



# HUMBOLDT BAY MUNICIPAL WATER DISTRICT

Board of Directors Meeting

April 2021



Black Bart area at Ruth Lake

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



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

**Meeting Start Time: 9:00 a.m.**  
**DUE TO COVID-19 THE DISTRICT WILL BE  
HOLDING THE MEETING VIA ZOOM**  
**April 8, 2021**

**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**

Consistent with Executive Orders N-25-20 and N-29-20 from the Executive Department of the State of California and the Humboldt County Public Health Officer's November 3, 2020 Shelter-in-Place Order, the Board members will be participating via Zoom. The Board room at 828 7th street will be open to the public and social distancing and wearing of face coverings will be enforced.

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

<https://us02web.zoom.us/j/87051153283?pwd=ODdtRXUzTkIrR2cvbStRd3ozZ1VUZz09>

**Participate by phone: 1-669-900-9128**

**Enter meeting ID: 870 5115 3283**

**Enter password: 870 5115 3283**

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 comment via email until 5 pm. the day before the Board Meeting by sending comments to the Board Secretary at hbitner@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. Comments received prior to the meeting 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 comment will also be received during the meeting.

**Time Set Items:**

Item	
8.1d	McNamara & Peepe Glendale Property 9:15 am
8.1aii	Local Sales: Trinidad Rancheria 10:00 am
9.1	Vivid Green 10:30 am
10.1	Engineering 11:00 am

**The Board will take a scheduled lunch break from 12:00 pm to 1:00 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 given the opportunity to address items that are on the agenda at the time the Board takes up that item. Pursuant to the Brown Act, the Board may not take action on any item that does not appear on the agenda.

**5. MINUTES**

**5.1** Minutes of March 11, 2021 Regular Meeting - discuss and possibly approve\*

**5.2** Minutes of the March 11, 2021 Public Hearing - discuss and possibly approve\*

**6. CONSENT AGENDA**-*These matters are routine in nature and are usually approved by a combined single vote*

**6.1** Media articles of local/water interest\*

**7. CORRESPONDENCE**

**7.1** Letter from State Water resources Board notifying District to prepare for drought conditions\*

**7.2** Notification of Annual Schedule of Fees by the Division of Dam Safety\*

**7.3** USFS Use Permit – discuss\*

**8. CONTINUING BUSINESS**

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

a. Local Sales

i. Nordic Aquafarms update\*

ii. Trinidad Rancheria Feasibility Study update - **(Time set 10:00 am)**

iii. Local Sales Committee Meeting – report out

b. Transport -discuss

c. Instream Flow – discuss

d. McNamara and Peepe – **(Time Set 9:15 am)**

i. Mad River Policy committee – report out

ii. Letters of support to DTSC\*

iii. Local articles\*

**8.2** Trinity County Master Lease Committee Meeting – report out

**8.3** Disaster declaration at Ruth Lake – status report\*

## **9. NEW BUSINESS**

### **9.1 Lease Lot Line Adjustment (Time Set 10:30am)\***

- a. Resolution 2021-07 – discuss and possibly approve\*
- b. Grant Deed from Vivid Green, LLC. to HBMWD- Lot Line Adjustment to APN 020-490-04 - consider and possibly approve\*
- c. Grant Deed from HBMWD to Vivid Green, LLC - Lot Line Adjustment to APN 020-100-35 – consider and possibly approve\*

### **9.2 Ruth Lake CSD Lease Lot policy updates -discuss\***

### **9.3 District Credit Card for Ruth Hydro Operator – discuss and possibly approve\***

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

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

- a. Closed Session report out

## **10. REPORTS (from Staff)**

### **10.1 Engineering (Time set 11:00 am)**

- a. 12kV Switchgear Replacement (\$755,832 District Match) – status report
  - i. Notice of CalOES Community Power Resiliency grant (\$215,000) - discuss \*
- b. Collector Mainline Redundancy Hazard Mitigation Grant (\$790,570 District Match) – status report and RFI response
- c. Reservoir Structural Retrofit Hazard Mitigation Grant (\$914,250 District Match)-status report
- d. TRF Generator Hazard Mitigation Grant (\$460,431 District Match) – status report
- e. Appeal of FEMA Funding Denial for Collector 4 Emergency Restoration Work-status report
- f. R.W. Matthews Dam & Spillway Seismic Stability HMGP Advance Assistance Grant – District match commitment letter – discuss and possibly approve\*
- g. Status report re: other engineering work in progress

### **10.2 Financial**

- a. Financial Report– accept March 2021 financial statement & vendor detail report - discuss and possibly accept\*
- b. COVID-19 Supplemental Paid Sick Leave Measure - discuss\*
- c. Unum Life Insurance-discuss and possible approval\*

### **10.3 Operations**

- a. Monthly report on projects and operations– discuss\*

## **11. MANAGEMENT**

- a. CSDA\*
- b. ACWA
  - i. Headwaters Committee Meeting – report out\*
  - ii. Coalition letter in support of SB 323\*
- c. Tsunami Warning Test\*
- d. USC Executive Education in Public Policy certificate\*



## **12. DIRECTOR REPORTS & DISCUSSION**

### **12.1** General comments or reports from Directors

- a. Offshore Wind Farm article\*
- b. Prescribed Fire article\*

### **12.2** ACWA

- a. Region 1 Board Meeting -report out\*
- b. Letter of Support for Governor Newsom’s Wildfire and Forest Resiliency Action Plan and Agreement for Shared Stewardship of California’s Forest and Rangelands\*
- c. Headwaters Committee – report out\*
- d. Spring Conference
  - i. Authorize expenditure for Directors and Staff to attend Spring Conference – discuss and possibly approve
  - ii. Change the Regular Board of Directors Meeting start time from 9:00am to 1:00pm on May 13, 2021 to accommodate Virtual Spring conference attendance -discuss and possibly approve

### **12.3** ACWA – JPIA

- a. RSF Refunds\*

### **12.4** Organizations on which HBMWD Serves:

- a. RCEA- status report\*
- b. RREDC-status report\*

## **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 April 2, 2021)



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



**Minutes for Meeting of Board of Directors**  
**March 11, 2021**

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### 1. Roll Call

Vice-President Latt called the meeting to order at 9:00 am and noted the Time Set items. Director Rupp conducted the roll call. The meeting was conducted within all Brown Act requirements.

#### **Members Present:**

Director Neal Latt  
 Director Bruce Rupp  
 Director Michelle Fuller  
 Director David Lindberg

#### **Members Absent:**

Director Sheri Woo

#### **Staff:**

John Friedenbach, General Manager  
 Dale Davidsen, Superintendent  
 Chris Harris, Business Manager  
 Heather Bitner, Board Secretary  
 Dee Dee Simpson, Accounting and HR Assistant

#### **Others Present**

Sherrie Sobol, Regulatory and Program Analyst  
 Jennifer Kalt, Humboldt Baykeepers

### 2. Flag Salute

Vice-President Latt led the flag salute.

### 3. Accept Agenda

Mr. Friedenbach requested an edit to Item 12.3, a., which should read Resolution 2021-03, and item 12.3b should read 2021-04. The Resolutions are numbered properly in the Board packet.

On motion by Director Lindberg seconded by Director Rupp, the Board Accepted the Agenda with Revisions for the March 11, 2021 Regular Meeting by the following Roll Call Vote:

Director Michelle Fuller	AYE
Director Neal Latt	AYE
Director Lindberg	AYE
Director Bruce Rupp	AYE
Director Sheri Woo	ABSENT

There was no public comment.

### 4. Public Comment

There was no public comment.

### 5. Minutes

An amendment to the minutes was requested to reflect that surface water is what will be tested in Agenda Item 8.5.

On motion by Director Fuller seconded by Director Rupp, the Board Approved the Minutes for the February 11, 2021 Regular Meeting, with edits, by the following Roll Call Vote:

Director Michelle Fuller	AYE
Director Neal Latt	AYE
Director Lindberg	AYE
Director Bruce Rupp	AYE
Director Sheri Woo	ABSENT

There was no public comment.

## 6. Consent Agenda

Item 6.1, pg. 12, was pulled to point out that the Eel River water is included in the Russian River watershed and is often overlooked. There was clarification of the empirical source "Maven," which is an online news source that combs news services for relevant articles related to water in California.

On motion by Director Fuller seconded by Director Lindberg, the Board Approved the Consent Agenda by the following Roll Call Vote:

Director Michelle Fuller	AYE
Director Neal Latt	AYE
Director Lindberg	AYE
Director Bruce Rupp	AYE
Director Sheri Woo	ABSENT

There was no public comment.

## 7. Correspondence

**7.1** 02-02-21 letter from Division of Safety of Dams (DSOD) accepting inundation maps submitted for Matthews Dam - In the unlikely event of a dam failure, the District's Inundation Maps are complete and have been accepted.

**7.2** District letter to municipal customers regarding domestic usage per Ordinance 16 contracts - Ordinance 16 provides for utilizing the metrics (on a 5-year rolling basis) for rates of the domestic water sales. The Board asked if the numbers represented an increase in water usage, to which Staff answered that they are slightly down in usage and will provide the relative % usage to the Board.

**7.3** Cal OES lease lot debris removal letter

Staff was notified by Cal OES that they will not be removing the debris from the lease lot that is on the District's property. Currently staff is negotiating with CalOES to remove the debris. Mr. Ponnet spoke to staff about the lease lot subdivision boundaries, and is understandably upset about the lack of clarity for his debris. Additional research is needed to determine the best course of action prior to continuation of hazardous debris removal work at the lake.

**7.4** Invasive Species alert letter

Zebra mussels have been detected in the sale of moss balls at a pet store in Washington state. Local pet stores and aquatic supplies stores have been alerted and asked to share the information with their staff and

customers in order to protect the lake and local water infrastructure. We did receive feedback from one pet store who have destroyed their inventory of moss balls by putting it in their freezer.

There was no public comment.

## **8. Continuing Business**

### **8.1 Water Resource Planning-Local Sales**

#### i. Nordic Aquafarms update –

Staff has received a letter requesting confirmation that the District can provide adequate water for their domestic needs. As there is adequate water supply to the peninsula, as was planned for in anticipation of future businesses opening, Staff will draft a letter of confirmation to Nordic Aquafarms for them to use in their permitting process.

#### ii. Trinidad Rancheria Feasibility Study update

Staff sent a letter to Westhaven CSD per Board direction, regarding the use of future water from the Trinidad Rancheria pipeline. There has not been a response yet.

Staff has met with Caltrans regarding putting a water pipeline extension along the Little River crossing with the trail being created. Another option is a pedestrian trail or using the existing bridge crossing. They seemed to be generally in favor of the waterline extension.

McKinleyville CSD (MCSD) has approved the waiver of conflict for Mitchel Law Firm. MCSD also provided a map of their distribution grid, including the termination pipelines' northern boundaries. The next step is to talk with Trinidad Rancheria staff about their specific water needs to determine pipe size and water line routes. Green Diamond is aware of the project and approached staff about the possibility of a pipeline going through their property. Further updates will be presented next month.

#### b. Transport – no updates

#### c. Instream Flow – no updates

#### d. McNamara and Peepe

##### i. Media coverage of McNamara and Peepe

##### ii. District letters to Senator McGuire and Assembly member Wood requesting additional funding for remediation efforts

##### iii. Letter from City of Eureka to DTSC

Senator McGuire and Representative Wood's offices have requested a meeting with Staff as a result of the letters of support from the City of Arcata, Humboldt Baykeepers, and Humboldt CSD requesting additional funds for the McNamara – Peepe site to be allocated. Staff requested the Mad River Policy Committee also attend that meeting.

Mr. Friedenbach wanted to be very clear that the source water has not been contaminated by this area of concern. The source water is very pure and meets all drinking water standards. There is no reason to avoid tap water. The Board commended the preventative efforts to reach out for additional support from other agencies which has been so effective. The focus on remediation is to prevent any contamination by the site. Surface and ground water sampling have occurred by SHN. By mid-April, DTSC should publish those results.

RRDEC has also been instrumental in promoting the issue. Jennifer Kalt, with Humboldt Baykeepers, added that she has set up a meeting with Jim Wood's and Senator McGuire's office and McNamara-Peepe is on the radar for the elected officials.

## **8.2 Disaster declaration at Ruth Lake**

### **a. Cal fire letter acknowledging Timber Harvest Plan**

PG&E is nearly done with Phase 2 (P2) tree felling operations. The trees remaining are on burned lease lots and PG&E work has been halted until the hazardous structures can be removed. The District logger has begun removing the District's hazardous trees. Road conditions and weather are preventing the trees being taken offsite, but will resume when possible.

A Timber Harvest Plan was approved by Cal Fire.

There was no public comment.

## **9. New Business**

### **9.1 Resolution 2021-01: Appreciation of Sherrie Sobol**

Resolution 2021-01: Appreciation of Sherrie Sobol was read aloud and enthusiastically approved. Ms. Sobol was presented a framed certificate and expressed her appreciation to the Board.

On motion by Director Rupp seconded by Director Latt, the Board Adopted Resolution 2021-01 by the following Roll Call Vote:

Director Michelle Fuller	AYE
Director Neal Latt	AYE
Director Lindberg	AYE
Director Bruce Rupp	AYE
Director Sheri Woo	ABSENT

There was no public comment.

### **9.2 PARS client review**

Staff met with PARS regarding the District's pension stabilization rate program. The District has contributed \$750,000, with almost \$200,000 in interest earned. Since its inception, the total portfolio has had a performance of 9.71% with last year's average being 12.5%. Staff stated that we are slightly ahead in the plan to fund the District's PERS obligation.

There was no public comment.

### **9.3 Preliminary Pension Liability Assessment**

Staff heard a presentation from Cal Muni Advisors regarding CalPERS information for the District's unfunded liability. Staff will evaluate the information and come back in the Summer with a plan regarding the OPEB liabilities going forward. Cal Muni Advisors will send a proposal and will be presented at the following meeting.



There was no public comment.

#### **9.4 COVID-19 Essential Service Pay Increase**

Staff introduced the proposal, noting that with the extreme contagiousness of COVID-19, District staff has negotiated their responsibilities through unprecedented times. When the inevitable positive cases arose, the remaining District staff stepped up in an extraordinary way. It had a tremendous emotional and physical impact.

The District has repeatedly been denied requests for vaccination by County Public Health, and no foreseeable dates to receive vaccines. With the hyperawareness that is required, staff recommends a temporary, 365 days, 5% increase to acknowledge the past, and to help prevent the pandemic fatigue. The cost to the District is \$131,000 and represents an average \$1.93 increase for each permanent staff member, which includes PERS costs. The request is to be retroactive to March 1, 2021, and will continue until February 28, 2022. Staff has requested to take funding from the Reserve fund for emergency funds multiple times this year, but is anticipating not needing the majority of past requests as emergency debris removal has cost less to the District.

The Board acknowledged the amazing work and day to day sacrifices made by the staff.

On motion by Director Lindberg seconded by Director Rupp, the Board Approved the COVID-19 Essential Service Pay by the following Roll Call Vote:

Director Michelle Fuller	AYE
Director Neal Latt	AYE
Director Lindberg	AYE
Director Bruce Rupp	AYE
Director Sheri Woo	ABSENT

There was no public comment.

#### **9.5 CLOSED SESSION-**

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

The Board Adjourned to Closed Session at 1:02 pm and returned to Open Session at 1:09 pm.

- a. Closed Session report out

The Board had nothing to Report Out other than to state the Item will be brought forward to the April meeting to have all Board Members present. There was no public comment.

### **10. Reports from Staff**

#### **10.1 Engineering (Time set 11:00 am)**

- a. 12kV Switchgear Replacement (\$755,832 District Match)

GHD and PG&E have reviewed and approved the most recent switchgear equipment proposal. There is a scheduled shipping date of July 9, 2021 for the switchgear equipment. This is critical for the schedule. And construction could be completed by November, 2021. The generator controller change order is also moving forward.

For the CalOES grant proposal, as a result of the PSPS for \$215,000, Mr. Stephens noted that although denial notices have gone out, the District has not received notice either way. It is suspected that the District's grant request will be approved.

b. Collector Mainline Redundancy Hazard Mitigation Grant (\$790,570 District Match)

The response to the RFI was related to the Phase 1 Geotech work. This is a competitive process, and FEMA is moving forward on Phase 1 funding. An RFQ (Request for Qualifications) would determine who the engineer will be for the project.

c. Reservoir Structural Retrofit Hazard Mitigation Grant (\$914,250 District Match)

Draft 65% plans were submitted to the District in February. Final drawings will be presented to the District at the end of March for the biological and cultural resources study. Cal OES completes the NEPA process and will award Phase 1 funding when completed.

d. TRF Generator Hazard Mitigation Grant (\$460,431 District Match)

This was just completed under the most recent round of applications for emergency grants. It will be Fall 2021 when we hear back.

e. Appeal of FEMA Funding Denial for Collector 4 Emergency Restoration Work

There is nothing new to report.

f. R.W. Matthews Dam Spillway Retrofit Scoping Project HMG Program

GHD is repackaging past applications (at no charge) to fit into the application.

g. Status report re: other engineering work in progress

There is nothing to report on this item.

The Board asked about the 90-day period passing on the grant in item e. His sense is that they are just very backed up. There have been requests for information so he believes it is still in process.

## 10.2 Financial

a. Financial Report– accept February 2021 financial statement & vendor detail report

Staff presented the financial report for the month of February. Although the five accounts are much more conservative than PARS, last month they still had slightly less than 1% returns.

The District is currently collecting advanced funds for the redundant pipeline and is anticipating having it fully funded by the time it is needed for the project's matching funds. A new listed item, Line 22a, which is the \$10,000 deposit from Trinidad Rancheria to report out status of these funds.

At 67% of the budget year, the District's water revenue, and personnel expenses are close to trend. DG Fairhaven has been sold and it is anticipated they will be running again. Engineering expenses have all been grant related, and is why the Expense category reports out \$0 expenses. PG&E is trending over budget. Fire Disaster recovery expenses are going to be roughly \$73,000 and submitted to FEMA. District final costs are \$3500. Reimbursement requests have been sent as they are incurred.

Monthly expenses by vendor came to \$291,915.47. Director Woo reviewed the expenditures and did not report any concerns.

On motion by Director Rupp seconded by Director Lindberg the Board Accepted the February 2021 Financial Statement and Vendor Detail Report in the amount of \$291,915.47 by the following Roll Call Vote:

Director Michelle Fuller	AYE
Director Neal Latt	AYE
Director Lindberg	AYE
Director Bruce Rupp	AYE
Director Sheri Woo	ABSENT

There was no public comment.

b. Fiscal Year 2021-22 Budget Discussions Calendar

The Board agreed with the budget calendar with a Special Meeting on May 20, 2021 at 9:00 am. There was no public comment.

c. Project Budget Additions – Army Corps of Engineers (ACE) 404 Permit and Water Board 401 Permit –

The biological opinion needs to be completed, and is a \$30,000 addition to the FY 2020-21 budget. It will be financed from reserves initially. The Board would like it to be funded through a reallocation.

On motion by Director Rupp seconded by Director Lindberg, the Board Approved the addition to the FY 2020/21 budget for the ACE 404 Permit and Water Board 401 Permit in the Amount of \$30,000 by the following Roll Call Vote:

Director Michelle Fuller	AYE
Director Neal Latt	AYE
Director Lindberg	AYE
Director Bruce Rupp	AYE
Director Sheri Woo	ABSENT

There was no public comment.

### 10.3 Operations

a. Monthly report on projects and operations

The Board asked if a trend is being highlighted regarding backwashes in the report? Staff noted that the turbidity was higher than in past months, and it takes more to maintain the high standard of water quality. That is the purpose of the TRF, and it is typical for this time of year.

Mapping for the seismic retrofitting is moving along. Staff reiterated that cybersecurity is of the utmost importance. Live connections to outside access to the computer system is very limited and turned off as soon as maintenance has been completed by an offsite vendor.

A tree branch knocked power lines down on a Saturday, resulting in some overtime, but was repaired by Operations staff. The Eureka backup generator is up and running. All lake and spillway levels are better than last year, despite having less than average rainfall.

## **11. Management**

### **11.1 ACWA – Energy Committee**

Staff attended the ACWA Energy Committee. The main takeaway was regarding the electrical vehicle fleet program. There was a follow up presentation by the District account representative. Staff is researching the state requirement to convert its fleet and to see if it will apply to our fleet. There are rebate programs for both charging stations and vehicles.

- a. Electric Vehicle Fleet
- b. ACWA Coalition Support for SB 323

This legislation would shorten the statute of limitations regarding the increase in fees. A District was sued five years after a rate increase. The new legislation would make it 120 days to pursue a change. HCSD has also supported this legislation.

On motion by Director Rupp seconded by Director Lindberg, the Board Authorized joining the coalition in support of SB 323 by the following Roll Call Vote:

Director Michelle Fuller	AYE
Director Neal Latt	AYE
Director Lindberg	AYE
Director Bruce Rupp	AYE
Director Sheri Woo	ABSENT

There was no public comment.

Mr. Friedenbach presented a District jacket to the new Board Secretary, Heather Bitner, who was very appreciative of the District's generosity, and forgave the unscheduled appearance on camera since her name was embroidered on the beautiful blue jacket.

## **12. Director Reports & Discussion**

**12.1** General -comments or reports from Directors -There were no reports.

### **12.2 ACWA**

Director Rupp attended the meeting and reported out that there are solid cash reserves, and they do want to sell their commercial building.

### **12.3 ACWA – JPIA**

- a. Resolution 2021-03: Concurrence of Nomination for Ms. Melody Henriques-McDonald for the Executive Committee

On motion by Director Rupp seconded by Director Lindberg, the Board Approved Resolution 2021-03: Concurrence of Nomination for Ms. Melody Henriques-McDonald, and Resolution 2021-04: Concurrence of Nomination Mr. Thomas A. Cuquet for the Executive Committee by the following Roll Call Vote:

Director Michelle Fuller	AYE
Director Neal Latt	AYE
Director Lindberg	AYE
Director Bruce Rupp	AYE
Director Sheri Woo	ABSENT

There was no public comment.

**12.4 Organizations on which HBMWD Serves:**

- a. RCEA- There was no report.
- b. RREDC-There was strong support from membership for the DTSC issue with McNamara and Peepe. A letter of support is being sent.

The Board Adjourned for lunch at 11:45am and returned at 1:00pm.

**Adjournment**

The meeting adjourned at 1:10pm.

Attest:

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Neal Latt, Vice-President

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J. Bruce Rupp, Secretary/Treasurer





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



**Minutes for Special Meeting of Board of Directors**  
**March 11, 2021**

### 1. Roll Call

President Woo called the meeting to order at 5:34 pm. Director Rupp conducted the roll call. The Public Hearing was conducted within all Brown Act requirements.

**Members Present:**

Director Neal Latt  
Director Bruce Rupp  
Director Michelle Fuller  
Director David Lindberg  
Director Sheri Woo

**Members Absent:**

None

**Staff:**

John Friedenbach, General Manager  
Chris Harris, Business Manager  
Sherrie Sobol, Program and Regulatory Analyst  
Heather Bitner, Board Secretary  
Dee Dee Simpson, Accounting and HR Assistant

**Others Present**

Troy Nicolini

### 2. Flag Salute

President Woo led the flag salute.

### 3. Accept Agenda

On motion by Director Rupp seconded by Director Latt, the Board Accepted the Agenda for the March 11, 2021 Special Meeting by the following Roll Call Vote:

Director Michelle Fuller	AYE
Director Neal Latt	AYE
Director Lindberg	AYE
Director Bruce Rupp	AYE
Director Sheri Woo	AYE

There was no public comment.

### 4. Public Comment

There was no public comment.

### 5. Retail Water Rate Study

a. Retail Water Rate Study Staff Report

Staff introduced the highlights of the proposal initially brought to the Board at the Regular Board Meeting in December, 2019. Proposition 218 is the Right to Vote on Taxes Act, which requires the District to identify parcels, and calculate fees imposed. Notice by mail must be sent to each identified owner; a public hearing must be held; and the District must consider written protests, with one protest per parcel. If the fees are protested by a majority, then the fee may not be imposed. For HBMWD, that number would be 106 protests. Costs will be based on the size of the water meter. HBMWD will calculate these fees annually going forward.

Current retail rates do not cover District operational expenses. Factors used to determine this included:

1. Costs for operations
2. Capital facilities
3. Wholesale and transmission rates
4. American Water Works Association (AWWA) M-1 Principles

To smooth the transition, the increases will be spread over five years, to insure rates balance within five years. Tiered rates are being eliminated by state case laws and therefore not recommended. Staff recommends approval of the proposed retail rates for FY 20-21 through 2026.

The District is aware of some citizens in Fairhaven with higher rates than in Manila. Proposed rates are based on the costs of HBMWD exclusively. When Peninsula CSD (PCSD) takes over the water system, they will be required to conduct their own rate study and it will be different. HBMWD charges for all fees within the District, not just those in Fairhaven.

Water costs are currently included at a certain amount at no charge. The fees proposed are based on California case law standards.

Projected future rates were introduced. The increase to Fairhaven is \$1.78 per base rate (not including consumption charges). The average increase is \$6.29. Details for FY21-22: Capitol rates for Fairhaven grid and non-Fairhaven grid, costs are \$36.33, which is a flat rate. The proposed rate has more accurately allocated costs based on meter size. An 8" meter is significantly more expensive to replace than a 5/8" meter. Outside the Fairhaven grid, there is no distribution grid, and the proposed rates are \$2.90 for a standard size meter.

The Board asked to clarify whether the Capitol replacement rate reflects a different rate due to the different types of pipes. Staff responded that fire suppression lines are a different system entirely. All rate payers were notified in Jan 22, 2021.

Public comment:

A 3-minute timer was displayed for public comment. Mr. Troy Nicolini sent an email comment, which was read aloud and is attached to the record.

The Public Comment period was closed 5:56 pm. There were no email protests received during the public hearing. Two protests were received via mail, which is less than the 106 required to stop the rate increase.

Staff offered an alternative suggestion to the Board to reach a written agreement with PCSD prior to July 1, 2021 to take over the retail water system, then HBMWD would rescind the rate increase. Negotiations would work out the problems with merging systems. Staff could report back to the Board in June to determine if rate increases could be rescinded after a move towards independent systems. The Board directed Staff to work to find a solution with PCSD to move the retail water grid to them, and to make the District whole of any losses during the transition.

Mr. Nicolini addressed the Board noting that in the negotiations it is important to note that the entire system will benefit from an updated grid and environmental mitigation costs, therefore the whole system may need to be responsible for that part of the transition. Board members requested a full public process regarding the topic of replacing infrastructure to move towards an independent PCSD.

The Resolution 2021-06 was read aloud.

On motion by Director Rupp seconded by Director Latt, the Board Approved the Resolution 2021-06: Increasing the District Rates for District Water Service, and further directed Staff to enter into discussion with PCSD as described by the General Manager for the March 11, 2021 Special Meeting by the following Roll Call Vote:

Director Michelle Fuller	AYE
Director Neal Latt	AYE
Director Lindberg	AYE
Director Bruce Rupp	AYE
Director Sheri Woo	AYE

There was no public comment.

**Adjournment**

The meeting adjourned at 6:12pm.

Attest:

\_\_\_\_\_  
Sheri Woo, President

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

## **A tribute to California's 'First Lady of Water'**

Posted on October 7, 2014 by UC Davis Center for Watershed Sciences



A former telephone operator from Nebraska, Pauline Davis became the longest-serving woman in the California Legislature and an effective advocate of local water development. *Source: private collection of Rodney Davis*

*By Tina Cannon Leahy*

As water policy consultant for the California Assembly, I occasionally research legislative history to iron out competing theories on a law's meaning. So it was earlier this year when I visited the California State Archives to investigate the [Davis-Dolwig Act of 1961](#).

I took a manila folder from the nice clerk and sat in the rows of small wooden desks to learn what this "Mr. Davis" and "Mr. Dolwig" had in mind when they drafted the bill more than 50 years ago.

My jaw dropped when I pulled a carbon-copied transcript of a 1960 water committee hearing fully identifying the "Davis" as Assemblyman *Pauline L. Davis*. A woman in the Legislature! Involved in water policy! The water committee chair, no less!

It was, as James Brown sang in the 1960s, "a man's, man's, man's world" back then – and still is, for the most part, in the world of water policy. As a woman in water policy I was awestruck that a woman was tackling water policy before I was born. How could I not know? What ensued was a near-obsession to find out more.

The archives didn't hold much, but an online perusal of UC Berkeley's [Bancroft Library](#) led to a jackpot: Davis had participated in a Women in Politics Oral History Project in the late 70's and early 80's but then she embargoed the release of the interview until 2010. (She died in 1995 at age 78.) The library still showed the transcript as unavailable, but a quick conversation with the library remedied that. As far as I know, I became the first public member to gain access.ill

The memoir unfurled an implausible story: A petite telephone operator and mother of two from Nebraska who in the post-WWII "happy homemaker" era overcomes a divorce and the death of a second husband to become the longest-serving woman in the California Legislature and an effective player in the state's notoriously testosterone-driven water wars.



Pauline Davis with fellow Assemblywoman Dorothy Donohue in the mid-1950s. *Source: private collection of Rodney Davis*

Davis was an unrelenting defender of "area-of-origin" laws - protections that give counties where exported water supplies originate a future right to call on that water if the need arises. Several causes she championed and resource questions she confronted are still alive today: How do we balance the needs of different regions of the state while protecting our fisheries? Should we build a peripheral conveyance around the Delta? Who is ultimately responsible for State Water Project enhancements versus maintenance? (That last question brought me to the state archives.)

Davis was sympathetic to the water fears of those in the Delta, stating of the 1982 peripheral canal debate, "I don't think one geographic area of a state should rob the very thing that keeps the other area of the state alive, because in the final analysis you're all going to sink." The "Delta people," she said, were "having the same problem as the counties of origin."



Davis' California odyssey began with a work transfer to Stockton where she tried to save her shaky marriage. The effort failed, but she stayed. Later, on a blind date, she met her second husband, Lester Davis, who was running a Democratic campaign for Assemblyman in a district covering several rural Northern California counties, from Downieville to the Oregon border.

Ms. Davis was none too pleased. Assemblyman was a part-time job that would require her husband to take a leave of absence from his better-paying work as a railroad engineer. But, as she put it, "He assured me that he wouldn't stay in it very long so I went along with it." Upon his inauguration in 1947, she became his sole staffer in both the Capitol and the district office in Portola, Plumas County. It gave them extra income and allowed the two to remain together in the constant shuttle between Portola and Sacramento. It was, as Ms. Davis recalled, "a very happy marriage."



Assemblywoman Pauline Davis campaigning for re-election in 1953. *Source: personal collection of Rodney Davis*

But in 1952, tragedy struck. The assemblyman died of thrombosis while campaigning for a fourth term. When he still received a majority of the primary votes, turmoil ensued. Democratic party operatives implored the young widow to be the candidate. She refused, citing debt from her late husband's primary and "the children to raise by myself," including a toddler. She relented on a promised \$5,000 in campaign donations.

No sooner did she accept the nomination than the pledges of support began to evaporate. Her backers then got the first glimpse of the courage that served her later. She threatened to withdraw unless they made good on the money, advising that they "go right across the street to the bank and borrow it."

They did just that, but financing was only the first of her obstacles. Litigation challenging her late listing on the ballot went all the way to the California Supreme Court. Some considered her candidacy a joke. She recounted that while campaigning in Tulelake "my Republican opponent and the two men with him were making fun of me

and really laughing their hearts out as I was walking down the street. So, it gave me a great deal of satisfaction to be able to take the election, because they were so sure of themselves."



Assemblywoman Pauline Davis occupied the same seat as her late husband on the Assembly Floor - No. 68 - for all 24 years in office. *Source: private collection of Rodney Davis*

In her first year in the Legislature, she authored a bill requiring equal pay for equal work by women. It never got out of committee. Asked if she endured any particular hostilities, Davis said, "Oh, I encountered those „when I became involved in the California water plan."

Davis immersed herself in water policy at the very start of her legislative career. She considered water to be "so basic of all the other natural resources that I felt that it would be a necessity for me to go into the field as deeply as I could."

She sought guidance from the Office of the Legislative Counsel - particularly George Murphy and J.D. Straus, the latter of whom she called "a perfectionist in the water field as it pertained to water rights" - and spent every spare hour she could with them.

The knowledge soon served her well. In 1956, Harvey O. Banks, an engineer, is appointed head of the new state Department of Water Resources with the task of developing the State Water Project to export water from the relatively wet north to dry south.

Davis was appalled that fellow northerners did not share her alarm over the proposed enormous transfer of natural wealth.

"My goodness sakes! You're dealing with liquid gold!" she recalled in her oral history interview. "You're not dealing with something that is a commodity that can be replaced, because once that water wagon leaves Northern California... it just isn't coming back!"



A water bond debate in Redding on Feb. 28, 1960. Clair Hill, a water engineering consultant and Sen. Hugo Fisher of San Diego spoke for it. Assembly members Davis and Bruce Allen of San Jose spoke against it. *Source: private collection of Rodney Davis*

In 1959 the Legislature authorized \$1.75 billion in general obligation bonds for construction of the State Water Project. Gov. As Norris Hundley Jr. tells it in "The Great Thirst," Pat Brown won over Davis and other northern legislators by offering a compromise measure - the [Davis-Grunsky Act](#) - authorizing \$130 million of the bond sales for development of local water projects. As Davis put it in a newspaper commentary, a "water bond issue of this magnitude should include absolute guarantees for the protection and maintenance of important recreation features, such as salmon and steelhead spawning grounds that might be destroyed by the construction of a water project."WJ

By 1961 DWR was pushing to dam the Feather River and create the giant Lake Oroville - in Davis' district. She leveraged the Oroville debate to achieve her second major piece of legislation, the Davis-Dohvig Act, which requires consideration of fish and wildlife enhancement and recreational opportunities „when planning State Water Project facilities. Importantly, the law also mandates that the project's water and power contractors pay for actions to help fish and „wildlife affected by the project.

By Shakespeare's measure, Davis' contributions to California water policy are clear: Her past *was* prologue. Look no further than this year's water bond measure, Proposition 1. The two biggest fights during the drafting were how much to spend on surface water storage and whether funding should benefit the [Bay Delta Conservation Plan](#).



Pauline Davis detonates explosives at a ceremonial groundbreaking of the Grizzly Valley Dam near Portola on Sept. 27, 1964. Source: private collection of Rodney Davis

Prop. 1 would have met Davis' approval. Her enthusiastic support for building reservoirs earned her the moniker "Lady of the Lakes." A news photo of the groundbreaking ceremony for the state-owned Grizzly Valley Dam in Plumas County 50 years ago shows Davis as the lone female official flanked by her grown daughters and young son, [Rodney Davis](#), who became a state appellate court judge and is now an Episcopal priest. With a plunger, she set off the first explosive in the construction of the dam, „which formed Lake Davis, named in honor of her late husband.

Davis served 24 years in the Assembly, from 1953 through 1976, as was described by former Assembly Speaker Leo T. McCarthy as "the most effective legislator in representing her district that I have ever seen." Wil From 1960 to 1966, she was the sole woman in the 120-member Legislature. Reflecting on male chauvinism in her oral history, Davis advised women to "learn the men's language, study their minds, and the way they work in the political arena and in the business field, and just go forward and not let it bother you too much."

Here's to you Pauline Davis. Wife. Mother. Widow. Politician. Water warrior. Role model. California's First Lady of Water.

*Tina Cannon Leahy is Principal Consultant for the California Assembly Water, Parks & Wildlife Committee. The opinions expressed here are strictly her own.*

[\[i\]](#) All quotations, unless otherwise indicated, are from Pauline L. Davis, "California Assemblywoman, 1952-1976," an oral history conducted 1977-1982 by Malca Chall, Regional Oral History Office, The Bancroft Library, University of California, Berkeley, 1986.

