 | 0% |
| 30 Tesla Battery Project - TRF | 233 | 1,396 | 0 | 0 |
| 30a Articulating Arm for Vac Trailer | 0 | 2,575 | 0 | 0 |
| TOTAL EQUIPMENT & FIXED ASSET PROJECTS | 20,589 | 213,723 | 243,050 | 88% |

C. MAINTENANCE PROJECTS

| | MTD EXPENSES | YTD TOTAL | BUDGET | % OF BUDGET |
|---|-----------------|--------------|---------|----------------|
| 31 FY23 Pipeline Maintenance | 0 | 1,693 | 4,000 | 42% |
| 32 FY23 12 kV Electric System Maintenance | 0 | 0 | 4,200 | 0% |
| 33 FY23 Main Line Meter Flow Calibration | 0 | 0 | 28,000 | 0% |
| 34 FY23 Technical Support and Software Updates | 0 | 1,422 | 31,500 | 5% |
| 35 FY23 Generator Services | 0 | 113 | 3,500 | 3% |
| 36 FY23 Hazard & Diseased Tree Removal | 0 | 0 | 8,000 | 0% |
| 37 FY23 Cathodic Protection | 0 | 654 | 1,500 | 44% |
| 38 FY23 Maintenance Emergency Repairs | 0 | 8,725 | 50,000 | 17% |
| 39 FY23 Fleet Paint Repairs | 0 | 3,444 | 5,000 | 69% |
| 40 FY23 Power Pole/Line Inspection/Maintenance | 0 | 15,853 | 17,500 | 91% |
| 41 Truesdale to Samoa Booster Station Telemetry Radio | 0 | 0 | 3,750 | 0% |
| 42 Line Shed Alarm Upgrades | 0 | 0 | 6,500 | 0% |
| 43 Right-of-Way Clearing Under Cable Cars | 0 | 0 | 5,000 | 0% |
| 44 FY23 TRF Generator Service <i>(Treatment Facility Project)</i> | 0 | 69 | 500 | 14% |
| 45 FY23 TRF Limitorque Valve Retrofit Supplies <i>(Treatment Facility Project)</i> | 0 | 0 | 14,500 | 0% |
| 46 TRF Instrumentation Replacement <i>(Treatment Facility Project)</i> | 0 | 22,772 | 24,750 | 92% |
| 47 TRF Valve Network Upgrade (Phase 1 of 5) <i>(Treatment Facility Project)</i> | 0 | 0 | 121,000 | 0% |
| 48 TRF Plant Water System <i>(Treatment Facility Project)</i> | 0 | 0 | 2,000 | 0% |
| 49 FY23 Brush Abatement Ruth Hydro | 0 | 0 | 6,500 | 0% |
| 50 FY23 LTO Insurance | 0 | 0 | 5,000 | 0% |
| 51 FY23 Spillway Repairs | 0 | 438 | 10,000 | 4% |
| 52 Investigate/Repair Flip Bucket/Curtain Drain | 0 | 0 | 105,000 | 0% |
| 54 Ruth Security and Fire Control Panel | 0 | 3,976 | 4,500 | 88% |
| 55 Fire Disaster Recovery 2020 | 0 | 4,394 | 0 | 0 |
| 56 COVID-19 Pandemic Expenses | 0 | 884 | 0 | |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
PROJECT PROGRESS REPORT - PAGE 3 OF 5
December 31, 2022

50% Of Budget Year

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

| | MTD EXPENSES | YTD TOTAL | BUDGET | % OF BUDGET |
|--|-----------------|---------------|----------------|----------------|
| 57 Load Bank Hydro Plant Generator | 0 | 0 | 2,000 | 0% |
| 58 Main Office Parking Lot Sealing and Stripping | 0 | 0 | 3,000 | 0% |
| TOTAL MAINTENANCE PROJECTS | 0 | 64,437 | 467,200 | 14% |

D. PROFESSIONAL & CONSULTING SERVICES

| | MTD EXPENSES | YTD TOTAL | BUDGET | % OF BUDGET |
|---|-----------------|--------------|--------|----------------|
| 59 Prof. Services for New Capital Debt | 0 | 0 | 0 | 0 |
| 60 FY23 Crane Testing/Certification | 13,155 | 13,155 | 10,000 | 132% |
| 61 FY23 Chlorine System Maintenance | 0 | 2,638 | 6,750 | 39% |
| 62 FY23 Hydro Plant Annual Elec. Maint./Testing | 0 | 0 | 4,000 | 0% |
| 63 Above Ground 10,000 Gallon Fuel Tank Testing | 0 | 0 | 5,400 | 0% |
| 64 ATS Pro-IT Support | 1,430 | 7,150 | 19,000 | 38% |
| 65 FY23 Essex Mad River Cross-Sectional Survey | 4,197 | 10,747 | 12,000 | 90% |
| 66 FY23 GHD Review Essex Mad River Cross-Sectional | 0 | 0 | 5,000 | 0% |
| 67 FY23 Technical Training | 187 | 1,448 | 27,000 | 5% |
| 68 FY23 O & M Training | 0 | 0 | 20,000 | 0% |
| 69 FY23 Public Education Funds | 0 | 125 | 5,000 | 3% |
| 70 TRF Router Multi-Year Support | 0 | 1,752 | 2,000 | 88% |
| 71 Ruth Router Multi-Year Support | 0 | 1,372 | 1,000 | 137% |
| 72 Transformer Testing and Repair | 0 | 0 | 7,500 | 0% |
| 73 GIS / FIS Essex Area | 0 | 0 | 12,000 | 0% |
| 74 Salary Survey | 0 | 0 | 15,000 | 0% |
| 75 FY23 Mad River Regulatory Compliance Assistance | 0 | 1,230 | 50,000 | 2% |
| 76 FY23 Annual Sect. 115 Pension Trust Contribution | 0 | 0 | 50,000 | 0% |
| 77 FY23 Grant Applications Assistance | 0 | 0 | 20,000 | 0% |
| 78 Domestic Water for Nordic Aqua Farm | 0 | 0 | 5,000 | 0% |
| 79 Engineering Support - On-Site Hypochlorite | 0 | 0 | 10,000 | 0% |
| 80 Engineering Study-Replace 15-inch Peninsula Pipe | 12,018 | 12,018 | 38,000 | 32% |
| 81 Samoa Peninsula Coastal Development Permit | 0 | 10,128 | 31,200 | 32% |
| 82 Engineering Support for Essex Tesla Battery | 0 | 0 | 7,500 | 0% |
| 83 Engineering Support for TRF Tesla Battery Proj | 0 | 0 | 7,500 | 0% |
| <i>(Treatment Facility Project)</i> | | | | |
| 84 Essex Control Building Expansion Plans/Specs | 0 | 0 | 46,000 | 0% |
| 86 FY23 FERC DSSMR | 0 | 2 | 5,000 | 0% |
| 86 FY23 FERC Chief Dam Safety Engineer | 0 | 0 | 12,000 | 0% |
| 87 FY23 Dam Spillway Wall Monument Survey | 0 | 14,040 | 16,000 | 88% |
| 88 GHD Review of Matthews Dam Spillway Wingwall | 0 | 0 | 6,500 | 0% |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
PROJECT PROGRESS REPORT - PAGE 4 OF 5
December 31, 2022

50% Of Budget Year

**D. PROFESSIONAL & CONSULTING SERVICES (CONT)**

| | MTD EXPENSES | YTD TOTAL | BUDGET | % OF BUDGET |
|---|-----------------|---------------|----------------|----------------|
| 89 FY23 Spillway Repair, Dam Inspection & Reporting | 0 | 254 | 5,000 | 5% |
| 90 DSSMP Update | 0 | 0 | 10,000 | 0% |
| 91 Assist Assessments Spillway Drains, Flip Bucket | 0 | 0 | 20,000 | 0% |
| 92 GEI Tiltmeter Monitoring | 0 | 0 | 12,000 | 0% |
| TOTAL PROF/CONSULTING SERVICES | 30,987 | 76,059 | 503,350 | 15% |

E. INDUSTRIAL SYSTEM PROJECTS

| | | | | |
|---|----------|---------------|---------------|------------|
| 93 Maintain Water Supply to Industrial Pump Station 6 | 0 | 0 | 13,250 | 0% |
| 93A I/W Reservoir Overflow Dissipator Maint/Hardening | 0 | 13,527 | 9,500 | 142% |
| TOTAL INDUSTRIAL SYSTEM PROJECTS | 0 | 13,527 | 22,750 | 59% |

F. CARRY-OVER PROJECTS FROM PRIOR YEAR

| | | | | |
|---------------------------------|----------|--------------|---------------|------------|
| 94 Replace Collector 4 Cable | 0 | 0 | 2,000 | 0% |
| 95 Line Shed #8 | 0 | 9,043 | 10,000 | 90% |
| TOTAL CARRYOVER PROJECTS | 0 | 9,043 | 12,000 | 75% |

G. ADVANCED CHARGES & DEBIT SERVICE FUNDS COLLECTED

| | MTD | YTD | BUDGET | % BUDGET |
|---|---------------|----------------|----------------|------------|
| 96 On-Site Generation of Chlorine <i>(\$1.2M - FY23, Treatment Facility Project)</i> | 20,833 | 125,000 | 250,000 | 50% |
| 97 Prof. Services for New Capital Debt | 13,517 | 81,100 | 162,200 | 50% |
| TOTAL ADVANCED CHARGES COLLECTED | 34,350 | 206,100 | 412,200 | 50% |

H. PROJECTS NOT CHARGED TO MUNICIPAL CUSTOMERS

| | MTD EXPENSES | YTD TOTAL | BUDGET | % OF BUDGET |
|--|-----------------|--------------|----------|----------------|
| 98 On-Site Generation of Chlorine <i>(\$1.2M - FY23, Treatment Facility Project)</i> | 9,075 | 50,496 | 0 | 0 |
| 99 Humboldt Bay Radio Read Meters <i>(Capital Replacement Funds)</i> | 0 | 0 | 9,500 | 0% |
| 100 Ruth Paving and Repairs <i>(Non-FEMA August Complex Wildfire Funds Collected)</i> | 0 | 0 | 112,250 | 0% |
| 101 Pump Station 6 Gravel Bar Work and Permitting <i>(ReMat Reserves)</i> | 0 | 0 | 40,000 | 0% |
| 102 Domestic Water System Cathodic Protection <i>(Collected Advance Charges)</i> | 9,444 | 16,586 | 65,000 | 26% |
| 103 Streambed Flow Enhancement Grant <i>(DWR Grant)</i> | 638 | 6,726 | 457,755 | 1% |
| 104 Quagga Grant Expenses <i>(Multiple Grants)</i> | 0 | 46,056 | 0 | 0% |
| 104a Pre-Funded Shoreline Debris Removal Project (FEMA) | \$49,051 | \$49,051 | \$97,942 | 50% |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
PROJECT PROGRESS REPORT - PAGE 5 OF 5
December 31, 2022

50% Of Budget Year



H. PROJECTS NOT CHARGED TO MUNICIPAL CUSTOMERS (con't)

| | MTD EXPENSES | YTD TOTAL | BUDGET | % OF BUDGET |
|---|-----------------|----------------|------------------|----------------|
| 105 Forestry Consultant <i>(NCRP Grant)</i> | 0 | 0 | 14,638 | 0% |
| 106 Clean-Out Industrial Water Tank <i>(ReMat Reserves)</i> | 0 | 527 | 100,000 | 1% |
| 107 CalFire Healthy Forest Grant <i>(CalFire Grant)</i> | 2,816 | 36,138 | 5,000,000 | 1% |
| 108 CalFire Fuels Reduction Program <i>(CalFire Funding)</i> | 0 | 194 | 500,000 | 0% |
| TOTAL NOT CHARGED TO CUSTOMERS | 71,023 | 205,774 | 6,397,085 | 3% |

PROJECT PROGRESS REPORT SUMMARY OF ALL ACTIVITY

| CUSTOMER CHARGES | MTD | YTD | BUDGET | % BUDGET |
|---|------------------|------------------|--------------------|------------|
| TOTAL NON-GRANT FUNDED CAPITAL PROJECTS | 40,881 | 41,342 | 419,000 | 10% |
| <i>Treatment Facility Portion</i> | 0 | 0 | | |
| TOTAL EQUIPMENT & FIXED ASSET PROJECTS | 20,589 | 213,723 | 243,050 | 88% |
| <i>Treatment Facility Portion</i> | 0 | 3,201 | | |
| TOTAL MAINTENANCE PROJECTS | 0 | 64,437 | 467,200 | 14% |
| <i>Treatment Facility Portion</i> | 0 | 22,840 | 162,750 | |
| TOTAL PROF/CONSULTING SERVICES | 30,987 | 76,059 | 503,350 | 15% |
| <i>Treatment Facility Portion</i> | 0 | 0 | 7,500 | |
| TOTAL INDUSTRIAL SYSTEM PROJECTS | 0 | 13,527 | 22,750 | 59% |
| TOTAL CARRYOVER PROJECTS | 0 | 9,043 | 12,000 | 75% |
| <i>Treatment Facility Portion</i> | 0 | 0 | 0 | |
| TOTAL ADVANCED CHARGES/DEBIT SERVICE | 34,350 | 206,100 | 412,200 | 50% |
| <i>Treatment Facility Portion</i> | \$20,833 | \$125,000 | \$250,000 | |
| TOTAL CUSTOMER CHARGES | \$126,807 | \$624,232 | \$2,079,550 | 30% |

| NON-CUSTOMER CHARGES (CURRENT FY) | MTD | YTD | BUDGET | % BUDGET |
|--|------------------|--------------------|---------------------|-----------|
| TOTAL GRANT FUNDED CAPITAL PROJECTS | 5,227 | 190,528 | 10,859,497 | 2% |
| TOTAL NON-CUSTOMER CHARGES | 71,023 | 205,774 | 6,397,085 | 3% |
| TOTAL USE OF ENCUMBERED FUNDS | 14,273 | 239,547 | 611,885 | 39% |
| TOTAL NON-CUSTOMER CHARGES | \$90,523 | \$635,849 | \$17,868,466 | 4% |
| GRAND TOTAL PROJECT BUDGET ACTIVITY | \$217,331 | \$1,260,081 | \$19,948,016 | 6% |



HUMBOLDT BAY MUNICIPAL WATER DISTRICT
ENCUMBERED FUNDS RECONCILIATION REPORT
December 31, 2022

| | MTD EXPENSES | YTD TOTAL | AMOUNT ENCUMBERED | REMAINING | |
|--|--|--------------|----------------------|-----------|----------|
| A. CAPITAL PROJECTS | | | | | |
| 1E | Fiber Optic Link - Collector 2 (Phase 1) | 0 | 0 | 28,500 | 28,500 |
| 2E | Power and Fiber Optic Link to Collector 2, Phase 2 | 0 | 0 | 44,000 | 44,000 |
| 3E | Line Shed #8 | 0 | 28,600 | 28,600 | 0 |
| 4E | Solar at Eureka Main Office | 12,880 | 26,078 | 29,650 | 3,572 |
| 5E | TRF Line Shed 5 Ramp and Concrete Work | 0 | 0 | 850 | 850 |
| 6E | Headquarters Remodel | 0 | 542 | 30,000 | 29,458 |
| B. EQUIPMENT & FIXED ASSET PROJECTS | | | | | |
| 7E | Penstock Ventilation System | 0 | 0 | 2,525 | 2,525 |
| 8E | Collector Lube Oil Detection System | 0 | 0 | 3,050 | 3,050 |
| 9E | Replace Unit 9 | 0 | 792 | 17,600 | 16,808 |
| 10E | TRF Chemical Building PLC Module Expansion | 0 | 3,326 | 2,090 | (1,236) |
| 11E | Eureka Office Phone System | 0 | 21,041 | 14,600 | (6,441) |
| 12E | Transformer at Hydro Plant | 0 | 29,371 | 49,150 | 19,779 |
| C. MAINTENANCE PROJECTS | | | | | |
| 13E | FY22 Brush Abatement Ruth Hydro | 0 | 0 | 6,500 | 6,500 |
| 14E | Replace Collector 4 Cable | 0 | 2,806 | 3,650 | 844 |
| 15E | Collector MCC Breaker & Door Switch Replacement | 0 | 77,960 | 66,125 | (11,835) |
| 16E | Collector 1 Interior Painting | 0 | 11 | 600 | 589 |
| 17E | FY22 Main Line Meter Flow Calibration | 0 | 1,746 | 2,500 | 754 |
| 18E | Cyber Assessment | 0 | 15,025 | 19,250 | 4,225 |
| 19E | Power Pole/Line Inspection/Maintenance | 0 | 3,926 | 3,800 | (126) |
| 20E | Upgrade Microsoft Office - Essex | 0 | 0 | 900 | 900 |
| 21E | Security Fencing Replacement - Essex & Samoa BPS | 930 | 930 | 47,200 | 46,270 |
| 22E | Lighting Upgrades for Shop/Collectors/Line Sheds | 0 | 0 | 8,150 | 8,150 |
| 23E | TRF Sludge Bed Gutter Replacement | 0 | 888 | 8,175 | 7,287 |
| D. PROFESSIONAL & CONSULTING SERVICES | | | | | |
| 24E | 404 Permit Assistance | 0 | 164 | 24,360 | 24,196 |
| 25E | Lease Lots Surveys | 0 | 2,382 | 25,000 | 22,618 |
| 26E | GIS / FIS Ruth Area, Including Internship | 0 | 0 | 5,000 | 5,000 |
| 27E | GIS Project at Ruth Lake (USFS) | 0 | 0 | 7,500 | 7,500 |
| 28E | Ruth Vehicle Abatement | 0 | 6,830 | 7,000 | 170 |
| 29E | ATS Pro-IT Support | 0 | 1,430 | 1,430 | 0 |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
 ENCUMBERED FUNDS RECONCILIATION REPORT (con't)
 December 31, 2022



| | MTD EXPENSES | YTD TOTAL | AMOUNT ENCUMBERED | REMAINING |
|--|-----------------|--------------|----------------------|-----------|
| D. PROFESSIONAL & CONSULTING SERVICES (con't) | | | | |
| 30E Collector Arc Flash Study Update and Breaker Testi | 0 | 9,529 | 20,000 | 10,471 |
| 31E Collector 4 Restoration | 0 | 0 | 5,000 | 5,000 |
| 32E FY22 Crane Operator Re-Certification | 0 | 0 | 1,000 | 1,000 |
| 33E FY22 Backflow Tester Training | 0 | 0 | 1,200 | 1,200 |
| 34E Public Education Funds | 0 | (104) | 1,500 | 1,604 |
| 35E Mad River Watershed USFS Lidar | 0 | 0 | 20,000 | 20,000 |
| 36E Coastal CDP - GHD | 232 | 5,505 | 18,155 | 12,650 |
| 37E CAISO Meter Inspection Calibration | 0 | 0 | 4,000 | 4,000 |
| 38E FERC Part 12 - Independent Consultant & Engineer | 230 | 307 | 42,840 | 42,533 |
| 39E FERC Chief Dam Safety Engineer | 0 | 461 | 10,435 | 9,975 |

| | | | | |
|-------------------------------|---------------|----------------|----------------|----------------|
| ENCUMBERED FUNDS TOTAL | 14,273 | 239,547 | 611,885 | 372,338 |
|-------------------------------|---------------|----------------|----------------|----------------|

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
Report dates: 12/1/2022-12/31/2022Page: 1
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| Vendor Name | Date Paid | Description | Amount Paid |
|--|------------|---|-------------|
| 101 NETLINK | | | |
| 101 NETLINK | 12/01/2022 | <i>Ruth Data Link/Internet</i> | 190.00 |
| Total 101 NETLINK: | | | 190.00 |
| AAA Water Systems | | | |
| AAA Water Systems | 12/29/2022 | <i>2 Water Softeners</i> | 8,980.00 |
| Total AAA Water Systems: | | | 8,980.00 |
| AC3 | | | |
| AC3 | 12/27/2022 | <i>Annual crane inspection and certification</i> | 13,000.00 |
| Total AC3: | | | 13,000.00 |
| Acme Rigging & Supply Company | | | |
| Acme Rigging & Supply Company | 12/27/2022 | <i>Certification of lifting chain capacity</i> | 159.64 |
| Acme Rigging & Supply Company | 12/27/2022 | <i>New sling</i> | 52.78 |
| Total Acme Rigging & Supply Company: | | | 212.42 |
| ACWA/JPIA | | | |
| ACWA/JPIA | 12/21/2022 | <i>RETIREE MEDICAL</i> | 8,302.87 |
| ACWA/JPIA | 12/21/2022 | <i>COBRA Dental</i> | 98.92 |
| ACWA/JPIA | 12/21/2022 | <i>COBRA Vision</i> | 37.12 |
| ACWA/JPIA | 12/21/2022 | <i>COBRA Medical</i> | 711.77 |
| Total ACWA/JPIA: | | | 9,150.68 |
| Advanced Display & Signs | | | |
| Advanced Display & Signs | 12/13/2022 | <i>DOT numbering and District logo for various fleet vehicles</i> | 173.80 |
| Advanced Display & Signs | 12/29/2022 | <i>Additional fleet emblems and DOT numbering</i> | 142.34 |
| Total Advanced Display & Signs: | | | 316.14 |
| AirGas NCN | | | |
| AirGas NCN | 12/12/2022 | <i>Gaurdian Anchor Plate for Essex meter access vault</i> | 202.45 |
| AirGas NCN | 12/29/2022 | <i>Respirator supplies</i> | 21.93 |
| AirGas NCN | 12/29/2022 | <i>Respirator</i> | 39.47 |
| Total AirGas NCN: | | | 263.85 |
| Altec Industries, Inc | | | |
| Altec Industries, Inc | 12/12/2022 | <i>Chipper repair parts</i> | 791.98 |
| Total Altec Industries, Inc: | | | 791.98 |
| American Water Works Association | | | |
| American Water Works Association | 12/29/2022 | <i>Member #02591722 Renewal - Term 3/1/23-2/29/24</i> | 106.00 |
| Total American Water Works Association: | | | 106.00 |
| Analytical Services, Inc | | | |
| Analytical Services, Inc | 12/12/2022 | <i>Lab Tests</i> | 2,305.00 |
| Total Analytical Services, Inc: | | | 2,305.00 |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
Report dates: 12/1/2022-12/31/2022Page: 2
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| Vendor Name | Date Paid | Description | Amount Paid |
|---|------------|---|-------------|
| Asbury Environmental Services | | | |
| Asbury Environmental Services | 12/29/2022 | Waste oil pickup for Essex | 95.00 |
| Total Asbury Environmental Services: | | | 95.00 |
| AT & T | | | |
| AT & T | 12/27/2022 | Eureka Office Long Distance | 7.22 |
| AT & T | 12/27/2022 | Ruth HQ Long Distance | 6.47 |
| AT & T | 12/27/2022 | Eureka/Essex Landline | 33.97 |
| AT & T | 12/27/2022 | Arcata/Essex Landline | 33.97 |
| AT & T | 12/27/2022 | Eureka Office/Alarm | 55.01 |
| AT & T | 12/27/2022 | TRF | 26.65 |
| AT & T | 12/27/2022 | Essex office/Modem/Control Alarm System | 26.65 |
| Total AT & T: | | | 189.94 |
| AT&T Advertising Solutions | | | |
| AT&T Advertising Solutions | 12/29/2022 | white page listing | 21.00 |
| Total AT&T Advertising Solutions: | | | 21.00 |
| ATS Communications | | | |
| ATS Communications | 12/27/2022 | IT Support for Essex Admin Computers | 1,430.00 |
| Total ATS Communications: | | | 1,430.00 |
| Baldwin,Blomstrom,Wilkinson & Associat | | | |
| Baldwin,Blomstrom,Wilkinson & Associat | 12/07/2022 | Cal Fire Healthy Forest Grant CEQA Analysis and reforestation | 1,146.25 |
| Baldwin,Blomstrom,Wilkinson & Associat | 12/07/2022 | Cal Fire Healthy Forest Grant | 1,669.50 |
| Total Baldwin,Blomstrom,Wilkinson & Associat: | | | 2,815.75 |
| Ben Boak | | | |
| Ben Boak | 12/27/2022 | Shoreline Debris Removal | 48,750.00 |
| Total Ben Boak: | | | 48,750.00 |
| Blue Star Gas - Sequoia Gas Co. | | | |
| Blue Star Gas - Sequoia Gas Co. | 12/01/2022 | Ruth Bunkhouse propane tank rental | 95.90 |
| Blue Star Gas - Sequoia Gas Co. | 12/13/2022 | Propane for Ruth HQ | 532.67 |
| Blue Star Gas - Sequoia Gas Co. | 12/29/2022 | Propane for Ruth HQ | 122.11 |
| Blue Star Gas - Sequoia Gas Co. | 12/29/2022 | Propane for Ruth Bunkhouse | 392.52 |
| Blue Star Gas - Sequoia Gas Co. | 12/13/2022 | Propane for Ruth Bunkhouse | 311.70 |
| Total Blue Star Gas - Sequoia Gas Co.: | | | 1,454.90 |
| Chris Merz | | | |
| Chris Merz | 12/12/2022 | Expense Reimbursement Safety Shoes | 336.84 |
| Chris Merz | 12/27/2022 | Wellness Grant Reimbursement | 34.00 |
| Total Chris Merz: | | | 370.84 |
| Citi Cards | | | |
| Citi Cards | 12/29/2022 | D Batteries for Eureka Office | 18.56 |
| Total Citi Cards: | | | 18.56 |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
Report dates: 12/1/2022-12/31/2022Page: 3
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| Vendor Name | Date Paid | Description | Amount Paid |
|--|------------|---|-------------|
| City of Eureka | | | |
| City of Eureka | 12/12/2022 | Eureka office water/sewer | 89.53 |
| Total City of Eureka: | | | 89.53 |
| Coastal Business Systems Inc. | | | |
| Coastal Business Systems Inc. | 12/07/2022 | Essex copy/fax machine | 295.88 |
| Coastal Business Systems Inc. | 12/07/2022 | Eureka office copy and fax machine | 827.43 |
| Coastal Business Systems Inc. | 12/07/2022 | Eureka office - scan setup assistance | 48.75 |
| Total Coastal Business Systems Inc.: | | | 1,172.06 |
| Dale H. Davidsen | | | |
| Dale H. Davidsen | 12/29/2022 | Reimbursement for earthquake repair crew | 50.49 |
| Total Dale H. Davidsen: | | | 50.49 |
| Dave Perkins | | | |
| Dave Perkins | 12/01/2022 | Mileage Reimbursement | 163.69 |
| Total Dave Perkins: | | | 163.69 |
| DFS | | | |
| DFS | 12/01/2022 | Fee for Title Transfer for 2023 FORD F550 | 125.00 |
| Total DFS: | | | 125.00 |
| DMV | | | |
| DMV | 12/01/2022 | Taxes for 2023 F550 | 14,461.00 |
| Total DMV: | | | 14,461.00 |
| Downey Brand Attorneys LLP | | | |
| Downey Brand Attorneys LLP | 12/27/2022 | Legal Fees Nov 2022 - BL Rancheria Water | 239.00 |
| Downey Brand Attorneys LLP | 12/27/2022 | Legal Fees Nov 2022 - Instream Flow Investigation | 637.50 |
| Total Downey Brand Attorneys LLP: | | | 876.50 |
| Eureka Oxygen | | | |
| Eureka Oxygen | 12/01/2022 | cylinder rental | 126.04 |
| Total Eureka Oxygen: | | | 126.04 |
| FasTrak Invoice Processing Department | | | |
| FasTrak Invoice Processing Department | 12/07/2022 | Golden Gate Bridge Toll for AWWA Conference | 9.40 |
| FasTrak Invoice Processing Department | 12/01/2022 | 11/10/22 Toll Fee - Richmond-San Rafael Bridge | 7.00 |
| Total FasTrak Invoice Processing Department: | | | 16.40 |
| FEDEX | | | |
| FEDEX | 12/29/2022 | Ship safety video back to JPLA | 14.81 |
| FEDEX | 12/29/2022 | Return portable eyewash shower hose | 12.51 |
| Total FEDEX: | | | 27.32 |
| Frontier Communications | | | |
| Frontier Communications | 12/29/2022 | Ruth Hydro/Ruth Dataline | 218.64 |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
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| Vendor Name | Date Paid | Description | Amount Paid |
|--------------------------------|------------|---|-------------|
| Frontier Communications | 12/29/2022 | Ruth HQ | 56.04 |
| Total Frontier Communications: | | | 274.68 |
| GEI Consultants, Inc | | | |
| GEI Consultants, Inc | 12/27/2022 | FERC Safety Inspection | 230.25 |
| Total GEI Consultants, Inc: | | | 230.25 |
| GHD | | | |
| GHD | 12/29/2022 | Engineering - CDP for Samoa Peninsula ROW Phase 1 | 232.26 |
| GHD | 12/29/2022 | Engineering - Peninsula 15" DW Replacement Concept Analysis | 12,018.00 |
| GHD | 12/29/2022 | Engineering - DW Pipeline Direct Assessment | 9,443.84 |
| GHD | 12/29/2022 | Engineering - Collector 2 Rehabilitation | 5,227.14 |
| GHD | 12/29/2022 | Engineering - Mad River X-Sect Survey Analysis | 4,197.00 |
| GHD | 12/29/2022 | General Engineering | 473.75 |
| GHD | 12/29/2022 | General Engineering | 473.76 |
| GHD | 12/29/2022 | General Engineering - Ruth | 379.01 |
| GHD | 12/29/2022 | General Engineering - OnSite Chlorine Generation | 94.76 |
| Total GHD: | | | 32,539.52 |
| Grainger | | | |
| Grainger | 12/29/2022 | Flush valve assembly for Main Office Bathroom | 50.70 |
| Total Grainger: | | | 50.70 |
| Harbor Freight Tools | | | |
| Harbor Freight Tools | 12/12/2022 | Liners foar storage boxes on new Unit #4 | 48.23 |
| Total Harbor Freight Tools: | | | 48.23 |
| Health Equity Inc | | | |
| Health Equity Inc | 12/07/2022 | HSA Admin Fee - 6 employees | 17.70 |
| Health Equity Inc | 12/07/2022 | HSA Admin Fee 10 employees | 29.50 |
| Health Equity Inc | 12/21/2022 | District HSA Contributions- 1 employees | 333.33 |
| Total Health Equity Inc: | | | 380.53 |
| Hensel Hardware | | | |
| Hensel Hardware | 12/12/2022 | maintenance shop supplies | 19.52 |
| Hensel Hardware | 12/29/2022 | Shop paint inventory | 20.81 |
| Hensel Hardware | 12/29/2022 | Hasp lock for main office roof access hatch | 15.17 |
| Hensel Hardware | 12/29/2022 | materials for main office PV | 64.97 |
| Total Hensel Hardware: | | | 120.47 |
| Henwood Associates, Inc | | | |
| Henwood Associates, Inc | 12/06/2022 | Consultant Services Agreement- October 2022 | 430.94 |
| Total Henwood Associates, Inc: | | | 430.94 |
| Hilfiker Co. | | | |
| Hilfiker Co. | 12/29/2022 | Poly coated rungs for IW overflow vault | 87.40 |
| Total Hilfiker Co.: | | | 87.40 |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
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| Vendor Name | Date Paid | Description | Amount Paid |
|--------------------------------------|------------|---|-------------|
| Humboldt County Treasurer | | | |
| Humboldt County Treasurer | 12/29/2022 | <i>Fund No 3876 Account 800870</i> | 45,611.43 |
| Total Humboldt County Treasurer: | | | 45,611.43 |
| Humboldt Fence Company | | | |
| Humboldt Fence Company | 12/29/2022 | <i>Supplies for Essex security fencing</i> | 867.53 |
| Total Humboldt Fence Company: | | | 867.53 |
| Humboldt Redwood Company, LLC | | | |
| Humboldt Redwood Company, LLC | 12/12/2022 | <i>Mt Pierce Lease site</i> | 308.26 |
| Total Humboldt Redwood Company, LLC: | | | 308.26 |
| Ian Ivey | | | |
| Ian Ivey | 12/29/2022 | <i>Wellness Grant Reimbursement</i> | 34.00 |
| Total Ian Ivey: | | | 34.00 |
| Industrial Electric | | | |
| Industrial Electric | 12/12/2022 | <i>Hardware for Main Office HVAC</i> | 9.94 |
| Industrial Electric | 12/29/2022 | <i>Park 1 electrical</i> | 4.87 |
| Total Industrial Electric: | | | 14.81 |
| Johnson's Mobile Rentals LLC | | | |
| Johnson's Mobile Rentals LLC | 12/29/2022 | <i>Temporary fence rental for TRF Tesla battery project</i> | 232.74 |
| Total Johnson's Mobile Rentals LLC: | | | 232.74 |
| JTN Energy, LLC | | | |
| JTN Energy, LLC | 12/06/2022 | <i>Consultant Services Agreement - October 2022</i> | 430.94 |
| Total JTN Energy, LLC: | | | 430.94 |
| Ken Davis | | | |
| Ken Davis | 12/12/2022 | <i>Wellness Grant 2022</i> | 34.00 |
| Total Ken Davis: | | | 34.00 |
| Mad River Union | | | |
| Mad River Union | 12/12/2022 | <i>annual subscription</i> | 40.00 |
| Total Mad River Union: | | | 40.00 |
| Matthew Davis | | | |
| Matthew Davis | 12/29/2022 | <i>Return</i> | 220.00 |
| Total Matthew Davis: | | | 220.00 |
| Mendes Supply Company | | | |
| Mendes Supply Company | 12/12/2022 | <i>Eureka office supplies</i> | 99.61 |
| Mendes Supply Company | 12/29/2022 | <i>Eureka office supplies</i> | 49.57 |
| Total Mendes Supply Company: | | | 149.18 |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
Report dates: 12/1/2022-12/31/2022Page: 6
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| Vendor Name | Date Paid | Description | Amount Paid |
|---|------------|---|-------------|
| Miller Farms Nursery | | | |
| Miller Farms Nursery | 12/12/2022 | Oil drain line for Altec Chipper | 26.88 |
| Miller Farms Nursery | 12/29/2022 | Security fencing supplies | 29.51 |
| Miller Farms Nursery | 12/29/2022 | Saw supplies | 51.52 |
| Miller Farms Nursery | 12/29/2022 | Security fencing supplies | 30.15 |
| Miller Farms Nursery | 12/29/2022 | Security fencing supplies | 3.21 |
| Total Miller Farms Nursery: | | | 141.27 |
| Mission Linen | | | |
| Mission Linen | 12/01/2022 | Uniform Rental | 138.45 |
| Mission Linen | 12/01/2022 | Uniform Rental | 109.75 |
| Mission Linen | 12/01/2022 | maintenance supplies | 32.12 |
| Mission Linen | 12/01/2022 | Uniform Rental | 138.45 |
| Mission Linen | 12/01/2022 | Uniform Rental | 122.10 |
| Mission Linen | 12/01/2022 | maintenance supplies | 102.49 |
| Mission Linen | 12/01/2022 | Uniform Rental | 138.45 |
| Mission Linen | 12/01/2022 | maintenance supplies | 15.73 |
| Total Mission Linen: | | | 797.54 |
| Mitchell, Brisso, Delaney & Vrieze | | | |
| Mitchell, Brisso, Delaney & Vrieze | 12/06/2022 | Legal Services- November 2022 | 310.00 |
| Mitchell, Brisso, Delaney & Vrieze | 12/06/2022 | Legal Services- VDI Claim November 2022 | 62.00 |
| Total Mitchell, Brisso, Delaney & Vrieze: | | | 372.00 |
| Motion Industries, Inc | | | |
| Motion Industries, Inc | 12/29/2022 | Shipping Charges - Inv #CA23-00533504 | 16.61 |
| Total Motion Industries, Inc: | | | 16.61 |
| Napa Auto Parts | | | |
| Napa Auto Parts | 12/29/2022 | Never seize lubricant | 19.19 |
| Napa Auto Parts | 12/29/2022 | Maintenance shop supplies | 25.56 |
| Napa Auto Parts | 12/29/2022 | Ruth boat annual maintenance | 48.58 |
| Napa Auto Parts | 12/29/2022 | Fleet service supplies for Units 1 & 3 | 266.70 |
| Napa Auto Parts | 12/29/2022 | Tub solvent, drive belt & lube | 141.16 |
| Napa Auto Parts | 12/29/2022 | Tail lamp | 1.22 |
| Napa Auto Parts | 12/29/2022 | Oil filter | 13.00 |
| Total Napa Auto Parts: | | | 515.41 |
| Nilsen Co. | | | |
| Nilsen Co. | 12/12/2022 | Chain link fence stretching tool | 54.61 |
| Total Nilsen Co.: | | | 54.61 |
| North Coast Laboratories | | | |
| North Coast Laboratories | 12/12/2022 | lab tests - Humboldt Bay Retail | 95.00 |
| North Coast Laboratories | 12/12/2022 | lab tests - Fieldbrook-Glendale CSD | 95.00 |
| North Coast Laboratories | 12/12/2022 | lab tests - Humboldt Bay Retail | 225.00 |
| North Coast Laboratories | 12/12/2022 | lab tests - Humboldt Bay Retail | 95.00 |
| North Coast Laboratories | 12/12/2022 | lab tests - Fieldbrook-Glendale CSD | 95.00 |
| Total North Coast Laboratories: | | | 605.00 |