[\[ii\]](#) Unattributed newspaper clipping. Personal collection of Rodney Davis

[\[iii\]](#) Associated Press, *Pauline Davis; Assemblywoman for 24 Years*, December 16, 1995





## 2020 (mega) wildfire season



Mar 24, 2021 | [Sierra Nevada Updates](#) (no author listed)

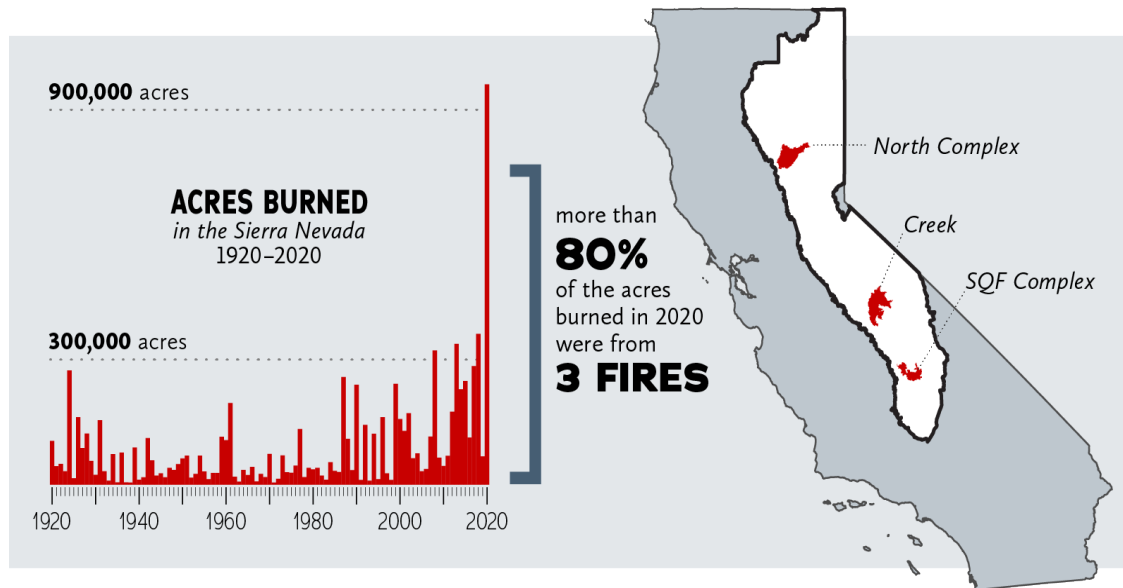
Nearly half of the 2020 Creek Fire, the largest in the modern history of the Sierra Nevada, burned at high severity. The amount, size, and arrangement of high-severity fire in 2020 appears to be unlike anything the region has experienced in the past.

### **A record-breaking year in 3 fires**

Almost one million acres burned in the Sierra Nevada in 2020, which is more than double the previous record set in 2018. Although the amount of fire grabs headlines, more concerning is the type and distribution of these fires. The Creek, North Complex, and SQF fires were three of the five largest Sierra Nevada fires in the last 100 years, and each fire left behind large areas where all, or nearly all, vegetation was killed.



Historically, hundreds of thousands of acres burned in the Sierra Nevada in a normal year, but they were spread across the landscape in many smaller fires, not concentrated in a few megafires like in 2020.



## The wrong kind of high-severity fire

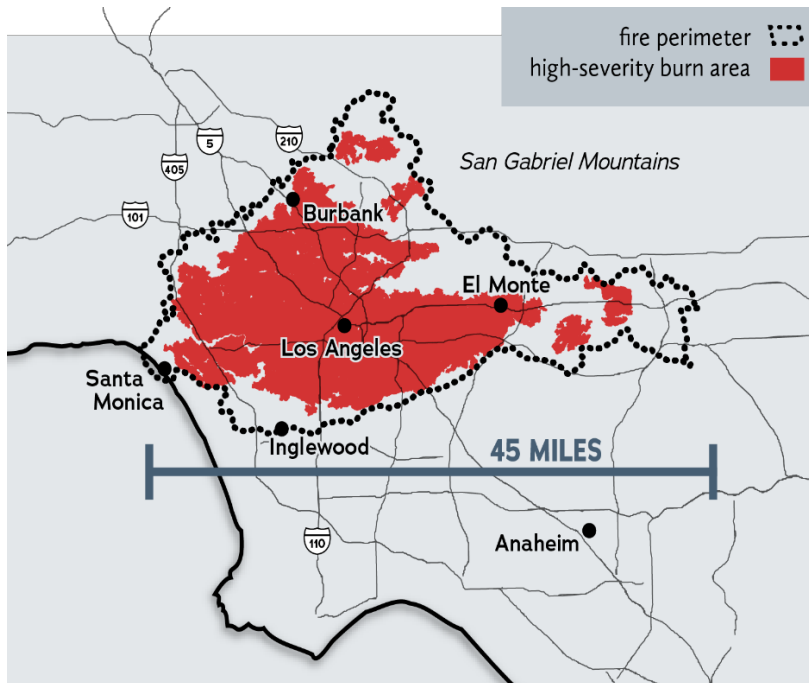
The scientific literature describing fire regimes in the Sierra Nevada's mixed conifer forests refers to high-severity burn *patches*, relatively small areas within a mosaic of fire effects where all, or nearly all, vegetation is killed.



This vocabulary is inadequate to describe what transpired in 2020. Instead, the intensity with which these large 2020 fires burned created high-severity burn *landscapes*. The amount, size, and arrangement of high-severity fire in the region appears to be unlike anything the region has experienced in the past.

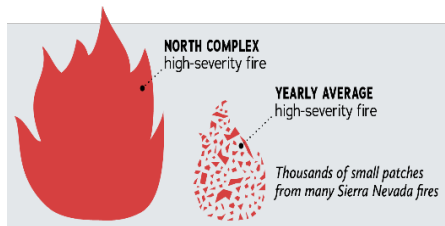
## NORTH COMPLEX FIRE OVERLAYED ON LOS ANGELES

The 2020 North Complex Fire, near Lake Oroville, burned over 170,000 acres at high severity. This area is bigger than downtown L.A. and neighboring cities.



## NORTH COMPLEX FIRE *QUADRUPLES* YEARLY HISTORICAL AVERAGE

The North Complex Fire's high-severity burn landscape is unlike anything the Sierra Nevada has experienced. This one fire's high-severity burn area is four times larger than the average area burned at high severity from all Sierra Nevada fires **during an entire year**. (Note: the average area burned is based on a healthy, historical fire regime that predated European settlement).



Historically, fires burned small areas (“patches”) at high-severity that were mixed among other small

patches of low and moderate severity. The North Complex Fire did not burn like historical fires—it burned a single high-severity landscape.

## Fire Season Impacts

The North Complex Fire was one of three megafires in the Sierra Nevada in 2020. The Creek and SQF Complex Fires also burned large landscapes at high-severity in mixed conifer forests.

These megafires affected communities up and down the Sierra Nevada. Sixteen lives were lost, and more than 3,500 homes and businesses were destroyed, including most of the town of Berry Creek.



Berry Creek, California.

The size and severity of these megafires also caused:

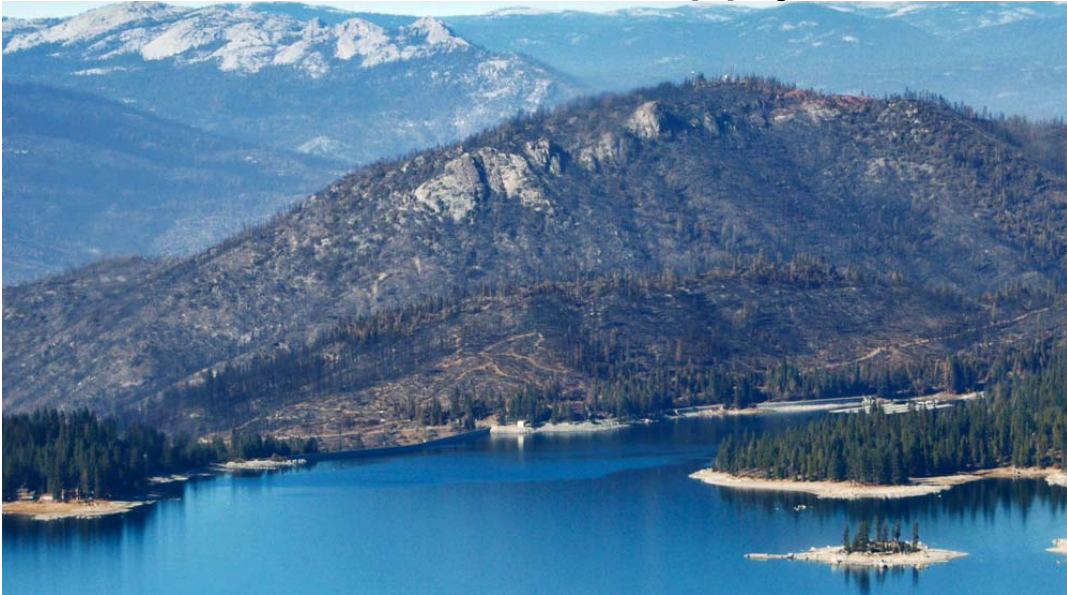
- megasmoke across California
- California's forest carbon to go up in smoke
- risks for California's water supply

### A GIANT (SEQUOIA) LOSS

The SQF Complex Fire killed hundreds, if not thousands, of old-growth Giant Sequoias that had survived countless smaller, less severe fires. The tragic loss of these ancient trees highlights how fires of this type degrade, rather than renew, Sierra Nevada forests along with the habitat, carbon storage, and water security benefits they provide.



## 2020 megafires create risks for California's water supply



Mar 3, 2021 | [Sierra Nevada Updates](#) (no author listed)

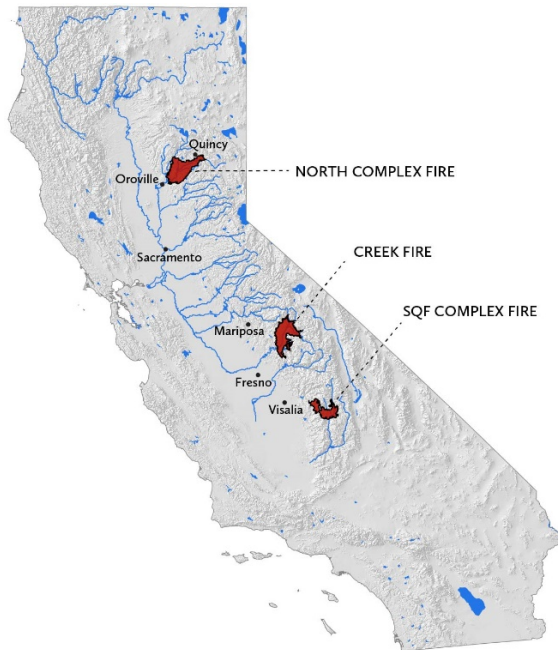
The forested watersheds of the Sierra Nevada are the origin of more than 60 percent of the state's developed water supply. Sierra Nevada megafires that kill all, or nearly all, vegetation across large landscapes pose serious risks to this system.

In the immediate aftermath of a fire, high-severity burn areas lack vegetation to stabilize soils. Making matters worse, the intense heat can cause the soils themselves to change in ways that reduce their ability to absorb water during rain or snowmelt events. This means that high-severity burn areas can experience runoff and erosion rates five-to-ten-times greater than low- or moderate-severity burn areas. The resulting sediment enters nearby creeks and rivers, degrading water quality and adversely affecting regional aquatic habitats.

Plumes of sediment from post-fire rain events can also impact reservoir operations until the sediment settles out to the bottom. Once there, it reduces water storage capacity. Adapting to and cleaning up from these sedimentation events can be a difficult and expensive process for the owners of water infrastructure.

## Three Sierra Nevada megafires create risks for California water supply

The 2020 North Complex, Creek, and SQF Complex megafires created high-severity burn areas of unprecedented size in three watersheds important for California's water supply.



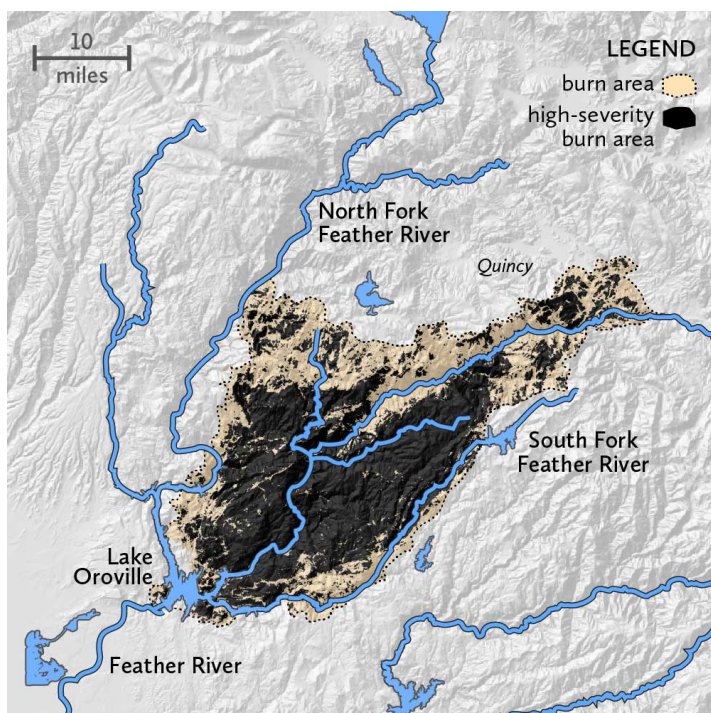
The 2020 North Complex, Creek, and SQF Complex Fires were three of the five largest Sierra Nevada fires over the last 100 years.

## North Complex Fire and the Feather River

The North Complex Fire, the second largest in Sierra Nevada history, burned approximately 319,000 acres in the Feather River



watershed. An astonishing 58 percent burned at high-severity. The Feather River is the source for the Oroville-Thermalito Complex consisting of Lake Oroville and a series of associated hydroelectric generating facilities. Lake Oroville is the second-largest reservoir in California and the largest source of water for the State Water Project. The State Water Project is the backbone of California's water distribution system, providing water for home, farm, and industrial use in the San Francisco Bay area, the San Joaquin Valley and Southern California. The hydroelectric facilities have a combined capacity of more than 750 megawatts.

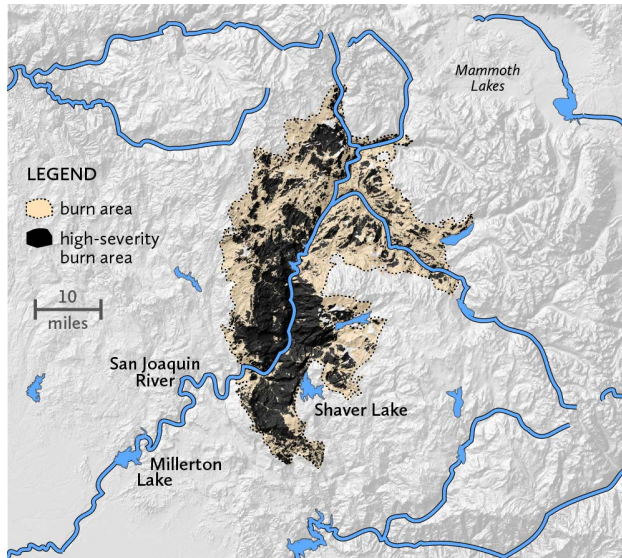


The North Complex Fire burned around the Feather River and Lake Oroville, the largest contributor to the State Water Project.

### **Creek Fire and the San Joaquin River**

The Creek Fire is the largest in the history of the Sierra Nevada. It burned roughly 380,000 acres of the San Joaquin River watershed, 43 percent at high-severity. The San Joaquin River flows to Millerton Lake where it is impounded by the Friant Dam, the source for both the Madera and Friant-Kern canals. Water stored here

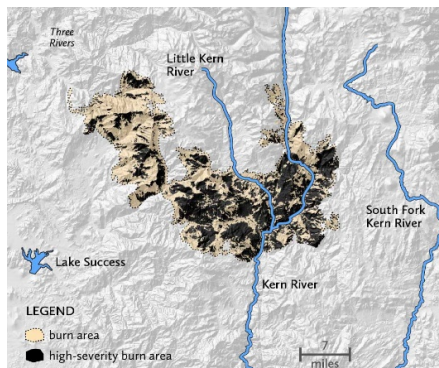
supports a million acres of agricultural production throughout the fertile San Joaquin Valley.



The Creek Fire burned around the headwaters of the San Joaquin River, a major component of the Central Valley Project.

### **SQF Complex Fire and the Kern River**

The SQF Complex Fire, is the fifth largest on record in the Sierra Nevada. It burned nearly 175,000 acres in the Kern River watershed, 43 percent at high-severity. The Kern River is the southernmost river in the Sierra Nevada and source for Lake Isabella, a reservoir roughly 40 miles Northeast of Bakersfield that holds water utilized for drinking, irrigation, and groundwater recharge in the Southern San Joaquin Valley.



The SQF Complex Fire burned around the Kern River, which is a source of irrigation water for the Central Valley.

## **The water costs of fire**

We won't know what challenges these 2020 megafires will create for downstream water systems for several years, and depending on the amount and timing of precipitation, the worst sedimentation impacts may not materialize. At the same time, Placer County Water Agency's (PCWA's) experience in the aftermath of the 2014 King Fire suggests that the water costs of the 2020 fire season may well prove significant.

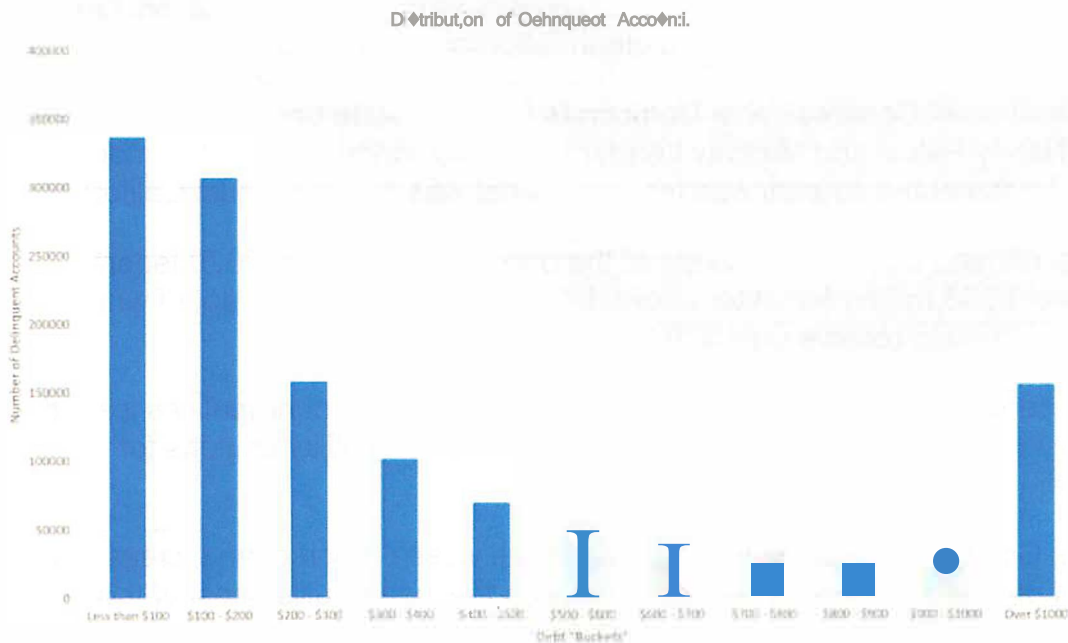
Those expenditures, \$5–10 million each time one of their reservoirs must be cleaned and up to \$200,000 for each day a hydropower plant must sit idle, led PCWA to join the SNC, Tahoe National Forest, The Nature Conservancy, Placer County, American River Conservancy and UC Merced in the French Meadows Partnership. The collaborative's successful French Meadows Restoration Project is proactively reducing fire risk through ecologically-sound fuel-reduction treatments across a 28,000-acre landscape and winning a 2020 Regional Forester's Award in the process. Less than 100 miles to the north, the SNC is helping to fund the North Yuba Forest Partnership, another collaborative (that includes the Yuba Water Agency) that is planning work across an even larger 275,000-acre landscape. In both instances, multiple public entities are joining local and national nonprofit organizations and industry representatives to work towards common goals of more resilient forests and forest communities.

With assistance from Sierra Nevada Watershed Improvement Program grants, these forward-looking collaboratives are investing in resilience now to avoid paying for disasters later. Both Placer County's King Fire experience and research conducted by the SNC, the Mokelumne Avoided Cost Analysis, suggest that this is a prudent financial decision for water agencies, land managers, timber interests, and governments alike.



# Times-Standard 3-9-2021

## Jared Huffman: Support is needed to help pay water bills



A graph from the State Water Resources Control Board shows the distribution of household water debt as of November, which is estimated to collectively amount to \$1 billion. Rep. Jared Huffman and other state Democrats penned a letter to Congressional leaders stating the likely one-time \$70 million payment California is expected to receive upon the passage of the American Rescue Plan is insufficient to address the total debt. (Screenshot)

By [SONIA WARAICH](#) | [swaraich@times-standard.com](mailto:swaraich@times-standard.com) |  
March 9, 2021 at 2:48 p.m.

State residents have been struggling to keep up with their water bills during the COVID-19 pandemic, but government officials say help is on the way.

Survey results from the State Water Resources Control Board released in late January estimate about 1.6 million or 12% of households across the state have not paid their water bills resulting in an estimated \$1 billion in statewide household water debt. The average household debt is \$500.

North Coast Congressman Jared Huffman issued a news release stating the American Rescue Plan, making its way through the House of Representatives once again to incorporate Senate changes, includes a "one-time federal allocation for water assistance," but ongoing relief is needed.

"Over the past year water has proven to be a critical resource during the pandemic - it's needed to wash hands, cook meals, and countless other day-to-day necessities," Huffman said in a statement. "With more families staying home and an increase in personal water usage, households in California and across the country are getting buried in debt. Congress must provide funding for water affordability assistance nationwide. In order to have an equitable recovery from this pandemic, we have to ensure everyone has equal access to clean, affordable water."

Huffman and other Congressional Democrats from the state penned a letter to House Speaker Nancy Pelosi and Minority Leader Kevin McCarthy stating the amount allocated for the entire country was far below what was needed in just California.

"This level of need dwarfs the entirety of the one-time December 2020 federal allocation of \$638 million for water affordability assistance nationwide, of which California is likely to receive only \$70 million," the letter states.

While household water debt is an issue, the state and local municipalities issued emergency orders at the start of the pandemic preventing utility shutoffs for nonpayment.

In Eureka, City Manager Miles Slattery said there wasn't much of an increase in the number of people that were delinquent in paying their water bills; most of those people were struggling to pay their water bills before the start of the pandemic.

"We have seen some commercial and residential become delinquent, but we're not doing shutoffs," Slattery said, adding that will be the case until the pandemic ends.

The Eureka City Council has already approved a program to help city residents with utility payments, but must await funding from the state before it can implement the program, Slattery said.

"That should be up and running soon," Slattery said. "We're hoping to get the go-ahead to start that program and allow for people to apply for money to pay their utilities."

For areas lying just outside of Eureka city limits, Terrence Williams, general manager of the Humboldt Community Services District, said there are currently three times as many delinquent utility payments as is typical.

"That is not a great situation for the district, but it's not as bad as other districts," Williams said.

The primary contributor to that is being unable to disconnect households' water service when they fail to make payments, Williams said.

"Once the order is lifted, we will be able to go back to these customers who have high balances and we will have some enforcement mechanisms like being able to turn off their water service," Williams said.

However, Williams said some of the people who are failing to pay their water bills are likely unable to pay their mortgages, so the water district will still be left holding the bag if those residents face foreclosure.

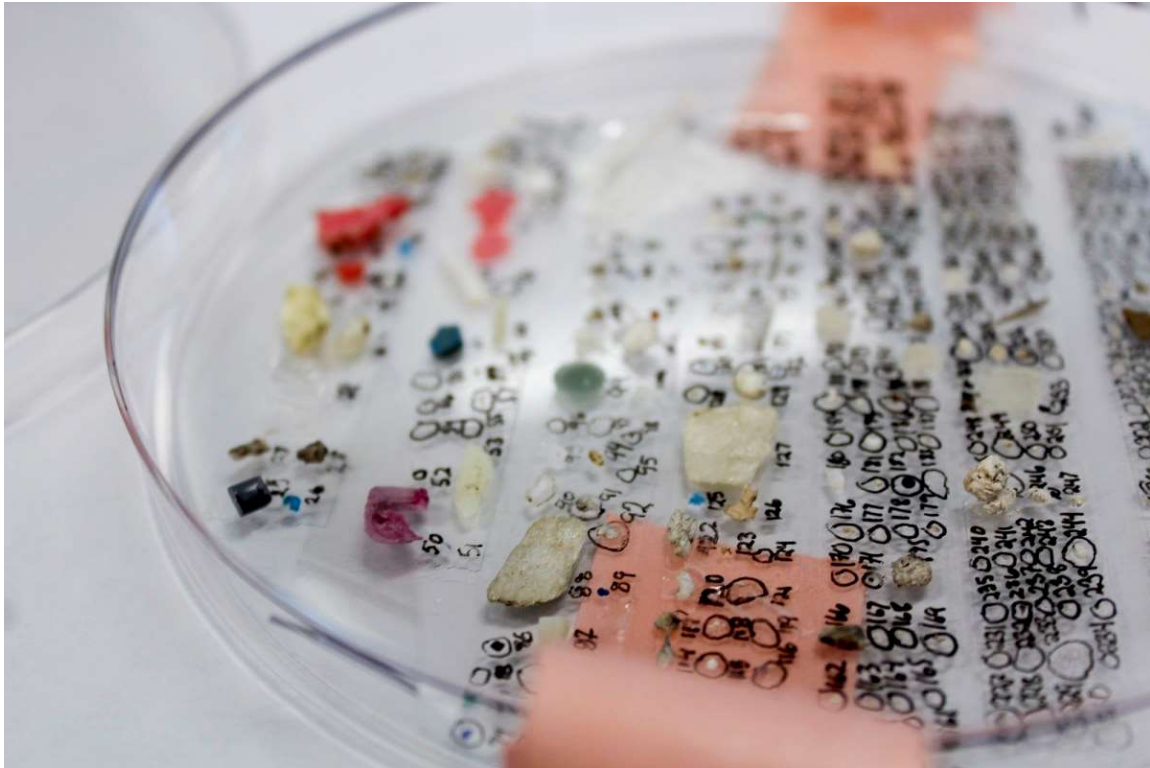
It's hard to predict what kind of assistance will actually come down from the state, but Williams said an economic stimulus package that would assist with the back payments would be helpful to both the district and the customers unable to pay.

"If you do live in the district and you have a back balance, please come in and work with us," Williams said. "We're happy to figure out a payment plan or some other way to help you pay your bill."

*Sonia Waraich can be reached at 707-441-0506.*

**ENVIRONMENT****Premature or precautionary? California is first to tackle microplastics in drinking water**

PUBLICATION: CAL MATTERS

BY RACHEL BECKER MARCH 15, 2021

Microplastics collected in the San Francisco Bay Area are identified and labeled for research in a lab headed by Chelsea Rochman, an assistant professor at the University of Toronto. California is about to set the world's first guidelines for microplastics in drinking water. Photo by Cole Brookson courtesy of Rochman Lab

**IN SUMMARY**

Huge gaps exist in scientific knowledge, but California is about to set the world's first health guidelines for microplastics in drinking water. Yet no one agrees how to test water for the tiny bits of plastic, or how dangerous they are.

California is poised to issue the world's first guidelines for microplastics in drinking water despite no data on how plentiful they are in the state, [no scientific agreement](#) on how to test water for them and little research on their health risks.

The pieces of plastic — smaller than an ant, some so tiny they can be seen only with a microscope — have contaminated wildlife and human bodies through their [food, air and water](#).

Under a [2018 state law](#), California must require four years of testing for microplastics in drinking water, and the state must consider guidelines to help water providers and consumers determine what levels may be safe to drink.

Now the state Water Resources Control Board is blazing a trail to issue a preliminary health-based threshold and testing methods by July 1.

The state's aim is to take a precautionary approach, moving to tackle potential threats posed by microplastics.

But there are big obstacles to such early action: Research into the consequences of ingesting tiny plastic fragments is still in its infancy. No one knows how widespread microplastics in California's drinking water really are. [There isn't even a standardized method](#) to test for them. And no one knows what dose may be "safe" to consume, since the human health effects are [largely unknown](#).

California's water regulators are pushing to close those gaps. "To be honest, if the legislature hadn't given us such an aggressive deadline, with rather high goals, this might not happen this year," said [Scott Coffin](#), a research scientist with the State Water Resources Control Board. "It really is accelerating the field quite a bit."

[Theresa Slifko](#), chemistry unit manager at the [Metropolitan Water District of Southern California](#), which provides imported water to 19 million Californians, warns that monitoring drinking water for

microplastics is going to be “very complicated and time consuming, and that’s why it’s expensive.”

Developing a health guideline for microplastics is “a tough one,” said Razmik Manoukian, the Los Angeles Department of Water and Power’s director of water quality. “But there’s a lot of studies worldwide done on plastic exposures ... so it could be they can come out with a preliminary number.”

Researchers applaud California’s efforts to move forward, even though they caution that drinking water is not thought to be the biggest source of microplastics people consume. People probably absorb more [simply by breathing](#).

“We now know that we live in a soup of plastic that is getting ever denser. And we don’t seem to be changing our ways. And the contaminants, they live longer than we do, meaning that the soup will get thicker,” said [Rolf Halden](#), director of the Biodesign Center for Environmental Health Engineering at Arizona State University.

“So is it too early to do something? No, it is actually a bit late.”

### **Awash in microplastics**

Microplastics have contaminated the environment and the bodies of animals [around the world](#): Ice cores [in the Arctic](#), [invertebrates in Antarctica](#), [humpback whales in the North Sea](#), [seals](#) and [seabirds](#) in the Southern Ocean, fish and shellfish [on six continents](#) and even [human placentas](#).

California banned microbeads in toiletries like facial scrubs and toothpaste [five years ago](#). But sources of tiny plastic are still ubiquitous: Synthetic clothing sheds microplastics in [wash cycles](#) that discharge into sewers, [fragments rub off car tires](#) and [ever-increasing plastic waste](#) crumbles into tiny particles. All of these particles can wind up in waterways that provide drinking water, such as the massive, [444-mile long California Aqueduct](#).

[Trillions](#) of microplastic particles are floating on the surface of the world's oceans, weighing at least [100,000 tons](#). And that doesn't include the unknown quantities in freshwater rivers and lakes, or the particles that have sunk into the oceans, washed ashore or been consumed by marine life.

While from pole to pole there's been widespread study of the environment to figure out where microplastics have wound up, there's been less research into their possible effects on people.

No government has developed a health-based threshold for microplastics in drinking water, according to the water board's [Scott Coffin](#).

The health threshold won't be an [enforceable standard](#) at this point; it's unlikely to carry [the weight of regulation](#). Instead, it will probably be a preliminary guideline to help water providers and consumers assess the levels in their water, and it is likely to change with more research, Coffin said.

"It will be the world's first health-based guidance value of any sort for microplastics formally recommended by a working group or

government agency," he said. "This will carry a lot of authority, even if it is just a preliminary guidance level."

California's efforts took off when a constituent reached out to state [Sen. Anthony Portantino](#), a Democrat from the La Cañada Flintridge area, warning that plastic fibers in drinking water may contain toxic chemicals.

Despite opposition from the Metropolitan Water District and other water providers, the Legislature passed [Portantino's bill](#) in 2018 calling for standardized testing methods and four years of monitoring statewide. The law also urged the water board to consider recommending a health threshold by [July 1 2021](#).

Another [law](#) instructs the state's Ocean Protection Council to develop a strategy for addressing microplastics in oceans.

**"This will carry a lot of authority, even if it's just a preliminary guidance level."**

**SCOTT COFFIN, RESEARCH SCIENTIST AT STATE WATER RESOURCES CONTROL BOARD**

The goal of the drinking water guideline is to help Californians understand the levels of microplastics detected in their water when the agencies start making the testing data public, which could happen as soon as next year.

"The question from the public (is), 'Well, what does that (level) mean?' It's never a satisfactory answer to say, 'Geez, I don't know,'" said [Mic Stewart](#), water quality section manager of the Metropolitan Water District. "We'll need to look to the state for guidance on that."



Now, an international team of researchers assembled by the water board and the [Southern California Coastal Water Research Project](#), a public agency that has been studying waterway health since 1969, are scouring scientific literature for hints about the toxicity of microplastics.

Researchers have fed microplastics to rodents and reported [changes to their immune systems](#) and [heart tissue](#). Mice that ate microplastics had [lower sperm counts](#), and ones fed very high doses produced more abnormal sperm. Microplastics, which have [turned up human stool](#), can pass through [the intestinal lining](#) of rats and cause [gut inflammation](#) in mice.

The challenge is extrapolating the findings in lab animals to potential effects in people.

The [World Health Organization concluded](#) in 2019 that there was too little evidence to understand the toxicity of microplastics, and “no reliable information suggests it is a concern through drinking-water exposure.”

Water providers who opposed California’s microplastics bill also said at the time that it was premature to set a guideline. “Without studying the effect exposure to microplastics has on the human body, there is no way to determine the impact of the varying levels of microplastics found in drinking water,” the [California Municipal Utilities Association](#) wrote in 2018.

But environmental health researchers in Europe [pushed back](#) against what they called this “‘no risk’ soundbite.” Two scientists wrote in the journal [Environment International](#) that “logic does not allow the

current knowledge gap... to steer the bias towards a belief that 'microplastics are safe.'"

"We can say with pretty high confidence that eating plastic and breathing in plastic is not beneficial," said [Susanne Brander](#), an environmental toxicologist at Oregon State University who is working with Coffin's team.

"We're pretty sure this is a problem. It's just a matter of having enough data to say how much is too much."

Since the World Health Organization's report, the number of toxicity studies about microplastics has roughly doubled, Coffin [said in a recent hearing](#).

"We'll actually be able to say with some level of certainty whether or not this is an immediate issue for people's health, or if it's an issue that will arise down the road," he said.

**"We can say with pretty high confidence that eating plastic...is not beneficial. We're pretty sure this is a problem. It's just a matter of having enough data to say how much is too much."**

**SUSANNE BRANDER, ENVIRONMENTAL TOXICOLOGIST AT OREGON STATE UNIVERSITY**

It's the opposite approach to how drinking water is usually regulated. In most cases, state or federal water regulators [know how much](#) of a contaminant is in the water, and research has already linked it to health effects in humans.

[Bart Koelmans](#), a professor of aquatic ecology and water quality at Wageningen University in the Netherlands, said that California's approach is warranted as an early risk assessment of an emerging contaminant.

"It is not that people do this (assessment) when it *can* be done. It is done when an answer is needed," said Koelmans, who has participated in California's assessment of the health effects. "That makes us then take a more precautionary approach, to stay on the safe side."

### **The hunt for microplastics**

Even as the state works to develop drinking water limits on microplastics, state officials know nothing about how plentiful they are in California's water supply because testing has not started yet.

"We have been studying these things since 1959. And we still don't have a standard method," Coffin said.

Until just a few years ago, many scientists peered through a microscope and sorted the particles by hand, Coffin said. "You squeeze the particle with tweezers, and you kind of have a guess if it's plastic or not," he said. "Very crude, honestly."

Now some labs stain the particles to make them easier to spot. They shine an infrared beam or laser at a particle and look for telltale wavelengths of light that it absorbs or bounces back to confirm it is plastic. Another way is to [vaporize the sample](#) and analyze the gases.

This water flea in a research lab has microplastics highlighted in green in its gut. Invertebrates were exposed in the lab to microplastics at a

higher rate than what would be found in the wild in order to measure a response to the particles. The researchers found more deaths among the ones that ingested secondary microplastics — those that have degraded from larger plastic items. Photo courtesy of Martin Ogonowski and Christoph Schür, Department of Environmental Science and Analytical Chemistry (ACES), Stockholm University

The state assembled an international assortment of laboratories working to streamline these techniques and figure out which are the most cost-effective for testing drinking water, sediment, ocean water and fish tissue. They expect to reveal by July what tests water providers must use.

The [Southern California Coastal Water Research Project](#) is leading the effort, sending jars of water spiked with microplastics and other materials to more than two dozen labs to see if they can distinguish microplastics from other contaminants and accurately count particles.

“The sample sets that were put together for us were very interesting,” said [Slifko](#) of the Metropolitan Water District, which is one of the labs. “They had rabbit hair in them. There was also cellulose fibers from toilet paper. There was a lot of different red herrings in there.”

Slifko’s researchers filtered the water and then peered at the particles through microscopes. They picked out pieces of plastic with forceps, then put them on a petri dish lined with sticky tape to count them.