Humboldt Bay Municipal Water District

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| Vendor Name | Date Paid | Description | Amount Paid |
|---|------------|---|-------------|
| Northern California Safety Consortium | | | |
| Northern California Safety Consortium | 12/06/2022 | membership fee | 75.00 |
| Northern California Safety Consortium | 12/29/2022 | Annual hazmat refresher course | 900.00 |
| Total Northern California Safety Consortium: | | | 975.00 |
| Occu-Med, Ltd | | | |
| Occu-Med, Ltd | 12/27/2022 | Pre-employment physical - Executive Assistant/Board Secretary | 422.45 |
| Total Occu-Med, Ltd: | | | 422.45 |
| Occupational Health Service of Mad River | | | |
| Occupational Health Service of Mad River | 12/06/2022 | DMV physical | 236.25 |
| Total Occupational Health Service of Mad River: | | | 236.25 |
| Optimum/Sudden Link | | | |
| Optimum/Sudden Link | 12/06/2022 | Fieldbrook-Glendale CSD Internet | 323.61 |
| Optimum/Sudden Link | 12/12/2022 | Essex internet | 231.77 |
| Optimum/Sudden Link | 12/12/2022 | Essex Phones | 72.11 |
| Optimum/Sudden Link | 12/07/2022 | TRF Internet | 25.27 |
| Optimum/Sudden Link | 12/07/2022 | TRF Internet - Blue Lake SCADA Monitoring | 50.55 |
| Optimum/Sudden Link | 12/07/2022 | TRF Internet - Fieldbrook-Glendale CSD | 50.55 |
| Optimum/Sudden Link | 12/16/2022 | Eureka Internet | 208.45 |
| Total Optimum/Sudden Link: | | | 962.31 |
| Pacific Gas & Electric Co. | | | |
| Pacific Gas & Electric Co. | 12/01/2022 | Ruth HQ | 122.58 |
| Pacific Gas & Electric Co. | 12/01/2022 | Ruth Bunk House | 94.39 |
| Pacific Gas & Electric Co. | 12/27/2022 | Eureka Office | 627.82 |
| Pacific Gas & Electric Co. | 12/27/2022 | Jackson Ranch Rectifier | 19.44 |
| Pacific Gas & Electric Co. | 12/27/2022 | HWY 299 Rectifier | 146.49 |
| Pacific Gas & Electric Co. | 12/27/2022 | West End Road Rectifier | 158.80 |
| Pacific Gas & Electric Co. | 12/27/2022 | TRF | 8,240.36 |
| Pacific Gas & Electric Co. | 12/27/2022 | Ruth Hydro Valve Control | 33.41 |
| Pacific Gas & Electric Co. | 12/27/2022 | Ruth Hydro | 31.37 |
| Pacific Gas & Electric Co. | 12/27/2022 | Samoa Booster Pump Station | 482.75 |
| Pacific Gas & Electric Co. | 12/27/2022 | Samoa Dial Station | 62.44 |
| Pacific Gas & Electric Co. | 12/27/2022 | Essex Pumping - Oct 2022 | 61,617.81 |
| Pacific Gas & Electric Co. | 12/29/2022 | Ruth Bunkhouse | 125.81 |
| Pacific Gas & Electric Co. | 12/29/2022 | Ruth HQ | 117.93 |
| Total Pacific Gas & Electric Co.: | | | 71,881.40 |
| Pitney Bowes Inc | | | |
| Pitney Bowes Inc | 12/13/2022 | Ink for Postage Meter | 92.85 |
| Pitney Bowes Inc | 12/27/2022 | postage meter lease | 260.15 |
| Total Pitney Bowes Inc: | | | 353.00 |
| Purchase Power | | | |
| Purchase Power | 12/12/2022 | Refill Postage | 500.00 |
| Purchase Power | 12/27/2022 | Postage Refill | 500.00 |
| Total Purchase Power: | | | 1,000.00 |

Humboldt Bay Municipal Water District

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| Vendor Name | Date Paid | Description | Amount Paid |
|--|------------|--|-------------|
| Rebecca J. Moyle | | | |
| Rebecca J. Moyle | 12/29/2022 | Wellness Grant Reimbursement | 34.00 |
| Total Rebecca J. Moyle: | | | 34.00 |
| Recology Arcata | | | |
| Recology Arcata | 12/12/2022 | Essex Garbage/Recycling Service | 676.36 |
| Total Recology Arcata: | | | 676.36 |
| Recology Humboldt County | | | |
| Recology Humboldt County | 12/07/2022 | Eureka office garbage/recycling service | 95.55 |
| Total Recology Humboldt County: | | | 95.55 |
| Ryan Chairez | | | |
| Ryan Chairez | 12/16/2022 | Wellness Grant 2022 | 34.00 |
| Ryan Chairez | 12/16/2022 | Safety Boot Reimbursement | 186.62 |
| Total Ryan Chairez: | | | 220.62 |
| Ryan V Murphy | | | |
| Ryan V Murphy | 12/12/2022 | Safety Boot Reimbursement | 216.30 |
| Total Ryan V Murphy: | | | 216.30 |
| Salisbury Online | | | |
| Salisbury Online | 12/29/2022 | Electrical Safety Supplies | 4,083.73 |
| Salisbury Online | 12/29/2022 | Electrical Safety Supplies | 606.63 |
| Total Salisbury Online: | | | 4,690.36 |
| Sanders Roofing Inc | | | |
| Sanders Roofing Inc | 12/29/2022 | Main office roof replacement | 40,775.00 |
| Sanders Roofing Inc | 12/29/2022 | Fasteners for solar brackets | 204.00 |
| Total Sanders Roofing Inc: | | | 40,979.00 |
| Sitestar Nationwide Internet | | | |
| Sitestar Nationwide Internet | 12/01/2022 | Essex Internet - Dec 2022 | 51.90 |
| Total Sitestar Nationwide Internet: | | | 51.90 |
| Six Rivers Communications | | | |
| Six Rivers Communications | 12/29/2022 | New radio Unit 4 | 544.25 |
| Total Six Rivers Communications: | | | 544.25 |
| State Water Resources Control Board | | | |
| State Water Resources Control Board | 12/29/2022 | NPDES Drinking Water Purveyors Annual Permit Fee | 3,274.00 |
| Total State Water Resources Control Board: | | | 3,274.00 |
| Streamline | | | |
| Streamline | 12/01/2022 | Website maintenance membership fee | 450.00 |

Humboldt Bay Municipal Water District

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| Vendor Name | Date Paid | Description | Amount Paid |
|---|------------|--|-------------|
| Total Streamline: | | | 450.00 |
| SWAPE, LLC | | | |
| SWAPE, LLC | 12/06/2022 | McNamara & Peepe site hydrology, hydrogeology & sampling | 2,216.50 |
| SWAPE, LLC | 12/06/2022 | McNamara & Peepe site hydrology, hydrogeology & sampling | 147.50 |
| Total SWAPE, LLC: | | | 2,364.00 |
| SWRCB Accounting Office | | | |
| SWRCB Accounting Office | 12/29/2022 | Wholesaler Water System Annual Fees 7/1/22-6/30/23 | 16,008.47 |
| Total SWRCB Accounting Office: | | | 16,008.47 |
| SWRCB-DWOCP | | | |
| SWRCB-DWOCP | 12/27/2022 | D2 Cert Renewal - Bruce Brashear | 60.00 |
| SWRCB-DWOCP | 12/27/2022 | Water Treatment T2 Exam Fee-Bruce Brashear | 60.00 |
| SWRCB-DWOCP | 12/29/2022 | D3 Cert Applicationl - Seth Stone | 90.00 |
| Total SWRCB-DWOCP: | | | 210.00 |
| Tehama Tire Service | | | |
| Tehama Tire Service | 12/12/2022 | Flat repair on Unit #16 | 22.50 |
| Total Tehama Tire Service: | | | 22.50 |
| The Mill Yard | | | |
| The Mill Yard | 12/29/2022 | Hardware | 37.24 |
| The Mill Yard | 12/29/2022 | Hardie board for main office roof replacement | 81.15 |
| Total The Mill Yard: | | | 118.39 |
| Thrifty Supply | | | |
| Thrifty Supply | 12/12/2022 | plumbing parts for maintenance shop gutter | 24.56 |
| Thrifty Supply | 12/29/2022 | Eureka Office Toilet Repairs | 144.81 |
| Total Thrifty Supply: | | | 169.37 |
| Trinity County General Services | | | |
| Trinity County General Services | 12/29/2022 | Pickett Peak site lease | 257.50 |
| Total Trinity County General Services: | | | 257.50 |
| Trinity County Solid Waste | | | |
| Trinity County Solid Waste | 12/12/2022 | Ruth HQ dump fees | 4.59 |
| Trinity County Solid Waste | 12/12/2022 | Ruth Hydro dump fees | 4.59 |
| Total Trinity County Solid Waste: | | | 9.18 |
| U.S. Bank Corporate Payment System | | | |
| U.S. Bank Corporate Payment System | 12/13/2022 | CSDA Sample Policy Handbook | 225.00 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Virtual Event - Bridge the Gaps | 50.00 |
| U.S. Bank Corporate Payment System | 12/13/2022 | CSDA Board Secretary Conference | 900.00 |
| U.S. Bank Corporate Payment System | 12/13/2022 | GAN Conference Call | 6.91 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Business Cards | 32.66 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Conference Refund of double charge` | 775.00- |
| U.S. Bank Corporate Payment System | 12/13/2022 | Hotel for Board Secretary Conference | 681.88 |

Humboldt Bay Municipal Water District

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| Vendor Name | Date Paid | Description | Amount Paid |
|---|------------|--|-------------|
| U.S. Bank Corporate Payment System | 12/13/2022 | Annual Rewal of Microsoft 365 - Director Laptops | 99.99 |
| U.S. Bank Corporate Payment System | 12/13/2022 | On X Premium annual membership for Ruth Phones | 29.99 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Bronze Plaque | 1,492.20 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Adobe Annual Renewal | 239.88 |
| U.S. Bank Corporate Payment System | 12/13/2022 | 12' coiled phone cord for Eureka Office | 13.52 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Crane Operator certification core exam | 155.00 |
| U.S. Bank Corporate Payment System | 12/13/2022 | AWWA Fall Conference - Meal | 55.83 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Essex Office Supplies | 248.63 |
| U.S. Bank Corporate Payment System | 12/13/2022 | 2 Replacement meter heads for Chip Export Dock | 872.64 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Spendwise monthly subscription - Oct 2022 | 79.70 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Katan Paper for slash piles for shoreline debris removal project | 270.85 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Eureka office supplies | 32.07 |
| U.S. Bank Corporate Payment System | 12/13/2022 | AirMed Renewals x 1 | 65.00 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Eureka office new monitors | 535.60 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Eureka office COVID tests | 117.84 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Eureka office toner cartridge | 152.83 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Safety Boot 1 | 327.00 |
| U.S. Bank Corporate Payment System | 12/13/2022 | AWWA Fall Conference - Meal | 10.72 |
| U.S. Bank Corporate Payment System | 12/13/2022 | AWWA Fall Conference - Fuel for travel | 120.42 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Solar at Eureka Office | 3,491.00 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Solar at Eureka Office | 9,120.41 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Online Hazmat Training | 319.00 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Essex door repair | 106.67 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Safety Sign for IW overflow dissipater | 79.52 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Lunch with SWRCB inspector | 54.15 |
| U.S. Bank Corporate Payment System | 12/13/2022 | Supply hose for portable eyewash/shower | 205.98 |
| U.S. Bank Corporate Payment System | 12/13/2022 | TRF pump gear oil | 32.77 |
| Total U.S. Bank Corporate Payment System: | | | 19,450.66 |
| U.S. Postmaster | | | |
| U.S. Postmaster | 12/06/2022 | Annual PO Box Rental | 212.00 |
| Total U.S. Postmaster: | | | 212.00 |
| USA Blue Book | | | |
| USA Blue Book | 12/29/2022 | Marking Paint HB Retail | 35.96 |
| USA Blue Book | 12/29/2022 | Marking Paint FBGD | 35.96 |
| Total USA Blue Book: | | | 71.92 |
| USC Foundation | | | |
| USC Foundation | 12/12/2022 | Backflow Prevention Annual Membership - Humboldt Bay Retail | 31.20 |
| USC Foundation | 12/12/2022 | Backflow prevention Annual Membership - Fieldbrook-Glendale | 88.80 |
| Total USC Foundation: | | | 120.00 |
| USDA Forest Service | | | |
| USDA Forest Service | 12/12/2022 | US Forest Service Special Use Permit | 12,963.38 |
| USDA Forest Service | 12/12/2022 | US Forest Service Special Use Permit | 12,963.38 |
| Total USDA Forest Service: | | | 25,926.76 |
| VALEO Networks | | | |
| VALEO Networks | 12/29/2022 | Eureka office monthly computer maintenance | 1,880.99 |

Humboldt Bay Municipal Water District

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| Vendor Name | Date Paid | Description | Amount Paid |
|--|------------|---------------------------------|-------------|
| Total VALEO Networks: | | | 1,880.99 |
| Valley Pacific Petroleum Servi, Inc | | | |
| Valley Pacific Petroleum Servi, Inc | 12/12/2022 | Cardlock - Pumping & Control | 430.72 |
| Valley Pacific Petroleum Servi, Inc | 12/12/2022 | Cardlock - Water Quality | 430.72 |
| Valley Pacific Petroleum Servi, Inc | 12/12/2022 | Cardlock - Maintenance | 430.72 |
| Valley Pacific Petroleum Servi, Inc | 12/12/2022 | Cardlock - Humboldt Bay Retail | 111.99 |
| Valley Pacific Petroleum Servi, Inc | 12/12/2022 | Cardlock - FGCS | 318.72 |
| Total Valley Pacific Petroleum Servi, Inc: | | | 1,722.87 |
| Verizon Wireless | | | |
| Verizon Wireless | 12/12/2022 | General Manager | 37.88 |
| Verizon Wireless | 12/12/2022 | Ruth Area | 25.64 |
| Verizon Wireless | 12/12/2022 | Humboldt Bay Retail | 11.11 |
| Verizon Wireless | 12/12/2022 | Fieldbrook Glendale CSD | 31.63 |
| Verizon Wireless | 12/12/2022 | Humboldt Bay IPAD | 9.88 |
| Verizon Wireless | 12/12/2022 | Fieldbrook Glendale CSD IPAD | 28.13 |
| Verizon Wireless | 12/12/2022 | Ruth Area | 18.25 |
| Verizon Wireless | 12/12/2022 | Ruth Hydro | 18.26 |
| Total Verizon Wireless: | | | 180.78 |
| Watt's Cleaning Services | | | |
| Watt's Cleaning Services | 12/06/2022 | Eureka Office Cleaning | 278.00 |
| Total Watt's Cleaning Services: | | | 278.00 |
| Wonder Bros. Auto Body | | | |
| Wonder Bros. Auto Body | 12/29/2022 | Unit 6 Body and paint repairs | 1,780.39 |
| Wonder Bros. Auto Body | 12/29/2022 | Unit 6 Body and paint repairs | 1,780.38 |
| Wonder Bros. Auto Body | 12/12/2022 | Replacement mirror for Unit #16 | 224.96 |
| Total Wonder Bros. Auto Body: | | | 3,785.73 |
| Grand Totals: | | | 392,030.01 |

Memo to: HBMWD Board of Directors
From: Dale Davidsen, Superintendent
Date: January 4th, 2023
Subject: Essex/Ruth December 2022 Operational Report

Upper Mad River, Ruth Lake, and Hydro Plant

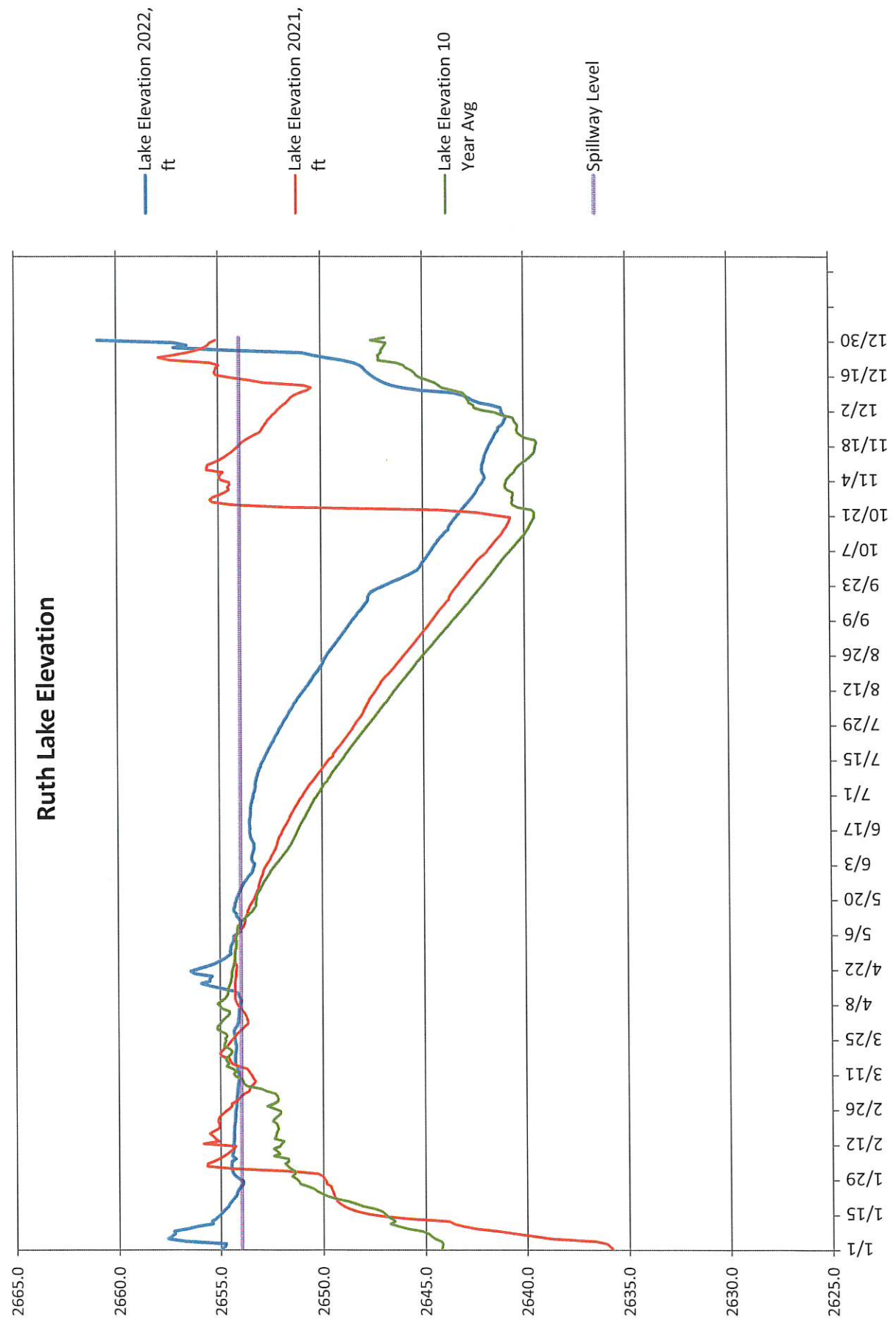
1. Flow at Mad River above Ruth Reservoir (Zenia Bridge) averaged 617 cfs with a high of 4630 cfs on December 27th and a low of 39 cfs on December 3rd
2. The conditions at Ruth Lake for December were as follows:
The lake level on December 31st was 2660.92 feet which is:
 - 20.04 feet higher than November 30th, 2022
 - 5.79 feet higher than December 31st, 2021
 - 13.39 feet higher than the ten-year average
 - 6.92 feet above the spillway
3. Ruth Headquarters recorded 18.54 inches of rainfall for December
4. Ruth Hydro produced 247,200 KWh in December. There were 3 shut downs: all PGE unplanned events for 2 hours and 19 minutes with 462 KWh lost production
5. The lake discharge averaged 411 cfs with a high of 6248 cfs on December 31st

Lower Mad River, Winzler Control, and TRF

6. The river at Winzler Control Center, for December, had an average flow of 9397 cfs. The river flow was a high of 33,900 cfs on December 31st
7. The domestic water conditions were as follows:
 - a. The domestic water turbidity average was 0.15 NTU, which meets Public Health Secondary Standards
 - b. As of December 31st, we pumped 227.380 MG at an average of 7.335 MGD
 - c. The maximum metered daily municipal use was 8.800 MG on December 22nd
8. The TRF is online; conditions for December were as follows:
 - a. Average monthly source water turbidity was 0.27 NTU
 - b. Average monthly filtered water turbidity was 0.04 NTU
 - c. Number of filter backwashes for the month was 44
9. December 1st – HazWoper 8 hr. refresher training for 7 Essex staff through NCSC
10. December 2nd – 90 Day truck BIT inspections
11. December 3rd – Paul took his T-3 and D-3 exams in Redding. Passed both.
12. December 13th – I attended an ASDSO webinar on Piezo well monitoring.