“Each of those samples took at least 120 hours per sample,” Slifko said. “In drinking water, it’s essentially looking for a pin in a haystack.”

Another potential obstacle: contamination from plastic in the lab or researchers' clothing, said [Steve Weisberg](#), the Southern California water research project's executive director.

"We actually have a lock on my laboratory. I do not have a key, and I run the place. Why? because I wear these polyester shirts! You're not allowed in the lab with a polyester shirt," Weisberg said.

### **Stopping the flow**

Some experts question whether focusing on drinking water is enough. [Bottled water](#), for instance, may be [a bigger source of microplastics](#) than tap water.

"That health threat will not be addressed by just removing microplastics from drinking water, sadly," said Arizona State University's Halden.

Ultimately, experts say, the solution will be to reduce the flow of plastics into the environment.

When your house is flooding, "the first thing is you have to stop the pipe," Halden said. "We have to stop the pipes that are flooding our environment, our food, our water, everything with these types of materials."

[Treatment plants](#) tend to [catch larger plastic particles](#). But sewage treatment plants can still release [billions of tiny particles](#) every year into waterways. They also can make their way back into the environment [through sewage sludge](#) applied to crops.

California lawmakers are looking for ways to stop the flow of plastics with a package of bills announced last week. [Some would](#) require new washing machines to be equipped with filters. But these bills may face an uphill battle. Last year, lawmakers after a fiery discussion [rejected a pair of bills](#) aimed at restricting single-use plastic packaging and food products. [Another](#) that would have required filters in state laundry facilities died.

Testing water and setting a guideline is the first step.

"I'm excited to see California's influence on other states," said Oregon State's Brander. "It's nice to see them taking the lead, and potentially setting a really good precedent going forward."

## Marin water suppliers nearing decision on drought measures



A bridge is revealed by low water levels at Nicasio Reservoir in Nicasio, Calif., on Friday, March 19, 2021. (Alan Dep/Marin Independent Journal)

Marin Independent Journal

By WILL HOUSTON

PUBLISHED: March 24, 2021 at 5:45 p.m.

Following two dry winters in a row, the state and Marin County water agencies plan to take more drastic actions in the coming weeks in the face of what could be the second prolonged drought in a decade.

With rain levels at record lows in some areas, stirring thoughts of the 1976-1977 drought, Marin water suppliers plan to decide next month whether to enact mandatory conservation orders similar to those of the five-year drought in 2013-2017.

The Marin Municipal Water District, which serves 191,000 residents in central and southern Marin, plans to meet on April 6 to discuss potential mandatory restrictions. Options that could be considered later that month include limiting outdoor irrigation to one day per week; prohibiting people from refilling pools and hot tubs; and prohibiting people from washing their cars using potable water.

“We have already started the discussion of mandatory restrictions and what that might look like during our recent board meetings,” said Jeanne Mariani-Belding, a district spokeswoman. “We plan to continue that discussion during our upcoming April board meetings as well, but there is no set date for board action.”

Only 20 inches of rain fell at the district’s Lagunitas Lake reservoir from July 1 through Wednesday, compared with the 45 inches it normally would receive by this time of year. The district receives 75% of its supply from its seven local reservoirs in the Mount Tamalpais watershed and the other 25% from Sonoma Water.

Whether it adopts voluntary or mandatory conservation orders, the district could also implement emergency water rates to cover revenue losses. This would include a 10% rate increase under voluntary measures to up to a 25% rate hike under mandatory orders. The district forecasts it would lose about \$12.5 million under voluntary

conservation measures or up to \$20.5 million under a 40% mandatory conservation order.

The North Marin Water District, which serves about 61,000 people in the Novato area, also plans to consider mandatory restrictions next month, including restricting outdoor irrigation, suspending new water connections and setting mandatory conservation targets. The district has recorded about 8 inches of water at its Stafford Lake reservoir, which is the lowest amount on record dating to 1916.

Stafford Lake supplies about 25% of the district's supply, with the other 75% coming from Sonoma Water. Stafford Lake was at about 42% capacity as of this week, according to district data.

The district's 1,800 customers in West Marin have been under conservation orders since April 2020.

About 90% of the state, including most of Marin County, was in at least a mild drought as of last week, according to the latest U.S. Drought Monitor data.

In a sign of the dire situation of the state's water supply, the California Water Resources Control Board announced this week that it will halve the requested water allocations to cities, farmers and other water users in the Bay Area, Central Valley and Southern California served by the State Water Project. The change does not affect Marin County water supplies, which primarily consist of rainfall in local reservoirs. It's unclear whether the California State Water Board will implement mandatory conservation targets for water suppliers similar to the 2013-2017 drought. Typically, the state and other water agencies wait until April to consider any conservation orders.

"Right now, we're watching hydrology to determine the next steps," State Water Board spokesperson Ailene Voisin said Wednesday.

Smaller water districts such as Bolinas Community Public Utility District have already taken more drastic action.

Last month, the district approved what is believed to be the first water rationing measures in the Bay Area in response to the recent dry conditions. The district's customers would be required to limit water use to 125 gallons per day if they collectively use an average of 76,000 gallons of water per day in a seven-day period.

The latest data from March 16 through Monday show that residents have met the district's conservation goals and were using an average of 51,776 gallons per day.

The district last enacted mandatory rationing in 2009 but rescinded it only a few weeks later following a deluge of 10 inches of rain.

So far the district has only received about 16 inches of rainfall, which is less than half of its annual rainfall, said Jennifer Blackman, the district general manager. The district



serves about 1,600 Bolinas residents using water from Arroyo Hondo Creek and two small reservoirs, which district staff said would face being depleted as early as this summer without conservation measures.

“We are encouraging all of our customers to keep up their good work and resist any temptation to increase water use as we head into the typically dry months of the year,” Blackman said. “Every drop saved today renders us more resilient tomorrow.”

PRESS RELEASE BY BEST, BEST AND KREIGER, ATTORNEYS AT LAW

MAR 17, 2021

# BB&K Secures Key Groundwater Pumping Rights Ruling

Decision in Antelope Valley Groundwater Basin Adjudication First of its Kind

For the first time, a California Appellate Court has addressed the issue of limiting the right to pump groundwater by a landowner who has never pumped from a particular basin. While the rights of pumping and non-pumping landowners have generally been considered equal, the Fifth District Court of Appeal decided that, in certain situations, the two can be treated differently.

The decision came in the ongoing adjudication of the Antelope Valley Groundwater Basin, the largest, most complex groundwater pumping rights case ever in California, and one of the largest in U.S. history. In 2016, a [Los Angeles Superior Court judge signed a judgment](#) that determined who has the right to pump water from the Basin and established a long-term sustainable management structure. For more than 60 years, more water has been pumped out of the groundwater Basin than is naturally replenished. This has caused subsidence, which literally means that the ground has been sinking, and falling water levels. The goal of the adjudication is to bring sustainable management to the Basin and to limit further subsidence.

“Groundwater management is an incredibly important issue in California, as evidenced by the adoption of the Sustainable Groundwater Management Act,” Best Best & Krieger LLP Managing Partner and Water Law veteran Eric Garner said of the 2014 law. “To effectively manage groundwater in California, there must be some ability to limit pumping rights of landowners who have never pumped. The court’s decision here for the first time provides concrete authority to limit the pumping of non-pumping overlying landowners.”

Garner represents County of Los Angeles Waterworks District No. 40, along with Partner Jeffrey Dunn and Of Counsel Wendy Wang, in the complex litigation that began in 1999. BB&K, and, specifically Garner and Dunn, is the only law firm in California history to have represented the lead party in two different groundwater adjudications — this one and the Santa Maria groundwater adjudication, which ended in 2012 with an appellate court decision that resulted in an important victory for public water suppliers.

The case is [\*Antelope Valley Groundwater Cases, F082469\*](#).

## GEOENGINEERING

# 8 states are tweaking the weather (and it might not work)

Chelsea Harvey, E&E News reporter

Published: Tuesday, March 16, 2021



A pilot flies a single-engine plane into a line of thunderstorms during a cloud seeding mission over Kansas. Weather modification is used to fight drought related to climate change, but it's unclear if it works. AP Photo/Charlie Riedel  
*Part one in a series.*

The mountaintops rumble to life unnaturally each year as snow clouds darken the sky across the West.

Open flames burst from the throats of metal chimneys, mounted on squat towers nestled among the peaks. With a low hiss, puffs of particles belch from their mouths into the air, where the wind catches them and whisks them away.

These aren't ordinary particles. They're tiny bits of crushed-up silver iodide, a crystal-like photosensitive substance once used in photography.

But it's not used to take pictures out in the mountains. It's meant to make snow.

As the wind whips the particles across the mountaintops, drafts of air sweep them higher into the sky — so high that some of them eventually touch the clouds. There, an elegant transformation takes place.

The crystalline silver iodide particles have a structure similar to ice — and inside a cloud, like attracts like. Water droplets begin to cluster around the particles, freezing solid as they gather together.

These frozen clusters eventually grow too heavy to stay in the air. They fall from the cloud and drift gently toward the Earth, dusting the mountaintops with fresh snow.

This is not a page from a science fiction novel. "Cloud seeding" is a real practice — in fact, it's been around for decades. It's used today to boost precipitation in at least eight states across the western U.S. and dozens of countries around the world.

Interest in cloud seeding is growing as temperatures steadily rise, increasing drought risks in places like the Mountain West. But there's a catch. Scientists aren't sure how well cloud seeding works today, let alone in a warmer climate.

Amid growing concerns about water resources in the western U.S., scientists are working to answer those questions. Today, cloud seeding research represents the cutting edge of weather and climate science — a convergence of questions about the influence of warming on our dwindling water resources and our ability to control those consequences.

"Certainly we're in a better position now to address that question than we were 10 years ago," said Jeff French, an atmospheric scientist at the University of Wyoming. "The state of the science has progressed to the point that it is a question that we can and should be trying to address now."

Cloud seeding can take a few different forms. In some places, it's used to boost rainfall or prevent hailstorms. But in the U.S., it most commonly aims to enhance snowfall, and usually with silver iodide.

Extra snow can be a boon for water resources, especially in places like the drought-plagued West. Snowpack is a vital source of fresh water for millions of people across the country when it melts in the spring.

Boosting snowpack is being pursued with growing urgency. Much of the western U.S. has been gripped by drought for the last 20 years.

Scientists **recently concluded** that the past two decades represent the driest span in the region since at least the late 1500s. This "megadrought" has been heavily influenced by climate change, they found.

Rising temperatures and the ongoing drought have taken a major toll on Western water resources.

Recent studies find that large patches of the Mountain West have experienced major snowpack declines over the last few decades (*ClimateWire*, Dec. 13, 2018). The snow season is also growing shorter as the climate warms and spring gets an early start.

Meanwhile, Western water managers are contending with the growing threat of shortages. Flow has dwindled on major water systems like the Rio Grande and the Colorado River, which each supply water to millions of people.

With temperatures steadily rising, cloud seeding poses one attractive solution.

"Water managers basically have two choices, and both of them are implemented," said French. "One is to somehow reduce the demand through conservation, and the other is to somehow increase the supply. And cloud seeding is a relatively inexpensive proposition."

Proving that it works, though, is another matter.

Weather experiments are notoriously difficult to conduct. The scientific gold standard would be a study that proves cloud seeding produced an outcome that definitely would not have happened without it. But that kind of research requires a combination of specialized experimental design and highly advanced technology.

For most of cloud seeding's long history, it just wasn't possible. Only within the last few years has technology advanced enough for researchers to really dig into the problem.

"We now have much better tools to try to observe cloud seeding as it's happening," French said. "So it's sort of about taking this new technology that has been developed over the last 20 years, or improved upon over the last 20 years, and applying it to really a very old problem."

## Decades of questions



A radar truck measures precipitation during a recent cloud seeding experiment in the western United States. Joshua Aikins

Humans have been experimenting with weather control for the better part of the last century.

Vincent Schaefer, a researcher with General Electric, is often credited with the first cloud seeding experiments in the 1940s. Much of Schaefer's work during and after World War II centered on preventing aircraft from icing over in midair. So he designed a special homemade freezer to help him better understand the way ice forms inside clouds.

As the story goes, Schaefer entered the lab one day to discover that his freezer had been turned off. Hoping to cool it as quickly as possible, he placed a block of dry ice inside the box. A cloud of glistening ice crystals instantly formed in the air.

In 1946, Schaefer conducted the first true cloud seeding experiment by aircraft. He dropped 6 pounds of crushed dry ice into a cloud in the Adirondack Mountains of New York. Almost immediately, snow began to fall.

In later experiments, Schaefer and other GE colleagues would discover that certain types of particles are more effective at helping ice crystals form. Silver iodide, they found, is one of the best.

Weather modification quickly captured the attention of the U.S. government. Over the next few decades, it would fund cloud seeding experiments on everything from drought management to military applications.

In 1947, Project Cirrus — a collaboration between GE and the U.S. military — made history as scientists' first attempt to modify a hurricane. On Oct. 13, the operation dumped nearly 200 pounds of dry ice into a cyclone that was churning off the coast of Florida.

In the 1960s and early 1970s, the federal government continued to experiment with the idea of cloud seeding hurricanes — but to little avail. Scientists eventually concluded that it wasn't effective.

Beginning in the early 1960s, the Bureau of Reclamation funded a series of cloud seeding experiments known as Project Skywater, aimed at boosting water resources in the Western states. Reports suggest the project had mixed results.

In the late 1960s and early 1970s, the U.S. military even experimented with weather modification as a weapon of war. Operation Popeye, as it was dubbed, aimed to generate enough rainfall to disrupt enemy supply routes in Vietnam.

These efforts were short-lived. In 1977, an international treaty banned the use of weather modification for military purposes.

There was a common thread among many of these early experiments: Either they weren't useful, they were quickly discontinued or scientists couldn't tell how well they were working.

"There was a ton of research done in the '60s and '70s and '80s," said French, the University of Wyoming scientist. "But all of that kind of came to a halt when I think there was a realization that agencies were spending millions upon millions of dollars year after year, and the results continued to sort of be inconclusive."

The problem, he said, is that weather modification studies are really difficult to design and carry out.

To prove that cloud seeding has a real effect, scientists have to demonstrate that whatever outcome it produces would not have happened without it. That requires setting up an experiment with at least two tests — one with cloud seeding and one without it — in the same location and under identical weather conditions.

Because the weather changes so quickly, that's really difficult to do. And even when it's possible, such studies require advanced monitoring technology, including high-tech radar. This kind of tech just wasn't widely available until recently.

That means cloud seeding research has mainly relied on statistical studies instead. These studies measure the precipitation produced with cloud seeding in one location, and then they compare it to a different location where no cloud seeding took place.

The two settings aren't identical in these kinds of studies. That means they don't definitively prove that the precipitation produced by cloud seeding in one area would not have happened without it.

In 2003, the National Research Council published a comprehensive [report](#) on weather modification, highlighting these problems. It concluded that "there is still no convincing scientific proof of the efficacy of intentional weather modification efforts."

Still, NRC recommended continued research on weather modification — in no small part because of its potential to address the West's worsening water concerns.

That same hope has led state water agencies to keep funding cloud seeding operations, even after federal research efforts dropped off in the 1980s.

"I think there's a pretty easy explanation for why it continued," French said. "Cloud seeding is rooted in a pretty solid, well-understood physical basis of why it *should* work."

### **States embrace uncertainty**

Today, cloud seeding operations take place in at least eight states across the western U.S., with varying levels of investment often shared among state agencies, utilities and private companies such as mountain resorts.

Cloud seeding programs in the upper Colorado River Basin, for instance, cost around \$1.5 million each year. The costs are split among state agencies in Colorado, Utah and Wyoming, where the majority of the operations take place, as well as Nevada, California, New Mexico and Arizona, which also stand to benefit from increased flow on the Colorado River.

In the last few years, cloud seeding has featured more prominently in drought management strategies across the West. The cost-sharing agreement in the Colorado River Basin was finalized in 2018, after states had spent years individually managing their cloud seeding operations. The agreement extends through the fall of 2026.

Since 2018, Wyoming and Colorado have strengthened their programs by investing in aerial cloud seeding operations — that's seeding conducted by aircraft — in addition to the ground-based machines they already have scattered throughout the mountains.

These are relatively inexpensive investments, all things considered — a low risk for a potentially high reward. But is it actually making a difference?

Most programs point to statistical studies to justify their efforts. These studies indicate that seeded clouds can produce around 5% to 15% more snowfall compared with areas where no cloud seeding took place.

If that's right, it puts the cost of cloud seeding at around a few dollars per acre-foot of water (equivalent to about half an Olympic-size swimming pool). That's far less expensive than the cost of many other water-saving interventions, such as water conservation, recycling or desalination, which can cost hundreds of dollars per acre-foot.

Still, statistical studies don't prove that cloud seeding is actually causing the heavier snowfall. That requires a more specialized scientific experiment — and only within the last few years have scientists finally been able to make that happen.

As recently as 2015, an extensive [report](#) prepared for the Bureau of Reclamation concluded that continued research is still warranted, but it noted that "the 'proof' the scientific community has been seeking for many decades is still not in hand."

### **Cutting-edge research**

On Jan. 19, 2017, a research plane roared through the gray skies above Idaho's Payette River Basin, spewing silver iodide into the air. Assembled on the snow-capped peaks below, snow gauges and portable radar machines were poised to measure the snow that scientists hoped would follow.

It was the beginning of an experiment that would turn cloud seeding science on its head. Known as the SNOWIE project — short for "Seeded and Natural Orographic Wintertime Clouds" — the study provided some of the first quantitative evidence that cloud seeding actually works.

For three days that January, weather conditions would align to set up the perfect cloud seeding experiment. The sky was cold and cloudy — but no snow was falling. Over the course of these three days, the research plane would make more than a dozen trips over the mountaintops, releasing the same amount of silver iodide each time.

"For three days there was cloud cover, but no snowfall, no natural precipitation," said Katja Friedrich, an atmospheric scientist at the University of Colorado, Boulder, who helped lead the SNOWIE project. "We put the seeding material into the supercooled liquid cloud, and we were able to generate precipitation. And that was very revolutionary."

Thanks to high-tech radar equipment, the scientists were able to monitor the response of the clouds from the moment the silver iodide was released into the air until the moment snow began to fall. Over the course of those three days, the scientists estimated that around 286 Olympic swimming pools' worth of snow fell from the clouds they seeded.

Friedrich and her colleagues, including scientists from Colorado, Wyoming, Illinois and Idaho, published their findings in a groundbreaking [paper](#) last year in *Proceedings of the National Academy of Sciences*.

SNOWIE came in the midst of a kind of a renaissance for cloud seeding research in the United States. After years of relatively little scientific interest in weather modification, a series of projects over the last decade have paved the way for new insights.

The Wyoming Weather Modification Pilot Project, launched in 2008, was among the first of these. Funded by the state of Wyoming, the project aimed to evaluate the success of cloud seeding efforts spanning three target areas in mountain ranges across the state.

"The results that came out on that — they were positive, but they weren't sort of 100% fully conclusive," said French.

But the project did highlight some major advancements in cloud seeding research over the last few decades, including improvements in radar and other observation tools, as well as major leaps in computer modeling.

With these new and improved technologies, the SNOWIE project catapulted cloud seeding research to the cutting edge of weather and climate science.

"The question is not anymore, 'Does cloud seeding work?'" said Sarah Tessendorf, an atmospheric scientist with the National Center for Atmospheric Research and another scientist who worked on the SNOWIE project. "The questions really are, 'How and when does it work? How effective is it under different conditions?'"

As droughts and warming squeeze water supplies in the American West, scientists are busy trying to answer those questions.

The SNOWIE project is still lending insight four years after it ended, Tessendorf said. Thanks to recent advancements in computer models, scientists can now simulate the effects of silver iodide on clouds — and they can use these simulations to conduct controlled experiments, exactly the kinds of studies that cloud seeding research has been missing.

At the same time, the data collected by the SNOWIE project is helping scientists validate their models and make sure their simulations are realistic.

"I really feel like today, in this day and age, we are at a pretty exciting stage with the science behind cloud seeding, being that we've been able to collect some really great data over the last few years," Tessendorf said. "And with the computer capabilities, there's really a lot of promise to make advancements in this field."

But experts also advise keeping expectations in check. The science so far suggests that cloud seeding is far from a silver bullet when it comes to dealing with drought.

For one thing, the SNOWIE experiments generated a fairly modest amount of snowfall.

"As we've shown in the paper, we cannot really generate an awful lot of snow," Friedrich said. "We can generate snow, but not that we can really overcome a drought situation."

Moreover, the SNOWIE project took place across a single, small slice of Idaho over the course of just three days.

With the momentum from the SNOWIE project still strong, scientists are hopeful they'll be able to answer many of the biggest questions still remaining about how well cloud seeding works. But it may take time and much more research.

"The bigger question is does it 'work' — and I put 'work' in quotes — on the scale of an entire season over an entire mountain range?" said French, the University of Wyoming scientist, who also contributed to the SNOWIE project.

"Can we really make an impactful difference? And in my mind we're still quite a ways away from answering that question."



[The UCSB Current](#)**Computing Clean Water**

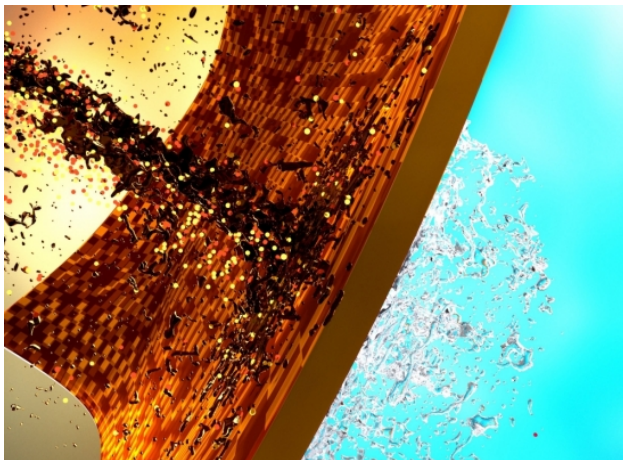
Researchers' computational methods pave the way for next-generation membrane technology for water purification

By Andrew Masuda

Thursday, March 11, 2021 - 09:00

Santa Barbara, CA

[polymer-membrane-water-treatment-blong-uc-santa-barbara.jpg](#)



Concept illustration of a water purification membrane with computationally designed, molecular-scale patterning of surface functional groups, which collectively function to reject a variety of molecular contaminants and foulants **Photo Credit:** BRIAN LONG/UCSB

Water is perhaps Earth's most critical natural resource. Given increasing demand and increasingly stretched water resources, scientists are pursuing more innovative ways to use and reuse existing water, as well as to design new materials to improve water purification methods. Synthetically created semi-permeable polymer membranes used for contaminant solute removal can provide a level of advanced treatment and improve the energy efficiency of treating water; however, existing knowledge gaps are limiting transformative advances in membrane technology. One basic problem is learning how the affinity, or the attraction, between solutes and membrane surfaces impacts many aspects of the water purification process.

"Fouling — where solutes stick to and gunk up membranes — significantly reduces performance and is a major obstacle in designing membranes to treat produced water," said M. Scott Shell, a chemical engineering professor at UC Santa Barbara, who conducts computational simulations of soft materials and biomaterials. "If we can fundamentally understand how solute stickiness is

affected by the chemical composition of membrane surfaces, including possible patterning of functional groups on these surfaces, then we can begin to design next-generation, fouling-resistant membranes to repel a wide range of solute types.”

Now, in a paper published in the Proceedings of the National Academy of Sciences (PNAS), Shell and lead author Jacob Monroe, a recent Ph.D. graduate of the department and a former member of Shell's research group, explain the relevance of macroscopic characterizations of solute-to-surface affinity.

“Solute-surface interactions in water determine the behavior of a huge range of physical phenomena and technologies, but are particularly important in water separation and purification, where often many distinct types of solutes need to be removed or captured,” said Monroe, now a postdoctoral researcher at the National Institute of Standards and Technology (NIST). “This work tackles the grand challenge of understanding how to design next-generation membranes that can handle huge yearly volumes of highly contaminated water sources, like those produced in oilfield operations, where the concentration of solutes is high and their chemistries quite diverse.”

Solutes are frequently characterized as spanning a range from hydrophilic, which can be thought of as water-liking and dissolving easily in water, to hydrophobic, or water-disliking and preferring to separate from water, like oil. Surfaces span the same range; for example, water beads up on hydrophobic surfaces and spreads out on hydrophilic surfaces. Hydrophilic solutes like to stick to hydrophilic surfaces, and hydrophobic solutes stick to hydrophobic surfaces. Here, the researchers corroborated the expectation that “like sticks to like,” but also discovered, surprisingly, that the complete picture is more complex.

“Among the wide range of chemistries that we considered, we found that hydrophilic solutes also like hydrophobic surfaces, and that hydrophobic solutes also like hydrophilic surfaces, though these attractions are weaker than those of like to like,” explained Monroe, referencing the eight solutes the group tested, ranging from ammonia and boric acid, to isopropanol and methane. The group selected small-molecule solutes typically found in produced waters to provide a fundamental perspective on solute-surface affinity.

The computational research group developed an algorithm to repattern surfaces by rearranging surface chemical groups in order to minimize or maximize the affinity of a given solute to the surface, or alternatively, to maximize the surface affinity of one solute relative to that of another. The approach relied on a genetic algorithm that “evolved” surface patterns in a

way similar to natural selection, optimizing them toward a particular function goal.

Through simulations, the team discovered that surface affinity was poorly correlated to conventional methods of solute hydrophobicity, such as how soluble a solute is in water. Instead, they found a stronger connection between surface affinity and the way that water molecules near a surface or near a solute change their structures in response. In some cases, these neighboring waters were forced to adopt structures that were unfavorable; by moving closer to hydrophobic surfaces, solutes could then reduce the number of such unfavorable water molecules, providing an overall driving force for affinity.

“The missing ingredient was understanding how the water molecules near a surface are structured and move around it,” said Monroe. “In particular, water structural fluctuations are enhanced near hydrophobic surfaces, compared to bulk water, or the water far away from the surface. We found that fluctuations drove the stickiness of every small solute types that we tested. ”

The finding is significant because it shows that in designing new surfaces, researchers should focus on the response of water molecules around them and avoid being guided by conventional hydrophobicity metrics.

Based on their findings, Monroe and Shell say that surfaces comprised of different types of molecular chemistries may be the key to achieving multiple performance goals, such as preventing an assortment of solutes from fouling a membrane.

“Surfaces with multiple types of chemical groups offer great potential. We showed that not only the presence of different surface groups, but their arrangement or pattern, influence solute-surface affinity,” Monroe said. “Just by rearranging the spatial pattern, it becomes possible to significantly increase or decrease the surface affinity of a given solute, without changing how many surface groups are present.”

According to the team, their findings show that computational methods can contribute in significant ways to next-generation membrane systems for sustainable water treatment.

“This work provided detailed insight into the molecular-scale interactions that control solute-surface affinity,” said Shell, the John E. Myers Founder’s Chair in Chemical Engineering. “Moreover, it shows that surface patterning offers a powerful design strategy in engineering membranes are resistant to fouling by a

variety of contaminants and that can precisely control how each solute type is separated out. As a result, it offers molecular design rules and targets for next-generation membrane systems capable of purifying highly contaminated waters in an energy-efficient manner.”

Most of the surfaces examined were model systems, simplified to facilitate analysis and understanding. The researchers say that the natural next step will be to examine increasingly complex and realistic surfaces that more closely mimic actual membranes used in water treatment. Another important step to bring the modeling closer to membrane design will be to move beyond understanding merely how sticky a membrane is for a solute and toward computing the rates at which solutes move through membranes.

The research was performed as part of the Center for Materials for Water and Energy Systems (M-WET), an Energy Frontier Research Center supported by the U.S. Department of Energy. The collaborative partnership includes researchers at UCSB, the University of Texas at Austin, and the Lawrence Berkeley National Laboratory.

## New curriculum approaches water conservation through Indigenous lens



Local tribes, schools and nonprofits developed the Advocacy and Water Protection in Native California curriculum to encourage students to look at local conservation through an indigenous lens. (Save California Salmon — Contributed)

Times Standard

By [ISABELLA VANDERHEIDEN](mailto:ivanderheiden@times-standard.com) | [ivanderheiden@times-standard.com](mailto:ivanderheiden@times-standard.com) |

March 15, 2021 at 3:15 p.m.

Local tribes, schools and nonprofits have developed a new high school curriculum that seeks to encourage environmental advocacy through an Indigenous lens. The advocacy and water protection curriculum meets state standards in science, social studies, health, history and language arts and seeks to bolster “culturally informed education” in the classroom.

The curriculum is based on the “Advocacy and Water Protection in Native California” speaker series that was developed by Save California Salmon and Humboldt State University’s Native American Studies department, said department chair, Cutcha Risling Baldy.

“This series hosted speakers from throughout California to discuss many important subjects around water and how these issues affect Indigenous communities,” Risling Baldy told the Times-Standard via email. “After this series was done, we continued to work with Save California Salmon on the next steps for the series which included interest from several groups in developing a curriculum so that people could teach students about these important issues.”

The idea is, the curriculum can be integrated into several subjects rather than a single course, according to Regina Chichizola, policy director for Save California Salmon.

“If you’re teaching about science, there’s no reason why you can’t use local examples,” Chichizola said. “If you’re teaching about civil rights or history or social studies, using local situations and knowledge is a way to get students more involved, both in their schooling but also in how to help them identify with their communities.”

It’s not just learning, the curriculum has the potential to help students build practical life experiences, Chichizola said.

“For so many years, Native youth have struggled in Western education systems that teach a curriculum which disempowers their voices, their cultural teachings, and also their knowledge. We see this having a lasting effect on how Native youth succeed in school and we also see that other youths internalize stereotypes or negative things about Native people or they view Native people as only in the past,” Risling Baldy said. “But when you have a curriculum that teaches young people about Indigenous sovereignty, self-determination, Indigenous science and traditional ecological knowledge they are given the tools to imagine a better future for everyone, they are taught to think using multiple ways of knowing.”

Klamath-Trinity Joint Unified School District staff Margo Robbins said the curriculum is “very timely for this period in history.”

“Not just for our Native students but for all students because we all need good, clean water,” Robbins said. “Not everybody lives by the river, but everybody relies on water. (The curriculum) talks about what we need to have a healthy water supply, the things that are threatening it and what students can do to help protect it.”

Robbins said the new curriculum makes learning more meaningful.

“It’s really kind of difficult to engage students in the classroom, to find things that they’re interested in and to really catch their attention,” Robbins said. “I feel like this curriculum does that. It really connects to real-life situations and it’s interactive.”

Since the curriculum can be applied to several subjects, Robbins said educators will be empowered to mold the curriculum to fit their students’ needs.

“Maybe in some schools, just the science teacher might implement it but in other schools, it would look like project-based learning across multiple disciplines,” Robbins explained. “The language arts teacher would be teaching it, a social studies teacher would be teaching it and the science teacher and they would break it up into different parts, and they would all be teaching it at the same time as a thematic unit.”

Robbins is optimistic the curriculum could be implemented statewide.

“We hope that some teachers will be able to adapt the curriculum and put it into practice in their classrooms beginning the fall if they feel ready to do that,” Risling Baldy said. “Otherwise, we will continue to hold training sessions over the summer to help teachers prepare for how to integrate the curriculum into their classrooms in fall 2021 or later.”

The Humboldt County Office of Education will host two informational webinars for interested educators on March 26 and April 2.





## Beavers Make Good Neighbors

*San Francisco Estuary Magazine, March 2021*

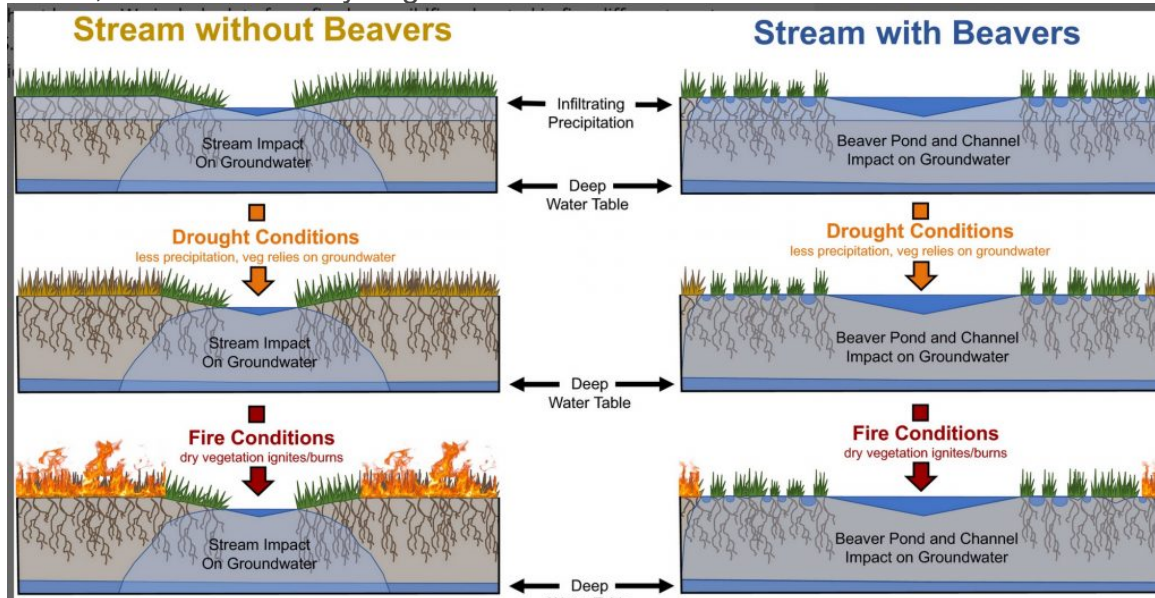
By [Michael Adamson](#)

Much like when tech money reshapes an historical neighborhood, a beaver's move downtown can cause the locals to worry. In Napa, the animals' sprawling waterfront complexes create worrying pools along the riverbank, while the native cottonwoods are whittled down and threaten landowners' roofs. It seems destined that two species known for their environmental engineering would struggle to live in unison. However, municipalities like Napa and Martinez in Contra Costa County have learned to live with their beavers, and the upcoming California Beaver Summit aims to set the record straight.

"Our approach is hands-off," says Jeremy Sarrow, a resource specialist with Napa County Flood Control and Water Conservation District, describing the county's tack toward managing beaver dams built along inhabited waterfronts. This isn't so much to say that they turn a blind eye to conflicts between beavers and concerned landowners, but rather that their position is that there's no need for conflict in the first place.

Sarrow explains that while beaver dams appear to look like they can cause localized flooding, they aren't as permanent as they appear. "When you get a decent flow event, even a one- or two-year recurrence interval, there's typically enough velocity to blow out the dam entirely," he says. Simple underwater structures can also be installed to allow water to flow freely underneath the dam. While beaver-felled trees can cause property damage, Sarrow suggests that a three-foot-high wrapping of hardware cloth (similar to chicken wire but more durable) around the trunk of a tree is sufficient to deter a beaver.

Furthermore, it's becoming increasingly apparent that beaver habitats have a lasting positive impact on surrounding ecosystems. Emily Fairfax, a scientist and assistant professor at California State University Channel Islands interviewed by *Estuary News* last April, has focused her research on beavers' impact on fire resilience. "In severe fires, areas with beaver dams held up pretty well," says Fairfax. Viewed from above, "those areas stayed green."



Source: [Ecological Applications, December 2020, ESA Journals.](#)

Recent Bay Area history has also shown that when a beaver moves in, a whole lot of biodiversity follows. In 2007, when one settled into Alhambra Creek in Martinez, Heidi Perryman and other community advocates fought to protect it from government-ordered extermination. "Within a few months, we saw green herons, wood ducks, and river otters returning to the creek," Perryman says. She went on to found the community group Worth A Dam to tell the story of the Martinez beaver and advocate for a similar approach in other urban waterways.

This kind of lynchpin effect is characteristic of a keystone species. Like grey wolves and sea otters in their respective domains, beavers play a critical role in fostering the health of riparian ecosystems, yet they still struggle for the recognition they deserve.

In May of 2020, the California Department of Fish and Wildlife issued a permit to trap and shoot beavers in eastern Contra Costa County, despite Martinez's precedent. A local news outlet described the controversy that ensued as "a backlash from animal lovers" over "pesky beavers." Despite the growing understanding among both scientists and government agencies, the popular notion of beavers as pest species, not ecological wunderkind, remains indelible.



*Beaver dam in Napa. Photo: Rusty Cohn*

This enduring misconception stems from the belief that beavers aren't endemic to California. In reality, frontier trappers and traders nearly extirpated beavers from the state. By the time the 49ers came west, beaver sightings were so few that they were perceived as a novelty, not a necessity. "We convinced ourselves that we didn't need them," says Perryman.

To help educate the community and share best practices across agencies and counties, Perryman and others have organized the California Beaver Summit this April 7 and 9. Speakers will clarify beaver history, share the benefits their presence provides, and teach how to interact more responsibly with them. Fairfax, a featured speaker on the second day, will discuss her recent research on beavers and last year's historic fire season.

"It's not about having enough evidence at this point," says Perryman on the value beavers bring to California waterways. "Everybody that drinks water and doesn't want their house burned down should be interested in something that solves both problems." *Author's note: It appears that there is no consensus on how to pluralize "beaver." The author has chosen to use "beavers" (over "beaver") for consistency and clarity's sake, and feels strongly that the summit should have a panel dedicated to getting to the heart of this matter.*

*Top Photo: Two beavers by Heidi Perryman*



## *“Homage” to history*

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### ***Lanphere and Ma-le’l Dunes distinguished as a National Natural Landmark***



*The Seaside daisy is one of a diverse collection of wildflowers that grow in the open dunes. These species have specialized adaptations to survive the harsh dune environment. Credit: Andrea Pickart/USFWS*

*US Fish and Wildlife Service Website*

*By John Heil*  
March 23, 2021

**After decades of hard work** by U.S. Fish and Wildlife Service employees, volunteers, tribes and partners, and after two previous efforts in the '80s and '90s, the Lanphere and Ma-le’l Dunes were finally recognized as a **National Natural Landmark** on January 19, 2021.



*Large expanses of moving dunes are believed to have been set in motion during the last megaquake on the Cascadia subduction zone in 1700. These dunes are juxtaposed with stabilized forested dunes. Wildlife leave the forest at night to hunt, leaving their tracks to be seen by day. Credit: Andrea Pickart/USFWS*

Managed by the Service and the Bureau of Land Management, the dunes are located west of Arcata in northwestern California, within the Humboldt Bay National Wildlife Refuge and Ma-le’l Dunes Cooperative Management Area. The site includes a diverse array of native vegetation and is known for several species of rare flora.

“Being recognized nationally really validates all the restoration work we’ve been doing in the dunes,” said **Andrea Pickart**, Service coastal ecologist for the refuge, of the efforts to remove invasive European beach grass and other species. “It is really exciting.”

“Andrea has been a driving force – such a dedicated, hardworking employee,” said **Cashell Villa**, Service project leader for the Humboldt Bay National Wildlife Refuge. “It is amazing, just incredible to be recognized.” The National Park Service, which administers the landmark process added: “Andrea has been working to conserve, restore and protect this site for over 30 years and deserves a large amount of credit for this project.”

Conservation of the area started in the 1940s by Hortense and William Lanphere “who were determined to conserve the property,” per Pickart. In 1976, the Lanpheres, who were both professors at what is now Humboldt State University in the Wildlife Department, donated the land to The Nature Conservancy who expanded the territory further before transferring to the Service in 1997.



*A member of the California Conservation Corps plants native dune grass on an adaptation site, part of a six-year research project to understand effects of climate change on the dunes and develop strategies to increase resilience. Credit: Andrea Pickart/USFWS*

**In addition to the Lanpheres**, “Ma-le’l” is named after one of several Wiyot tribal villages within the dunes in 1850, an area known for its abundant huckleberry harvest, and as ethnographer Llewellyn Loud noted was “visited annually in September, during the huckleberry season.”

“I think that the significance of the designation of the dunes as a NNL is in part an homage to the Wiyot’s role and history as stewards and members of this place and the natural world,” said **Adam Canter**, tribal botanist/GIS specialist for the Wiyot Tribe Natural Resources Department. “If ever there were a people of the dunes in California, that title could very well go to the Wiyot.

“Hopefully this will ensure that funding for maintenance restoration, Wiyot eco-cultural restoration, and ecological research will be maintained into the future. Having worked at Lanphere and Ma-le’l, I appreciate and understand the hard work of many that have contributed to the preservation of the natural characteristics and processes at the dunes. Hopefully this designation will provide increased opportunities for the Wiyot to continue co-managing and stewarding its ethnobotanical area and provide eco-cultural restoration opportunities for Wiyot youth.”

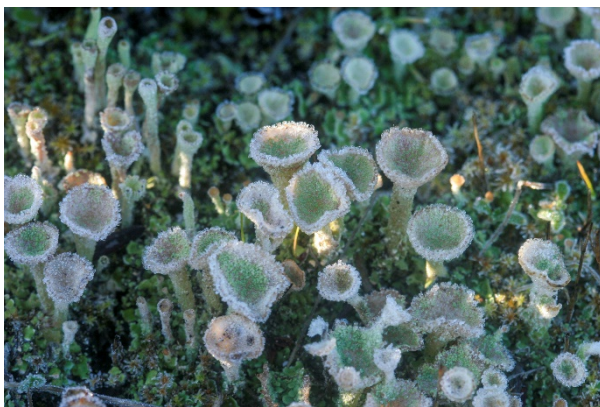


*The forested dunes are renowned for their diversity of nonvascular plants and fungi. Pictured here are reindeer lichen, bearberry and beaked moss carpeting the forest floor. Credit: Andrea Pickart/USFWS*

**Marnie Atkins**, the Wiyot tribe's Da gou rou louwi' Cultural Center manager added, "The dunes are special to me because it is a direct connection to my Wiyot ancestors. I can see where they lived, and I can follow in their footsteps along the paths that they made and that the BLM and Service personnel and community volunteers recovered from overgrowth and underuse. It is true that the landscape holds varieties of plant life that will continue to be enjoyed, understood and protected to maintain important biodiversity and animal habitat. It is a location that partnerships can be built through land management and stewardship work.

"Further, Ma-le'l is a place that illustrates the cultural significance and historical activities that happened on the land by the ancestors of present-day and future Wiyot people. Ultimately, it is a place that demonstrates and validates the connection to the lived landscape that my Wiyot ancestors constructed over thousands upon thousands of years."

**The landmark process**, which started in 2016 for the dunes, recognizes and encourages the conservation of sites that contain outstanding biological and geological resources. According to the Park Service's evaluation, "the Lanphere Ma-le'l Dunes represents a perfect example of this concept, containing one of the most diverse and highest quality remnants of coastal dunes in the North Pacific Border Bio Physiographic Region."



*Close up of pixie cups lichen. A lichen is a symbiotic pairing of an algae or cyanobacteria, which can photosynthesis, with a fungus. Credit: Andrea Pickart/USFWS*

Executive director of the Friends of the Dunes, **Mike Cipra**, said the complex at Lanphere and Ma-le'l Dunes contains dynamic interrelated habitats, including foredunes, herbaceous and woody swales, freshwater wetlands, parabolic dunes, coniferous and riparian forest, and saltmarsh. "This exciting mosaic of healthy, intact habitats yields a

tremendous amount of floristic diversity in a relatively small area. As a result, this integrated ecosystem is a wonderland for exploration, inspiration and learning.”

Canter agreed: “The removal and absence of invasive non-native species makes this site one of the most pristine stretches of dune systems along the west coast. In addition to these natural values, is the rich history of the Wiyot’s occupation of the dunes. While being close to the cities of Arcata and Eureka, Lanphere and Ma-le’l still maintain wilderness characteristics and place for relaxation, introspection, and solace.

“Along with the plant and lichen diversity found in the dunes, this landmark provides a rare glimpse at what the west coast would have been like before western contact, while also serving as a refugium for species more commonly found further north. Ma-le’l is also one of the more significant Wiyot ethnobotanical sites within the tribe’s ancestral territory.”



*A pair of nesting ospreys fly above a nest in a large snag. The freshwater swamps found in the Ma-le’l Dunes provide habitat for these and other bird species. Credit: Andrea Pickart/USFWS*

The dunes also afford the public an inspiring view of a natural coastal ecosystem that was once common along the western coast.

“The benefit I see for the community is recognition and publicity, which could lead to increased use and a greater investment in this unique resource,” said Pickart.

“This shines the light on just how rare these systems are,” said **Tom Anderson**, Service assistant refuge supervisor for the California-Great Basin Region. “I’m glad it is getting the recognition it deserves. It is so far away from everything else. This designation might draw more people to the other side of the bay now.”

**The Blue Lake Rancheria has collaborated** and consulted with the Service on managing the numerous important cultural sites located at Ma-le’l Dunes and the new Northern Dunes Unit. **Janet Eidsness**, tribal historic preservation officer has coordinated with Pickart, the Wiyot tribe and Bear River Band of the Rohnerville Rancheria on developing site protection measures for vegetation management plans including removal of non-native European beach grass and yellow lupine to allow for the natural migration of the parabolic dunes.





*The saltmarshes of the Lanphere and Ma-le'l Dunes have been restored through the removal of non-native *Spartina* and now support native salt marsh species including two rare species. Credit: Andrea Pickart/USFWS*

“If not for these dunes, there would be no Humboldt Bay and their natural patterns are important to resiliency related to rising sea levels,” said Eidsness.

“Those of us who work in coastal conservation, who lead community-based education and stewardship programs here, and who recreate in these restored dune ecosystems know how truly unique and inspiring the Lanphere and Ma-le'l Dunes are,” said Cipra. “We’re thrilled that this connected and conserved landscape is finally being recognized as nationally significant. The recent National Natural Landmark designation is a tribute to our partners at the U.S. Fish and Wildlife Service, the Bureau of Land Management, the Wiyot tribe, and literally thousands of community members who have worked for years to conserve and restore these special places.”

Molly Brown, field manager with the Bureau of Land Management agreed. “We have been happy to work with the Service and our partners at neighboring Lanphere Dunes to conserve this important dunes ecosystem. We are absolutely thrilled that this locally popular natural area has been recognized as a National Natural Landmark and look forward to the American public enjoying this unique, living landscape for generations to come.”

*For more on the Humboldt Bay National Wildlife Refuge, check out [“Turning the tide on sea level rise.”](#)*

*Last updated: March 24, 2021*

## **In what is hailed as a conservation success story, bald eagle numbers have soared**

ANNA M. PHILLIPS *LOS ANGELES TIMES*

MARCH 24, 2021 11:58 AM,

The number of bald eagles — a species that once came dangerously close to extinction — in the United States has more than quadrupled over the last dozen years despite massive declines in overall bird populations, government scientists announced Tuesday.

A new survey by the U.S. Fish and Wildlife Service found that since 2009, when the last count was taken, the number of eagles had soared to an estimated 316,700 in the lower 48 states. At the species' lowest point in the 1960s, there were fewer than 500 nesting pairs in those states.

Though bald eagles have been steadily recovering, the latest figures surprised even scientists who study avian populations.

At a news conference Tuesday, Interior Secretary Deb Haaland celebrated the findings as evidence that species vulnerable to extinction can be rescued by government intervention, a departure from the Trump administration's efforts to significantly weaken the Endangered Species Act.

Although the bald eagle was removed from the endangered list in 2007, conservationists credit much of the population's recovery to decades of protection from federal regulations that made it

“I know that the previous administration took steps to undermine key provisions of the Endangered Species Act,” Haaland said. “We will be taking a close look at all of those revisions and considering what steps to take.”

Some of the increase may be due to the Fish and Wildlife Service's new method of counting the birds. The agency has long used aerial surveys to monitor the species, but its latest update includes crowdsourced data from the online ornithological database eBird.

About 180,000 bird watchers around the nation reported their bald eagle sightings to the database, according to Amanda Rodewald, senior director for avian population studies at the Cornell Lab of Ornithology, which maintains eBird. Those sightings provided government scientists with an entirely new view of the species, particularly in parts of the country that aren't easily surveyed from above.

Though there's no way to know for sure how much of the growth is because of the crowdsourced data, said Brian Millsap, national raptor coordinator for the Fish and Wildlife Service, the latest estimates line up with other survey data.

“While the eBird data has improved the estimates, the vast majority of this increase really is attributed to bald eagle population growth,” Millsap said.

There were once thought to be as many as half a million bald eagles in North America, but hunting, habitat destruction and DDT poisoning put the species' survival in doubt. By 1963, only 417 mating pairs were documented in the lower 48 states.

The species was added to the list of threatened and endangered species in 1967.

When the federal government released its last population estimate, which used data from 2009, there were believed to be just over 72,400 birds.

In recent years, the booming eagle population has led the birds to increasingly take up residence in more urban areas.

A pair of bald eagles nested in a pine tree on the side of Highway 39 in the San Gabriel Mountains in 2019, drawing crowds of enthusiastic and sometimes overly aggressive bird watchers. That year, about 200 "urban eagles" found a home in Seattle suburbs, where they created a headache for residents who accused the birds of dropping trash scavenged from a nearby landfill into their yards.

## California condors to return to Northwest skies after 100-year absence

By [Bradley W. Parks](#) (OPB)

Bend, Ore. March 25, 2021 6 a.m. .

**The Yurok Tribe of Northern California has worked for decades to return California condors to the Pacific Northwest. They hope to release their first birds this fall.**



A California condor named Kaweah is pictured at the Oregon Zoo in this file photo from 2018.  
*Miranda Daviduk / OPB*

The endangered California condor is ready to return to the skies of the Pacific Northwest after a century's absence.

The U.S. Fish and Wildlife Service, the Yurok Tribe and the National Park Service announced Tuesday they will establish an experimental population of California condors in the Yurok ancestral territory. A final rule published by the Fish and Wildlife Service will allow the tribe to build a condor release facility in Redwood National Park.

The announcement marks a monumental step forward for a bird once on the brink of extinction and for the Yurok Tribe's broader cultural restoration effort that includes language revitalization, removal of dams along the Klamath River and more.

"As soon as I heard the news, I started crying," said Tiana Williams-Claussen, director of the Yurok Tribe's wildlife department. "This is something that I've been working for literally my entire adult career."

The wild California condor population once dipped as low as 23 birds worldwide. Condors are scavengers. One of the primary threats to their survival is lead ammunition. If the birds eat animal remains laced with lead, it can poison and kill them.

Another common threat is the insecticide DDT, which, though long banned in the U.S., persists in the environment. It thins condor eggshells causing them to break before the babies are ready to emerge.

All wild condors were put in captive breeding programs by 1987 to try to save the species, including one at the Oregon Zoo.

Now, after decades of recovery efforts, more than 300 wild California condors are flying the skies of Arizona, Utah, California and Baja California. The global population of wild and captive condors is more than 500.

“The California condor is a shining example of how a species can be brought back from the brink of extinction through the power of partnerships,” said Paul Souza, regional director for the U.S. Fish and Wildlife Service’s California-Great Basin Region, in a press release.

The Yurok Tribe has worked for decades to return the condor — called *pregoneesh* in the Yurok language — to the Pacific Northwest alongside many federal, state and private entities. The bird’s recovery plays a large role in healing Yurok people, Williams-Claussen said.

“Bringing a species like California condor, *pregoneesh*, back to our ancestral territory ... that’s a huge reparation in the wound that the Yurok people and all tribes in this area have suffered since contact and the disruption to our eco-region,” Williams-Claussen said.

The Yurok Tribe and Redwood National Park will operate the condor release facility in tandem. The Yurok will become the first tribal nation to reintroduce condors in the wild, Audubon Magazine reported last year.

“When I see condors flying in the sky, it’s really representative of everything that we as Yurok people are as world renewal people, as people who are working hard to restore their hearts and their spirits and their lands,” Williams-Claussen said.

The facility will hold small groups of condors that will form cohorts before they’re released into the wild — some alone, some in pairs. All of the birds will be outfitted with satellite and radio transmitters to monitor their behavior and for wildlife managers to intervene where necessary.

They’re hoping to release their first condors this fall.



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## State Water Resources Control Board

March 22, 2021

Humboldt Bay Municipal Water District  
P.O. Box 95  
Eureka, CA 95502

### **ONGOING DRY CONDITIONS IN MOST CALIFORNIA WATERSHEDS - PREPARE FOR DROUGHT IMPACTS STATEWIDE**

After two years of low precipitation, the U.S. Drought Monitor now reports that 95 percent of California is experiencing Moderate to Exceptional Drought. Reservoir and groundwater levels are significantly below average, and despite recent storms, snowpack is only 58 percent of average as of March 10, 2021. Continued dry conditions can threaten water supplies, impair critical habitat, reduce recreational opportunities, and create uncertainty for all water users. Hydrologic conditions since 2020 have been very similar to the drought years of 2014 and 2015.

Your early efforts can help minimize the potential impact of water management actions on businesses, homes, farms, and California's public trust resources. Start planning now for potential water supply shortages later this year and identify practical actions you can take to increase drought resilience, such as increasing water conservation measures, reducing irrigated acreage, managing herd size, using innovative irrigation and monitoring technologies, or diversifying your water supply portfolio.

The Division of Water Rights (Division) relies on accurate and timely water use data from you and other diverters to help manage California's water. All diverters must report their annual water use, and many diverters must report diversion metering or measuring data. By accurately reporting your water diversion and use data on time, you fulfill your legal reporting obligation and provide critically important information for managing the state's water resources.

The Division is monitoring the situation closely and plans to engage more frequently with water users if dry conditions continue or worsen. We encourage you to work collaboratively with your community to develop cooperative water management solutions that meet both local and state-level needs.

More information on **Drought Conditions** can be found at: <https://www.drought.gov/drought-status-updates/drought-status-update-california-nevada>

More information about the **Division of Water Rights** can be found at: <https://www.waterboards.ca.gov/waterrights/>



**DEPARTMENT OF WATER RESOURCES**

1416 NINTH STREET, P.O. BOX 942836  
SACRAMENTO, CA 94236-0001  
(916) 653-5791

**Notice to Dam Owners  
Division of Safety of Dams**

Notification of Annual Schedule of Fees – Effective July 1, 2021  
California Dam Safety Program  
March 23, 2021

The Department of Water Resources' Division of Safety of Dams (DSOD) is committed to its mission of protecting life and property from dam failures in California in the most cost-effective manner. The California Dam Safety Program (Program) is funded solely through annual fees and application filing fees. Annual fees are assessed and collected to cover the costs of the Program and are governed by section 6307 of the California Water Code.

Annual fees for the Fiscal Year (FY) 2021/22 billing cycle will be reduced by approximately 15 percent due to a one-time savings in operating expenses. However, please note that annual fees for the FY 2022/23 billing cycle are projected to return to FY 2020/21 rates plus adjustments, as necessary.

Enclosed is the FY 2021/22 Annual Schedule of Fees that will be used to issue billing invoices by April 30, 2021. Annual fees for FY 2021/22 are due July 1, 2021, and in accordance with Water Code section 6307, subdivision (b), penalties and interest may be imposed for fees received more than 30 days after the deadline.

If a paper invoice is not received by April 30, 2021, or to request an electronic copy of the invoice by email, contact Administrative Officer Marcelino Alcantar at (916) 565-7804 or at [Marcelino.Alcantar@water.ca.gov](mailto:Marcelino.Alcantar@water.ca.gov) by May 15, 2021, so that we may provide a duplicate invoice.

If you have any questions, please call Andrew J. Mangney, Chief of the Field Engineering Branch, at (916) 565-7800.

Sincerely,

A handwritten signature in cursive script that reads "Sharon K. Tapia".

Sharon K. Tapia, Chief  
Division of Safety of Dams

Enclosures

**DEPARTMENT OF WATER RESOURCES**

1416 NINTH STREET, P.O. BOX 942836  
 SACRAMENTO, CA 94236-0001  
 (916) 653-5791



**CALIFORNIA DAM SAFETY PROGRAM  
 ANNUAL SCHEDULE OF FEES  
 FISCAL YEAR 2021/22**

**Effective July 1, 2021**

Beginning on July 1, 2020, section 315(a)(3) of Article 3, Chapter 1, Division 2, Title 23 of the California Code of Regulations (CCR) incorporates a Critical Appurtenant Structure (CAS) Fee into the Annual Schedule of Fees. The CAS Fee is a surcharge assessed on the Dam Fee, which is proportional to the size of the dam. Fifteen percent of the cost of the regulatory program is proportionally distributed through the CAS Fee to dam systems with CAS. The maximum number of CAS used in the assessment of the CAS Fee is capped at two (2) per dam, and it does not apply to dams classified as Low Hazard Potential, pursuant to section 315 of the CCR. Rates used in computing each of the fee components of the annual fees billed are rounded to the nearest dollar.

Annual Fee = Admin Fee + Dam Fee + CAS Fee, where

Admin Fee = Flat Fee per dam  
 Dam Fee = Dam Rate x Dam Height  
 CAS Fee\* = CAS Rate x Dam Fee (\$) x Number of CAS (not to exceed two), where the CAS Rate = 0.3883

\*Note: The CAS Fee is calculated then rounded to the nearest dollar.

General Rate<sup>1</sup>

*Dams with no GAS or classified as Low Hazard Potential:*

$$\text{Annual Fee (No CAS)} = \underbrace{\$858}_{\text{Admin Fee}} + \underbrace{\$201 \text{ per foot of height}}_{\text{Dam Fee}}$$

*Dams with One (1), or Two (2) or more GAS:*

$$\text{Annual Fee (CAS)} = \underbrace{\$858}_{\text{A Fee}} + \underbrace{\$201 \text{ per foot of height}}_{\text{m Fee}} + \underbrace{0.3883 \times \$201 \text{ per foot of height} \times 1 \text{ or } 2 \text{ CAS as applicable}}_{\text{S Fee}}$$

**DEPARTMENT OF WATER RESOURCES**

1416 NINTH STREET, P.O. BOX 942836  
 SACRAMENTO, CA 94236-0001  
 (916) 653-5791



**CALIFORNIA DAM SAFETY PROGRAM  
 ANNUAL SCHEDULE OF FEES  
 FISCAL YEAR 2021/22**

Reduced Rate: Farm and Ranch or Small and Privately Owned Dams<sup>(2)</sup>

*Dams with no CAS or classified as Low Hazard Potential:*

$$\text{Annual Fee (No CAS)} = \underbrace{\$172}_{\text{Admin Fee}} + \underbrace{\$40 \text{ per foot of height}}_{\text{Dam Fee}}$$

*Dams with One (1), or Two (2) or more CAS:*

$$\text{Annual Fee (CAS)} = \underbrace{\$172}_{\text{Admin Fee}} + \underbrace{\$40 \text{ per foot of height}}_{\text{Dam Fee}} + \underbrace{0.3883 \times \$40 \text{ per foot of height} \times 1 \text{ or } 2 \text{ CAS as applicable}}_{\text{CAS Fee}}$$

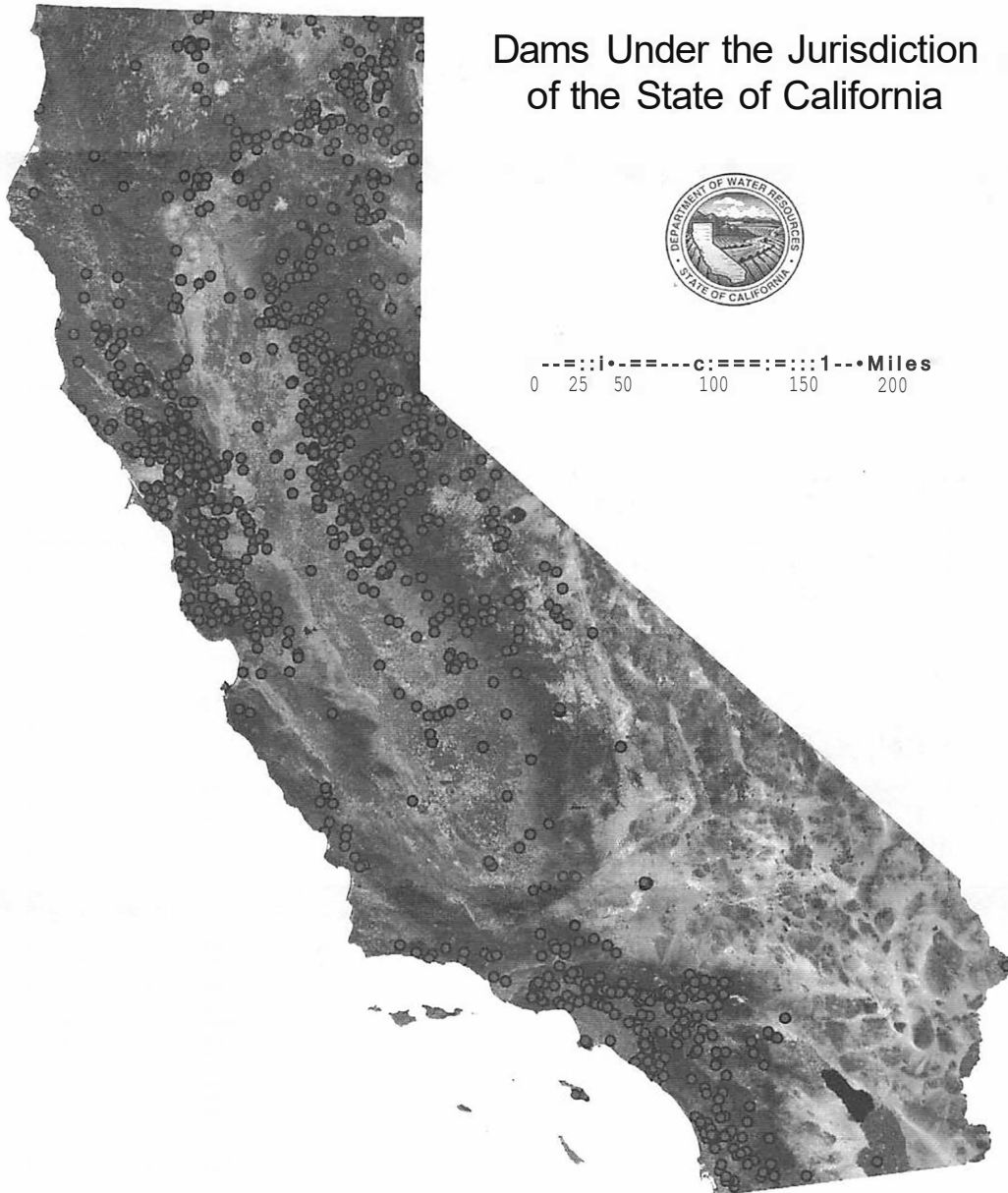
Limited Rate: Inoperative Dams and Special Exclusion<sup>(3)</sup>

\$858 per dam under the General Rate  
 \$172 per dam under the Reduced Rate

- (1) Division 3, Part 1, Chapter 6, section 6307(a) of the California Water Code  
 (2) Division 3, Part 1, Chapter 6, sections 6307(e & f) of the California Water Code  
 (3) Division 3, Part 1, Chapter 6, section 6307(d) of the California Water Code and Title 23, Waters, section 316 of the California Code of Regulations

**DEPARTMENT OF WATER RESOURCES**

1416 NINTH STREET, P.O. BOX 942836  
SACRAMENTO, CA 94236-0001  
(916) 653-5791



**Dams Under the Jurisdiction  
of the State of California**



0 25 50 100 150 200 Miles

H.B.M.W.D. MAR 12 2021

**File Code:** 2720  
**Date:** March 9, 2021

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

Dear Mr. Friedenbach:

I am in receipt of Humboldt Bay Municipal Water District's request to accept my offer of a payment plan, for your combined CY2020 and CY2021 special use permit fees for Ruth Lake Dam. Enclosed is a rebilling for all three installment payments. The total payment amount for the combined years is \$46,242.31, or \$23,052.00 for CY2020 and \$23,190.31 for CY2021. Your three enclosed invoices display the following payments and due dates:

\$15,414.11 due 4/8/21,  
\$15,414.10 due 6/21/21 and  
\$15,414.10 due 9/8/21.

Two copies of each bill are enclosed for your payment convenience and records. Payment instructions and options are in the upper left corner of the bill, with the exception that local Forest Service offices are not currently open for in-person payments.

Regarding the other inquiries included in your February 23, 2021 email, the inflation factor applied annually to special uses is the Implicit Price Deflator-Gross Domestic Product (IPD-GDP). As you requested, my staff emailed you the 2017 National Agriculture Statistics Service (NASS) valuation report that was applied to the special uses database system in 2019 for implementation in the CY 2020 billing cycle. This email was sent on March 8, 2021. The NASS valuation is updated every five years, so the next valuation is scheduled for 2022. Exactly when the updated 2022 valuation would be applied to the special uses system is not determined at the Forest level.

Please recall that a payment plan will not be available for the CY2022 billing cycle, and you can expect to receive that invoice near the end of the year. In accordance with the terms of the water district's special use permit, fees are due on January 1 of each year. In any year in which you do not receive a bill as expected, you are welcome to contact my staff about that atypical situation. In this case, there were multiple factors that led to the delay, including research into your appraisal options, and other unrelated events. Sometimes delays happen due to data issues at the national level; however, any delay will not relieve permittees of their payment obligations.

If you have any questions about your payments or other items discussed in this letter, you may



---

**File Code:** 2720  
**Date:** February 4, 2021

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

Dear Mr. Friedenbach:

This letter accompanies the 2020-21 annual billing for Humboldt Bay Municipal Water District's (HBMWD) special use permit for portions of Ruth Lake on National Forest System lands and the associated FERC-exempt hydroelectric system (Authorization MDR1400 02). The 2020 bill was not sent last year, and thus is included now with the 2021 billing. The Forest Service fee structure changed for the 2020 billing; our research into the available options for your organization as well as various other circumstances delayed the sending of your bill.

In 2019 the Forest Service implemented a national fee structure for uses that should be billed according to an appraised rate but which have not had an actual recent appraisal, according to Forest Service policy. This is in keeping with the language in HBMWD's special use permit under the fee clause which states, "Provided, charges for this use shall be made or readjusted whenever necessary to place the charges on a basis commensurate with the fair market value of the authorized use." The new fee is based on a national valuation formula for each county known as the NASS (National Agriculture Statistics Service) valuation, and Trinity County has one of the lowest per-acre rates of all counties on the Six Rivers National Forest under this new fee structure, at \$1,921/acre in 2019. The annual bill is calculated on 5 percent of the appraised value of National Forest System (NFS) lands under permit, adjusted annually for inflation, so the 2020 and 2021 bills for the water district's use is:

2019 Appraised value using the NASS valuation = 240 acres x \$1,921/acre = \$461,040

2020 land use fee = \$461,040 x 0.05 = \$23,052.00

2021 land use fee = \$23,052.00 x variable annual inflation factor of 1.006 = \$23,190.31

As in the past, in future years the fee will continue to be adjusted annually for inflation. Bills based on the implementation of national fee policies are not appealable; however, this letter will provide your agency with some options if you are seeking options to mitigate the effects of this new fee.

If you are seeking no mitigation for this billing, you can simply pay the enclosed bill by its due date, according to the instructions in the upper-left corner of the bill.



John Friedenbach

2

If you need a mitigation for this bill, I can offer you a payment plan option for this billing year. Specifically, this year's fee could be split into three separate billing invoices, spread evenly over either three or six months at your request, without interest.

One of the above payment options must be utilized to keep your permit in good standing: pay in full now, or request a three-month payment plan, or request a six-month payment plan. With any of these payment options, you can expect to receive next year's bill at the regular time near the end of this calendar year, with a due date of January 1, 2022 and no payment plan option for the 2022 billing.

In addition to the payment options for the 2020-21 bill, HBMWD has an additional option to seek a private appraisal for the permitted lands, which could influence your permit fees in future years, after such an appraisal is completed and accepted by both your agency and the Forest Service.

The following are the basic considerations to understand if considering pursuing a private appraisal:

- The appraisal would need to be contracted by the Forest Service, and performed to the Uniform Appraisal Standards for Federal Land Acquisitions, also known as Yellow Book standards. The Forest Service contracts the work under our agency specifications, utilizing vetted Yellow Book appraisers.
- HBMWD would be responsible for reimbursing the Forest Service for the costs of appraisal. Although a Yellow Book appraisal may sometimes cost up to \$10,000, this type of an appraisal may be more likely to run in the \$5,000–\$7,000 range.
- For purposes of the appraisal, the highest and best use of the appraised lands would be the permitted use. Thus, comparable parcels would be ones that are not very usable in one way or another.

If you are interested in paying this year's bill under a payment plan, please contact Julia Everta, lands and minerals specialist, within two weeks of the date of this letter. She will be able to cancel the enclosed bill and will issue the payment plan billings at your request. Similarly, if you are interested in pursuing a private appraisal or have any questions stemming from this letter, you can contact Julia at [julia.everta@usda.gov](mailto:julia.everta@usda.gov) or (707) 441-3543.

Sincerely,

**KATHLEEN MICK** Digitally signed by KATHLEEN MICK  
Date: 2021.02.05 08:26:17 -08'00'

KATHLEEN MICK  
Acting Forest Supervisor

Enclosure

cc: Chris Harris, HBMWD; Kristen Lark





# HUMBOLDT BAY MUNICIPAL WATER DISTRICT

Section 8.1ai Page 85

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](mailto:OFFICE@HBMWD.COM)

Website: [www.hbmwd.com](http://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

March 12, 2021

**VIA EMAIL: [asuarez@co.humboldt.ca.us](mailto:asuarez@co.humboldt.ca.us)**

Alyssa Suarez

Planner

Humboldt County Planning Department

3015 H Street

Eureka CA 95501

**Re: Project #: PLN-2020-16698**

**Nordic Aquafarms California, LLC**

**APN: 401-112-021**

Dear Ms. Suarez,

I am writing regarding the above referenced project application by Nordic Aquafarms. This letter is to inform your department that a water analysis has been performed by our agency, Humboldt Bay Municipal Water District, the domestic and industrial water provider to the above referenced project parcel.

Although a specific project analysis was not conducted as part of our District's 2015 Urban Water Management Plan, as stated in our plan:

*"Overall, water supply and demand are projected to be of low to moderate vulnerability of climate change in the north coast region in general, and even less so in the Mad River watershed. The Mad River watershed is rainfall-dominated (little to no snowpack), and annual demand on water supplies available from the watershed are typically well below 10% of mean runoff. As noted in Section 3.3.1, HBMWD has estimated that demand up to 36 MGD (compared to a current annual average usage of 10 MGD) could be met reliably, even if the unprecedented condition of continuous hydrology similar to the 1976-77 drought occurred."*

Nordic Aquafarms has informed us that their peak domestic potable water demand is 300,000 gallons per day with normal daily demand less than 200,000 gallons per day. Both of these volumes are well within our available capacity to reliably deliver domestic potable water to their project.

In addition to domestic water, Nordic Aquafarms has requested industrial (non-treated) water from our District. Nordic has informed us that their industrial water maximum demand will be 3 million gallons per day. Our industrial system is designed to deliver a maximum capacity of 75 million gallons per day and consistently delivered 65 million gallons per day while the two former pulp mills resided on the Samoa Peninsula (both of which have closed). Consequently, our District has more than sufficient capacity and ability to provide Nordic Aquaculture's project with 3 million gallons per day of industrial water. (4.6 % of previous volume supplied).

Therefore, we confirm Humboldt Bay Municipal Water District's ability to provide domestic potable water of 300,000 gallons per day and industrial non-potable water of 3 million gallons per day to the Nordic Aquafarms California, LLC project located on APN 401-112-021.

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

Respectfully,

A handwritten signature in black ink, appearing to read "John Friedenbach". The signature is fluid and cursive, written over the typed name and title.

John Friedenbach  
General Manager

Cc: David Noyes, Nordic  
Scott Thompson, Nordic  
Nathan Stevens, GHD

FIELDBROOK GLENDALE COMMUNITY SERVICES DISTRICT  
P.O. BOX 2715 – MCKINLEYVILLE, CA 95519

Ms. Cheryl L. Prowell  
Department of Toxics Substances Control  
700 Heinz Avenue  
Berkeley, CA 94710

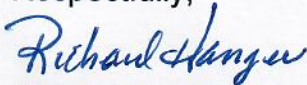
**Re: McNamara & Peepe Lumber Mill Soil and Groundwater Monitoring and  
Cleanup – Humboldt County**

Dear Ms. Prowell,

Our district is a wholesale water customer of the Humboldt Bay Municipal Water District (HBMWD). We have been monitoring the situation and correspondence between DTSC and HBMWD concerning the above-referenced contaminated site. Our municipality serves 550 residential and commercial water customers within our service area. Consequently, we are extremely concerned about the former McNamara & Peepe Lumber Mill site, particularly because DTSC issued an Imminent and Substantial Endangerment (ISE) Determination for the site in April, 2008, and it appears that little progress has been made since then to remediate the contamination. The importance of this matter cannot be overstated. The site is located directly adjacent to the Mad River, upstream and within close proximity to HBMWD's Raney wells which supply drinking water to all of our customers and to two-thirds of the residents of Humboldt County.