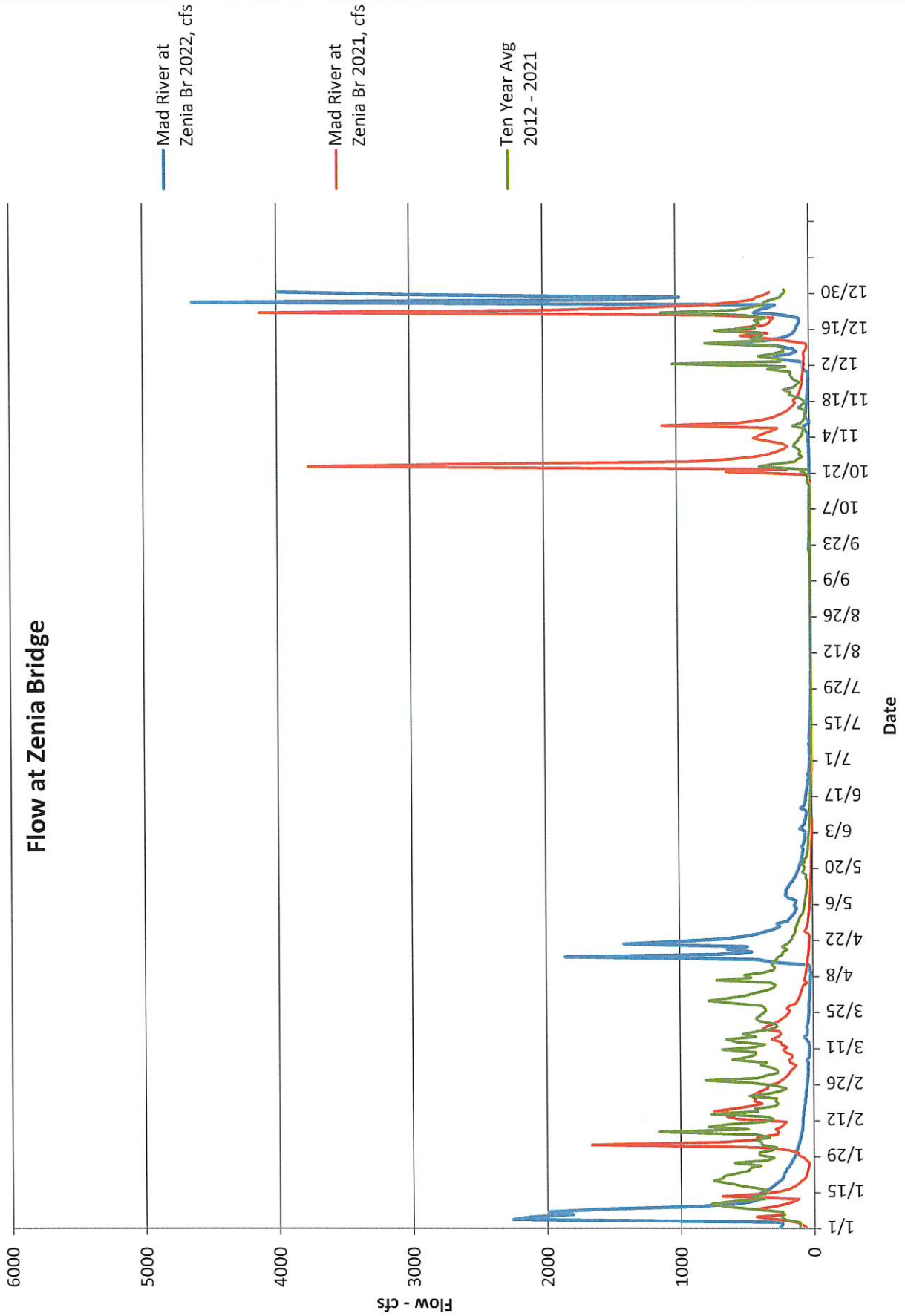
13. December 15th
 - a. Safety meetings
 - i. Ergonomics
 - ii. Slips, trips & falls
 - iii. SDS
 - b. Bill's Retirement and Holiday gathering.
14. December 20th - 6.4 EARTHQUAKE at 02:34
 - a. Repaired a leak in the TRF influent line chlorine injection point. Dewatered the line and did line repairs before we could operate the TRF.
 - b. Lost all utility power and went onto generators for approximately 16 hrs. Also lost all internet communications.
 - c. Larry felt the earthquake at Ruth. He did a first look inspection of the dam at 0300 and followed up with a more thorough inspection at daylight.
 - d. Repaired / replaced ceiling tiles in Board Room
15. December 27th – Due to recent storms, the lake went over spillway this morning.
16. Current and Ongoing Projects
 - a. Tesla battery bank projects
 - i. TRF project is done, Commissioning soon, waiting for PG&E PTO.
 - ii. Essex project in progress
 - b. OSHG – Equipment procurement in progress
 - c. Collector 1 interior painting – In progress
 - d. Main Office Solar project – Solar panel installation in progress.
 - e. Routine annual equipment maintenance and services.

Ruth Lake Elevation

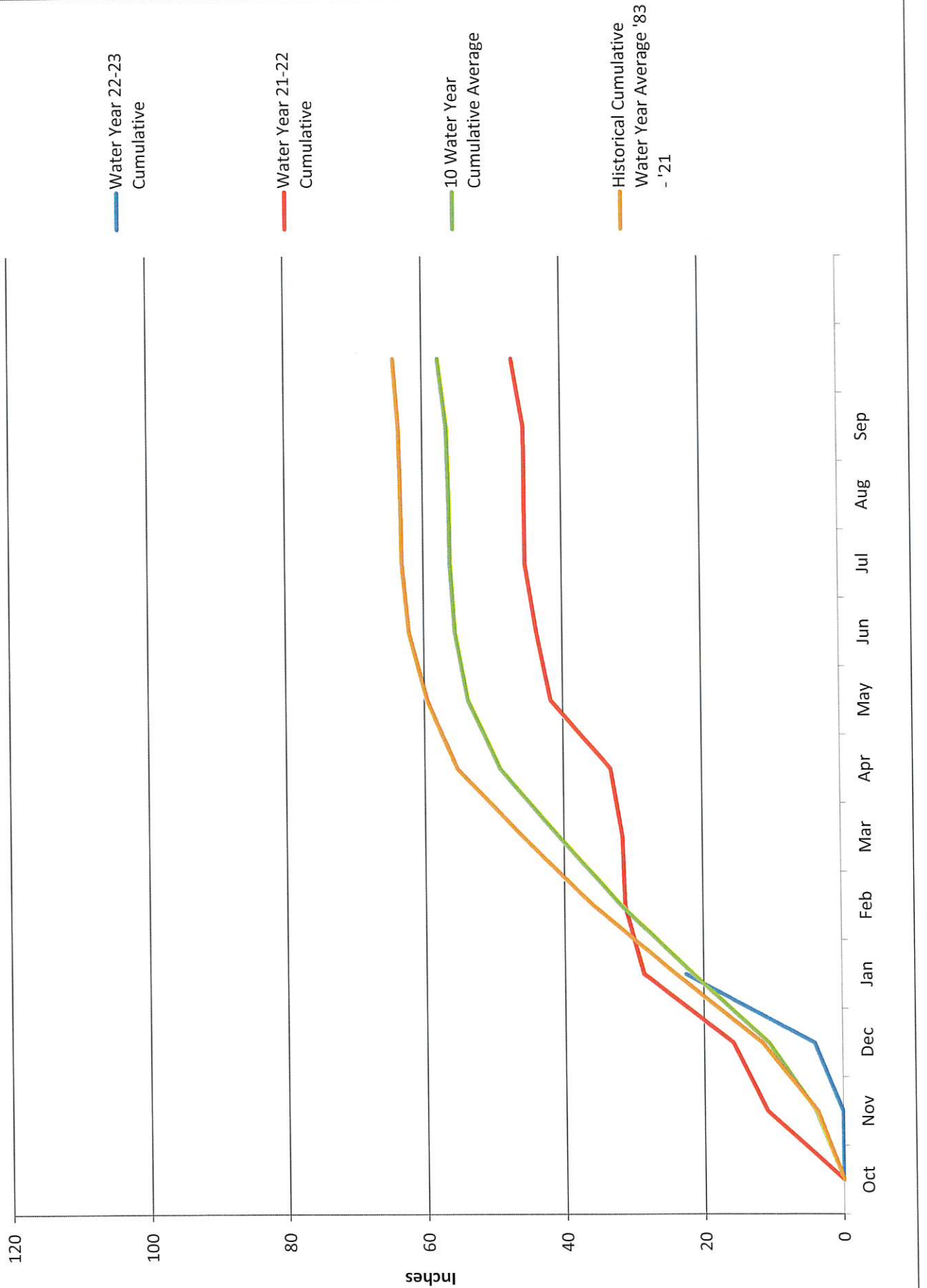


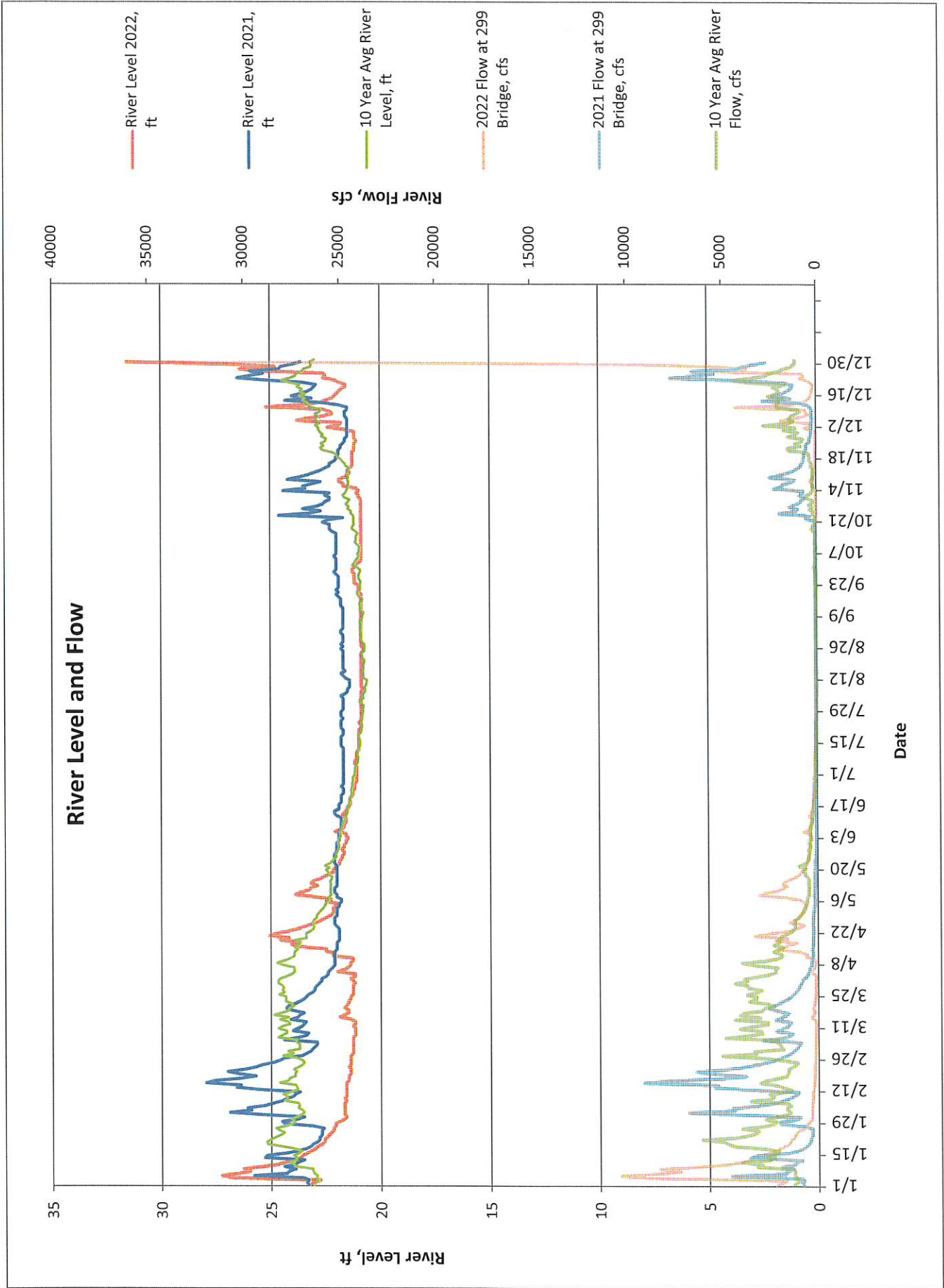
— Lake Elevation 2022, ft
— Lake Elevation 2021, ft
— Lake Elevation 10 Year Avg
— Spillway Level

Flow at Zenia Bridge



Ruth Rainfall - Water Year 2022-2023







Ruth Lake Community Services District

12200 Mad River Road

P.O. Box 6

Mad River, CA 95552

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

Email: ruthlakecsd@yahoo.com Website: www.ruthlakecsd.org

Board of Directors

Jordan Emery

Debbie Sellman

Ed Johnson

Ben Boak

Roger Kirkpatrick

DRAFT

January 2, 2023

The Board of Directors
Humboldt Bay Municipal Water District
P.O. Box 95
Eureka, CA 95502

Dear Board Members:

The Ruth Lake Community Services District would like to exercise its option to extend the "Master Lease" for the "Buffer Strip" around Ruth Lake. Ruth Lake CSD would like to ask for a waiver to the provision of requesting for a renewal during the last 30 days of the term which expires May 31, 2023.

The original lease was with Trinity County, which subsequently assigned it to the Ruth Lake CSD. The lease contract offers the lessee the option to extend the lease in ten-year increments beyond this date for a maximum of 99 years. This includes the original 39 years (June 1, 1964, to May 31, 2003) and six ten-year extensions which could extend the lease until May 31, 2063.

The Ruth Lake CSD would like to extend the current lease by one ten-year period at this time. This would extend the lease until May 31, 2033. The most important reason for extending rather than entering into a new lease is that an extension keeps Trinity County as a responsible party in the lease, in effect, maintaining an extra layer of 'legal insulation' between the lease and Humboldt Bay MWD.

The advantages to extending the lease at this time are several. If we cannot offer the existing recreational sub-leaseholders an extended commitment, they have no impetus to improve their sites. If we can assure them, they will be able to enjoy their improvements into the foreseeable future, they will be much more likely to upgrade their existing improvements, and to invest more time and money in developing and maintaining their sites.

One of the most important methods both our Districts use to improve our facilities is through grant funding. One of the requirements for receiving grant money is to be able to show that we will have control of the assets for sufficient time to pay the public back through use of the

facilities. If we cannot show that we have that kind of guarantee, we will become ineligible for grant funding.

Ruth Lake has been identified as the undiscovered jewel of Trinity County. It is being promoted as one of the major economic replacements for the declining timber industry. Both the Southern Trinity Area Rescue and Southern Trinity Volunteer Fire Department have identified the Lake as a necessary ingredient for the economic sustainability of the area. Extending the lease for the buffer strip to cover the next 10 years shows that both Districts are interested in the long-term survival and improvement of the area. It shows that we are committed to the partnerships that are so prevalent in political rhetoric today.

Sincerely,

DRAFT

Jordan Emery
Chairman, Board of Directors



Ruth Lake Community Services District

12200 Mad River Road

P.O. Box 6

Mad River, CA 95552

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

Email: ruthlakecsd@yahoo.com Website: www.ruthlakecsd.org

DRAFT

SUBLEASE AGREEMENT

THIS SUBLEASE AGREEMENT ("sublease" or "Agreement") is made on this _____ day of _____, 20____, between the RUTH LAKE COMMUNITY SERVICES DISTRICT (hereinafter referred to as "RLCSD") and _____ (hereinafter referred to as "Sublessee").

RECITALS

This sublease is made regarding the following facts and objectives:

A. **Sublessee** desires to sublet the following described property from **RLCSD**:

Lease Site # _____ of the Ruth Lake CSD Lease Lots Map attached as Exhibit A

B. The above-described property (along with other properties) is the subject of a certain lease entered into between the Humboldt Bay Municipal Water District, as Lessor, and the County of Trinity, as Lessee, dated December 31, 1964, which was subsequently assigned to **RLCSD** ("Master Lease"). The contents of the Master Lease are posted at RLCSD's website [www.ruthlakecsd.org] and are incorporated herein by reference.

C. This sublease is intended to carry out the recreational purposes permitted by the Master Lease.

D. **RLCSD** is willing to sublet the above-described property to Sublessee on the terms and provisions set forth in this sublease.

NOW, THEREFORE, the parties AGREE as follows:

1. **RLCSD** hereby subleases to **Sublessee**, upon the terms and conditions described herein, the real property described above ("premises"). **RLCSD** expressly reserves, however, the right to establish and maintain (prior or after execution of this Agreement) easements on or across the subleased premises for purposes of ingress, egress, and public utilities.

2. **Sublessee** agrees to be bound by all of the terms and conditions of that certain lease entered into between the Humboldt Bay Municipal Water District (**HBMWD** herein), as Lessor, and the County of Trinity, as Lessee, dated December 31, 1964, which was subsequently assigned to **RLCSD** herein ("Master Lease"). **In the event of any inconsistencies between this sublease and**

the Master Lease, the Master Lease shall prevail. Sublessee acknowledges that Ruth Lake is an artificial impoundment of water created primarily for municipal and industrial purposes and that any recreational use of the water is subordinate to such uses. Sublessee also agrees to be bound by all policies, standards, rules, and regulations of RLCSD, past, present, or future which may be amended from time to time with or without prior notice. Failure to do so shall be considered a material breach of this Agreement and shall be grounds for termination of this Agreement pursuant to Section 25.