We understand that budgets are limited. However, we encourage DTSC and the State to redouble its efforts to immediately identify and utilize all available funding sources to clean up the former McNamara and Peepe site to prevent contamination of our drinking water source – the Mad River. We understand that DTSC has proposed to spend only \$30,000 in its current year's budget for this site and that those monies would be spent only on investigation activities. In December, 2018, DTSC made a finding that "soil and groundwater contamination at the site is not under control and the implemented remedial actions (from 1998) are no longer protective of human health and the environment." Accordingly, we urge DTSC to commit **no less than \$200,000** for this site this budget year to immediately advance its investigation and cleanup efforts to protect our drinking water source. DTSC must make immediate remediation of this site its top priority.

Respectfully,



Richard Hanger  
General Manager  
Fieldbrook Glendale Community Services District

Cc: Senator Mike McGuire  
Assemblyman Jim Woods



# Humboldt Community Services District

*Dedicated to providing high quality, cost effective water and sewer service for our customers*

March 11, 2021

Ms. Cheryl L. Prowell  
Department of Toxics Substances Control  
700 Heinz Avenue  
Berkeley, CA 94710

**Subject: McNamara & Peepe Lumber Mill Soil and Groundwater Monitoring and Cleanup – Humboldt County**

Dear Ms. Prowell,

Our district is a wholesale water customer of the Humboldt Bay Municipal Water District (HBMWD). We have been monitoring the situation and correspondence between DTSC and HBMWD concerning the above-referenced contaminated site. Our municipality serves 7,750 residential and commercial water customers within our service area. Consequently, we are extremely concerned about the former McNamara & Peepe Lumber Mill site, particularly because DTSC issued an Imminent and Substantial Endangerment (ISE) Determination for the site in April, 2008, and it appears that little progress has been made since then to remediate the contamination. The importance of this matter cannot be overstated. The site is located directly adjacent to the Mad River, upstream and within close proximity to HBMWD's Raney wells which supply drinking water to all of our customers and to two-thirds of the residents of Humboldt County.

We understand that budgets are limited. However, we encourage DTSC and the State to redouble its efforts to immediately identify and utilize all available funding sources to clean up the former McNamara and Peepe site to prevent contamination of our drinking water source – the Mad River. We understand that DTSC has proposed to spend only \$30,000 in its current year's budget for this site and that those monies would be spent only on investigation activities. In December, 2018, DTSC made a finding that "soil and groundwater contamination at the site is not under control and the implemented remedial actions (from 1998) are no longer protective of human health and the environment." Accordingly, we urge DTSC to commit **no less than \$200,000** for this site this budget year to immediately advance its investigation and cleanup efforts to protect our drinking water source. DTSC must make immediate remediation of this site its top priority.

Respectfully,  
on behalf of the Humboldt Community Services District Board of Directors



Alan Bongio  
Board President

cc: Senator Mike McGuire  
Assemblyman Jim Woods

*Mad River Union Wed 3/10/2021*

## Arcata demands state clean up possible toxic threat to drinking water

February 24, 2021

Ms. Cheryl L. Prowell

Department of Toxics Substances Control

700 Heinz Avenue

Berkeley, CA 94710

Re: McNamara & Peepe Lumber Mill Soil and Groundwater Monitoring and Clean-up – Humboldt County

Dear Ms. Prowell,

The City of Arcata is a wholesale water customer of the Humboldt Bay Municipal Water District (HBMWD). We have been monitoring the situation and correspondence between DTSC and HBMWD concerning the above-referenced contaminated site.

Our municipality serves 18,400 residential and commercial water customers within our service area. Consequently, we are extremely concerned about the former McNamara & Peepe Lumber Mill site, particularly because DTSC issued an Imminent and Substantial Endangerment (ISE) Determination for the site in April, 2008, and it appears that little progress has been made since then to remediate the contamination.

The importance of this matter cannot be overstated. The site is located directly adjacent to the Mad River, upstream and within close proximity to HBMWD's Raney wells which supply drinking water to all of our customers and to two-thirds of the residents of Humboldt County.

### ✦ LETTER OF THE WEEK

We understand that budgets are limited. However, we encourage DTSC and the State to redouble its efforts to immediately identify and utilize all available funding sources to clean up the former McNamara and Peepe site to prevent contamination of our drinking water source – the Mad River.

We understand that DTSC has proposed to spend only \$30,000 in its current year's budget for this site and that those monies would be spent only on investigation activities.

In December, 2018, DTSC made a finding that "soil and groundwater contamination at the site is not under control and the implemented remedial actions (from 1998) are no longer protective of human health and the environment."

Accordingly, we urge DTSC to commit no less than \$200,000 for this site this budget year to immediately advance its investigation and cleanup efforts to protect our drinking water source.

Please make immediate remediation of this site its top priority.

Respectfully,

**Sofia Pereira**, Mayor City of Arcata

Cc: Senator Mike McGuire;

Assemblyman Jim Woods

**DEPARTMENT OF FORESTRY AND FIRE PROTECTION**

Humboldt-Del Norte Unit  
118 S. Fortuna Boulevard  
Fortuna CA 95540-0425  
Humboldt County  
(707) 725-4413  
Website: [www.fire.ca.gov](http://www.fire.ca.gov)



March 31, 2021

Humboldt Bay Municipal Water District  
828 7TH ST  
EUREKA, CA 95501

**Notice of Inspection**

**Section 4604 of the Public Resources Code (PRC) requires the department to inspect timber operations for compliance with the Forest Practice Act and rules of the Board of Forestry and Fire Protection.**

Harvest Document: 1-21EM-00055-TRI

Inspection Date: 03/24/2021

Inspection Type: Active

Inspection Number: 1

Inspection ID: INSP-21-000991

Person Contacted: Jake Morris

**Inspector Observations**

Operations were active during the inspection. Morris Logging was falling and processing burnt trees adjacent to Ruth Lake. This is a large exemption that has already had trees cut by Utility contractors and decks of logs are scattered along Mad River road. Morris will only be held accountable for their operations and not of the utility companies operations. Fire tools are required on the active landing after April 1st. Please call if you have any questions.

Sincerely,

Lucas Titus RPF#2870  
Forester I, Bridgeville Resource Management  
Office (707)777-1720  
Cellular (707)599-6893  
EMAIL: [Lucas.Titus@fire.ca.gov](mailto:Lucas.Titus@fire.ca.gov)

cc: Unit, Region, LTO, TLO, TO, RPF, FG, WQ, FILE

To view harvesting documents, please visit: <https://caltreesplans.resources.ca.gov/caltrees/>

## John Friedenbach

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**From:** John Friedenbach <friedenbach@hbmwd.com>  
**Sent:** Tuesday, March 30, 2021 8:34 AM  
**To:** Kristen Lark (kristen.lark@usda.gov); 'McArthur, Ted O -FS'; 'Tim Bailey'  
**Cc:** Jeff Meyer  
**Subject:** CalFire Healthy Forest Grant Opportunity

Greetings All,

Our Humboldt Bay Municipal Water District is planning to apply for a CalFire Forest Health Grant to begin the reforestation of the burned areas within the footprint of the August Complex wildfire in the headwaters area of the Mad River. See internet links below.

<https://www.grants.ca.gov/grants/cal-fire-forest-health-grants-2/>

<https://www.fire.ca.gov/programs/resource-management/climate-change-and-energy/forest-health/>

We are seeking collaboration partners for our grant application and would like you to partner with us. The grants are for watershed wide projects which would encompass more land than HBMWD owns around Ruth Lake. You can customize the grant funding to suit your particular needs on your lands as long as those meet the grant criteria.

I believe this is an excellent opportunity for all of us to begin to restore our headwaters forest.

The deadline to apply is May 19<sup>th</sup> so we don't have a lot of time.

Kindly let me know this week if you are interested in partnering with us and forming a coalition group. If you know of others whom we should include in our collaboration, I am willing to consider additions.

Regards,

John Friedenbach  
General Manager  
Humboldt Bay Municipal Water District  
www.hbmwd.com  
707-443-5018 work  
707-362-7509 cell





## John Friedenbach

---

**From:** Mick, Kathy- FS <Kathleen.Mick@usda.gov>  
**Sent:** Tuesday, March 30, 2021 8:55 AM  
**To:** friedenbach@hbmwd.com  
**Cc:** Lark, Kristen -FS; Marshall, Jeremy -FS; Mc arthur, Ted - FS; Tim Bailey  
**Subject:** FW: [External Email]CalFire Healthy Forest Grant Opportunity

Hi John,

This email serves as an expression of our interest in partnering with you on the opportunities mentioned below to restore important landscapes affected by the August Complex wildfire.

Mad River District Ranger and Forest Resource Officer Jeremy Marshall will serve as POCs.

We look forward to the partnership and collaboration. Please let us know how you would like to move forward.

As a side note, I am currently Acting Forest Sup on the Six Rivers NF until May 8 and then Ted McArthur will be back from his Forest Supervisor assignment on the Shasta-Trinity NF.

Thanks,

Kathy



**Kathleen E. Mick**  
**Acting Forest Supervisor**  
**Forest Service**  
Six Rivers National Forest  
**c: 760-920-1511**  
[Kathleen.Mick@usda.gov](mailto:Kathleen.Mick@usda.gov)

1330 Bayshore Way  
Eureka, CA 95501  
[www.fs.fed.us](http://www.fs.fed.us)



Caring for the land and serving people

## **Humboldt Bay Municipal Water District**

**To:** Board of Directors  
**From:** John Friedenbach  
**Date:** April 1, 2021  
  
**Re:** Fire Disaster Recovery update

### **Discussion**

As the Board is aware, staff have been conducting fire recovery efforts around Ruth Lake. We continue to work with the FEMA and NCRS grants. Our salvage logging operations have begun in earnest. CalOES has begun the burn debris removal on Lease Lots. PG&E continues to remove hazard trees near power lines and CalOES continues to remove hazard trees near public roads. The District's interests regarding these activities are being monitored by our onsite staff and Eureka office staff.

In terms of reforestation efforts, staff has the following updates.

1. CalFire has a grant opportunity open for Healthy Forests. Applications due May 19<sup>th</sup>. Staff sent the attached email to USFS, The Watershed Center, and private property owners to solicit collaboration on a grant application. Each contact responded favorably to our collaboration suggestion.
2. Staff subsequently had a lengthy conversation with the USFS Mad River District Ranger regarding our reforestation efforts and the grant concepts. This led to a discussion by the Ranger with Congressman Huffman. Staff followed that up with a discussion with Congressman Huffman's Eureka office staff (John Driscoll). Mr. Driscoll was provided copies of the ACWA Headwaters white papers and policy. Mr. Driscoll offered support to the District's fire disaster recovery efforts at Ruth Lake.
3. Staff contacted The Arbor Foundation for possible grant funding. They are interested in participating with our District. Their grant projects typically range from 10,000 to 10 Million tree seedlings. Multiyear projects are allowed. Further discussions will ensue when staff has solidified our reforestation plan.
4. Staff is meeting on April 2<sup>nd</sup> with Baldwin, Blomstrom, Wilkinson & Associates (forestry consultants) regarding their scope of activities under the NCRP Forestry grant. A report out will be provided at the Board meeting.
5. Staff is meeting on April 2<sup>nd</sup> with The Watershed Center regarding collaboration with the District for our reforestation efforts. A report out will be provided at the Board meeting.
6. During a site visit at Ruth Lake by District staff on March 24<sup>th</sup>, a new apparent encroachment of structures onto District property was discovered on the west side of Ruth Lake. Staff is investigating this apparent encroachment and discussing with District Counsel how to proceed.
7. During the same site visit, staff discovered an apparent unauthorized water diversion from a spring located on the same District parcel on the west side of Ruth Lake. Staff is investigating this issue as well.

Staff will continue to provide updates to the Board regarding our fire disaster recovery efforts at Ruth Lake.

**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: John Friedenbach  
Date: March 31, 2021  
Re: Lot Line Adjustment with Vivid Green, LLC

**Discussion**

As you may recall, in 2019 staff learned that a legal cannabis cultivation facility has been partially constructed on District property near Ruth Lake. The affected District parcel is APN: 020-100-035 located at the headwaters area of Ruth Lake in Trinity County. The adjacent property owner, Vivid Green, LLC., was provided with erroneous property line survey information and possible clerical errors were made by the Trinity County Building Department during the building permit issuance process. Vivid Green and the District have negotiated a mutually agreeable lot line adjustment.

At Vivid Green's expense, a lot line adjustment affecting our two parcels has been prepared and surveyed. Attached are two grant deeds to perfect the lot line adjustment. A portion of District property will be conveyed to Vivid Green and an equivalent portion of Vivid Green's parcel will be conveyed to the District, so no compensation will change hands. Also attached is District Resolution Number 2021-07 to complete the real property transfer.

**Recommendation**

Approve Resolution 2021-07 which authorizes the General Manager to sign grant deeds on behalf of the District and instruct General Manager to have grant deeds recorded. Authorize General Manager to terminate existing lease between HBMWD and Vivid Green, LLC. once deeds are recorded.

**RESOLUTION NO. 2021-07**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE HUMBOLDT BAY MUNICIPAL WATER DISTRICT AUTHORIZING THE GENERAL MANAGER TO EXECUTE GRANT DEED CONVEYING A PORTION OF REAL PROPERTY TO VIVID GREEN, LLC AND TO ACCEPT GRANT DEED BY VIVID GREEN, LLC CONVEYING A PORTION OF ITS PROPERTY TO THE DISTRICT**

A. **WHEREAS**, the Humboldt Bay Municipal Water District (“**District**”) is a duly formed and operating Municipal Water District and is the owner of that certain real property situated in the County Of Trinity and designated Assessor Parcel No. 020-100-35 (“**District Property**”), as shown and designated on the Lot Line Adjustment Plot Plan attached hereto as **Exhibit A**;

B. **WHEREAS**, Vivid Green, LLC (“**VG**”) is a California limited liability company and is the owner of that real property adjacent to the District Property and designated Assessor Parcel No. 020-490-04, as shown and designated on **Exhibit A** hereto (“**VG Property**”);

C. **WHEREAS**, pursuant to that certain Letter of Intent dated December 14, 2019, the District and VG agreed to exchange, by way of lot line adjustment, an approximate one-acre portion of real property to accommodate an encroachment by VG on the District’s Property;

D. **WHEREAS**, Water Code § 71690 authorizes the District to acquire, hold, and dispose any real property; and

E. **WHEREAS**, VG intends to execute a Grant Deed, a copy of which is attached hereto as **Exhibit B**, conveying to the District that portion of the VG Property as shown and depicted on **Exhibit A** hereto and the District agrees to accept the Grant Deed from VG once executed; and

F. **WHEREAS**, the District intends to execute a Grant Deed, a copy of which is attached hereto as **Exhibit C**, conveying to VG that portion of the District Property as shown and depicted on **Exhibit A** hereto and District authorizes the General Manager to execute the Grant Deed on behalf of the District subject to the conditions stated below; and

G. **WHEREAS**, the District finds that the exchange of real property authorized by this Resolution is of equal value.

**NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE HUMBOLDT BAY MUNICIPAL WATER DISTRICT DOES HEREBY ADOPT THE RECITALS AND FINDINGS STATED ABOVE AND FURTHER FINDS AND DECLARES AS FOLLOWS:**

1. The General Manager is hereby authorized to execute all documents reasonably required to close escrow on the conveyances indicated herein;
2. The General Manager is authorized and directed to execute a certificate of acceptance of the Grant Deed appended to this Resolution as *Exhibit B* and to cause the certificate to be delivered to escrow;
3. The General Manager is authorized and directed to execute the Grant Deed appended to this Resolution as *Exhibit C*, provided that the following conditions be satisfied prior to or concurrent with the close of escrow:
  - a. That VG pay current on its rent obligations under the Lease Agreement between the District and VG as of the date of the close of escrow;
  - b. That VG pay all associated costs and expense concerning the lot line adjustment, escrow, and other closing costs; and
  - c. That VG reimburse the District for all reimbursable expenses pursuant to Section 6 of the Non-Binding Letter of Intent dated December 14, 2019.

**PASSED, APPROVED AND ADOPTED** this 8th day of April, 2021, by the following roll call vote:

AYES:  
NAYES:  
ABSENT:

ATTEST:

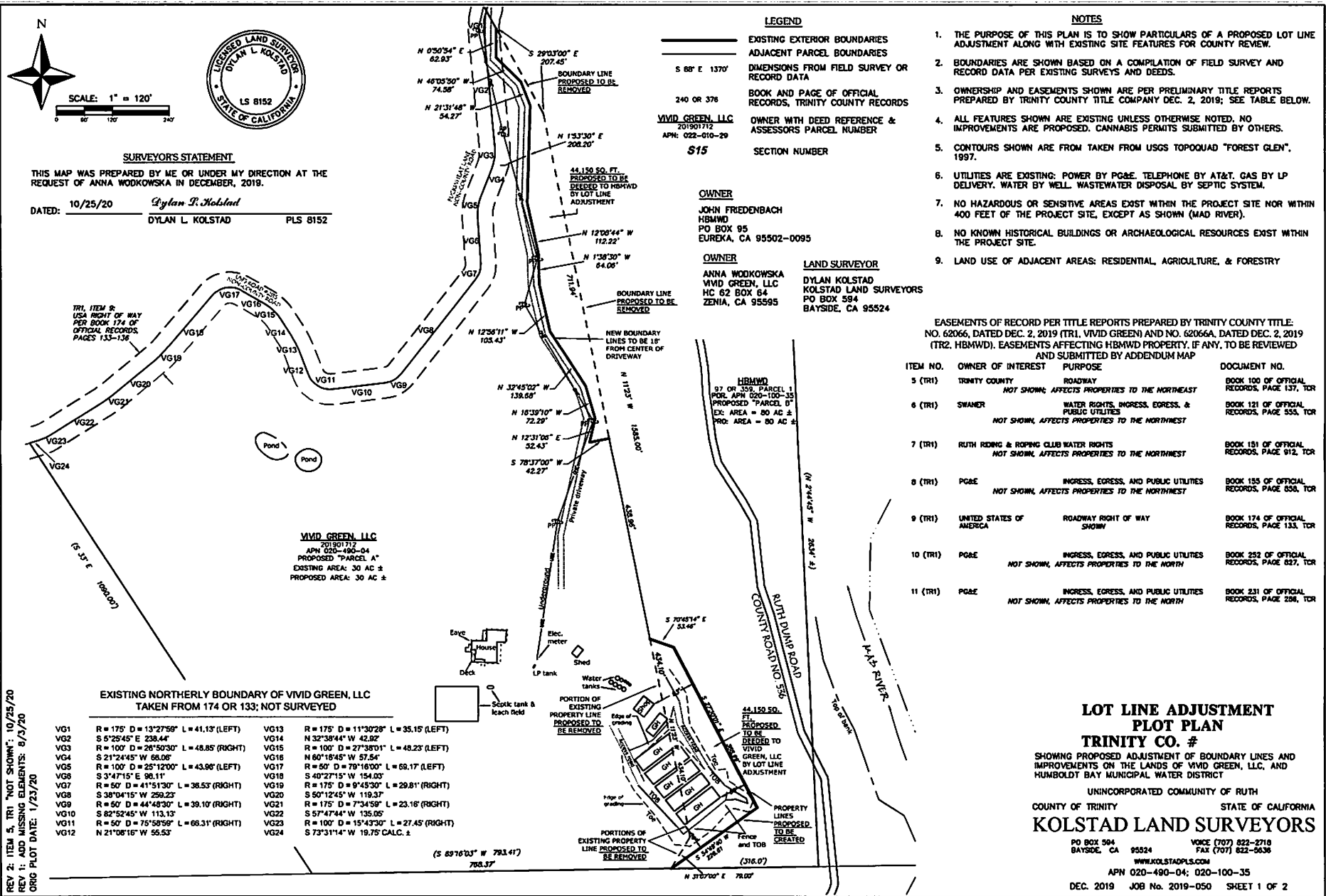
---

Sheri Woo, President

---

J. Bruce Rupp, Secretary/Treasurer

# Exhibit A



**SURVEYOR'S STATEMENT**

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AT THE REQUEST OF ANNA WODKOWSKA IN DECEMBER, 2019.

DATED: 10/25/20 *Dylan L. Kolstad*  
 DYLAN L. KOLSTAD PLS 8152

**LEGEND**

- EXISTING EXTERIOR BOUNDARIES
- ADJACENT PARCEL BOUNDARIES
- S 68° E 1370'
- 240 OR 378
- VIVID GREEN, LLC**  
201901712  
APN: 022-010-29  
**S15**
- OWNER WITH DEED REFERENCE & ASSESSORS PARCEL NUMBER
- SECTION NUMBER

**NOTES**

1. THE PURPOSE OF THIS PLAN IS TO SHOW PARTICULARS OF A PROPOSED LOT LINE ADJUSTMENT ALONG WITH EXISTING SITE FEATURES FOR COUNTY REVIEW.
2. BOUNDARIES ARE SHOWN BASED ON A COMPILATION OF FIELD SURVEY AND RECORD DATA PER EXISTING SURVEYS AND DEEDS.
3. OWNERSHIP AND EASEMENTS SHOWN ARE PER PRELIMINARY TITLE REPORTS PREPARED BY TRINITY COUNTY TITLE COMPANY DEC. 2, 2019; SEE TABLE BELOW.
4. ALL FEATURES SHOWN ARE EXISTING UNLESS OTHERWISE NOTED. NO IMPROVEMENTS ARE PROPOSED. CANNABIS PERMITS SUBMITTED BY OTHERS.
5. CONTOURS SHOWN ARE FROM TAKEN FROM USGS TOPOQUAD "FOREST GLEN", 1997.
6. UTILITIES ARE EXISTING: POWER BY PG&E, TELEPHONE BY AT&T, GAS BY LP DELIVERY, WATER BY WELL, WASTEWATER DISPOSAL BY SEPTIC SYSTEM.
7. NO HAZARDOUS OR SENSITIVE AREAS EXIST WITHIN THE PROJECT SITE NOR WITHIN 400 FEET OF THE PROJECT SITE, EXCEPT AS SHOWN (MAD RIVER).
8. NO KNOWN HISTORICAL BUILDINGS OR ARCHAEOLOGICAL RESOURCES EXIST WITHIN THE PROJECT SITE.
9. LAND USE OF ADJACENT AREAS: RESIDENTIAL, AGRICULTURE, & FORESTRY

**OWNER**

JOHN FREDENBACH  
 HBMWD  
 PO BOX 95  
 EUREKA, CA 95502-0095

**OWNER**

ANNA WODKOWSKA  
 VIVID GREEN, LLC  
 HC 62 BOX 64  
 ZENIA, CA 95595

**LAND SURVEYOR**

DYLAN KOLSTAD  
 KOLSTAD LAND SURVEYORS  
 PO BOX 594  
 BAYSIDE, CA 95524

EASEMENTS OF RECORD PER TITLE REPORTS PREPARED BY TRINITY COUNTY TITLE: NO. 62066, DATED DEC. 2, 2019 (TR1, VIVID GREEN) AND NO. 62066A, DATED DEC. 2, 2019 (TR2, HBMWD). EASEMENTS AFFECTING HBMWD PROPERTY, IF ANY, TO BE REVIEWED AND SUBMITTED BY ADDENDUM MAP

ITEM NO.	OWNER OF INTEREST	PURPOSE	DOCUMENT NO.
5 (TR1)	TRINITY COUNTY	ROADWAY NOT SHOWN, AFFECTS PROPERTIES TO THE NORTHEAST	BOOK 100 OF OFFICIAL RECORDS, PAGE 137, TOR
6 (TR1)	SWANER	WATER RIGHTS, INGRESS, EGRESS, & PUBLIC UTILITIES NOT SHOWN, AFFECTS PROPERTIES TO THE NORTHWEST	BOOK 121 OF OFFICIAL RECORDS, PAGE 553, TOR
7 (TR1)	RUTH ROBB & ROPING CLUB	WATER RIGHTS NOT SHOWN, AFFECTS PROPERTIES TO THE NORTHWEST	BOOK 151 OF OFFICIAL RECORDS, PAGE 912, TOR
8 (TR1)	PG&E	INGRESS, EGRESS, AND PUBLIC UTILITIES NOT SHOWN, AFFECTS PROPERTIES TO THE NORTHWEST	BOOK 155 OF OFFICIAL RECORDS, PAGE 550, TOR
9 (TR1)	UNITED STATES OF AMERICA	ROADWAY RIGHT OF WAY SHOWN	BOOK 174 OF OFFICIAL RECORDS, PAGE 133, TOR
10 (TR1)	PG&E	INGRESS, EGRESS, AND PUBLIC UTILITIES NOT SHOWN, AFFECTS PROPERTIES TO THE NORTH	BOOK 252 OF OFFICIAL RECORDS, PAGE 827, TOR
11 (TR1)	PG&E	INGRESS, EGRESS, AND PUBLIC UTILITIES NOT SHOWN, AFFECTS PROPERTIES TO THE NORTH	BOOK 231 OF OFFICIAL RECORDS, PAGE 298, TOR

**LOT LINE ADJUSTMENT  
 PLOT PLAN  
 TRINITY CO. #**

SHOWING PROPOSED ADJUSTMENT OF BOUNDARY LINES AND IMPROVEMENTS ON THE LANDS OF VIVID GREEN, LLC, AND HUMBOLDT BAY MUNICIPAL WATER DISTRICT

UNINCORPORATED COMMUNITY OF RUTH  
 COUNTY OF TRINITY STATE OF CALIFORNIA  
**KOLSTAD LAND SURVEYORS**

PO BOX 594 VOICE (707) 822-2718  
 BAYSIDE, CA 95524 FAX (707) 822-0636

WWW.KOLSTADPLS.COM  
 APN 020-490-04; 020-100-35

DEC. 2019 JOB No. 2019-050 SHEET 1 OF 2

REV 2: ITEM 5, TR1 NOT SHOWN; 10/25/20  
 REV 1: ADD MISSING ELEMENTS; 9/3/20  
 ORIG PLOT DATE: 1/23/20

EXISTING NORTHERLY BOUNDARY OF VIVID GREEN, LLC  
 TAKEN FROM 174 OR 133; NOT SURVEYED

VG1 R = 175° D = 13°27'59" L = 41.13' (LEFT)	VG13 R = 175° D = 11°30'28" L = 35.15' (LEFT)
VG2 S 5°25'45" E 238.44'	VG14 N 32°38'44" W 42.82'
VG3 R = 100° D = 26°50'30" L = 48.85' (RIGHT)	VG15 R = 100° D = 27°38'01" L = 48.23' (LEFT)
VG4 S 21°24'45" W 68.06'	VG16 N 60°18'45" W 57.54'
VG5 R = 100° D = 25°12'00" L = 43.96' (LEFT)	VG17 R = 50° D = 79°16'00" L = 69.17' (LEFT)
VG6 S 3°17'15" E 98.11'	VG18 S 40°27'15" W 154.03'
VG7 R = 50° D = 41°51'30" L = 36.53' (RIGHT)	VG19 R = 175° D = 9°45'30" L = 29.81' (RIGHT)
VG8 S 38°04'15" W 259.23'	VG20 S 50°12'45" W 119.37'
VG9 R = 50° D = 44°48'30" L = 39.10' (RIGHT)	VG21 R = 175° D = 7°34'59" L = 23.16' (RIGHT)
VG10 S 82°52'45" W 113.13'	VG22 S 57°47'44" W 135.05'
VG11 R = 50° D = 75°58'58" L = 66.31' (RIGHT)	VG23 R = 100° D = 15°43'30" L = 27.45' (RIGHT)
VG12 N 21°08'16" W 55.52'	VG24 S 73°31'14" W 19.75' CALC. ±

(S 63°16'13" W 793.41')  
 793.37'

# Exhibit B

**RECORDING REQUESTED BY**

Anna Wodkowska

**WHEN RECORDED RETURN TO  
AND MAIL TAX STATEMENTS TO:**

Humboldt Bay Municipal Water District  
PO Box 95  
Eureka, CA 95502

SPACE ABOVE THIS LINE FOR RECORDER'S USE

## GRANT DEED

**THE UNDERSIGNED GRANTOR(S) DECLARE(S)**

County of Trinity  
Parcel No. por. 020-490-04

Documentary Transfer Tax is \$ \_\_\_\_\_

- computed on full value of interest or property conveyed, or
- full value less value of liens or encumbrances remaining at the time of sale

THERE IS NO CONSIDERATION FOR THIS CONVEYANCE,  
**Vivid Green, LLC**, a California Limited Liability Company,  
hereby GRANT(s) to  
**Humboldt Bay Municipal Water District**, a political subdivision of the State of California,

the following real property in the unincorporated area:  
County of Trinity, State of California:

As per legal description attached hereto as **Exhibit "A"**

*"The property described herein is for lot line adjustment purposes only. It shall not be sold as a separate parcel. Recordation of this Grant Deed is for the purpose of adjusting property lines and does not create additional parcels. This Property Line Adjustment is pursuant to LLA No P-\_\_\_\_\_"*

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

State of California  
County of \_\_\_\_\_

\_\_\_\_\_  
Ivan Nanev, CEO for  
Vivid Green, LLC

On \_\_\_\_\_ before me, \_\_\_\_\_  
a Notary Public, personally appeared \_\_\_\_\_

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies) and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature \_\_\_\_\_

My commission expires: \_\_\_\_\_



**Exhibit "A"**  
**Legal Description**

That real property situated in the County of Trinity, State of California, described as follows:

All that portion of the southwest quarter of the southeast quarter of Section 24, Township 2 South, Range 7 East, Humboldt Meridian, described as follows:

COMMENCING at the quarter-corner between Sections 24 and 25 of said Township, as shown by Book 7 of Maps & Surveys, Page 163, Trinity County Records (perpetuated by Book 17 of Maps & Surveys, Pages 140-146), and from which point, a 3/4" iron pipe, with plastic plug, stamped "LS 3431", being corner note 9 of said Book 7 of Maps & Surveys, Page 163, bears North 0 degrees, 07 minutes, 59 seconds West, 3976.35 feet;

Thence North 45 degrees, 44 minutes, 29 seconds East, 1335.37 feet to a 3/4" galvanized iron pipe, with plastic plug, stamped "Kolstad LS 8152", being the POINT OF BEGINNING of this description;

Thence North 12 degrees, 31 minutes, 06 seconds East, 52.43 feet to a 3/4" galvanized iron pipe, with plastic plug, stamped "Kolstad LS 8152";

Thence North 16 degrees, 39 minutes, 10 seconds West, 72.29 feet to a 3/4" galvanized iron pipe, with plastic plug, stamped "Kolstad LS 8152";

Thence North 32 degrees, 45 minutes, 02 seconds West, 139.68 feet to a 3/4" galvanized iron pipe, with plastic plug, stamped "Kolstad LS 8152";

Thence North 12 degrees, 56 minutes, 11 seconds West, 105.43 feet to a 3/4" galvanized iron pipe, with plastic plug, stamped "Kolstad LS 8152";

Thence North 1 degree, 38 minutes, 30 seconds West, 64.06 feet to a 3/4" galvanized iron pipe, with plastic plug, stamped "Kolstad LS 8152";

Thence North 12 degrees, 08 minutes, 44 seconds West, 112.22 feet to a 3/4" galvanized iron pipe, with plastic plug, stamped "Kolstad LS 8152";

Thence North 1 degree, 53 minutes, 30 seconds East, 208.20 feet to a 3/4" galvanized iron pipe, with plastic plug, stamped "Kolstad LS 8152";

Thence North 21 degrees, 31 minutes, 48 seconds West, 54.27 feet to a 3/4" galvanized iron pipe, with plastic plug, stamped "Kolstad LS 8152";

Thence North 46 degrees, 05 minutes, 50 seconds West, 74.58 feet to a 3/4" galvanized iron pipe, with plastic plug, stamped "Kolstad LS 8152";

Thence North 0 degrees, 50 minutes, 54 seconds East, 62.93 feet to the easterly boundary of the land conveyed to Vivid Green, LLC, by deed recorded as instrument number 201901712, Trinity County Records, marked by a 3/4" galvanized iron pipe, with plastic plug, stamped "Kolstad LS 8152";

Thence South 29 degrees, 03 minutes, 00 seconds East, along the easterly boundary of said Vivid Green, LLC land, 207.45 feet to an angle point therein;

Thence South 11 degrees, 23 minutes, 00 seconds East, along the easterly boundary of said Vivid Green, LLC land, 711.94 feet to a point thereon which bears North 78 degrees, 37 minutes, 00 seconds East feet from the Point of Beginning;

Thence South 78 degrees, 37 minutes, 00 seconds West, 42.27 feet to the Point of Beginning.



A handwritten signature in black ink, appearing to read "Dylan L. Kolstad", written over a horizontal line.

Dylan L. Kolstad, LS 8152  
Document prepared:  
December 12, 2019

RECORDING REQUESTED BY

Anna Wodkowska

WHEN RECORDED RETURN TO AND MAIL TAX STATEMENTS TO:

Vivid Green, LLC
1647 Willow Pass Road #182
Concord, CA 94520

SPACE ABOVE THIS LINE FOR RECORDER'S USE

GRANT DEED

THE UNDERSIGNED GRANTOR(s) DECLARE(s)

County of Trinity
Parcel No. por. 020-100-35

Documentary Transfer Tax is \$

- checkbox computed on full value of interest or property conveyed, or
checkbox full value less value of liens or encumbrances remaining at the time of sale

THERE IS NO CONSIDERATION FOR THIS CONVEYANCE,

Humboldt Bay Municipal Water District, a political subdivision of the State of California,

hereby GRANT(s) to

Vivid Green, LLC, a California Limited Liability Company,

the following real property in the unincorporated area:

County of Trinity, State of California:

As per legal description attached hereto as Exhibit "A"

"The property described herein is for lot line adjustment purposes only. It shall not be sold as a separate parcel. Recordation of this Grant Deed is for the purpose of adjusting property lines and does not create additional parcels. This Property Line Adjustment is pursuant to LLA No P-"

Dated:

State of California
County of

By: John Friedenbach, President
Humboldt Bay Municipal Water District

On before me,
a Notary Public, personally appeared

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies) and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature

My commission expires:

**Exhibit "A"**  
**Legal Description**

That real property situated in the County of Trinity, State of California, described as follows:

All that portion of the southwest quarter of the southeast quarter of Section 24, Township 2 South, Range 7 East, Humboldt Meridian, described as follows:

COMMENCING at the quarter-corner between Sections 24 and 25 of said Township, as shown by Book 7 of Maps & Surveys, Page 163, Trinity County Records (perpetuated by Book 17 of Maps & Surveys, Pages 140-146), and from which point, a 3/4" iron pipe, with plastic plug, stamped "LS 3431", being corner note 9 of said Book 7 of Maps & Surveys, Page 163, bears North 0 degrees, 07 minutes, 59 seconds West, 3976.35 feet;

Thence North 66 degrees, 32 minutes, 54 seconds East, 1237.13 feet to a 3/4" galvanized iron pipe, with plastic plug, stamped "Kolstad LS 8152", being the POINT OF BEGINNING of this description;

Thence South 27 degrees, 30 minutes, 01 seconds East, 388.99 feet to a 3/4" galvanized iron pipe, with plastic plug, stamped "Kolstad LS 8152";

Thence South 54 degrees, 49 minutes, 40 seconds West, 226.61 feet to the southeast corner of the land conveyed to Vivid Green, LLC, by deed recorded as instrument number 201901712, Trinity County Records, marked by a 3/4" galvanized iron pipe, with plastic plug, stamped "Kolstad LS 8152";

Thence North 31 degrees, 07 minutes, 00 seconds East, along the easterly boundary of said Vivid Green, LLC land, 79.00 feet to an angle point therein;

Thence North 11 degrees, 23 minutes, 00 seconds West, along the easterly boundary of said Vivid Green, LLC land, 434.10 feet to a point thereon which bears North 70 degrees, 45 minutes, 14 seconds West from the Point of Beginning of this description;

Thence leaving said easterly boundary, South 70 degrees, 45 minutes, 14 seconds East, 53.46 feet to the Point of beginning.



A handwritten signature in black ink, appearing to read "Dylan L. Kolstad", written over a horizontal line.

Dylan L. Kolstad, LS 8152  
Document prepared:  
December 12, 2019

**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: John Friedenbach  
Date: April 1, 2021

Re: Ruth Lake CSD Policy Handbook

**Discussion**

Prior to the 1990's there was a lack of consistency in applying rules and regulations to the Lease Lot improvements around Ruth Lake. To address this issue, HBMWD and RLCSD worked collaboratively to create the Ruth Lake Community Services District Policy Handbook (Handbook). The Handbook contains, among other topics, a series of policies governing Lease Lot improvements. See Handbook index attached.

As a consequence of the August Complex fire's devastation to Lease Lot structures, Lease Lot Holders have begun submitting applications to construct new lease lot improvements. During HBMWD's approval review process, staff has noted several topics in the policies that could be updated. Although these are RLCSD's policies, since HBMWD reserves ultimate approval authority regarding improvements under the terms of the Master Lease with Trinity County, it is appropriate for HBMWD to recommend improvements to the contents of the RLCSD Policies.

Policy 6300 – Easement and Utility Installation (see copy attached) does not include a requirement that above ground utilities use dedicated utility poles. Prior to the fire, many of these lines were attached to trees. Attaching utility lines to trees creates a potential fire hazard. PG&E's current practice is to prohibit this practice. The proposed policy edit would require dedicated utility poles and prohibit attachment to trees. Note that the existing policy recommends underground utilities.

Policy 8100 – Recreational Sub-Lease Holder Lake Water Systems (see copy attached) does not contain provisions consistent with current CalFire rural fire suppression requirements for building improvements. CalFire requires a 2,500-gallon fire suppression tank for new construction. The proposed policy edit includes references to CalFire's requirement. A new policy regarding the CalFire fire suppression storage tanks should be developed and implemented in consultation with CalFire and the Trinity County Building Department. Attachment C to the permit application also contains two minor edits. (see copy attached)

**Recommendation**

Staff recommends that the Board consider the proposed amendments to the RLCSD policies 6300 – Easement and Utility Installation and 8100 Recreational Sub-Lease Holder Lake Water Systems and if concurring, recommend that RLCSD consider making the proposed amendments to bring the policies current.

Section 9.2 Page 104

**RUTH LAKE COMMUNITY SERVICES DISTRICT**  
**Policies, Procedures and Ordinances**

**TABLE OF CONTENTS**

**Policies and procedures**

<b>Number</b>	<b>Title</b>	<b>Date Approved</b>
<b>6000 Series</b>	<b>Ruth Lake Recreational Sublease Management</b>	
6000	Recreational Lease Site Standards	8/10/06
6010	Non-Recreational Use of Individual Sub-Lease Sites	8/12/99
6040	Insurance Requirements for Recreational Sub-Lease Holders	7/8/04
6050	Assignment/Transfer of Recreational Subleases	9/9/11
6100	Guidelines for the Construction of Recreational Dock and Mooring Facilities	11/8/11
6110	Boat and Swimming Docks for Recreational Sublease Holders	10/8/09
6120	Boat Dock Sites for Businesses Local to the Ruth Lake Area	3/8/96
6220	Individual Wastewater Treatment Systems on Recreational Sub-Lease Sites	5/10/07
6225	Construction and Maintenance of Pit Privies	5/10/07
6300	Easement and Utility Installation	10/11/96
6350	Tree and Brush Cutting Policy, Ruth Lake Buffer Strip Area	12/13/01
6360	Use of Fire on the Buffer Strip	4/12/07
6400	Boat Access Lease Site Improvements	5/10/07
6410	Septic Systems on Boat Access Leases	7/24/03
6800	Lease Fees and Payment	11/8/11
<b>7000 Series</b>	<b>Recreational Facilities Operation and Management</b>	

7200                      Campground Rules                      11/8/11

**8000 Series                      Water Systems Operation and Maintenance**

8100                      Recreational Sub-Lease Holder Lake Water  
Systems                      4/12/01

8110                      Monitoring of Recreational Sub-Lease Holder  
Lake Water Systems                      2/12/98

**Standards**

Ruth Lake Buffer Strip Road and Lease Site Standards                      4/19/94  
(HBMWD & RLCSD)



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

**POLICY TITLE:** EASEMENT AND UTILITY INSTALLATION

**POLICY NUMBER;** 6300

DRAFT

6300 It is the joint intent and desire of the Humboldt Bay Municipal Water District (HBMWD) and the Ruth Lake Community Services District (RLCSD) to implement the following policy.

6300.10 Require the use of already established easements or licenses for the installation of new utilities to either buffer strip leases or private property adjacent to the buffer strip.

6300.20 Require the undergrounding of new utility installations whenever feasible. It will be the responsibility of the lessee, utility, or private property owner to show good cause as to why utility installations cannot be placed underground. All above ground utilities must have dedicated power utility poles. Utilities must not be attached to trees.

6300.30 Current installations will be relocated to common easements, or placed Underground, where feasible and as circumstances arise which make it practicable to do so.

6300.40 RLCSD will have initial authority to make decisions on disputes of specific implementation of this policy; but, HBMWD retains its rights of final approval of all construction within the buffer strip, as provided in the master lease.

6300.50 **FEES:** The following fees shall be submitted to the RLCSD with the initial utility easement request.

6300.501 RLCSD shall collect and forward a \$100 fee for Humboldt Bay MWD to partially offset the costs of recording or modifying a utility easement.

6300.502 RLCSD shall collect an additional \$100 fee to offset its costs associated with a utility easement.

6300.60 **APPLICATION** for utility easement and installation shall include

6300.601 Site map accurately showing the proposed path of the utility and associated supports, other existing utilities, and existing or proposed structure and roads.

6300.602 Location and description of any trees or other significant vegetation that will have to be removed or trimmed.

6300.603 Location and details of any modifications to the terrain required (including temporary access roads or paths) necessary to install utility.

6300.604 Company name of utility installing the utility, and name and telephone number of point of contact within the company.

6300.70 This policy shall apply to all recreational sublease holders and adjacent property owners desiring to cross any portion of the Buffer Strip with any utility.

6300.80 This policy shall not apply to right of way licenses for roads which are covered under HBMWD resolution No. 285 and the Ruth Lake Buffer Strip and Lease site standards.

DRAFT

Approved by the RLCSD Board of Directors: October 11, 1996

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

**POLICY TITLE: RECREATIONAL SUB-LEASE HOLDER LAKE WATER SYSTEMS**

DRAFT

**POLICY NUMBER: 8100**

**8100.00** The purpose of this policy is to define the conditions of recreational sublease holder lake water system application, construction, use, and monitoring.

**8100.01** In 1984, the Ruth Lake CSD and Humboldt Bay MWD amended the original lease of 1964 between the HBMWD and Trinity County (the “master lease”, subsequently assigned to RLCSD in 1966), to enable RLCSD to allow the withdrawal of surplus untreated water from Ruth Lake Reservoir under certain conditions (Amendment to lease re: use of surplus water, Nov. 8, 1984).

**8100.02** If any condition in this policy, or any other policy concerning recreational sub-lease holder water systems, conflicts with the master lease or the amendment re: use of surplus water, the conditions and intent of the master lease and amendment shall prevail.

**8100.03** For the purposes of this policy, lake water is defined as any surface water gathered within the flood level of Ruth Lake, determined to be below elevation 2674, 20 feet above the current spillway elevation, and between the Matthews Dam and the Ruth Zenia Bridge.

**8100.031** Surface waters taken from rivers, creeks, or springs located above the flood level within the buffer strip are not subject to the requirements of this policy, however, both the Humboldt Bay MWD and the Ruth Lake CSD strongly recommend that the filtration and disinfection requirements of the lake water system be followed. This water is untreated and may contain contaminants which are harmful to humans.

**8100.032** A well shall be exempt from this policy if it has a permit from Trinity County or the State of California, and is considered to be free from the influence of surface water under the terms of that permit.

**8100.04** The authority to withdraw water from the lake granted to RLCSD by the HBMWD may be terminated with 10 days notice for any reason.

**8100.041** Therefore, RLCSD may terminate any and every sublease holders authorization to withdraw water without advance notice.

**8100.042** Each leaseholder notified that removal of the water system is necessary for any reason must physically remove the system to RLCSD’s and HBMWD’s satisfaction within 9 days of notification.

**8100.043** Any cost to RLCSD or HBMWD related to the physical disconnection or removal of a lake water system shall be borne completely by the individual system’s owner or operator, and shall be due and payable to RLCSD or HBMWD upon presentation of a bill.



**8100.05** If authorization for the water system is withdrawn due to the sublease holders unwillingness to comply with the conditions of the permit, or other conditions imposed by responsible governmental authority, the recreational sublease may be canceled at the sole option of the RLCSD Board of Directors.

**8100.10** Conditions of the lake water permit:

**8100.11** The maximum amount of water which may be withdrawn under the terms of the lease amendment from Ruth Lake by RLCSD and its sublease holders is 50,000 gallons per day.

**8100.12** The maximum amount of water which may be withdrawn by any individual sublease under the terms of the lease amendment is 240 gallons per day.

**8100.13** A lake water use permit may only be approved if:

**8100.131** An approved septic system exists on the site, or;

**8100.132** An approved septic system is to be installed at the same time.

**8100.14** Lake water shall only be used for the following non-commercial purposes:

**8100.141** Toilet flushing;

**8100.142** Residential fire suppression;

**8100.143** Human consumption, if approved.

A. Human consumption shall be deemed to exist if water is plumbed, or is capable of being plumbed, to any dwelling or structure capable of being used as a dwelling.

B. This determination shall be made by RLCSD, HBMWD, or Trinity County Health or Building officials.

**8100.144** [Residential Fire Suppression Storage Tank, not to exceed 2,500 gallons.](#)

**8100.15** Water obtained under this policy may only be used within the boundaries of the individual recreational sublease.

**8100.16** Use of water obtained under this policy for any other purpose, including, but not limited to garden or lawn watering, or any commercial use whatsoever, is strictly prohibited and will result in the immediate revocation of the individual permit and the complete removal of the system. Since the use of any water for any prohibited use jeopardizes the continued use of lake water by all other users, such a violation shall also be sufficient cause for the termination of the recreational sublease at the sole option of the RLCSD Board of Directors.

**DRAFT**

**8100.20** Application Contents:

**8100.21** Application for lake water use permit (form provided by RLCSD).

**8100.22** Exhibit A: Proposed delivery and storage (diagram provided by applicant).

**8100.23** Exhibit B: Terms and conditions of permit (RLCSD).

**8100.24** Exhibit C: Technical Specifications (applicant).

**8100.25** Exhibit D: Proposed filtration and disinfection system description (applicant).

**8100.26** Exhibit E: Application for approval of water system from Trinity County (TCHDmm6-85) (RLCSD).

**8100.30** Application process:

**8100.31** The initial application shall be made to RLCSD.

**8100.33** After review and acceptance of the application by RLCSD, RLCSD shall forward the application to HBMWD for review and acceptance, accompanied by any fee required by HBMWD.

**8100.34** After review and acceptance of the application by HBMWD, the application shall be forwarded to the Trinity County Health Department & [Trinity County Building Department](#) for review and acceptance, accompanied by any fee required by them. [Acceptance by CalFire for any fire suppression storage tank is required as a condition of installation.](#)

**8100.35** After acceptance by RLCSD, HBMWD and Trinity County Health & Building Departments, the applicant may begin construction of the system.

**8100.36** If the approved plan calls for the construction of a pump house structure or a separate structure for toilet facilities, the applicant is required to obtain the separate approval of RLCSD, HBMWD, and proper permits from the Trinity County Building Department prior to construction.

**8100.40** Final Approval of the system

**8100.41** When system is complete and in working condition, the applicant shall contact RLCSD and arrange for a final inspection of the system.

**8100.42** The Trinity County Health Department or its authorized representative shall review the system to ensure it is installed as per the application.

**8100.43** The following tests shall be made

**8100.431** If a chlorination treatment system, a chlorine residual shall be determined. Residuals shall be maintained within the range specified by the appropriate health authority (0.2mg/1min. to 4mg/1 max.).

**8100.432** If another type of treatment system, tests shall be made according to the manufacturers instructions.

**8100.433** A bacteriological sample shall be taken by the authorized inspector and analyzed by a state licensed laboratory.

**8100.44** When all tests have been satisfactorily reviewed by the Trinity County Health Department, RLCSD shall forward the completed application to the HBMWD for final approval.

**8100.50** The initial application fee shall accompany the initial application and shall be determined as follows:

<b>8100.501</b>	RLCSD Fee:	\$30
<b>8100.502</b>	HBMWD Fee:	\$50
<b>8100.503</b>	Trinity County Health Fee:	\$0
<b>8100.504</b>	Laboratory analysis Fee:	\$25 (for each sample required)

DRAFT

**8100.51** The application fee includes the water use fee for the lease year during which the application fee is made, regardless if water is used in the period or not. There shall be no proration of the fee if application is made in mid year.

**8100.52** Annual fee is \$65 per lease year (May 1-April 30), and shall be billed with the lease payment, regardless if water is used, or if the application has been completed.

**8100.53** Annual fee shall cease to be charged only upon written request of the leaseholder, and upon determination by RLCSD or HBMWD that the system has been dismantled and removed from the site, and that an acceptable source of water has been developed to replace it.

**8100.60** Multiple systems:

**8100.61** Recreational sub-lease holders may maintain a joint or shared system.

**8100.62** No more than 4 lease sites shall share a joint system.

**8100.63** A joint application may be submitted, however, each individual leaseholder shall be required to submit a separate and complete application fee since each site must be inspected and tested individually.

**8100.70** The Ruth Lake CSD must establish and enforce a monitoring program satisfactory to HBMWD and the Building and Health Departments of Trinity County in accordance with the lease surplus water amendment. This policy shall be approved and promulgated as RLCSD policy #8110. Monitoring of Individual lake water systems.

**8100.80** Use of alternate treatment systems. Where standard treatment systems are not feasible, for example, where electrical power is not available, optional systems will be considered.

Approved by the RLCSD Board of Directors: March 123, 1998  
Revised April 12, 2001

DRAFT



**LEASE LOT DRINKING WATER SYSTEMS - RUTH LAKE****GENERAL**

The water system shall consist of the following:

1. Intake System
2. Pump System
3. Distribution system
4. Disinfection and Filtration

**DRAFT**

Prior to the installation of the water system, a complete system drawing shall be submitted to the Humboldt Bay Municipal Water District for approval. The drawing shall show system location, pipe sizes, materials and a plan of the inlet structure.

All work and materials shall meet State, County and District codes. Fire Suppression systems are separate units with separate requirements.

**INTAKE SYSTEM**

The intake structure shall be constructed to prevent the entrance of foreign materials into the pump system and shall be easily accessible to perform required maintenance. A float or buoy type marker shall be attached to show its location. Additional buoy markers shall be placed at 20-foot intervals on pump suction or discharge lines, where submersed.

**PUMP SYSTEM**

There are a wide variety of pumps and appurtenances that will meet the design criteria. The three types of pumps most commonly used are Positive Displacement, Centrifugal, and Jet - the Submersible or Turbine being a variation of the three.

The system may be either Hydro pneumatic (pressure tank) or Gravity Storage. The pump will be controlled by pressure switch or float control to prevent tank overflow. Storage tanks may not exceed 1,000 Gal. Where the pump is not a submersible type, a pump house shall be constructed.

**DISTRIBUTION SYSTEM**

The distribution system includes all pipes, valves and hydrants from the pump system to the point of use and shall be designed to meet special conditions of each lot. The system shall be sized to furnish a minimum of 20 PSI at the point of use. There are a wide variety of piping materials available that will meet the design criteria. It is recommended that plastic pipe be used whenever possible. All pipes and fittings shall have a minimum working pressure of 150 PSI. A greater working pressure may be desired, depending on the individual lot conditions. All distribution lines shall be buried a minimum of 18 inches and marked above ground at 50-foot intervals. Method of marking shall be determined in the field during inspection.



**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: John Friedenbach  
Date: March 29, 2021  
Subject: Cal-Card Credit Cards for Ruth Hydro Operator / Area Representative

\*\*\*\*\*

**BACKGROUND**

As you may recall, in September 2015 the Board authorized switching the District credit cards to the Cal-Card system administered by US Bank. Currently, the General Manager, Superintendent, Business Manager, Operations Supervisor and Maintenance Supervisor have District credit cards.

Purchases made using the Cal-Card are governed by the District’s internal accounting controls as delineated in the Procedures for Requisitions, Purchase Orders, and Short-Form Contracts. Typical purchases are currently made for: computer software, training, conferences, securing lodging and airfare for ACWA, CSDA, AWWA and other training events, materials, supplies and small tools.

Attached for your reference is a copy of the employee agreement signed in advance of issuing a District credit card to an employee.

**CREDIT CARDS FOR MAINTENANCE AND OPERATIONS SUPERVISORS**

Similar to the Maintenance and Operations Supervisors, the Ruth Hydro Operator / Area Representative routinely secures goods and services for the daily operations of the District at the Gosselin Hydro Plant or Ruth Headquarters. There have been challenges in obtaining materials and supplies due to the remote nature of our Ruth area operations. Additionally, under the current process, the Hydro Operator may expend personal funds for items and then submits those for reimbursement. This creates an undue financial burden on this employee. The addition of individual credit card assigned to the Ruth Hydro Operator / Area Representative will eliminate material acquisition delays, financial burden on the employee, and improve operational efficiency.

**RECOMMENDATION**

Authorize the addition of one District credit card to the Cal-Card system to be assigned to the Ruth Hydro Operator / Area Representative. The credit limit will be \$2,500 for the card, similar to the existing limit on the cards assigned to the Operations and Maintenance Supervisors.

**AGREEMENT FOR USE OF DISTRICT CREDIT CARD** Section 9.3 Page 114

The U.S. Bank Corporate Card represents our District's trust in you. You are empowered as a responsible agent to safeguard District assets. Your signature below is verification that you have read the employee handbook and agree to comply with it as well as the following responsibilities. It also acknowledges that you have received the one card #XXXX-XXXX-XXXX-XXXX.

1. I understand the card is for District-approved purchases only and I agree not to charge personal purchases.
2. Improper use of this card can be considered misappropriation of District funds. This may result in disciplinary action up to and including termination of employment.
3. If the card is lost or stolen, I will immediately notify U.S. Bank by telephone. I will confirm the telephone call by mail or facsimile with a copy of the notification to the District's program administrator.
4. I agree to surrender the card immediately upon termination of employment, whether for retirement, voluntary or involuntary reasons.
5. The card is issued in my name. I will not allow any other person to use the card. I am considered responsible for any and all charges against the card.
6. All charges will be billed directly to and paid directly by the cardholder/District.
7. As the card is District property, I understand that I may be periodically required to comply with internal control procedures designed to protect District assets. This may include being asked to produce the card to validate its existence and account number. I may also be asked to produce receipts and statements to audit its use.
8. I will receive a Monthly Reconciliation Statement (MRS), which will report all activity during the statement period. Since I am responsible for all charges (but not for payment) on the card, I will resolve any discrepancies by either contacting the supplier or the bank.
9. I understand the corporate card is not necessarily provided to all employees. Assignment is based on my need to purchase materials for the District and/or to provide for District travel. My card may be revoked based on change of assignment or location. I understand that the card is not an entitlement nor reflective of title or position.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Approving Manager Signature

\_\_\_\_\_  
Employee Printed Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Approving Manager Printed Name

\_\_\_\_\_  
Date



March 12, 2021

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

SUBJECT: **NOTIFICATION OF SUBRECIPIENT ALLOCATION**  
Fiscal Year (FY) 2020 Community Power Resiliency Allocation to  
Special Districts Program  
Period of Performance: July 1, 2020, to October 31, 2021

Dear Mr. Friedenbach:

The California Governor's Office of Emergency Services (Cal OES) approved your FY 2020-21 Community Power Resiliency allocation in the amount of \$215,000. Eligible activities under this allocation are limited to:

- Equipment-  
Funds may be used for the procurement of:
  - Generators and generator connections for essential facilities, with an emphasis on clean energy and green solutions where possible or other alternative backup power sources;
  - Generator fuel and fuel storage;
  - Redundant emergency communications (e.g., battery-powered radios);
  - Portable vehicle-mounted charging stations;
  - Portable battery-powered and rechargeable radio repeater and transmission equipment.



3650 SCHRIEVER AVENUE, MATHER, CA 95655  
(916) 845-8859 TELEPHONE (916) 845-8511 FAX  
[www.CalOES.ca.gov](http://www.CalOES.ca.gov)

Humboldt Bay Municipal Water District  
 March 12, 2021  
 Page 2 of 3

- Plans-  
 Funds may be used for the development/update of:
  - Continuity plans;
  - Contingency plans for electrical disruptions that include considerations such as protecting individuals with access and functional needs, medical baseline and socially vulnerable populations, transportation, emergency public information, and preservation of essential functions;
  - Risk assessments for critical infrastructure and lifelines;
  - Post-event reports that identify lessons learned and corrective actions.
- Public education materials or supplies focused on individual family preparedness for electric disruptions.
- One-time costs associated with identifying and equipping resource centers for the public to access during electrical disruptions.

The following activities are **not allowed**:

- These funds shall not be used to secure, compensate, or backfill professional services contracts.
- Response costs associated with electric disruption events including any staffing or new positions, Emergency Operations Center staffing, security, law or fire response, or other overtime charges.

All activities funded with this allocation must be completed within the Grant Subaward period of performance. Additionally, the Subrecipient is subject to the following requirements:

- As a condition of receiving funding, special districts are encouraged to collaborate with their county to support critical infrastructure and resiliency with a particular focus on public safety, vulnerable communities, and individuals with access and functional needs.
- Must ensure they and their principals are not presently debarred, suspended, proposed for debarment, or declared ineligible.
- Must provide a Progress Report on the expenditures of the funds. The Progress Report is due no later than **November 30, 2021**. This Progress Report shall identify how the funds have been used, including identifying each project or activity undertaken, local entity that undertook the project or activity, the amount of funding provided to the project or activity, and a description of each project or activity. The report shall also identify the specific outcomes achieved by each project or activity,

Humboldt Bay Municipal Water District  
 March 12, 2021  
 Page 3 of 3

including whether the project or activity was completed and whether it was used during power outages.

- Must coordinate with their city or county planning agency to ensure that the project is in compliance with the California Environmental Quality Act (CEQA) Public Resource Code, Section 21000 et seq.
- Comply with the California Public Records Act, Government Code Section 6250 et seq.
- Must procure goods and services in compliance with applicable state and local laws, ordinances, rules, regulations, and policies.

**The undersigned represents that he/she is authorized to enter into this agreement for and on behalf of the Applicant.**

Subrecipient: Humboldt Bay Municipal Water District  
 Signature of Authorized Agent: John Friedenbach, General Manager  
 Printed Name of Authorized Agent: John Friedenbach  
 Title: General Manager Date: 3/19/21

Your dated signature and above fillable information is required on this Notification of Subrecipient Allocation. Please sign and return requested information to [PSPS@CalOES.ca.gov](mailto:PSPS@CalOES.ca.gov) within 20 calendar days upon receipt and keep a copy for your records. For further assistance, please email Cindy Logan at [PSPS@CalOES.ca.gov](mailto:PSPS@CalOES.ca.gov).

Sincerely,



MARK S. GHILARDUCCI  
 Director



## 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](mailto:OFFICE@HBMWD.COM)

Website: [www.hbmwd.com](http://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

### LOCAL MATCH FUND COMMITMENT LETTER

April 8, 2021

California Governor's Office of Emergency Services  
Hazard Mitigation Grants Program Unit  
3650 Schriever Avenue  
Mather, CA 95655

**Re: DR 4569, Control # 0538 – Humboldt Bay Municipal Water District Advance Assistance Matthews Dam and Spillway Seismic Stability Analysis and Design**

**Sub application Funding Match Commitment Letter**

Dear State Hazard Mitigation Officer:

As part of the Hazard Mitigation Grant Program process, a local funding match of at least 25% is required. This letter serves as Humboldt Bay Municipal Water District's (HBMWD) commitment to meet the local match fund requirements for the Hazard Mitigation Grant Program.

**SOURCE OF NON-FEDERAL FUNDS:** Local Agency Funding

**NAME OF FUNDING SOURCE:** HBMWD Water Rates

**FUNDS AVAILABILITY DATE:** April 8, 2021

**FEDERAL SHARE AMOUNT REQUESTED:** \$1,056,375

**LOCAL SHARE AMOUNT MATCH:** \$352,125

**FUNDING TYPE:** Cash from municipal customer water rates

If additional federal funds are requested, an additional local match fund commitment letter will be required. Kindly contact Chris Harris, Business Manager, at 707-443-5018 or [harris@hbmwd.com](mailto:harris@hbmwd.com) if you have any questions.

Respectfully,

John Friedenbach  
General Manager

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



<u><b>BANK ACCOUNT BALANCES AT MONTH-END</b></u>	March 31, 2021	March 31, 2020
<b>GENERAL ACCOUNTS</b>		
1. US Bank - General Account	2,412,728.46	1,679,931.12
2. US Bank - Xpress BillPay/Electronic Payments Account	11,432.06	1,674.27
<i>Subtotal</i>	2,424,160.52	1,681,605.39
<b>INVESTMENT &amp; INTEREST BEARING ACCOUNTS</b>		
3. US Bank - DWR/SRF Money Markey Acctn	166,517.67	303,331.33
4. US Bank - DWR/SRF Reserve CD Account	547,336.94	547,336.94
5. US Bank - PARS Investment Account	945,314.54	761,745.87
6. L. A. I. F Account - General Account	1,687.78	1,687.78
7. L. A. I. F Account - MSRA Reserve Account	441,335.20	436,009.70
8. CalTRUST - Restricted Inv. Account (Medium Term)	1,320,606.21	1,353,429.33
9. CalTRUST - Unrestricted Inv. Account (Medium Term)	428,493.17	358,905.56
10. CalTRUST - DWFP Reserve Account (FedFund)	240,671.25	239,466.91
11. CalTRUST - ReMat Account (LEAF Fund)	653,843.32	553,190.78
12. CalTRUST - General Reserve Account (Short-Term)	2,381,615.81	1,219,889.70
13. Humboldt County - SRF Loan Payment Account	188,307.48	50,441.36
14. Humboldt County - 1% Tax Account	1,166.69	-
15. Principle Investment Account	32,018.64	16,735.56
<i>Subtotal</i>	7,348,914.70	5,842,170.82
<b>OTHER ACCOUNTS</b>		
16. ReMat Deposit - Mellon Bank	27,000.00	27,000.00
17. Cash on Hand	650.00	650.00
18. Humboldt County - Investment Account (clsd)	-	-
19. Humboldt County - DWFP Reserve Account (clsd)	-	-
20. Humboldt County - MSRA Reserve Account (clsd)	-	-
21. Humboldt County - ReMat Account (clsd)	-	-
<i>Subtotal</i>	27,650.00	27,650.00
<b>TOTAL CASH</b>	<b>9,800,725.22</b>	<b>7,551,426.21</b>



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



**FUND BALANCES AT MONTH-END**

March 31, 2021

March 31, 2020

**RESTRICTED FUNDS - ENCUMBERED**

1. Prior-Year Price Factor 2 Rebate	(6,557.81)	(16,305.33)
2. Prior-Year Restricted AP Encumbrances	(134,742.00)	(50,604.00)
3. Advanced Charges - 12Kv Relocation	-	(242,177.00)
4. Advanced Charges - 18,000lb Excavator	(125,459.00)	(54,343.00)
5. Advanced Charges - 3x Tank Seismic Retrofit	(154,787.26)	(30,000.00)
6. Advanced Charges - Cathodic Protection Project	(74,997.00)	-
7. Advanced Charges - Collector 2 Rehabilitation	(694,538.49)	(385,000.00)
8. Advanced Charges - On-Site Generation of Chlorine	(476,196.00)	-
9. Advanced Charges - Redundant Pipeline	(136,728.00)	-
10. Advanced Charges - TRF Emergency Generator	(293,747.00)	(225,000.00)
11. Advanced Charges - Chlorine Scrubber	-	(350,000.00)
<i>Subtotal</i>	(2,097,752.56)	(1,353,429.33)

**RESTRICTED FUNDS - OTHER**

12. 1% Tax Credit to Muni's	(1,166.69)	-
13. DWR Reserve for SRF Payment	(166,517.67)	(303,331.33)
14. DWR Reserve for SRF Loan	(547,336.94)	(547,336.94)
15. Pension Trust Reserves	(945,314.54)	(761,745.87)
16. ReMat Deposit	(27,000.00)	(27,000.00)
17. HB Retail Capital Replacement Reserves	(85,030.62)	-
<i>Subtotal</i>	(1,772,366.46)	(1,639,414.14)

**UNRESTRICTED FUNDS**

**BOARD RESTRICTED**

18. MSRA Reserves	(443,022.98)	(437,697.48)
19. DWFP Reserves	(240,671.25)	(239,466.91)
20. ReMat Reserves	(653,843.32)	(553,190.78)
21. Paik-Nicely Development	(4,158.00)	(4,158.00)
22. Principle Investment Reserves	(32,018.64)	(16,735.56)
22a. Northern Mainline Extension Study Prepayment	(10,000.00)	-
<i>Subtotal</i>	(1,383,714.19)	(1,251,248.73)

**UNRESTRICTED RESERVES**

23. Accumulation for SRF Payment	(188,307.48)	(187,275.65)
24. Accumulation for Ranney/Techite Payment	44,289.31	41,234.14
25. General Fund Reserves	(4,402,873.84)	(3,166,924.94)
<i>Subtotal</i>	(4,546,892.01)	(3,307,334.01)
<b>TOTAL NET POSITION</b>	<b>(9,800,725.22)</b>	<b>(7,551,426.21)</b>

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

REVENUE REPORT

March 31, 2021

Of Budget Year

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

	MTD RECEIPTS	YTD RECEIPTS	PRIOR YEAR	BUDGET	% OF BUDGET
<b>1. Humboldt Bay Retail Water Revenue</b>	22,929	227,226	328,537	318,394	71%
<b>General Revenue</b>					
Interest	0	0	570	30,000	0%
FCSO Contract (Maint. & Operations)	15,741	169,508	151,760	225,000	75%
Power Sales (Net ReMat)	26,522	94,250	61,259	220,000	43%
Tax Receipts (1% Taxes)	0	198,457	531,564	825,000	24%
<b>2. Miscellaneous Revenue*</b>	10,740	74,608	39,556	50,000	149%
<i>*Detail on following page</i>					
<b>TOTAL PF2 REVENUE CREDITS</b>	<b>75,932</b>	<b>764,049</b>	<b>1,113,246</b>	<b>1,668,394</b>	<b>46%</b>

**B. DISTRICT REVENUE**

	MTD RECEIPTS	YTD RECEIPTS	PRIOR YEAR	BUDGET	% OF BUDGET
<b>3. Industrial Water Revenue</b>					
Harbor District	0	293	433	0	0
<i>Subtotal Industrial Water Revenue</i>	<i>0</i>	<i>293</i>	<i>433</i>	<i>0</i>	<i>0</i>
<b>4. Municipal Water Revenue</b>					
City of Arcata	104,556	948,115	1,031,926	1,147,108	83%
City of Blue Lake	14,307	131,869	144,052	161,539	82%
City of Eureka	247,010	2,239,112	2,435,269	2,753,934	81%
Fieldbrook CSD	13,803	125,688	130,245	149,132	84%
Humboldt CSD	81,783	734,569	783,161	886,893	83%
Manila CSD	5,598	52,575	56,657	62,563	84%
McKinleyville CSD	84,405	772,445	820,419	916,164	84%
<i>Subtotal Municipal Water Revenue</i>	<i>551,461</i>	<i>5,004,372</i>	<i>5,401,730</i>	<i>6,077,332</i>	<i>82%</i>
<b>TOTAL INDUSTRIAL &amp; WHOLESALE REVENUE</b>	<b>551,461</b>	<b>5,004,665</b>	<b>5,402,162</b>	<b>6,077,332</b>	<b>82%</b>
<b>5. Power Sales</b>					
Power Sales (ReMat Revenue)	59,845	205,535	129,972	300,000	69%
Interest (ReMat Revenue)	0	5,620	1,930	0	
<b>TOTAL REMAT REVENUE</b>	<b>59,845</b>	<b>211,155</b>	<b>131,902</b>	<b>300,000</b>	<b>70%</b>
<b>6. Other Revenue and Grant Reimbursement</b>					
HB Retail Capital Replacement Rev.	3,901	32,168	32,034		
FCSO Contract (Admin & Overhead)	7,668	68,742	46,573		
FEMA/CalOES Grant Revenue	0	401,234	219,229		
SWRCB In-Stream Flow Grant Revenue	0	44,742	172,457		
Quagga Grant (Pass-Through)	0	0	0		
August Complex Fire Recovery	8,962	13,318	0		
Interest - Muni PF2 Retained	(4)	24,936	8,167		
Net Increase/(Decrease) Investment Accounts	15,695	142,127	(795)		
<b>TOTAL OTHER/GRANT REVENUE</b>	<b>36,222</b>	<b>727,267</b>	<b>477,666</b>		
<b>GRAND TOTAL ALL REVENUE</b>	<b>723,460</b>	<b>6,707,136</b>	<b>7,124,976</b>	<b>8,045,726</b>	<b>83%</b>

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 MISCELANEOUS REVENUE - DETAIL REPORT  
 March 31, 2021

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

	MTD RECEIPTS	YTD RECEIPTS
<b><u>Miscellaneous Revenue</u></b>		
ACWA/JPIA HR LaBounty Safety Award	-	350
ACWA/JPIA Wellness Grant	-	952
Dividend - Principal Life	299	1,196
Fees - Park Use	-	400
Rebate - CALCard	575	962
Rebate - WISE Incentive	-	12,809
Refund - Diesel Fuel Tax	25	136
Refunds - Miscellaneous	-	231
Reimb - Attorney Fees-Kirkpatrick	-	775
Reimb - Attorney Fees-Vivid Green	-	2,161
Reimb - Blue Lake SCADA	47	47
Reimb. - Copies & Postage	2	69
Reimb. - Gas	-	-
Reimb. - Telephone	-	-
Reimb. - Emp. Vol. Life & AD&D	-	118
Rent - Parking Lot	-	-
Rent & Deposit - Vivid Green	1,000	4,600
Retirees' Health Ins./COBRA Reimb.	8,576	43,085
Sale - Surplus Equipment	-	4,708
UB - Bad Debt Recovery	-	161.4
UB - Water Processing Fees	120	420
UB - Hydrant Rental Deposit/Use	96	826
<b><u>Ruth Area</u></b>		
Lease - Don Bridge	-	-
Rent - Ruth Cabin	-	600
<hr/>		
<b>TOTAL MISCELANEOUS REVENUE</b>	<b>10,740</b>	<b>74,608</b>
<hr/>		

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 ALL - MONTHLY EXPENDITURE REPORT - PAGE 1 OF 3  
 March 31, 2021

75% Of Budget Year

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

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
<i>Compensation</i>					
1. Wages - Regular	187,990.35	1,534,173.84	1,397,243.59	2,241,878	75%
1a. COVID Essential Service Pay*	(9,424.65)	(9,424.65)	-	121,500	8%
2. Wages - Sick	4,491.33	35,376.12	42,030.03		
3. Wages - Vacation	4,008.72	116,926.06	86,259.26		
<i>Subtotal</i>	187,065.75	1,677,051.37	1,525,532.88	2,363,378	71%
4. Wages - Overtime	563.87	19,366.23	14,788.45	15,000	
5. Wages - Holiday (Worked)	-	11,048.84	9,378.16	15,000	
<i>Subtotal</i>	563.87	30,415.07	24,166.61	30,000	101%
6. Wages - Part-Time	980.66	22,046.24	23,025.61	78,551	28%
7. Wages - Shift Differential	754.88	8,079.60	7,078.11	11,000	73%
8. Wages - Standby	6,673.08	61,400.18	68,357.74	81,000	76%
9. Director Compensation	1,520.00	16,480.00	16,320.00	26,000	63%
10. Secretarial Fees	262.50	2,362.50	2,362.50	3,200	74%
11. Payroll Tax Expenses	15,799.03	142,292.06	132,271.35	192,173	74%
11a. COVID Ess. P/R Tax*	(720.99)	(720.99)	-	10,000	7%
<i>Subtotal</i>	25,269.16	251,939.59	249,415.31	401,924	63%
<i>Employee Benefits</i>					
12. Health, Life, & LTD Ins.	67,149.75	533,304.38	486,623.05	704,507	76%
13. Air Medical Insurance	195.00	2,080.00	2,015.00	2,145	97%
14. Retiree Medical Insurance	12,185.29	110,463.04	110,293.57	103,530	107%
15. Employee Dental Insurance	2,844.08	24,594.52	22,103.32	39,399	62%
16. Employee Vision Insurance	612.48	5,382.15	5,363.84	7,350	73%
17. Employee EAP	78.54	728.58	661.77	1,116	65%
18. 457b District Contribution	2,650.00	22,900.00	23,450.00	30,600	75%
19. CalPERS Expenses	26,807.65	443,204.16	401,036.65	547,851	81%
20. Workers Comp Insurance	-	63,122.49	45,464.74	100,961	63%
<i>Subtotal</i>	112,522.79	1,205,779.32	1,097,011.94	1,537,459	78%
<b>TOTAL S.E.B</b>	<b>325,421.57</b>	<b>3,165,185.35</b>	<b>2,896,126.74</b>	<b>4,332,761</b>	<b>73%</b>

\*As approved by the Board of Directors on March 11, 2021, COVID Essential Service Pay Increase is funded via District reserves.