3. The term of this sublease shall commence on _____, 2023, and shall expire on April 30, 2033, unless sooner terminated.

Subject to the Master Lease being renewed beyond May 31, 2023, AND provided Sublessee is not in default hereunder, RLCSD agrees to give Sublessee the first opportunity to renew the sublease on said premises for an additional term, upon such terms and conditions, as RLCSD deems reasonable at said time.

In no event shall this sublease (the original or any extension or renewal) extend beyond May 31, 2033, as that is the date RLCSD's lease with HBMWD expires.

4. Sublessee shall pay RLCSD, lease fees, the annual sum of \$_____. The annual lease fees to be paid shall be subject to adjustment every year during the term of this Agreement. In no event shall the lease fee be less than that stated above, nor shall the lease fee ever be decreased subsequent to a previous adjustment. The base for computing an adjustment of lease fee is the Consumer Price Index for all Urban Consumers (base year 2023 = 100) for the United States, published by the United States Department of Labor, Bureau of Labor Statistics ("Index"), which is, published most immediately preceding the date of commencement of the term of this Agreement ("Beginning Index"). The Index published most immediately preceding the adjustment date in question ("Extension Index") is to be used in determining the amount of the adjustment. If the Extension Index has changed in comparison to the Beginning Index, the annual lease fees (until the next lease adjustment) shall be set by multiplying the lease fees above by a fraction, the numerator of which is the Extension Index and the denominator of which is the Beginning Index. The lease fee shall never be lowered, even if the Index decreases. RLCSD will notify Sublessee of any lease fee increase, at which time Sublessee shall be responsible for the higher payments. If the Index is discontinued or revised during the term of this Agreement, such other governmental index or computation with which it is replaced shall be used in order to obtain substantially the same result as would be obtained if the Index had not been discontinued or revised.

5. Sublessee shall pay RLCSD, lease fees in accordance with RLCSD fee schedule. Lease fees shall be billed twice annually. Lease fees will be mailed by first class mail to the address last given to RLCSD by Sublessee during the third week of March and the third week of July each year. Lease fees are due on May 1 and September 1 of each year. A late fee of \$30 per month shall be charged if fees are not paid by the due date. Delinquent lease fees of 60 days or longer shall constitute a material breach of this Agreement and shall be grounds for termination of this Agreement pursuant to Section 25. Failure to update the mailing address is not a valid excuse for non-payment or late payment of lease fees.

6. Any cutting of timber, trees, or shrubs on **RLCSD** property by **Sublessee**, or at **Sublessee**'s direction, without the prior written consent of **RLCSD** and **HBMWD** shall constitute a breach of this Agreement and **RLCSD** shall have the right to terminate this Agreement. Cutting of timber, trees, or shrubs on **RLCSD** property may also constitute a crime under California Penal Code Section 384a.

7. **Sublessee** acknowledges, understands, and will comply with **HBMWD**'s and **RLCSD**'s Prevention Plan for Quagga Zebra Mussels at Ruth Lake (**Lake**), which has been incorporated into Ordinance 19 as adopted by **HBMWD** and effective July 12, 2009.

8. Any boat docks shall be constructed in accordance with all applicable governmental laws and regulations. In addition, any boat docks must be secured in a manner so as not to be allowed to drift loose in the **Lake**, and shall be marked in a permanent, non-removable manner with the lot number of the **Sublessee**. Docks shall at all times meet the Mooring System requirements as specified in **RLCSD** Policy Number 6100. If a **Sublessee**'s dock fails to meet the Mooring System requirements, the **Sublessee** shall either permanently remove the dock from the **Lake** or shall reimburse **RLCSD** for the cost it incurs to remove the dock from the **Lake** or shall be required to reimburse **RLCSD** for the cost it incurs to meet the Mooring System requirements if **RLCSD** elects to perform the work in accordance with Section 26. The placement and maintenance of boat docks shall be in compliance with all applicable governmental laws and regulations, including but not limited to, all of **RLCSD**'s standards.

9. Collection and disposal of all garbage and litter is the responsibility of **Sublessee**. Further, **Sublessee** shall comply with all applicable governmental sanitation laws and regulations. **Sublessee** shall be responsible for furnishing all utility services to the premises.

10. **Sublessee** understands and agrees that fire permits must be obtained throughout the fire season. No fires may be lit without a fire permit and all applicable fire regulations will be observed, including CAL FIRE Fire Safe Regulations. **RLCSD** reserves the right to impose stricter fire regulations. **Sublessee** further agrees to obtain an air quality burn permit and to comply with all air quality requirements for any burning of vegetation.

11. At no time shall the public be denied access to the reservoir over the portion of the subleased premises included within a minimum strip of 100 feet in horizontal width from the reservoir at maximum pool elevation. No fences shall be built nor shall any "NO TRESPASSING" or similar signs be posted within such 100-foot strip.

12. The subleased premises shall not be used as a permanent residence nor become the permanent domicile of **Sublessee**. The subleased premises shall be for part-time/non-permanent use only which is recreational in nature. **Sublessee** agrees to comply with all governmental laws, ordinances and regulations affecting or concerning the subleased premises.

13. **Sublessee** shall not engage in any activity in, on, or about, the subleased premises which constitute a Reportable Use (as hereinafter defined) of Hazardous Substances (as hereinafter defined) without the express prior written consent of **RLCSD** and compliance in a timely manner

(at **Sublessee's** sole cost and expense) with all applicable law. "Reportable Use" shall mean (a) the installation or use of any above or below ground storage tank, or (b) the generation, possession, storage, use, transportation, or disposal of a Hazardous Substance that requires a permit from, or with respect to which a report, notice, registration, or business plan is required to be filed with, any governmental authority. Reportable Use shall also include **Sublessee's** being responsible for the presence in, on or about the subleased premises of a Hazardous Substance with respect to which any applicable law requires that a notice be given to person entering or occupying the subleased premises or neighboring properties. **Sublessee** shall indemnify, defend, and hold **RLCSD** and **HBMWD** harmless from and against any and all liabilities, claims, causes of action, actions, damages, losses, hazards, nuisances, liabilities, cleanup costs, administrative orders and assessments or penalties, judicial awards and orders, expenses, costs, and fees (including, without limitation, attorney's fees, consultants fees, and expert fees), with respect to the existence, discharge, release, use, assembly, processing, manufacture or storage of a Hazardous Substance in, on, or about the subleased premises. The term "Hazardous Substance," as used herein, shall have the meaning given to it under applicable federal and state laws and regulations from time to time in effect.

14. **Sublessee** agrees to not assign this sublease to any third party without first obtaining the written consent of **RLCSD**. The conditions for obtaining consent to such an assignment include but are not limited to: 1) assignment must be for the fair market value of this sublease and the improvements on the subleased premises, and 2) **Sublessee** and the proposed assignee shall submit to **RLCSD** a notarized Assignment of Sublease (on a form provided by **RLCSD**) and shall pay such transfer fee. Any assignment made in violation of the terms of this paragraph shall be null and void and of no effect and shall be cause for immediate termination of this Agreement. "Subletting" of this sublease is strictly prohibited and any such "sub-sublease," whether oral or written, shall be null and void and of no effect, and shall be cause for immediate termination of this Agreement.

15. **Sublessee** agrees, at **Sublessee's** sole cost, to maintain the subleased premises in good condition and to keep the subleased premises in a clean and sightly condition and in as good of condition as when possession is delivered to **Sublessee**.

16. **Sublessee** agrees to pay any and all taxes, assessments, charges, licenses, and demands levied upon or against the subleased premises, any improvements or personal property situated thereon, as well as all charges for gas, electricity, water, telephone and other public services or utilities furnished to the subleased premises during the term of this sublease.

17. **Sublessee** shall not make any alterations, additions, or improvements to the subleased premises without first obtaining the written consent of **RLCSD** and having plans and specifications approved by **RLCSD** in writing. Following this approval, the proposed alterations, additions, or improvements must be approved by the **HBMWD** per the terms of the Master Lease, which process may take up to 45 days from date of approval by **RLCSD**. If **Sublessee** obtains written approval from both **RLCSD** and **HBMWD**, no alterations, additions, or improvements shall be commenced until ten (10) days after **RLCSD** has received written notice from **Sublessee** stating date of commencement of work so the **RLCSD** can post and record an appropriate notice of nonresponsibility. Said written approvals are valid for a maximum of 360 days, after which

time they expire if work has not been completed. **RLCSD** shall not have any responsibility to make any alterations, repairs or improvements to the subleased premises, and **Sublessee** shall not permit or allow to be committed any waste to the subleased premises.

Should it become necessary to make any alterations, removals, repairs or improvements to the subleased premises, or the utilities installed thereon, by reason of any ordinances, regulations or requirements of the County of Trinity, the State of California, the United States of America, the **HBMWD**, **RLCSD**, or any other applicable governmental authority, such alterations, removals, repairs, or improvements shall be paid for by **Sublessee**. **Sublessee** shall keep the subleased premises free and clear of all liens and other liens for or on account of labor performed or materials furnished at the instance or on behalf of **Sublessee**.

All improvements and alterations to the subleased premises shall become a part of the premises and shall belong to **RLCSD** upon termination of this Agreement, provided, however, that the **RLCSD** shall have the right to compel **Sublessee**, at the cost of **Sublessee**, to remove some or all of said improvements and alterations at the time of termination of this Agreement. **Sublessee** agrees not to paint or erect signs on the subleased premises without first obtaining the written consent of **RLCSD**. Removal, at **Sublessee's** sole expense, of any noncompliant alteration or improvement may be compelled at **RLCSD's** or **HBMWD's** election, in addition to any other remedy **RLCSD** or **HBMWD** may be entitled to under law or equity. If **Sublessee** fails to comply with the above approval steps, and/or if lease is in non-compliance **Sublessee** shall be liable for any penalty fees set forth in **RLCSD** policies.

18. If **Sublessee** is adjudged bankrupt or insolvent by any court, or if **Sublessee** makes any assignment for the benefit of creditors, or if a receiver is appointed for **Sublessee**, or if the interest of **Sublessee** is sold under execution, **RLCSD** may upon the occurrence of any such events, at its option, without notice or demand upon **Sublessee**, or upon any person or persons claiming by, through or under **Sublessee**, immediately cancel and terminate this sublease and all of the rights of **Sublessee** and of any and all persons claiming by, through or under **Sublessee** in and to the subleased premises, and **RLCSD** may thereupon reenter the subleased premises and repossess the same and expel **Sublessee**, and any and all persons claiming by, through or under **Sublessee**.

19. **RLCSD** reserves the right to enter upon the premises at all reasonable times to inspect and examine the same and to determine that the covenants hereof are being kept and performed.

20. Should the subleased premises, or **Sublessee's** improvements, or any part thereof, be taken or damaged by public or quasi-public authority under any power of eminent domain, or purchased under threat of condemnation by such authority, then this sublease shall terminate as to the part thus appropriated and **Sublessee** shall have no claim or interest in or to any award of damages for such appropriation; provided, however, that an equitable adjustment of lease fee shall be made if the part thus appropriated is less than the entire premises.

21. Should **Sublessee**, for any reason, remain in possession of the subleased premises, or any part thereof, after the expiration of the term of this sublease with the consent, express or

implied, of **RLCSD**, this sublease will continue on a month-to-month term only, but upon the same conditions and at the same rental (pro-rated) as herein set forth unless otherwise agreed in writing to the contrary.

22. **Sublessee** agrees to **protect, defend and indemnify, and hold RLCSD, HBMWD, the County of Trinity, and the State of California, and their respective directors, officers, agents, employees, and volunteers,** free and harmless from **and against any and all claims, actions, demands, damages, costs, expenses, attorney's fees and liability of whatever kind or character asserted by any person or persons on account of damage to property or injuries to or death of any person occurring upon or about the subleased premises or arising out of the use of the subleased premises by Sublessee or any Sublessee invitee or licensee. The provisions of this Section 22 will survive the expiration or earlier termination of the Master Lease or this sublease.**

23. **Sublessee** shall at **Sublessee's** own expense at all times during the term of **this** sublease cause to be maintained in full force and effect a policy or policies of public liability and property damage insurance issued by an insurance company or companies approved by **RLCSD** providing limits of at least \$500,000.00 per occurrence or \$500,000.00 combined single limit. **Sublessee** further agrees to add **RLCSD** and **HBMWD** and each of their respective directors, officers, employees, and authorized volunteers as additional insureds under such policy or policies and to furnish **RLCSD** and **HBMWD** with copies of said policy or policies or with certificates of insurance and endorsements as evidence thereof.

24. For a "road access lease" only **Sublessee** agrees, at **Sublessee's** own expense, during the entire term of this sublease, to maintain fire insurance, with extended coverage, on all improvements on the subleased premises for their full replacement value. Each policy, or a certificate of the policy, together with evidence of payment of premiums, shall be deposited with **RLCSD** at the commencement of the term of this Agreement, and on renewal of the policy not less than ten (10) days before expiration of the term of the policy.

25. Should **Sublessee** 1) fail to pay the lease fees provided for herein after written notice that the same is due pursuant to sections 4 & 5 above, 2) fail to faithfully perform or observe any provision of this Agreement, 3) fail to comply with **RLCSD** and **HBMWD** rules and regulations, or 4) should the subleased premises be vacated or abandoned, **Sublessee** shall be considered in material breach of this Agreement and all rights of **Sublessee** and of any and all persons claiming by, through or under **Sublessee** are terminated. In addition, **RLCSD** may pursue or seek any other remedy or enforce any right to which it may by law be entitled.

26. Should **Sublessee** fail to perform any action after notice from **RLCSD** to correct such action, **RLCSD** may, in its sole discretion, perform the action requested and charge **Sublessee** the cost of performing such action, which cost shall be considered additional lease fees and collected as such, including the imposition of attorney's fees and costs if any collection action is required.

27. **Sublessee** agrees to advise **RLCSD**, in writing, of **Sublessee's** address at the time of the execution of this sublease. **Sublessee** shall also advise **RLCSD**, in writing, within 10 days

of any change of address. Any notice or demand which **RLCSD** may desire to serve upon **Sublessee** may be served upon **Sublessee** personally or by mailing such notice to **Sublessee** at the last address given to **RLCSD** by **Sublessee** as heretofore provided. Any such notice or demand sent by mail shall be postage prepaid. Such mailed notice to the last address given by the **Sublessee** shall be deemed to have been properly delivered and **Sublessee** will be presumed to have been given adequate notice.

In the event there are several **Sublessees** with different addresses and telephone numbers, **Sublessees** shall designate which individual **Sublessee**, address and telephone number is the official recipient on behalf of all **Sublessees** of any notice set forth in this paragraph.

28. Time is expressly declared to be of the essence of this sublease and of all the provisions hereof, and the same shall bind and inure to the benefit of **RLCSD** and **Sublessee**, and their respective heirs, personal representatives, successors and assigns, as fully as though specifically set forth in each instance.

29. If any conflict arises between different **Sublessees** over property lines of sublease area, neither the **RLCSD** or **HBMWD** shall be liable and **RLCSD** will make a decision as to where the property lines lie, and all decisions of the **RLCSD** shall be final. Property lines of sublease area may also be adjusted by **RLCSD** for matters other than property line disputes or conflicts such as to adjust for minimum lot sizes required by the County of Trinity or State of California, or to accommodate United States Forest Service survey revisions.