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
MONTHLY EXPENDITURE REPORT - PAGE 2 OF 3

March 31, 2021

75% Of Budget Year

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

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
<i>Operations &amp; Maintenance</i>					
1. Auto Maintenance	6,125.48	29,412.75	35,827.17	39,700	74%
2. Engineering	2,098.15	16,720.64	31,497.00	75,000	22%
3. Lab Expenses	855.00	11,112.80	8,151.92	13,000	85%
4. Maintenance & Repairs					
General	1,537.87	19,492.25	9,583.30	48,000	41%
TRF	1,827.96	6,106.45	14,529.55	20,000	31%
<i>Subtotal</i>	<i>3,365.83</i>	<i>25,598.70</i>	<i>24,112.85</i>	<i>68,000</i>	<i>38%</i>
5. Materials & Supplies					
General	5,646.49	42,136.95	38,388.31	38,000	111%
TRF	568.89	11,022.04	18,160.53	35,000	31%
<i>Subtotal</i>	<i>6,215.38</i>	<i>53,158.99</i>	<i>56,548.84</i>	<i>73,000</i>	<i>73%</i>
6. Radio Maintenance	1,075.60	6,413.91	4,698.72	8,500	75%
7. Ruth Lake License	-	1,500.00	1,500.00	1,500	100%
8. Safety Equip./Training					
General	3,120.32	21,937.86	18,307.18	22,000	100%
TRF	2.48	678.03	463.84	2,000	34%
<i>Subtotal</i>	<i>3,122.80</i>	<i>22,615.89</i>	<i>18,771.02</i>	<i>24,000</i>	<i>94%</i>
9. Tools & Equipment	206.73	2,721.12	8,765.47	5,000	54%
10. USGS Meter Station	-	15,430.00	-	8,500	182%
<i>Operations Subtotal</i>	<i>23,064.97</i>	<i>184,684.80</i>	<i>189,872.99</i>	<i>316,200</i>	<i>58%</i>

**General & Administration**

11. Accounting Services	1,440.00	4,719.00	7,315.00	18,000	26%
12. Bad Debt Expense	-	-	-	-	0
13. Dues & Subscriptions	214.18	30,970.32	28,524.12	28,100	110%
14. General Manager Training	-	47.00	2,521.09	3,000	2%
15. IT & Software Maintenance	1,744.64	19,376.60	21,478.37	31,000	63%
16. Insurance	-	86,792.90	77,863.95	111,000	78%
17. Internet	866.69	7,539.96	6,806.78	10,000	75%
18. Legal Services	1,026.50	22,919.00	42,050.00	35,000	65%
19. Miscellaneous	553.07	2,874.21	13,200.46	11,500	25%
20. Office Building Maint.	1,837.88	13,754.56	11,013.36	16,000	86%
21. Office Expense	8,064.51	39,012.14	51,468.38	40,500	96%
22. Professional Services	-	3,165.72	4,449.79	20,000	16%
23. Property Tax	-	945.00	945.00	1,000	95%

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
MONTHLY EXPENDITURE REPORT - PAGE 3 OF 3  
March 31, 2021

75% Of Budget Year

**SERVICE & SUPPLY EXPENDITURES (con't)**

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
24. Regulatory Agency Fees	49,200.11	127,148.00	73,553.59	141,000	90%
25. Ruth Lake Programs	-	-	-	5,000	0%
26. Safety Apparel	-	2,925.68	3,268.36	3,000	98%
27. Technical Training	-	953.00	6,841.36	14,500	7%
28. Telephone	2,515.26	27,790.02	35,514.26	49,000	57%
29. Travel & Conference	-	(344.00)	13,597.46	25,000	-1%
<i>Gen. &amp; Admin. Subtotal</i>	<i>67,462.84</i>	<i>390,589.11</i>	<i>400,411.33</i>	<i>562,601</i>	<i>69%</i>

**Power**

30. Essex - PG & E	52,034.83	476,398.54	525,100.89		
31. 2Mw Generator Fuel	-	3,358.48	21,196.12		
<i>Subtotal Essex Pumping</i>	<i>52,034.83</i>	<i>479,757.02</i>	<i>546,297.01</i>		
32. All other PG & E	11,360.44	128,869.78	62,360.18		
<i>Subtotal All Power</i>	<i>63,395.27</i>	<i>608,626.80</i>	<i>608,657.19</i>	<i>764,500</i>	<i>80%</i>

**Total Service and Supplies incl.**

Power	153,923.08	1,183,900.71	1,198,941.51	1,643,301	72%
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**PROJECTS, FIXED ASSETS & CONSULTING SERVICES**

	Month-to-Date	Year-to-Date		Budget	% of Budget
	210,155.00	1,561,696.00		11,116,238	14%

<b>GRAND TOTAL EXPENSES</b>	<b>689,499.65</b>	<b>5,910,782.06</b>	<b>4,095,068.25</b>	<b>17,092,300</b>	<b>35%</b>
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33. Debt Service - SRF Loan	-	273,668.48	273,668.48	547,337	50%
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34. Debt Service - US Bank	81,094.05	162,188.10	162,188.10	162,200	100%
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**TOTAL EXPENSES WITH DEBT SERVICE**

	776,369.60	6,362,667.10	4,530,924.83	17,801,837	
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**OTHER EXPENSES**

35. ReMat Consultant Exp.	5,775.90	15,870.58	11,095.40		
36. Capital Replacement Exp.	-	157.88	-		

# HUMBOLDT BAY MUNICIPAL WATER DISTRICT

## PROJECT PROGRESS REPORT

March 31, 2021

75% Of Budget Year

### A. CAPITAL PROJECTS

	MTD	YTD		% OF
ACTIVE GRANT FUNDED CAPITAL PROJECTS	EXPENSES	TOTAL	BUDGET	BUDGET
1 Grant - 12kV Switchgear Relocation <i>(\$3M - FEMA Grant)</i>	3,852	408,889	2,517,062	16%
2 Grant - Collector 2 Rehabilitation <i>(\$1.6M - NCRP Prop1 Grant)</i>	9,965	80,465	1,600,000	5%
3 Grant - 3x Tank Seismic Retro <i>(\$3.5M - FEMA Grant, Phase 1 Approved)</i>	44,905	170,216	329,000	52%
3a Grant - Community Power Resiliency <i>(\$215,000 CalOES Grant)</i>	2,988	2,988	0	0
3b Grant - Collector Mainline Redundancy	775	34,108	0	0
NON-GRANT FUNDED CAPITAL PROJECTS				
4 Fiber Optic Link - Collector 2 (Phase 1)	0	2,970	65,000	5%
5 On-Site Generation of Chlorine <i>(\$850k - FY21-22, Treatment Facility Project)</i>	0	0	850,000	0%
6 Techite Intertie Location Abandonment	367	1,623	12,000	14%
7 FY21 Mainline Valve Replacement	0	0	31,750	0%
8 Main Office Emergency Generator	22,342	37,347	37,250	100%
9 Transformer at Hydro Plant	0	0	160,000	0%
10 Interruptor Switchgear Panel	0	0	28,000	0%
11 Headquarters Remodel	0	2	120,000	0%
12 Headquarters Fire System & Pump House	0	0	4,500	0%
13 Headquarters & Bunkhouse Generator	0	309	15,000	2%
14 Curbing on Mad River Road	0	200	5,800	3%
14a Tesla Battery Project - Essex	514	514	0	0
<b>TOTAL CAPITAL PROJECTS</b>	<b>85,707</b>	<b>739,631</b>	<b>5,775,362</b>	<b>13%</b>

### B. EQUIPMENT AND FIXED ASSET PROJECTS

	MTD	YTD		% OF
	EXPENSES	TOTAL	BUDGET	BUDGET
15 FY21 Replace Admin Computers (Ops)	0	1,519	2,500	61%
16 Ruth Vehicle (Unit 6)	0	43,168	62,500	69%
17 High Pressure Washer	0	0	11,250	0%
18 Portable Sandblasting Unit	0	4,195	4,750	88%
19 Wheels/Tires on Zieman Trailer	0	2,868	3,250	88%
20 Ergonomic Desks for AOS, WOS, Electrical Shop	0	4,114	4,750	87%
21 2 New Laptop Computers	0	2,924	3,000	97%
22 Tractor Mower	7,144	7,144	8,500	84%
23 Tools & Equipment Storage for Shop	0	2,320	2,750	84%



**HUMBOLDT BAY MUNICIPAL WATER DISTRICT****PROJECT PROGRESS REPORT - PAGE 2 OF 5**

75% Of Budget Year

March 31, 2021

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

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
24 Trench Shoring Equipment	0	3,184	3,750	85%
25 Portable Electric Valve Operator	0	11,651	11,000	106%
26 Hazardous Spill Containment Equipment	0	2,452	2,500	98%
27 Tractor	59,841	59,841	70,750	85%
28 Tilt-Deck Equipment Trailer	23	11,525	12,750	90%
29 Hydraulic Bolt Torque Machine	0	0	12,000	0%
30 Sieve Shaker	0	1,828	2,500	73%
<i>(Treatment Facility Project)</i>				
31 Replace Admin Computers (Office)	0	4,021	5,500	73%
32 Ergonomic Desk for Customer Service Desk	0	1,254	3,000	42%
33 Front Office Doors	0	0	6,000	0%
34 Base Radio Units for HQ & Relief Operator	0	3,161	3,750	84%
35 Howell Bungler Valve Cylinders	0	7,341	8,750	84%
36 Ruth Property Maintenance Equipment	2,859	2,968	4,000	74%
37 Ruth HQ Shop Lighting Upgrade/Equipment	4,559	4,559	6,250	73%
38 Log Boom Inspection Equipment	0	1,694	2,500	68%
<b>TOTAL EQUIPMENT &amp; FIXED ASSET PROJECTS</b>	<b>74,425</b>	<b>183,730</b>	<b>258,250</b>	<b>71%</b>

**C. MAINTENANCE PROJECTS**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
39 FY21 Pipeline Maintenance	656	7,013	12,750	55%
40 FY21 12kV System Maintenance	6,050	6,050	4,000	151%
41 FY21 Main Line Meter Flow Calculation	1,315	5,288	14,000	38%
42 FY21 Technical Support/Software Updates	725	8,278	17,250	48%
43 FY21 Generator Services	0	828	3,500	24%
44 FY21 TRF Generator Services	0	13	500	3%
<i>(Treatment Facility Project)</i>				
45 FY21 Hazard/Diseased Tree Removal	0	0	8,000	0%
46 FY21 Cathodic Protection	0	0	6,500	0%
47 FY21 Maintenance Emergency Repairs	0	21,802	50,000	44%
48 FY21 Fleet Paint Repairs	738	738	5,000	15%
49 Surge Tank Refurbishments	0	1,187	3,000	40%
50 Microsoft Office Package Upgrade	0	6,885	8,250	83%
51 FY21 Pipeline Repair Parts	0	0	12,250	0%
52 Collector Lube Oil Reservoir Replacement	0	13,167	16,000	82%
53 Oil Filter Crushing Station	0	0	2,500	0%
54 35kW Voltage Selector Switch	0	0	5,500	0%
55 Fence/Gate-DG Fairhaven Fire Service Meter	0	1,720	6,400	27%
56 FY21 TRF Limatorque Valve Retrofit Supplies	0	0	14,500	0%

*(Treatment Facility Project)*

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT****PROJECT PROGRESS REPORT - PAGE 3 OF 5**

75% Of Budget Year

March 31, 2021

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

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
57 FY21 Chemical Pump Spare Parts Inventory <i>(Treatment Facility Project)</i>	0	0	5,250	0%
58 Emergency Sample Sump Pump <i>(Treatment Facility Project)</i>	0	6,080	6,250	97%
59 TRF Process Pumps Rebuild Kit Inventory <i>(Treatment Facility Project)</i>	0	7,754	8,250	94%
60 Sludge Bed Lighting Project <i>(Treatment Facility Project)</i>	3,356	4,112	4,250	97%
61 Emergency Limitorque Gear Boxes <i>(Treatment Facility Project)</i>	0	0	14,750	0%
62 Brush Abatement - Ruth Hydro	0	0	6,500	0%
63 Howell Bunger Valve Inspection	0	0	1,110	0%
64 Ruth LTO Insurance	0	0	5,000	0%
65 Log Boom Inspection	0	260	1,000	26%
66 FY21 Abandoned Vehicle Abatement - Ruth	0	0	4,000	0%
67 Log Boom Hardware Replacement	0	4,183	7,000	60%
<b>TOTAL MAINTENANCE PROJECTS</b>	<b>12,839</b>	<b>95,360</b>	<b>253,260</b>	<b>38%</b>

**D. PROFESSIONAL & CONSULTING SERVICES**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
68 FY21 Crane Testing/Certification	0	8,248	10,000	82%
69 FY21 Chlorine System Maintenance	2,547	7,890	16,750	47%
70 FY21 Backflow Meter Training	1,780	1,780	3,000	59%
71 Hydro Plant Annual Elect. & Maintenance Inspection	0	0	2,050	0%
72 FY21 Essex Mad River Cross-Sectional Survey	0	7,803	10,000	78%
73 FY21 Technical Training	9,046	9,506	23,250	41%
74 FY21 O & M Training	0	0	20,000	0%
75 FY21 Essex Server Backup System (Monthly Fees)	0	8,580	8,750	98%
76 FY21 Public Education Funds	0	0	5,000	0%
77 Water Quality Monitoring Plan	47	560	30,000	2%
78 FY21 Electrical Technical Training	4,003	4,003	13,250	30%
79 FY21 Annual Section 115 Pension Trust Contribution	0	50,000	50,000	100%
80 FY21 Grant Application Assistance	6,000	9,666	20,000	48%
81 Comp. Domestic Pipeline Fitness Eval.	0	0	195,000	0%
82 Staff Gauge Survey	0	3,800	3,800	100%
83 Retail Rate Study Assistance	0	3,857	5,000	77%
84 FERC Part 12 - Plunge Pool Underwater Inspection	0	5,200	13,500	39%

## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

## PROJECT PROGRESS REPORT - PAGE 4 OF 5

75% Of Budget Year

March 31, 2021

**D. PROFESSIONAL & CONSULTING SERVICES (CONT)**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
85 FERC Part 12 - Geologist Inspection	0	1,700	6,800	25%
86 FERC Part 12 - Ind. Consultant Insp. (FY22)	0	6,614	20,000	33%
87 FERC - Dam Safety Surveillance & Monitoring Report	8,049	8,773	8,000	110%
88 FERC - Dam Safety Engineer	0	4,039	12,000	34%
89 Dam Spillway Wall Monument Survey	2,626	10,226	7,600	135%
90 Spillway Repair, Inspection & Reporting Assistance	0	210	10,000	2%
<b>TOTAL PROF/CONSULTING SERVICES</b>	<b>34,097</b>	<b>152,454</b>	<b>493,750</b>	<b>31%</b>

**E. INDUSTRIAL SYSTEM PROJECTS**

91 Maintain Water Supply to PS6 during Low-Flow	0	0	13,250	0.0%
<b>TOTAL INDUSTRIAL SYSTEM PROJECTS</b>	<b>0</b>	<b>0</b>	<b>13,250</b>	<b>0%</b>

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

92 Collector 5 Security & Anti-Vandalism Measures	0	0	7,500	0%
<b>TOTAL CARRYOVER PROJECTS</b>	<b>0</b>	<b>0</b>	<b>7,500</b>	<b>0%</b>

**G. PROJECTS NOT CURRENTLY CHARGED TO MUNICIPAL CUSTOMERS**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
93 18,000 Lb. Excavator <i>(Advanced Charges)</i>	0	97,341	222,800	44%
94 HB Retail Radio-Read Meter Project <i>(HB Retail Capital Replacement Funds)</i>	0	0	7,500	0%
95 Streambed Flow Enhancement Grant <i>(DWR Grant)</i>	965	16,333	467,969	3%
96 Refurbish PS-6 (Phase 1) <i>(EDA Grant &amp; Reserves)</i>	326	2,543	3,500,000	0%
97 I/W Reservoir Fencing Repairs/Replacement <i>(Reserves)</i>	0	810	11,250	7%
98 I/W System Evaluation Memo <i>(Reserves)</i>	0	0	26,000	0%
99 PS6 Gravel Bar Work <i>(Reserves)</i>	0	0	76,100	0%
100 Industrial System Assistance <i>(Reserves)</i>	886	886	10,000	9%
101 Industrial/Domestic System Intertie <i>(Reserves)</i>	0	0	11,000	0%
<sup>101</sup> A Fire Disaster Recovery 2020 <i>(Reserves)</i>	572	77,023	0	0%
<sup>101B</sup> Grant - FEMA - COVID-19 Pandemic <i>(Reserves)</i>	279	6,459	0	0%
<b>TOTAL NOT CHARGED TO CUSTOMERS</b>	<b>3,029</b>	<b>201,395</b>	<b>4,332,619</b>	<b>5%</b>



## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

## PROJECT PROGRESS REPORT - PAGE 5 OF 5

March 31, 2021

75% Of Budget Year

**H. ADVANCED CHARGES & DEBIT SERVICE FUNDS COLLECTED - FY21**

	MTD	YTD	BUDGET	% BUDGET
102 Grant - Collector Mainline Redundancy Pipeline <i>(\$3.1M - PENDING FEMA Grant)</i>	4,167	37,500	50,000	75%
103 Grant - Collector 2 Rehabilitation <i>(\$1.2M - NCRP Prop1 Grant)</i>	16,667	150,000	200,000	75%
104 Grant - 3x Tank Seismic Retro <i>(\$3.5M - FEMA Grant, Phase 1 Approved)</i>	16,667	150,000	200,000	75%
105 Grant - TRF Generator <i>(\$1.9M - PENDING FEMA Grant)</i>	2,083	18,750	25,000	75%
106 Cathodic Protection Project <i>(\$405k, FY22)</i>	8,333	75,000	100,000	75%
107 On-Site Generation of Chlorine <i>(\$850k, FY21-22)</i>	6,667	60,000	80,000	75%
108 Ranney Collector 3/Techite Debit Service Funds	14,745	132,709	162,200	82%
<b>TOTAL ADVANCED CHARGES COLLECTED - FY21</b>	<b>69,329</b>	<b>623,959</b>	<b>817,200</b>	<b>76%</b>

**PROJECT PROGRESS REPORT SUMMARY OF ALL ACTIVITY**

CUSTOMER CHARGES	MTD	YTD	BUDGET	% BUDGET
TOTAL NON-GRANT FUNDED CAPITAL PROJECTS*	26,986	80,062	479,300	17%
TOTAL EQUIPMENT & FIXED ASSET PROJECTS	74,425	183,730	258,250	71%
TOTAL MAINTENANCE PROJECTS	12,839	95,360	253,260	38%
TOTAL PROF/CONSULTING SERVICES	34,097	152,454	493,750	31%
TOTAL INDUSTRIAL SYSTEM PROJECTS	0	0	13,250	0%
TOTAL CARRYOVER PROJECTS	0	0	7,500	0%
TOTAL ADVANCED CHARGES/DEBIT SERVICE - FY21	69,329	623,959	817,200	76%
<b>TOTAL CUSTOMER CHARGES</b>	<b>\$217,676</b>	<b>\$1,135,565</b>	<b>\$2,322,510</b>	<b>49%</b>

\*EXCLUDES ON-SITE GENERATION OF CHLORINE

NON-CUSTOMER CHARGES (CURRENT FY)	MTD	YTD	BUDGET	% BUDGET
TOTAL GRANT FUNDED CAPITAL PROJECTS	58,721	659,569	4,446,062	15%
TOTAL NON-CUSTOMER CHARGES	3,029	201,395	4,332,619	5%
TOTAL USE OF ENCUMBERED FUNDS	29	94,563	229,305	41%
<b>TOTAL NON-CUSTOMER CHARGES</b>	<b>\$61,779</b>	<b>\$955,527</b>	<b>\$9,007,986</b>	<b>11%</b>
<b>GRAND TOTAL PROJECT BUDGET ACTIVITY</b>	<b>\$279,455</b>	<b>\$2,091,092</b>	<b>\$11,330,496</b>	<b>18%</b>

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**  
**ENCUMBERED FUNDS RECONCILIATION REPORT**  
**March 31, 2021**

	MTD	YTD	AMOUNT	
	EXPENSES	TOTAL	ENCUMBERED	REMAINING
<b>A. CAPITAL PROJECTS</b>				
1 TRF Line Shed 5	29	8,771	14,950	6,179
<b>B. EQUIPMENT &amp; FIXED ASSET PROJECTS</b>				
2 Chlorine System Maintenance	0	3,050	3,050	(0)
3 Col. 2 Underground 12Kv Power/Fiber Optic	0	1,395	21,460	20,065
4 Eureka Office Carpeting	0	13,500	14,500	1,000
5 Eureka Office ADA Upgrades	0	3,275	3,275	0
6 Fleet Maintenance Equipment	0	0	300	300
7 Meter Reader Handheld Unit	0	3,100	4,500	1,400
8 Replacement of UPS's (Phase 2)	0	27,434	27,950	516
<b>C. MAINTENANCE PROJECTS</b>				
9 Collector 1 Electrical Upgrade 2018/19	0	0	31,000	31,000
10 Gates at I/W Reservoir and SBPS	0	385	800	415
11 Ruth HQ Dock Decking	0	1,219	2,200	981
12 Ruth Slide Gate Hydraulic Oil	0	746	1,950	1,204
<b>D. PROFESSIONAL &amp; CONSULTING SERVICES</b>				
13 Hydro Plant Electrical and Maintenance Insp.	0	0	2,000	2,000
14 Ruth Hydro Relay Replacement-Phase 2	0	27,367	87,000	59,633
15 FY20 Abandoned Vehicle Abatement - Ruth	0	0	10,000	10,000
<b>E. FY20 SERVICE &amp; SUPPLY BUDGET</b>				
16 MAINTENANCE & REPAIRS	0	2465	2,465	0
17 MATERIALS & SUPPLIES	0	50	50	0
18 SAFETY EQUIP & TRAINING	0	500	550	50
19 ACCOUNTING	0	1305	1,305	0
<b>ENCUMBERED FUNDS TOTAL</b>	<b>29</b>	<b>94,563</b>	<b>229,305</b>	<b>134,742</b>

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 3/1/2021-3/31/2021Page: 1  
Mar 31, 2021 02:56PM

Vendor Name	Date Paid	Description	Amount Paid
<b>101 NETLINK</b>			
101 NETLINK	03/02/2021	<i>Ruth Data Link/Internet</i>	180.00
Total 101 NETLINK:			180.00
<b>ACWA/JPIA</b>			
ACWA/JPIA	03/19/2021	<i>RETIREE MEDICAL</i>	12,049.25
ACWA/JPIA	03/19/2021	<i>COBRA Dental</i>	98.92
ACWA/JPIA	03/19/2021	<i>COBRA Vision</i>	37.12
Total ACWA/JPIA:			12,185.29
<b>AirGas NCN</b>			
AirGas NCN	03/08/2021	<i>Ruth HQ Shop Lighting Upgrade and Equipment</i>	83.39
AirGas NCN	03/08/2021	<i>Ruth HQ Shop Lighting Upgrade and Equipment</i>	906.42
AirGas NCN	03/31/2021	<i>Ruth HQ Shop Lighting Upgrade and Equipment</i>	218.55
AirGas NCN	03/31/2021	<i>Ruth HQ Shop Lighting Upgrade and Equipment</i>	723.78
AirGas NCN	03/31/2021	<i>maintenance supplies</i>	86.47
Total AirGas NCN:			2,018.61
<b>Almquist Lumber</b>			
Almquist Lumber	03/31/2021	<i>Repair Park 4 picnic tables</i>	80.88
Total Almquist Lumber:			80.88
<b>AT &amp; T</b>			
AT & T	03/16/2021	<i>Eureka/Essex Land Line</i>	35.37
AT & T	03/16/2021	<i>Arcata/Essex Land Line</i>	35.37
AT & T	03/16/2021	<i>Samoa/Essex Land Line</i>	237.17
AT & T	03/16/2021	<i>Eureka office/modem</i>	57.11
AT & T	03/16/2021	<i>Eureka Office Alarm Line</i>	52.68
AT & T	03/16/2021	<i>Samoa Booster Pump Station</i>	55.24
AT & T	03/16/2021	<i>Valve Building - Samoa</i>	57.11
AT & T	03/16/2021	<i>Eureka office</i>	216.47
AT & T	03/16/2021	<i>TRF</i>	51.67
AT & T	03/16/2021	<i>Ruth Hydro Data Line</i>	52.68
AT & T	03/16/2021	<i>Essex office/Modem/Alarm System</i>	52.68
AT & T	03/15/2021	<i>SIMS Service</i>	319.04
Total AT & T:			1,222.59
<b>AT&amp;T Advertising Solutions</b>			
AT&T Advertising Solutions	03/02/2021	<i>white page listing</i>	21.00
AT&T Advertising Solutions	03/26/2021	<i>white page listing</i>	21.00
Total AT&T Advertising Solutions:			42.00
<b>AT&amp;T Long Distance</b>			
AT&T Long Distance	03/08/2021	<i>Eureka Office Long Distance</i>	48.56
AT&T Long Distance	03/15/2021	<i>Valve Building-Samoa Long Distance</i>	120.54
AT&T Long Distance	03/15/2021	<i>Essex Control Long Distance</i>	22.12
AT&T Long Distance	03/15/2021	<i>Eureka Office Long Distance</i>	7.38
AT&T Long Distance	03/15/2021	<i>TRF Long Distance</i>	30.57
AT&T Long Distance	03/15/2021	<i>Ruth Hydro/Dataline Long Distance</i>	161.69

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Vendor Name	Date Paid	Description	Amount Paid
Total AT&T Long Distance:			390.86
<b>AVO Training Institute</b>			
AVO Training Institute	03/31/2021	Electrical Technical Training - J. Hargadon	1,100.00
AVO Training Institute	03/31/2021	Electrical Technical Training - D. Corral	1,850.00
Total AVO Training Institute:			2,950.00
<b>BDI - M&amp;S Arcata</b>			
BDI - M&S Arcata	03/31/2021	equipment repair	1.85
Total BDI - M&S Arcata:			1.85
<b>Bedliners Plus</b>			
Bedliners Plus	03/29/2021	Unit 4 bedliner repair	738.25
Total Bedliners Plus:			738.25
<b>Ben Boak</b>			
Ben Boak	03/31/2021	Ruth area Fire Disaster Recovery - Boat Rental 2/17 and 2/25/2	450.00
Total Ben Boak:			450.00
<b>Citi Cards</b>			
Citi Cards	03/26/2021	Essex Safety Supplies-COVID	15.50
Citi Cards	03/26/2021	Eureka office building maintenance	3.25
Total Citi Cards:			18.75
<b>City of Eureka</b>			
City of Eureka	03/08/2021	Eureka office water/sewer	92.90
Total City of Eureka:			92.90
<b>Coast Counties Truck &amp; Equipment Company</b>			
Coast Counties Truck & Equipment Compan	03/31/2021	Unit 10 maintenannce	271.14
Total Coast Counties Truck & Equipment Company:			271.14
<b>Coastal Business Systems Inc.</b>			
Coastal Business Systems Inc.	03/15/2021	Eureka office copy and fax machine	1,010.99
Total Coastal Business Systems Inc.:			1,010.99
<b>Cummins Pacific LLC</b>			
Cummins Pacific LLC	03/09/2021	Eureka Emergency Generator	22,240.68
Total Cummins Pacific LLC:			22,240.68
<b>Dave Perkins</b>			
Dave Perkins	03/02/2021	auto mileage reimbursement	97.78
Total Dave Perkins:			97.78
<b>Deere &amp; Company</b>			
Deere & Company	03/09/2021	Tractor/Loader/Backhoe	59,841.35



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Vendor Name	Date Paid	Description	Amount Paid
Total Deere & Company:			59,841.35
<b>Dept Water Resources</b>			
Dept Water Resources	03/29/2021	Annual Dam Fees	33,786.00
Total Dept Water Resources:			33,786.00
<b>Diligent Corporation</b>			
Diligent Corporation	03/08/2021	Annual subscription	2,000.00
Total Diligent Corporation:			2,000.00
<b>Downey Brand Attorneys LLP</b>			
Downey Brand Attorneys LLP	03/29/2021	Legal Fees February 2021	121.50
Downey Brand Attorneys LLP	03/29/2021	Streambed Flow Enhancement Grant	81.00
Total Downey Brand Attorneys LLP:			202.50
<b>Eureka Oxygen</b>			
Eureka Oxygen	03/15/2021	cylinder rental	108.04
Total Eureka Oxygen:			108.04
<b>Fastenal Company</b>			
Fastenal Company	03/31/2021	Pipeline Maintenance	94.95
Fastenal Company	03/31/2021	Pipeline Maintenance	25.56
Fastenal Company	03/31/2021	maintenance shop supplies	24.26
Fastenal Company	03/31/2021	Pipeline Maintenance	7.60
Fastenal Company	03/31/2021	Pipeline Maintenance - Harbor District meter service	14.02
Total Fastenal Company:			166.39
<b>FEDEX</b>			
FEDEX	03/29/2021	Ship SCBA for annual testing	45.35
FEDEX	03/29/2021	Ship SCBA for annual testing	21.20
Total FEDEX:			66.55
<b>FleetPride</b>			
FleetPride	03/08/2021	vehicle maintenance	13.95
FleetPride	03/31/2021	Tilt-Deck Equipment Trailer	22.81
Total FleetPride:			36.76
<b>Frontier Communications</b>			
Frontier Communications	03/26/2021	Ruth HQ Phone	55.63
Frontier Communications	03/26/2021	Ruth Hydro/Ruth Dataline	187.97
Total Frontier Communications:			243.60
<b>GHD</b>			
GHD	03/31/2021	General Engineering - Nordic Water Modeling	885.88
GHD	03/31/2021	General Engineering - Collector Mainline Redundancy Grant	775.13
GHD	03/31/2021	General Engineering - Techite Intertie Location Abandonment	366.50
GHD	03/31/2021	General Engineering - Tesla Battery Project	405.76
GHD	03/31/2021	General Engineering - UWMP	46.63

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Vendor Name	Date Paid	Description	Amount Paid
GHD	03/31/2021	General Engineering - Essex	1,165.64
GHD	03/31/2021	General Engineering - Eureka	233.13
GHD	03/31/2021	12KV Switchgear Replacement - Grant	3,851.50
GHD	03/02/2021	TRF Generator OES-HM Grant Application	5,228.75
GHD	03/02/2021	General Engineering - Refurbish PS6 (Phase 1) Grant	326.38
GHD	03/02/2021	General Engineering - Ruth Inundation Mapping	336.25
GHD	03/02/2021	General Engineering - Eureka	279.75
GHD	03/02/2021	General Engineering - Essex	419.63
GHD	03/02/2021	Assistance with FERC DSSMR 2021	500.00
GHD	03/31/2021	Reservoirs (3) Seismic Retrofit - Grant	44,904.94
GHD	03/31/2021	Collector 2 Rehabilitation - Grant	9,964.57
GHD	03/31/2021	Assistance with FERC DSSMR 2021	7,113.75
GHD	03/31/2021	Review Spillway Floor and Staff Gauge Surveys	2,625.90
GHD	03/31/2021	TRF Generator OES-HM Grant Application	771.25
GHD	03/31/2021	Essex Generator Controller - PSPS Grant	2,987.54
Total GHD:			83,188.88
<b>Grainger</b>			
Grainger	03/31/2021	Eureka Office safety ladder	781.47
Total Grainger:			781.47
<b>H.T. Harvey &amp; Associates</b>			
H.T. Harvey & Associates	03/26/2021	Assistance with Streambed Flow Enhancement - Grant	884.00
Total H.T. Harvey & Associates:			884.00
<b>Harbor Freight Tools</b>			
Harbor Freight Tools	03/31/2021	Essex safety supplies - COVID	21.66
Harbor Freight Tools	03/31/2021	Essex maintenance supplies	15.18
Harbor Freight Tools	03/31/2021	vehicle maintenance	47.26
Total Harbor Freight Tools:			84.10
<b>Harper Motors</b>			
Harper Motors	03/31/2021	Unit 3 repair	417.49
Harper Motors	03/31/2021	Unit 8 repair	514.76
Harper Motors	03/31/2021	Unit 4 repair	871.02
Total Harper Motors:			1,803.27
<b>Health Equity Inc</b>			
Health Equity Inc	03/19/2021	District HSA Contributions - 7 employees	4,493.43
Health Equity Inc	03/05/2021	HSA Admin Fee - 2 employees	5.90
Health Equity Inc	03/05/2021	HSA Admin Fee 8 employees	23.60
Total Health Equity Inc:			4,522.93
<b>Hensel Hardware</b>			
Hensel Hardware	03/31/2021	Unit 16 maintenance	3.24
Hensel Hardware	03/31/2021	Essex building maintenance	27.12
Hensel Hardware	03/31/2021	park 4 picninc table repair	13.10
Hensel Hardware	03/31/2021	park signs maintenance	16.14
Hensel Hardware	03/31/2021	Essex EOC building maintenance	6.50

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Vendor Name	Date Paid	Description	Amount Paid
Total Hensel Hardware:			66.10
<b>Hensell Materials</b>			
Hensell Materials	03/31/2021	<i>maintenance supplies</i>	19.54
Total Hensell Materials:			19.54
<b>Henwood Associates, Inc</b>			
Henwood Associates, Inc	03/02/2021	<i>Consultant Services Agreement- January 2021</i>	587.32
Total Henwood Associates, Inc:			587.32
<b>Humboldt County Treasurer</b>			
Humboldt County Treasurer	03/31/2021	<i>Fund No 3876 Account 800870</i>	45,611.43
Total Humboldt County Treasurer:			45,611.43
<b>Humboldt Redwood Company, LLC</b>			
Humboldt Redwood Company, LLC	03/19/2021	<i>Mt Pierce Lease site</i>	296.40
Total Humboldt Redwood Company, LLC:			296.40
<b>Hummel Tire &amp; Wheel</b>			
Hummel Tire & Wheel	03/31/2021	<i>Unit 12 tires</i>	765.58
Total Hummel Tire & Wheel:			765.58
<b>Industrial Electric</b>			
Industrial Electric	03/31/2021	<i>TRF washwater pump repair</i>	1,217.80
Industrial Electric	03/31/2021	<i>TRF Line Shed 5</i>	28.88
Industrial Electric	03/31/2021	<i>Chlorine System Maintenance</i>	193.23
Industrial Electric	03/31/2021	<i>Chlorine System Maintenance</i>	128.98
Industrial Electric	03/31/2021	<i>electrical tools</i>	45.57
Total Industrial Electric:			1,614.46
<b>InfoSec Institute, Inc</b>			
InfoSec Institute, Inc	03/31/2021	<i>Technical Training - SCADA Security Boot Camp</i>	9,046.00
Total InfoSec Institute, Inc:			9,046.00
<b>Janet Powell</b>			
Janet Powell	03/02/2021	<i>auto mileage reimbursement</i>	126.84
Total Janet Powell:			126.84
<b>JTN Energy, LLC</b>			
JTN Energy, LLC	03/02/2021	<i>Consultant Services Agreement - January 2021</i>	587.32
Total JTN Energy, LLC:			587.32
<b>Kernen Construction</b>			
Kernen Construction	03/31/2021	<i>Pipeline Maintenance</i>	172.67
Total Kernen Construction:			172.67