30. **Sublessee** will not use or occupy the subleased site until there is proof of an acceptable water source and until a proper sewage disposal system has been installed, approved, and a certificate obtained in accordance with the following conditions:

A. **Road Access Lease:** Septic tank and leach field according to Trinity County and State of California requirements.

B. **Boat Access Lease:** Redwood vault privy (a.k.a an outhouse) or equivalent meeting all applicable standards is acceptable where lot improvements are minimal.

With respect to either a Road Access Lease or a Boat Access Lease, prior to construction of any residence or similar improvement, all systems will be in compliance with Trinity County and State of California requirements and will have appropriate County permits.

31. If this is a "Boat Access Lease", **Sublessee** agrees not to use, cause, or permit to be used, any motorized vehicle upon the subleased premises or any land access routes thereto which are under the control of the **RLCSD**. **Sublessee** shall not build, or cause to be built, any road access whatsoever. **Sublessee** further agrees that access to the sublease property shall be only by boat from the reservoir. Non-compliance with this provision shall be considered a material breach of this Agreement and shall be grounds for termination of this Agreement pursuant to Section 25.

32. **Sublessee** shall not divert or use any water from Ruth Lake Reservoir until proper application has been made for a water use permit from **RLCSD** and **HBMWD** and written approval is obtained for such diversion from both entities. **Sublessee** further agrees to locate any well for water at least 100 feet from the high-water mark of the Ruth Lake Reservoir and not initiate construction of any such water well until prior written approval is received from **RLCSD** and **HBMWD**. Non-compliance with this provision shall be considered a material breach of this Agreement and shall be grounds for termination of this Agreement pursuant to Section 25.

33. If **Sublessee** does not remedy within thirty (30) days any conditions of the subleased premises determined upon inspection to be in noncompliance with **RLCSD**, county and state standards and requirements, then this sublease shall be void, and all rights granted to the **Sublessee** by this Agreement shall be terminated and forfeited.

34. **Sublessee** and **Sublessee's** family, guests, agents, and invitees (collectively, the **Sublessee Parties**) shall comply with, and **RLCSD** shall enforce, all rules and regulations promulgated at any time by **HBMWD** with respect to Ruth Lake and the premises in furtherance of **HBMWD's** operation of Ruth Lake as a reservoir. To the extent that any breach of a provision of this sublease by **Sublessee** concurrently results in a breach of any provision of the Master Lease, **HBMWD** shall have the same remedies with respect to such breach provision as **RLCSD**.

35. Any personal property left upon **RLCSD** property or the subleased premises after the termination of this lease shall be considered abandoned or unclaimed and shall be disposed of in accordance with **RLCSD's** policy concerning abandoned and unclaimed property.

36. This Agreement contains the entire understanding between **Sublessee** and **RLCSD** with respect to its subject matter, and supersedes all prior agreements, oral or written, and all prior or contemporaneous discussions.

37. Any failure or delay on the part either Party to exercise any right under this Agreement shall not constitute a waiver of the right and shall not preclude such Party from exercising or enforcing the right, or any other provision of this Agreement, on any subsequent occasion.

38. This Agreement may be amended only in writing signed by **Sublessee** and **RLCSD** or their respective successors in interest.

39. In the event that any action or proceeding is brought to enforce one or more of the terms of this Agreement, to restrain an alleged violation of this Agreement, or to determine the validity of this Agreement or any part, the prevailing Party in any such action or proceeding shall be entitled to recover from the other its reasonable costs and attorneys' fees, in addition to any other remedies available to it in law or equity.

40. This Agreement is governed in accordance with the laws of the State of California, and the parties hereby agree that venue for any action brought to enforce the terms of this agreement shall be in a court of competent jurisdiction in the County of Trinity, California.

41. If any provision of this Agreement, or any portion thereof, is found by a court of competent jurisdiction to be unenforceable or invalid for any reason, such provision shall be severable and shall not in any way impair the enforceability of any other provision of this Agreement.

42. As a consideration for the entering into this sublease with **RLCSD, Sublessee** acknowledges and agrees that no improvement or alteration on the subleased premises, either existing at the time of execution by the parties to this sublease or made thereafter, shall be the subject of any claim or demand for compensation or offset by **Sublessee** upon **RLCSD, HBMWD**, or each of their respective officers, directors, agents or volunteers.



Ruth Lake Community Services District

12200 Mad River Road

P.O. Box 6

Mad River, CA 95552

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

Email: ruthlakecsd@yahoo.com Website: www.ruthlakecsd.org

SUBLEASE AGREEMENT

This sublease is made on this 1st day of May 2023, between the RUTH LAKE COMMUNITY SERVICES DISTRICT (hereinafter referred to as "RLCSD") and _____ (hereinafter referred to as "Sublessee").

IN WITNESS WHEREOF, the parties have executed this sublease effective the day and year first set forth above.

RLCSD: RUTH LAKE COMMUNITY SERVICES DISTRICT

By: _____ Dated: _____
Its: Manager

SUBLESSEE:

Printed Name _____ Signature _____ Date _____
Mailing Address _____ City _____ State _____ Zip Code _____
Email Address _____ Telephone _____

The above sublessee is the contact for all communications in accordance with paragraph 27.

SUBLESSEE:

Printed Name _____ Signature _____ Date _____
Mailing Address _____ City _____ State _____ Zip Code _____
Email Address _____ Telephone _____

SUBLESSEE:

Printed Name _____ Signature _____ Date _____
Mailing Address _____ City _____ State _____ Zip Code _____
Email Address _____ Telephone _____



January 3, 2023

The Honorable Gavin Newsom
 Governor, State of California
 1021 O Street, Suite 9000
 Sacramento, CA 95814

RE: 2023-24 Wildfire and Forest Resilience State Budget Allocations

Dear Governor Newsom,

On behalf of the California Forest Watershed Alliance (CAFWA), we are writing to offer our recommendations for 2023-24 State Budget allocations to the wildfire and forest resilience sector. CAFWA applauds your leadership over the last several years, particularly for championing a new \$1.3 billion investment over two years in extremely vital programs to improve the health of California's forests and watersheds while preventing future wildfires. We acknowledge the economic challenges ahead for the state and the difficulty of balancing fiscal responsibility with maintaining crucial programs such as forest resilience. However, it is urgent that the state maintain its investments in wildfire and forest resilience programs.

CAFWA is a unique coalition of diverse interests including organizations that represent water, environmental, local government, timber, and agricultural interests all dedicated to finding solutions to California's every-growing forest health and wildfire problem. The members of CAFWA are the Association of California Water Agencies (ACWA), California Farm Bureau Federation, California Forestry Association (Calforests), The Nature Conservancy, and Rural County Representatives of California (RCRC). Since its founding in 2014, CAFWA members have been working together to seek new ways to promote proactive, science-based, and ecologically sound forest management practices that will reduce the risk of destructive megafires. Our goal is to protect our forests, our natural resources, and our local economies and communities by accelerating the pace and scale of forest restoration.

The year 2022 was a relatively mild year for high-severity wildfires compared to previous years, particularly considering the acres burned versus 2020 and 2021. However, California's forest and wildlands are still far from the optimum healthy, resilient condition needed to prevent catastrophic fires, effectively sequester carbon, and provide the necessary quality and quantity of



The California Forest Watershed Alliance (CAFWA) is an urban-rural coalition representing water interests, local governments, the conservation community, agriculture, and the forestry sector, created to promote the restoration and improvement of California's forested watersheds. For more information, visit www.caforestsandwatersheds.org.

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water for the state's residents. The California Air Resources Board has set a goal of 2.3 million acres treated annually in its recently adopted "2022 Scoping Plan for Achieving Carbon Neutrality" to achieve the necessary greenhouse gas emissions reduction and carbon sequestration from the natural and working lands sector, a goal that will be impossible to achieve without significant, long-term investments in forest and wildland management.

As you consider your initial January 2023 State Budget proposal, the members of CAFWA urge you to consider the following:

Protecting Existing Forest Resilience Allocations

California has set records as it relates to the largest, most destructive fires on a near-annual basis for the last several years. These wildfire events produce some of the worst national air quality, impacting the health and quality of life of all Californians, while costing the state billions annually to support suppression efforts. While 2022 has given us some respite, it is unwise to assume future wildfire seasons will be as mild given the condition of California's forests and wildlands. As such, it is imperative that the state protect existing allocations to forest resilience programs, even with projected downturns in revenues.

CAFWA strongly supports full allocation of the \$600 million appropriated to 2023-24 forest resilience and wildfire mitigation programs in the 2022-23 State Budget Package. We also strongly support protecting the \$200 million annual investment from the Greenhouse Gas Reduction Fund (GGRF). These funds are crucial to maintaining the gains California has achieved in forest and watershed resilience programs, as well as continuing to safeguard the state's forested communities from the impacts of wildfires. These programs are vital to the quality and quantity of the entire state's water supply and reducing greenhouse gas (GHG) emissions from wildfire smoke statewide.

Long-Term Funding Mechanisms

While the members of CAFWA appreciate the annual allocations of funding to forest resilience programs, our forests and watersheds are critical state infrastructure worthy of long-term, annual investment. Forested watersheds provide the state's water supply, wildlife habitat, and with proper investment, have the potential to significantly contribute to California's GHG emissions reduction goals through carbon sequestration and reduced wildfire incidents. Our forests impact every California resident, whether it be through their drinking water, the air they breathe or their ability to recreate safely in a forested environment. CAFWA believes the state should seek a mechanism to support these programs annually and would be pleased to engage in an effort to develop a sustained, long-term funding solution to ensure that California's forests are managed and maintained to the most resilient benefit for all Californians.

Comprehensive Workforce Training

California must commit to addressing workforce shortages in forest health and resilience, including prescribed fire, fire suppression, and professional and vocational-based forest workers. Funding and training an adequate workforce helps ensure that projects will be successfully completed on the ground and that future funds allocated to forest resilience programs will be fully utilized. Furthermore, many forested communities have necessarily built their economic structures around the forests, largely through the recreation and tourism industry. Building a strong, vital

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forest resilience workforce in these communities will not only help safeguard residents from the impacts of wildfire, but will also support the economic vitality of many communities that will benefit from the creation of jobs and opportunity in this sector.

Investment in Infrastructure

While there are several pressures contributing to the wildfire issues in forested environments, the consistent and ever-expanding accumulation of woody material represents a key hazard that will require a greater and more diversified investment than the state has previously approved. While the increase in the pace and scale of prescribed fire is vital to wildfire resilience, mechanical removal of small diameter and dead or dying trees from the landscape is also an important treatment method and is often required as a pretreatment prior to the reintroduction of fire into forested landscapes. California is also currently experiencing an uptick in tree mortality commensurate with the 2015 bark beetle epidemic due to the last several years of drought conditions, making it even more imperative that the state invest in a panoply of options to utilize woody byproducts from the management of the state's forested lands.


California has not committed enough funding or support to infrastructure that would help utilize woody byproducts from forest management projects, which has resulted in increased piling and burning, or materials simply being left on the landscape to deteriorate. Neither option is optimal for reducing GHG emissions or promoting carbon sequestration, and leaving excessive materials on the landscape can actually pose an additional fire hazard. Biomass, cross-laminated timber, and even simply sequestering carbon by utilizing wood for building materials can not only help mitigate wildfire risk on the landscape, but can also provide beneficial end uses for the byproducts and encourage carbon sequestration. CAFWA strongly encourages a clear commitment to investments in infrastructure to utilize woody byproducts from forest management projects for their highest and best use.

The members of CAFWA appreciate your consideration of our recommendations and are happy to discuss further as the 2023-24 State Budget takes shape.

Sincerely,


Jay Ziegler, Senior Policy Advocate
Rural County Representatives of California


Jay Ziegler, Director
External Affairs and Policy
The Nature Conservancy


Matt Dias, President
California Forestry Association


Julia Bishop Hall, Senior Legislative Advocate
Association of California Water Agencies


Peter Ansel, Governmental Affairs Advocate
California Farm Bureau Federation



Redwood Coast Energy Authority
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SECTION 11.4a PAGE NO. 1

BOARD OF DIRECTORS MEETING AGENDA

December 15, 2022 -Thursday, 3:30 p.m.

COVID-19 NOTICE

RCEA AND HUMBOLDT BAY MUNICIPAL WATER DISTRICT OFFICES WILL NOT BE OPEN TO THE PUBLIC FOR THIS MEETING

Pursuant to the Governor's [Executive Order N-29-20](#) of March 17, 2020, and [revised Brown Act provisions](#) signed into law on September 16, 2021, the RCEA Board of Directors meeting will not be convened in a physical location. Board members will participate in the meeting via an online Zoom video conference.

To participate in the meeting online, go to <https://us02web.zoom.us/j/81972368051>. **To participate by phone**, call (669) 900-6833 or (253) 215-8782. Enter webinar ID: 819 7236 8051.

To make a comment during the public comment periods, raise your hand in the online Zoom webinar, or press star (*) 9 on your phone to raise your hand. You will continue to hear the meeting while you wait. When it is your turn to speak, a staff member will unmute your phone or computer. You will have 3 minutes to speak.

You may submit written public comment by email to PublicComment@redwoodenergy.org. Please identify the agenda item number in the subject line. Comments will be included in the meeting record but not read aloud during the meeting.

While downloading the Zoom application may provide a better meeting experience, Zoom does not need to be installed on your computer to participate. After clicking the webinar link above, click "start from your browser."

In compliance with the Americans with Disabilities Act, any member of the public needing special accommodation to participate in this meeting should call (707) 269-1700 or email Ltaketa@redwoodenergy.org at least 3 business days before the meeting. Advance notice enables RCEA staff to make their best effort to reasonably accommodate access to this meeting while maintaining public safety.

Pursuant to Government Code section 54957.5, all writings or documents relating to any item on this agenda which have been provided to a majority of the Board of Directors, including those received less than 72 hours prior to the RCEA Board meeting, will be made available to the public at www.redwoodenergy.org.

OPEN SESSION Call to Order

1. CHAIR PRO TEM APPOINTMENT

Select an RCEA Board Chair Pro Tem and Vice Chair Pro Tem to serve through January 2023.

2. REPORTS FROM MEMBER ENTITIES

3. ORAL COMMUNICATIONS

This time is provided for people to address the Board or submit written communications on matters not on the agenda. At the conclusion of all oral communications, the Board may respond to statements. Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

4. CONSENT CALENDAR

All matters on the Consent Calendar are considered to be routine by the Board and are enacted in one motion. There is no separate discussion of any of these items. If discussion is required, that item is removed from the Consent Calendar and considered separately. At the end of the reading of the Consent Calendar, Board members or members of the public can request that an item be removed for separate discussion.

4.1 Approve Minutes of November 17, 2022, Board Meeting.

4.2 Approve Disbursements Report.

4.3 Accept Financial Reports.

4.4 Extend Resolution No. 2022-6 Ratifying Governor Newsom's March 4, 2020, State of Emergency Proclamation and Authorizing Remote Teleconference Meetings of RCEA's Legislative Bodies, for the period December 15, 2022, through January 14, 2023, pursuant to Brown Act revisions of AB 361.

4.5 Adopt Resolution 2022-10 Adopting Updates to the Energy Risk Management Policy.

4.6 Adopt Proposed RCEA 2023 Policy Platform.

5. REMOVED FROM CONSENT CALENDAR ITEMS

Items removed from the Consent Calendar will be heard under this section.

COMMUNITY CHOICE ENERGY (CCE) BUSINESS – None.

Items under this section of the agenda relate to CCE-specific business matters that fall under RCEA's CCE voting provisions, with only CCE-participating jurisdictions voting on these matters with weighted voting as established in the RCEA joint powers agreement.

6. OLD BUSINESS

6.1 PG&E Local Government Partnership Contract Extension

Approve a Change Order to the PG&E Local Government Partnership Contract to extend the term through 2025, increase the budget by \$1,000,000, and make minor revisions to the program design and authorize the Executive Director to execute all applicable documents after review and approval of RCEA General Counsel.

7. NEW BUSINESS – None.

8. STAFF REPORTS

8.1 Executive Director's Report (Information only)

9. FUTURE AGENDA ITEMS

Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

10. CLOSED SESSION

10.1 Conference with real property negotiators pursuant to Government Code § 54956.8 in re: APNs 001-141-005 and 001-141-006; RCEA negotiator: Executive Director; Owner's negotiating party: Wells Commercial; Under negotiation: price and terms.

10.2 Public Employee Performance Evaluation, pursuant to Government Code Section 54957(b)(1): Executive Director.

11. RECONVENE TO OPEN SESSION

12. CLOSED SESSION REPORT

13. ADJOURNMENT

NEXT REGULAR MEETING

Thursday, January 26, 2023, 3:30 p.m.

Meeting location to be determined. Online and phone participation will be available via Zoom.



**REDWOOD COAST
Energy Authority**

**STAFF REPORT
Agenda Item # 1.1**

| | |
|--------------|---|
| AGENDA DATE: | December 15, 2022 |
| TO: | Board of Directors |
| PREPARED BY: | Lori Taketa, Clerk of the Board |
| SUBJECT: | Appointment of Chair and Vice Chair Pro Tem |

BACKGROUND

At the November Board of Directors meeting, Chair Stephen Avis reported that he was not re-elected to the Ferndale City Council and that his service on RCEA's Board would end. Similarly, Vice Chair Chris Curran will no longer be on the Blue Lake City Council as of the December RCEA meeting.

In keeping with RCEA's Joint Powers Agreement, "If a vacancy occurs in the position of Chair or Vice-Chair, the Board shall forthwith fill the vacancy for the duration of the unexpired term."

In the absence of both a Chair and Vice-Chair, it is common practice for the local government agency's Executive Director or Board Clerk to call the meeting to order and conduct the meeting until the governing body appoints a Chair and Vice-Chair Pro Tem.

STAFF RECOMMENDATION

Select an RCEA Board Chair Pro Tem and Vice Chair Pro Tem to serve through January 2023.

ATTACHMENTS

None.



BOARD OF DIRECTORS DRAFT MEETING MINUTES

November 17, 2022 - Thursday, 3:30 p.m.

Notice of this meeting was posted on November 10, 2022. Vice Chair Chris Curran called a regular meeting of the Board of Directors of the Redwood Coast Energy Authority to order on the above date at 3:38 p.m., stating that the teleconference meeting was being conducted pursuant to the AB 361 Brown Act open public meeting law revisions signed into law on September 16, 2021, and Governor Newsom's State of Emergency Proclamation of March 4, 2020. Vice Chair Curran stated that the posted agenda contained public teleconference meeting participation instructions.

PRESENT: Chair Stephen Avis (arrived 3:54 p.m.), Scott Bauer (arrived 4:04 p.m.), Vice Chair Chris Curran, Michelle Fuller (Humboldt Bay Municipal Water District Alternate Director), Mike Losey, Sarah Schaefer, Frank Wilson. ABSENT: Rex Bohn, Jack Tuttle, Sheri Woo (HBMWD Director). STAFF AND OTHERS PRESENT: General Counsel Nancy Diamond; Power Resources Director Richard Engel; Senior Power Resources Manager Jocelyn Gwynn; The Energy Authority Account Services Manager Jaclyn Harr, Executive Director Matthew Marshall; Power Resources Specialist Colin Mateer; Board Clerk Lori Taketa; Deputy Executive Director Eileen Verbeck.

ORAL COMMUNICATIONS

Community Advisory Committee member Larry Goldberg, who stated that he was speaking as a community member and solar energy professional and not as a CAC representative, requested that the Board assign staff to investigate microgrids as a supplemental distributed power source around the county in lieu of upgrading PG&E transmission infrastructure to address the county's limited electrical capacity issues. Mr. Goldberg described microgrids as a first step toward creating a distributed power network around the county.

Vice Chair Curran closed the oral communications portion of the meeting.

CONSENT CALENDAR

- 3.1 Approve Minutes of October 27, 2022, Board Meeting.
- 3.2 Approve Disbursements Report.
- 3.3 Accept Financial Reports.
- 3.4 Approve Resolution 2022-9, A Resolution of the Board of Directors of the Redwood Coast Energy Authority Approving Amendment No. 1 to a Behind the Retail Meter Capacity Storage Agreement with Swell VPP Fund 2021-I LLC.
- 3.5 Accept Quarterly Budget Report (Q1).

Neither directors nor members of the public requested that items be removed from the consent calendar.

M/S: Losey, Schaefer: Approve consent calendar items.

The motion passed with a unanimous roll call vote. Ayes: Curran, Fuller, Losey, Schaefer, Wilson. Noes: None. Absent: Avis, Bauer, Bohn, Tuttle. Abstain: None.

There was no quorum to conduct Community Choice Energy business.

OLD BUSINESS

7.1. Brown Act Open Meeting Law Changes and Meeting Options

Deputy Executive Director Verbeck reported on Assembly Bill 2449 which outlines ways for governing agency members to remotely participate in meetings, and RCEA public meeting options before and after the Governor's state of emergency ends on February 28, 2023. The directors supported conducting in-person and virtual hybrid meetings after the state of emergency ends and televising RCEA Board meetings on Access Humboldt if the expense was reasonable.

There were no responses from the public to Vice Chair Curran's invitation for comment and the public comment period was closed. Chair Avis joined the meeting during this discussion.

M/S: Wilson, Losey: Continue to conduct fully virtual meetings until February 28, 2023. Adopt Resolution No. 2022-6 Ratifying Governor Newsom's March 4, 2020, State of Emergency Proclamation and Authorizing Remote Teleconference Meetings of RCEA's Legislative Bodies, for the period November 17, 2022, through December 15, 2022, pursuant to Brown Act revisions of AB 361.

The motion passed with a unanimous roll call vote. Ayes: Avis, Curran, Fuller, Losey, Schaefer, Wilson. Noes: None. Absent: Bauer, Bohn, Tuttle. Abstain: None.

STAFF REPORTS

9.1. Executive Director's Report

Offshore wind outreach activities with CORE Hub will increase following the Bureau of Ocean Energy Management lease auction on December 6. Federal and state Inflation Reduction Act funding will increase customer program and public agency opportunities. RCEA is compiling information to share with member agencies and the public on how to access these funds.

Director Bauer joined the meeting. Executive Director Marshall confirmed there was a Community Choice Energy quorum.

OLD CCE BUSINESS

5.1. Energy Risk Management Quarterly Report

The Energy Authority Client Services Manager Jaclyn Harr reported on financial drivers affecting updated revenue forecasts for the next two years. The presented revenue projections reflected PG&E rates which are expected to be updated in December and go into effect by March or April. RCEA's customer generation rates continue to be set at 0.5% less than PG&E's rates, which are expected to rise by 3%. The power charge indifference adjustment (PCIA), a charge RCEA customers pay to make PG&E whole for power procured on RCEA's customers' behalf before they left PG&E, has been extremely volatile over the past two years and is expected to swing to a low point due to high energy prices, giving RCEA customers a small bill credit. Power costs, especially during peak summer months, are projected to increase. RCEA is about 90% hedged from extreme price increases in 2023 by

long-term power contracts and is less well-hedged in 2024. RCEA's historic and projected cash reserve balance and the effect of volatile global energy markets on the agency's ability to maintain a cash reserve were described. It is anticipated that RCEA will reach its target reserve level of \$35 million in November 2023. Ms. Harr suggested reconsidering RCEA's rate discount relative to PG&E rates no sooner than 2024, to give the agency time to build reserves while market conditions are favorable. Reserves allow for more stable rates for RCEA customers during market and PCIA swings as well as providing RCEA the ability to invest in above-market costs of advanced renewable energy projects such as microgrids and offshore wind.

The Directors discussed the CPUC regulatory process around PG&E rate setting, how advocacy groups monitor the process and how RCEA can have some independence from energy prices and related PCIA volatility through reserve building.

There were no responses from the public to Vice Chair Curran's invitation for comment and the public comment period was closed.

M/S: Avis, Schaefer: Accept Energy Risk Management Quarterly Report.

The motion passed with a unanimous roll call vote. Ayes: Avis, Bauer, Curran, Losey, Schaefer, Wilson. Noes: None. Absent: Bohn, Tuttle. Abstain: None. Non-Voting: Fuller.

FUTURE AGENDA ITEMS

Chair Avis stated that as he was not re-elected to the Ferndale City Council he is resigning from the RCEA Board. He thanked the RCEA Board and staff and reaffirmed his interest in wind power. Executive Director Marshall thanked Chair Avis on behalf of staff for his efforts while on RCEA's Board and expressed hope that the Chair would remain engaged in energy efforts as an RCEA customer and community member. Staff was asked to draft summarized instructions on remote meeting participation and additional materials on current projects to orient new Board directors. Staff encouraged orientation session attendance.

CLOSED SESSION

Staff stated there was nothing new to report to the Board in closed session regarding:

- 11.1** Conference with real property negotiators pursuant to Government Code § 54956.8 in re: APNs 001-141-005 and 001-141-006; RCEA negotiator: Executive Director; Owner's negotiating party: Wells Commercial; Under negotiation: price and terms.

There was no public comment regarding closed session item:

- 11.2.** Public Employee Performance Evaluation, pursuant to Government Code Section 54957(b)(1): Executive Director.

The directors adjourned to closed session at 4:40 p.m. to discuss item 11.2. The Board reconvened from closed session at 5:11 p.m. Executive Director Matthews stated there was nothing to report from closed session and adjourned the meeting at 5:12 p.m.

Lori Taketa
Clerk of the Board



Happy Holidays

RCEA News and Updates *December 2022*

Join us online



Community Choice Energy

Net Energy Metering Updates

In early November, the California Public Utilities Commission (CPUC) released a new proposed decision detailing the successor to the net energy metering (NEM) program (a.k.a. “net billing tariff,” or rooftop solar billing). The proposed decision as written will shift from paying customers retail rates for their exports to the grid to paying them based on Avoided Cost Calculator (ACC) values. These are values that change hourly and are intended to reflect an accurate value of rooftop solar to the electric grid. They are much lower than today’s NEM export compensation rates.



The grid access charge is not addressed in this proposed decision. The CPUC will address this charge in a different regulatory proceeding.

Customers will be automatically enrolled in the new E-ELEC tariff and pay the E-ELEC rate for grid imports. Currently, NEM customers are enrolled in TOU rates.

The successor tariff provides a “glide path” to the ACC export compensation amounts through the use of an adder that will decrease over time until the base ACC value is achieved. The adder amount is intended to achieve \$100/month bill savings for customers and ensure a 9-year payback period for residential customers. Low-income customers (CARE and FERA) receive a higher adder. Non-residential customers would not receive the adder.

An equity fund is available to help low-income customers access solar plus storage. This will be administered through the Self-Generation Incentive Program (SGIP).

NEM 1.0 and NEM 2.0 program legacy periods will remain the same (20 years).

In response to the proposed decision, RCEA submitted comments with other CCAs advocating for an extended sunset period for the current NEM program, additional incentives for low-income customers, and additional incentives for non-residential customers.

The earliest the CPUC will vote on a final decision establishing the successor to NEM 2.0 is December 15, 2022.

California Arrearage Payment Program 2.0

On November 22, 2022, the California Department of Community Services and Development awarded RCEA a \$977,599 allocation for the 2022 California Arrearage Payment Program (a.k.a. “CAPP”). This allocation will offer financial assistance for eligible residential customers to help reduce past due energy bill balances that increased during the COVID-19 pandemic.

Rebate totals to date

EV Charging Equipment
RCEA REBATE

4 approved

Electric Vehicles
RCEA REBATE

37 approved

Heat Pumps
RCEA REBATE

79 approved
4 reserved

Equipment & Appliance
RCEA REBATE

69 approved

2022 totals

Residential Services ASSESSMENTS

114 consultations
90 res kits

Non-Res Service ASSESSMENTS

292 Completed



Agency Projects - ongoing 

The CalSHAPE Program awarded 19 Humboldt County Schools \$1,181,893 for ventilation and plumbing projects.

Arcata Elementary School District – working on a lighting and Heat Pump water heater project

Burnt Ranch Elementary School - installing roof-mounted solar array

City of Arcata - ECAA application for Arcata Community Center in progress

City of Blue Lake - assisting with OES funding

City of Eureka - designing solar projects

County of Humboldt - Energy Benchmarking: setting the customer up with an online portal that will give them insight into their energy usage across their facilities.

Eureka City Schools - solar, storage, and EV bus charger projects are in progress

Pacific View Charter School – completed upgrade of all lighting to LED. Assisting with heat pump installation.

Pine Hill Elementary - ECAA loan project in progress

Redway Community Services District - revisiting possible solar project

Yurok Tribe - benchmarking and continuing energy efficiency projects for multiple locations



Projects and programs - new or on the horizon

- RCEA held a **contractor and vendor open house breakfast** to provide information to the local workforce about our many offerings. Many attendees signed up for RCEA's Contractor and Vendor Network (online directory for customers).
- We are diving deep into offerings from the **Inflation Reduction Act** to help our customers navigate and access available funding.
- Staff is shepherding the **RuralREN** proposal through the complex regulatory process and aiming for program approval by the end of 2023. RuralREN will bring more energy efficiency, financing, and workforce training programs to the county.
- We launched our **Enhanced Heat Pump Incentive Program (EPIC)** to increase our non-residential heat pump space and water heating incentives. This should make adopting this energy efficient technology more attractive to local businesses and public agencies.
- DSM and Power Resources staff partnered with Food for People for an outreach event in **Hoopa** and signed up new residential customers for our Customer Energy Solutions services.
- RCEA will make a \$100 donation to **Food for People** for every business that schedules a no-cost energy assessment. This is the second year for this successful community food bank promotion.
- **TECH Quick Start Grant** – We have completed our first projects in partnership with local contractors on our grant-funded program to provide heat pump rebates for users of non-regulated fuels such as propane, kerosene, and cordwood. The program rollout continues.
- **Rio Dell "Light the Night"** Project. RCEA is still reaching out and providing residential energy efficiency kits to Rio Dell residents who bring in and dispose of old, inefficient light bulbs at Rio Dell City Hall.

**WE
ARE
HIRING!**

Community Strategies Coordinator

RCEA is recruiting a full-time Program Coordinator to support our marketing and public engagement efforts. This is a frontline position that will interact daily with RCEA customers to promote and support RCEA's many programs and services.

See
our website
for details