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Vendor Name	Date Paid	Description	Amount Paid
<b>McMaster-Carr Supply</b>			
McMaster-Carr Supply	03/31/2021	<i>Chlorine system maintenance</i>	23.86
Total McMaster-Carr Supply:			23.86
<b>Miller Farms Nursery</b>			
Miller Farms Nursery	03/31/2021	<i>Ruth Property Maintenance Equipment</i>	1,394.09
Total Miller Farms Nursery:			1,394.09
<b>Mission Linen</b>			
Mission Linen	03/02/2021	<i>Uniform Rental</i>	98.16
Mission Linen	03/02/2021	<i>Uniform Rental</i>	98.16
Mission Linen	03/02/2021	<i>maintenance supplies</i>	63.34
Mission Linen	03/02/2021	<i>Uniform Rental</i>	123.85
Mission Linen	03/02/2021	<i>maintenance supplies</i>	53.14
Mission Linen	03/02/2021	<i>Uniform Rental</i>	123.85
Mission Linen	03/02/2021	<i>maintenance supplies</i>	63.34
Total Mission Linen:			623.84
<b>Mitchell, Brisso, Delaney &amp; Vrieze</b>			
Mitchell, Brisso, Delaney & Vrieze	03/08/2021	<i>Legal Services Tesla Battery Project- February 2021</i>	108.50
Mitchell, Brisso, Delaney & Vrieze	03/08/2021	<i>Legal Services- Ruth Area Fire Recovery February 2021</i>	93.00
Mitchell, Brisso, Delaney & Vrieze	03/08/2021	<i>Legal Services- February 2021</i>	108.50
Mitchell, Brisso, Delaney & Vrieze	03/08/2021	<i>Legal Services- Ruth Area Vivid Green February 2021</i>	46.50
Total Mitchell, Brisso, Delaney & Vrieze:			356.50
<b>Napa Auto Parts</b>			
Napa Auto Parts	03/31/2021	<i>vehicle maintenance</i>	12.24
Napa Auto Parts	03/31/2021	<i>Ruth HQ Shop Lighting and Equipment Upgrade</i>	39.49
Napa Auto Parts	03/31/2021	<i>Unit 8 repair</i>	263.09
Napa Auto Parts	03/31/2021	<i>vehicle maintenance supplies</i>	34.81
Napa Auto Parts	03/31/2021	<i>Unit 9 repair</i>	68.85
Napa Auto Parts	03/31/2021	<i>Unit 9 repair</i>	20.04
Napa Auto Parts	03/31/2021	<i>vehicle maintenance</i>	15.06
Napa Auto Parts	03/31/2021	<i>Unit 11 service</i>	84.23
Napa Auto Parts	03/31/2021	<i>vehicle maintenance</i>	167.05
Napa Auto Parts	03/31/2021	<i>vehicle maintenance</i>	32.62
Total Napa Auto Parts:			697.40
<b>North Coast Laboratories</b>			
North Coast Laboratories	03/02/2021	<i>lab tests - Humboldt Bay Retail</i>	285.00
North Coast Laboratories	03/02/2021	<i>lab tests - Fieldbrook-Glendale CSD</i>	95.00
North Coast Laboratories	03/02/2021	<i>lab tests - Humboldt Bay Retail</i>	95.00
North Coast Laboratories	03/02/2021	<i>lab tests - Humboldt Bay Retail</i>	95.00
North Coast Laboratories	03/02/2021	<i>lab tests - Fieldbrook-Glendale CSD</i>	95.00
North Coast Laboratories	03/02/2021	<i>lab tests - Fieldbrook-Glendale CSD</i>	95.00
North Coast Laboratories	03/02/2021	<i>lab tests - Humboldt Bay Retail</i>	95.00
Total North Coast Laboratories:			855.00
<b>Northern California Safety Consortium</b>			
Northern California Safety Consortium	03/08/2021	<i>membership fee</i>	75.00

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Vendor Name	Date Paid	Description	Amount Paid
Total Northern California Safety Consortium:			75.00
<b>Occu-Med, Ltd</b>			
Occu-Med, Ltd	03/15/2021	Pre-Employment Exam	398.56
Total Occu-Med, Ltd:			398.56
<b>Occupational Health Service of Mad River</b>			
Occupational Health Service of Mad River	03/31/2021	Annual Hearing and Respirator Exam	201.25
Occupational Health Service of Mad River	03/31/2021	Annual Hearing and Respirator Exam	201.25
Occupational Health Service of Mad River	03/31/2021	Annual Hearing and Respirator Exam	201.25
Occupational Health Service of Mad River	03/31/2021	Annual Hearing and Respirator Exam	201.25
Occupational Health Service of Mad River	03/31/2021	Annual Hearing and Respirator Exam	201.25
Occupational Health Service of Mad River	03/31/2021	Annual Hearing and Respirator Exam	201.25
Occupational Health Service of Mad River	03/31/2021	Annual Hearing and Respirator Exam	201.25
Occupational Health Service of Mad River	03/31/2021	Annual Hearing and Respirator Exam	201.25
Occupational Health Service of Mad River	03/31/2021	Annual Hearing and Respirator Exam	201.25
Total Occupational Health Service of Mad River:			1,811.25
<b>Pacific Gas &amp; Electric Co.</b>			
Pacific Gas & Electric Co.	03/02/2021	Ruth HQ	85.19
Pacific Gas & Electric Co.	03/02/2021	Ruth Bunkhouse	77.57
Pacific Gas & Electric Co.	03/16/2021	Eureka office	593.21
Pacific Gas & Electric Co.	03/16/2021	Jackson Ranch Rectifier	17.03
Pacific Gas & Electric Co.	03/16/2021	299 Rectifier	131.03
Pacific Gas & Electric Co.	03/16/2021	West End Road Rectifier	132.86
Pacific Gas & Electric Co.	03/16/2021	TRF	9,746.33
Pacific Gas & Electric Co.	03/16/2021	Ruth Hydro Valve Control	31.86
Pacific Gas & Electric Co.	03/16/2021	Samoa Booster Pump Station	345.80
Pacific Gas & Electric Co.	03/16/2021	Samoa Dial Station	34.24
Pacific Gas & Electric Co.	03/16/2021	Essex Pumping 2/1-28/2021	52,034.83
Pacific Gas & Electric Co.	03/31/2021	Ruth HQ	76.74
Pacific Gas & Electric Co.	03/31/2021	Ruth Bunkhouse	88.58
Total Pacific Gas & Electric Co.:			63,395.27
<b>Pacific Paper Co.</b>			
Pacific Paper Co.	03/31/2021	Floor Protectors	462.60
Pacific Paper Co.	03/31/2021	Eureka office supplies	184.40
Total Pacific Paper Co.:			647.00
<b>Pape Material Handling</b>			
Pape Material Handling	03/31/2021	John Deere 390 Tractor Mower	7,143.54
Total Pape Material Handling:			7,143.54
<b>Pierson Building Center</b>			
Pierson Building Center	03/04/2021	Essex Safety Supplies - COVID	2.48
Pierson Building Center	03/04/2021	Ruth HQ stove pipe maintenance	76.07
Total Pierson Building Center:			78.55
<b>Pitney Bowes</b>			
Pitney Bowes	03/18/2021	refill postage	552.06

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Vendor Name	Date Paid	Description	Amount Paid
Pitney Bowes	03/26/2021	postage meter lease	258.54
Total Pitney Bowes:			810.60
<b>PitStop Cleaning</b> PitStop Cleaning	03/09/2021	Eureka office cleaning	160.00
Total PitStop Cleaning:			160.00
<b>Platt Electric Supply</b> Platt Electric Supply Platt Electric Supply Platt Electric Supply Platt Electric Supply Platt Electric Supply Platt Electric Supply Platt Electric Supply	03/31/2021 03/31/2021 03/31/2021 03/31/2021 03/31/2021 03/31/2021 03/31/2021 03/31/2021	Chlorine System Maintenance Electrical shop tools chlorine system maintenance TRF Sludge Bed Lighting project TRF Sludge Bed Lighting project Ruth HQ shop lighting upgrade and equipment Electrical maintenance supplies	145.24 161.16 6.38 102.94- 3,458.47 573.61 36.63
Total Platt Electric Supply:			4,278.55
<b>R.J. Ricciardi, Inc, CPAs</b> R.J. Ricciardi, Inc, CPAs	03/26/2021	Annual Financial Audit FY19/20	1,440.00
Total R.J. Ricciardi, Inc, CPAs:			1,440.00
<b>Rebecca J. Moyle</b> Rebecca J. Moyle Rebecca J. Moyle Rebecca J. Moyle Rebecca J. Moyle	03/26/2021 03/26/2021 03/26/2021 03/26/2021	Eureka Office Petty Cash- Eureka office supplies Eureka Office Petty Cash - Mail Treatment Cert Exam App Eureka Office Petty Cash - Mail Distribution Cert Exam App Eureka Office Petty Cash - Eureka Office Building Maint	91.75 3.82 3.83 23.85
Total Rebecca J. Moyle:			123.25
<b>Recology Arcata</b> Recology Arcata	03/15/2021	Essex Garbage/Recycling Service	632.60
Total Recology Arcata:			632.60
<b>Recology Humboldt County</b> Recology Humboldt County	03/09/2021	Eureka office garbage/recycling service	91.71
Total Recology Humboldt County:			91.71
<b>Rogers Machinery Company, Inc</b> Rogers Machinery Company, Inc	03/31/2021	Pipeline Maintenance	341.09
Total Rogers Machinery Company, Inc:			341.09
<b>SCBA Safety Check, Inc</b> SCBA Safety Check, Inc SCBA Safety Check, Inc	03/31/2021 03/31/2021	Annual test of SCBA unit Annual test of SCBA unit	87.94 87.94
Total SCBA Safety Check, Inc:			175.88
<b>Sequoia Gas</b> Sequoia Gas Sequoia Gas	03/03/2021 03/31/2021	Fill propane at Industrial Water metering building-standby gene Ruth HQ Propane Tank Refill	15.17 132.24



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Vendor Name	Date Paid	Description	Amount Paid
Sequoia Gas	03/31/2021	Refill Ruth Bunkhouse propane	277.52
Total Sequoia Gas:			424.93
<b>Sitestar Nationwide Internet</b>			
Sitestar Nationwide Internet	03/03/2021	Essex Internet	52.90
Total Sitestar Nationwide Internet:			52.90
<b>Six Rivers Communications</b>			
Six Rivers Communications	03/31/2021	Lock Radio Alarm Transmission to Ruth	521.70
Total Six Rivers Communications:			521.70
<b>Staples</b>			
Staples	03/29/2021	Eureka office supplies	161.02
Staples	03/29/2021	Essex office supplies	12.62
Staples	03/29/2021	Essex office supplies	59.91
Staples	03/29/2021	Eureka office supplies	73.60
Staples	03/29/2021	Eureka office supplies	336.22
Total Staples:			643.37
<b>Streamline</b>			
Streamline	03/02/2021	Website maintenance membership fee	450.00
Total Streamline:			450.00
<b>Sudden Link</b>			
Sudden Link	03/08/2021	Fieldbrook-Glendale CSD Internet	309.69
Sudden Link	03/08/2021	Essex internet	197.73
Sudden Link	03/08/2021	Essex Phones	106.64
Sudden Link	03/08/2021	TRF Internet	25.27
Sudden Link	03/08/2021	TRF Internet - Blue Lake SCADA Monitoring	50.55
Sudden Link	03/08/2021	TRF Internet - Fieldbrook-Glendale CSD	50.55
Sudden Link	03/15/2021	Eureka Internet	208.45
Total Sudden Link:			948.88
<b>SWRCB-DWOCP</b>			
SWRCB-DWOCP	03/08/2021	Water Distribution Exam Fee- Matthew Davis	50.00
SWRCB-DWOCP	03/08/2021	Water Treatment Exam Fee-Matthew Davis	50.00
SWRCB-DWOCP	03/31/2021	D5 Certification Renewal - Neaz Ahmad	105.00
Total SWRCB-DWOCP:			205.00
<b>T.P. Tire Service, Inc</b>			
T.P. Tire Service, Inc	03/31/2021	Unit 1 flat repair	20.00
Total T.P. Tire Service, Inc:			20.00
<b>TechnoFlo Systems</b>			
TechnoFlo Systems	03/08/2021	Eureka meter mainline meter calibration/repair	1,218.00
Total TechnoFlo Systems:			1,218.00

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Vendor Name	Date Paid	Description	Amount Paid
<b>Telstar Instruments, Inc</b>			
Telstar Instruments, Inc	03/31/2021	TRF lab supplies	554.13
Telstar Instruments, Inc	03/31/2021	Chlorine system maintenance	2,026.82
Total Telstar Instruments, Inc:			2,580.95
<b>Tetrault Tire Center</b>			
Tetrault Tire Center	03/31/2021	Unit 13 tires	694.18
Total Tetrault Tire Center:			694.18
<b>Thatcher Company, Inc</b>			
Thatcher Company, Inc	03/31/2021	replenish chlorine - container credit	3,000.00-
Thatcher Company, Inc	03/31/2021	replenish chlorine	7,299.57
Total Thatcher Company, Inc:			4,299.57
<b>The Mill Yard</b>			
The Mill Yard	03/08/2021	sealing decks on collectors	101.83
The Mill Yard	03/31/2021	Repair Park 4 picnic tables	57.70
The Mill Yard	03/31/2021	Park 1 gazebo repair	199.20
The Mill Yard	03/31/2021	TRF Line Shed 5	26.02
Total The Mill Yard:			384.75
<b>Thomas Law Group</b>			
Thomas Law Group	03/08/2021	Legal Fees - February 2021	750.00
Total Thomas Law Group:			750.00
<b>Thrifty Supply</b>			
Thrifty Supply	03/09/2021	TRF maintenance	261.40
Thrifty Supply	03/09/2021	City of Eureka mainline meter calibration/repair	96.57
Thrifty Supply	03/09/2021	TRF maintenance	98.63
Thrifty Supply	03/31/2021	Maintenance Supplies	8.03
Thrifty Supply	03/31/2021	Equipment repair	25.97
Thrifty Supply	03/31/2021	Chlorine system maintenance	22.19
Total Thrifty Supply:			512.79
<b>Times Printing</b>			
Times Printing	03/08/2021	envelopes HBMWD	144.85
Total Times Printing:			144.85
<b>Trinity County General Services</b>			
Trinity County General Services	03/26/2021	Pickett Peak site lease	257.50
Total Trinity County General Services:			257.50
<b>Trinity County Solid Waste</b>			
Trinity County Solid Waste	03/16/2021	Ruth HQ dump fees	77.31
Trinity County Solid Waste	03/16/2021	Ruth Hydro dump fees	12.27
Total Trinity County Solid Waste:			89.58

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 3/1/2021-3/31/2021Page: 11  
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Vendor Name	Date Paid	Description	Amount Paid
<b>U.S. Bank Corporate Payment System</b>			
U.S. Bank Corporate Payment System	03/08/2021	Essex green waste disposal	110.00
U.S. Bank Corporate Payment System	03/08/2021	TRF Jesco chemical pump maintenance	127.15
U.S. Bank Corporate Payment System	03/08/2021	Dispose of Essex wood waste	110.00
U.S. Bank Corporate Payment System	03/08/2021	Late Fee	97.04
U.S. Bank Corporate Payment System	03/08/2021	Eureka office e-waste disposal	86.20
U.S. Bank Corporate Payment System	03/08/2021	Fieldbrook-Glendale CSD technical support for routers	725.00
U.S. Bank Corporate Payment System	03/08/2021	Ruth HQ Shop Lighting Upgrade and Equipment	724.31
U.S. Bank Corporate Payment System	03/08/2021	TRF Lab and Filter Building gutter maintenance	22.94
U.S. Bank Corporate Payment System	03/08/2021	Ruth HQ Shop Lighting Upgrade and Equipment	591.97
U.S. Bank Corporate Payment System	03/08/2021	Essex wood debris disposal	110.00
U.S. Bank Corporate Payment System	03/08/2021	Humboldt Bay Retail Customer service supplies	72.46
U.S. Bank Corporate Payment System	03/08/2021	Fieldbrook-Glendale CSD customer service supplies	97.30
U.S. Bank Corporate Payment System	03/08/2021	Eureka office supplies	117.00
U.S. Bank Corporate Payment System	03/08/2021	AirMedCare	65.00
U.S. Bank Corporate Payment System	03/08/2021	AirMedCare	65.00
U.S. Bank Corporate Payment System	03/08/2021	AirMedCare	65.00
U.S. Bank Corporate Payment System	03/08/2021	Essex COVID Safety Supplies	149.90
U.S. Bank Corporate Payment System	03/08/2021	Humboldt Bay Retail Backflow training	462.80
U.S. Bank Corporate Payment System	03/08/2021	Fieldbrook-Glendale CSD Backflow training	1,317.20
U.S. Bank Corporate Payment System	03/08/2021	TRF lab supplies	14.76
U.S. Bank Corporate Payment System	03/08/2021	Purchase Order Software	79.70
U.S. Bank Corporate Payment System	03/08/2021	Eureka office supplies	13.28
U.S. Bank Corporate Payment System	03/08/2021	Ruth HQ Shop Lighting Upgrade and Equipment	196.88
U.S. Bank Corporate Payment System	03/08/2021	Ruth HQ Shop Lighting Upgrade and Equipment	311.40
U.S. Bank Corporate Payment System	03/08/2021	Eureka office emergency generator installaiton	101.43
U.S. Bank Corporate Payment System	03/08/2021	Dispose of Essex Green waste	77.00
U.S. Bank Corporate Payment System	03/08/2021	Essex office supplies	86.31
U.S. Bank Corporate Payment System	03/08/2021	TRF - Floor Heater	96.96
U.S. Bank Corporate Payment System	03/08/2021	Eureka office COVID safety supplies	89.71
U.S. Bank Corporate Payment System	03/08/2021	Dam Safety Training - Webinar	99.00
U.S. Bank Corporate Payment System	03/08/2021	Domain Hosting	214.18
U.S. Bank Corporate Payment System	03/08/2021	Electrician Technical Training-Air Travel	548.05
U.S. Bank Corporate Payment System	03/08/2021	Electrician Technical Training - Air Travel	505.05
U.S. Bank Corporate Payment System	03/08/2021	Tire Storage - Ruth HQ	165.94
U.S. Bank Corporate Payment System	03/08/2021	New Employee District Jacket	68.31
U.S. Bank Corporate Payment System	03/02/2021	Ranney/Techite Project Loan Interest	2,167.63
U.S. Bank Corporate Payment System	03/02/2021	Ranney/Techite Project Loan Payment	78,926.42
Total U.S. Bank Corporate Payment System:			<u>88,878.28</u>
<b>US Security Supply</b>			
US Security Supply	03/31/2021	District locks maintenance	634.20
Total US Security Supply:			<u>634.20</u>
<b>USDA-Forest Service</b>			
USDA-Forest Service	03/26/2021	US Forest Service Special Use Permit	7,707.06
USDA-Forest Service	03/26/2021	US Forest Service Special Use Permit	7,707.05
Total USDA-Forest Service:			<u>15,414.11</u>
<b>VALEO Networks</b>			
VALEO Networks	03/29/2021	Eureka office Essential Care Computer Service	1,086.19
Total VALEO Networks:			<u>1,086.19</u>

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 3/1/2021-3/31/2021Page: 12  
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Vendor Name	Date Paid	Description	Amount Paid
<b>Valley Pacific Petroleum Servi, Inc</b>			
Valley Pacific Petroleum Servi, Inc	03/09/2021	cardlock fuel - pumping & control	406.08
Valley Pacific Petroleum Servi, Inc	03/09/2021	cardlock fuel-water quality	406.08
Valley Pacific Petroleum Servi, Inc	03/09/2021	cardlock fuel-maintenance	406.08
Valley Pacific Petroleum Servi, Inc	03/09/2021	cardlock fuel-Humboldt Bay Retail	105.58
Valley Pacific Petroleum Servi, Inc	03/09/2021	cardlock fuel-Fieldbrook-Glendale CSD	300.51
Valley Pacific Petroleum Servi, Inc	03/09/2021	Fuel for Eureka Office Emergency Generator	356.31
Total Valley Pacific Petroleum Servi, Inc:			1,980.64
<b>Verizon Wireless</b>			
Verizon Wireless	03/08/2021	General Manager	42.79
Verizon Wireless	03/08/2021	Ruth Area Fire Recovery	29.38
Verizon Wireless	03/08/2021	Customer Service - Humboldt Bay	18.65
Verizon Wireless	03/08/2021	Customer Service - Fieldbrook-Glendale CSD	53.10
Verizon Wireless	03/08/2021	Operations 1	.23
Verizon Wireless	03/08/2021	Customer Service Ipad-Humboldt Bay	9.88
Verizon Wireless	03/08/2021	Customer Service Ipad - Fieldbrook-Glendale CSD	28.13
Verizon Wireless	03/08/2021	Ruth Hydro	20.18
Verizon Wireless	03/08/2021	Ruth Area	20.19
Total Verizon Wireless:			222.53
<b>Wahlund Construction</b>			
Wahlund Construction	03/29/2021	12KV Electrical System Maintenance	6,050.00
Total Wahlund Construction:			6,050.00
<b>Wildwood Saw &amp; Sporting Goods</b>			
Wildwood Saw & Sporting Goods	03/15/2021	Ruth Property Maintenance Equipment - Mower	1,464.74
Total Wildwood Saw & Sporting Goods:			1,464.74
Grand Totals:			506,085.25

Humboldt Bay Municipal Water District

--Monthly Overtime Report--  
 Pay period dates: 3/1/2021 - 3/31/2021

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Position Title	2-01 Overtime Emp Hrs	2-01 Overtime Emp Amt	2-02 Doubletime Emp Hrs	2-02 Doubletime Emp Amt
Executive Assis	2.25	\$93	.00	\$0
Actg/HR Assit	1.50	\$70	.00	\$0
<b>Total ADMIN:</b>	<b>3.75</b>	<b>\$163</b>	<b>.00</b>	<b>\$0</b>
Elec & Ins Tech	4.75	\$276	.00	\$0
Maint Worker	1.25	\$36	.00	\$0
<b>Total ESSEX:</b>	<b>6.00</b>	<b>\$312</b>	<b>.00</b>	<b>\$0</b>
Hydro Oper Ruth	4.50	\$248	.00	\$0
<b>Total RUTH:</b>	<b>4.50</b>	<b>\$248</b>	<b>.00</b>	<b>\$0</b>
<b>Grand Totals:</b>	<b>14.25</b>	<b>\$722</b>	<b>.00</b>	<b>\$0</b>

**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: Chris Harris  
Date: April 8, 2021  
Re: Additional COVID-19 Paid Leave Extension

**Information**

The Families First Coronavirus Response Act (FFCRA) was passed by Congress on March 18, 2020, with an expiration date of December 31, 2020. This Act provides as additional 80-hours of COVID-19 Emergency Sick Leave as well as the potential for up to 12-weeks off for Emergency Family Medical Leave. These hours are separate from sick leave already provided by the District.

On March 19<sup>th</sup>, 2021, Governor Newsom signed SB95, extending mandatory COVID-19 Sick Leave Coverage until September 30, 2021. (Previously congress had made the FFCRA leave *optional* to employers for the period of January 1-March 31, 2021.)

**Conclusion**

Based on SB95, the District will extend the mandatory COVID-19 Sick Leave coverage until September 30, 2021.

**Attached**

Press Release, Governor Newsom's Office

March 30, 2020 Staff Memo – FFCRA Explanation and Flowchart

# Governor Newsom Signs Legislation to Ensure Access to Supplemental Paid Sick Leave for Workers Impacted by the Pandemic

Published: Mar 19, 2021

*Legislation creates uniform, statewide policy to ensure employees have access to COVID-19 supplemental paid sick leave through September 30, 2021*

SACRAMENTO – Building on the state's action to expand paid sick days protections for California's workforce during the pandemic, Governor Gavin Newsom today signed SB 95, legislation to ensure access to up to 80 hours of COVID-19 supplemental paid sick leave for eligible employees, including those advised to quarantine or isolate and those caring for COVID-impacted family members.

"Paid sick leave gives workers the time they need to care for themselves and loved ones while keeping their coworkers, families and communities safe," said Governor Newsom. "Even as case rates and hospitalizations decline and vaccinations ramp up, we can't let our guard down and must do all we can to stop this virus from spreading. I thank the Legislature for its continued leadership and commitment to supporting California workers affected by this pandemic."

SB 95 extends protections through September 30, 2021 and is retroactive to sick leave taken beginning January 1, 2021. Small businesses employing 25 or fewer workers are exempt from the legislation, but may offer supplemental paid sick leave and, if eligible, receive a federal tax credit.

"Protecting the frontline workers that have sustained us all during this unprecedented crisis has been a top priority of our emergency response from the very beginning of the pandemic," said Senator María Elena Durazo (D-Los Angeles). "By expanding supplemental paid leave, SB 95 will build on this progress by allowing employees across the state to put their health first without fearing that it might jeopardize their job. This emergency legislation will save lives, help small businesses, and ultimately keep our families and communities safer."

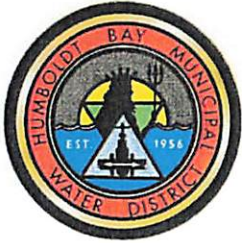
"Paid sick leave is critical not only for the well-being of our dedicated workforce, but for the safety of their families, customers and communities," said Assemblymember Wendy Carrillo (D-Los Angeles). "Under AB84/SB95, workers can rest assured they will be able to take time off if they or a loved one gets sick, need to quarantine or attend an appointment to be vaccinated. California's essential workers who have not had the privilege to stay home during the pandemic are deserving of protections that ultimately save lives. Combined with other initiatives implemented by the state to support workers and their employers, paid sick leave will help ensure California remains on the right track as we continue to make progress to safely reopen the state."

California took early action to expand paid sick days to employees in the food sector, and later enacted paid sick days protections for every employee exposed to or positive for COVID-19. From the beginning of the pandemic, the Administration has taken action to protect and support California's workforce, including expanding access to job-protected Paid Family Leave and workers' compensation; more resources for critical child support services for essential employees and vulnerable populations; additional weekly unemployment benefits; and support for employees to isolate and quarantine outside their home. The Administration has also built a pipeline of personal protective equipment to help workers stay safe on the job and expanded testing and health plan reimbursement for the essential workforce.

For full text of the bill, visit: <http://leginfo.legislature.ca.gov>.

###





# HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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## 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

# COPY

March 30, 2020

Greetings---

As some of you may be aware, on March 18, 2020 the Families First Coronavirus Response Act (FFCRA) was signed into law. While there are many layers to the FFCRA, this memo will review the items that directly impact the District staff immediately.

For all employers with less than 500 employees (including government agencies), the FFCRA provides an additional 80-hours of COVID-9 Emergency Sick Leave as well as the potential for up to 12-weeks off for Emergency Family Medical Leave. The COVID-19 Emergency Sick Leave is *separate* from the Sick Leave District Staff accrue with each pay period. The COVID-19 Sick Leave and Emergency Family Medical Leave are specifically and only for the COVID-19 Pandemic Emergency, and both have strict requirements for use.

## 1. COVID-19 EMERGENCY SICK LEAVE – 80 HOURS<sup>1</sup>

For the purposes of the COVID-19 Emergency Sick Leave, the District considers the schedule to be 5/days a week, 8/hours a day – 80 hours is two full weeks. There are two separate aspects of this sick leave, selfcare and care of others. Please see details below.

- a. **Federal Requirements for 100% OF PAY RECEIVED FOR 80-HOURS**<sup>1</sup> (any one of the following):
  - i. The employee must be subject to a quarantine or isolation order related to COVID-19 **\*\*\*THIS REQUIREMENT IS NOT APPLICABLE TO DISTRICT (OR ANY OTHER “ESSENTIAL”) EMPLOYEES\*\*\***
  - ii. The employee has been advised by a health care provider to self-quarantine due to conditions related to COVID-19.
  - iii. The employee is experiencing symptoms of COVID-19 and seeking a medical diagnosis.
- b. **Federal Requirements for 66% OF PAY (up to \$25.00/hr.) RECEIVED FOR 80-HOURS**<sup>1</sup> (any one of the following):
  - i. The employee is caring for an individual who is subject to items #a.i and/or #a.ii above.
  - ii. The employee is caring for a son/daughter due to school/daycare closure based on COVID-19 precautions.
  - iii. The employee is experiencing any other substantially similar conditions of COVID-19, but has not/cannot seek medical assistance (instructed to self-isolate by Department of Health, for example).
  - iv. For qualifications above (b.i-b.iii), employees will be paid 66% of their regular pay (up to \$25.00/hr), and will need to use additional leave banks to bring their pay up to 100% of regular pay. Eureka office staff will calculate the hours needed and provide documentation with the paystub.
- c. **Additional Requirements**

<sup>1</sup> Full-Time Employees. Permanent, Part-Time employees will receive hours commensurate with an average 2-weeks worked.

- i. This paid sick leave will not carry over and expires on 12/31/2020. (Federal Requirement).
- ii. Employees claiming 100% COVID-19 Sick Leave are required to have medical documentation (District requirement).
- iii. If either (100% or 66%) COVID-19 Sick Leave is used by an employee, for the health and safety of remaining staff, that employee is required to use all 80-hours (2-weeks) and is not permitted to return to work, nor will the employee be permitted entrance onto/into District facilities during this 14-day quarantine. (Health Department Self-Quarantine Guidance and District requirement).
- iv. Illness lasting more than 2-weeks will require the employee to utilize their existing District sick leave. Under no circumstances is an employee to return to work until they are completely healthy.
- v. Based on the continually changing conditions of the emergency COVID-19 pandemic, Management reserves the right to revisit the quarantine restrictions (c-iii, above) as needed.

## **2. COVID-19 – EMERGENCY FAMILY MEDICAL LEAVE – UP TO 12-WEEKS**

For the purposes of the COVID-19 Emergency Family Medical Leave, the District considers the schedule to be 5/days a week, 8/hours a day.

### **a. Federal Requirements for Emergency Family Medical Leave**

- i. The employee is unable to work due to a need to care for their son or daughter under 18 years of age due to the school or place of childcare being closed, or due to the child care provider of the son or daughter being unavailable, due to the COVID-19 public health emergency.
- ii. The first 10-days are unpaid, the employee may access other leave banks to cover these 10-days.
- iii. After the first 10-days, the employee is paid 66% of their current rate (maximum \$25.00/hr) for an additional maximum of 10-weeks (12-weeks total).
- iv. The employee **\*\*may not\*\*** access additional leave banks to reach 100% paid. "In no event shall such paid leave exceed \$200 per day and \$10,000 in aggregate."

## **3. ADDITIONAL INFORMATION**

### **a. Payroll Activity in the online system are:**

- i. 100%-COVID-MEDICAL – For 100% Pay Rate/80-hours<sup>1</sup> (Medical Documentation Required).
- ii. 66%-COVID-OTHER – For 66% Pay Rate/80-hours<sup>1</sup> (will be supplemented with other leave).
- iii. 66%FML-COVID-EFML – For 66% Pay Rate/10-Weeks (no supplementation from other leave).

**PLEASE SEE THE INCLUDED FLOWCHART**

Thank you all for the continued endeavors to remain safe and healthy during this challenging time. If you have any questions/concerns regarding the above, please don't hesitate to call me.

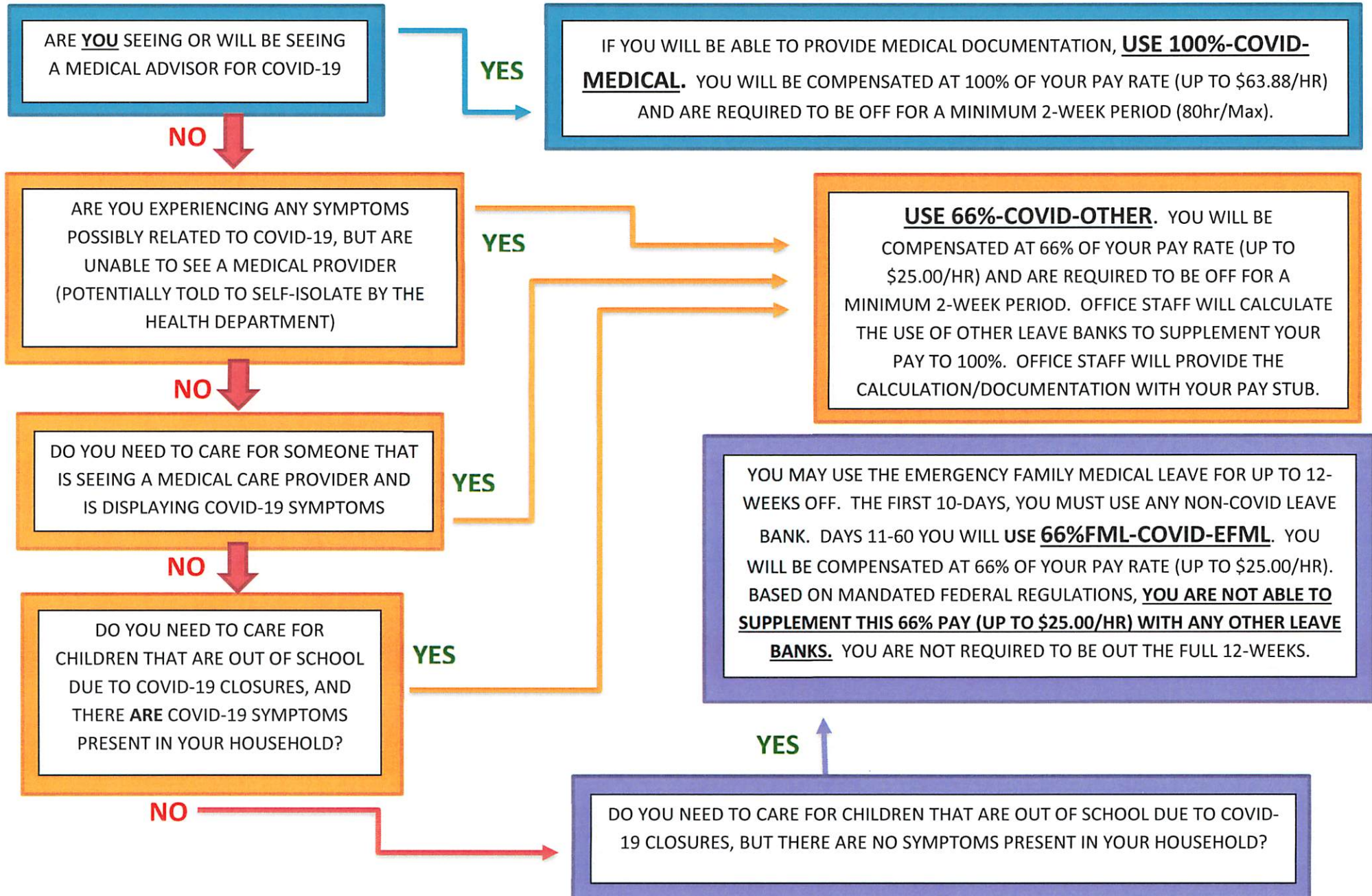


Chris Harris  
Business Manager

<sup>1</sup> Full-Time Employees. Permanent, Part-Time employees will receive hours commensurate with an average 2-weeks worked.



# HOW TO USE THE 80/HR COVID-19 SICK LEAVE AND EMERGENCY FAMILY MEDICAL LEAVE





# EMPLOYEE RIGHTS

## PAID SICK LEAVE AND EXPANDED FAMILY AND MEDICAL LEAVE UNDER THE FAMILIES FIRST CORONAVIRUS RESPONSE ACT

The **Families First Coronavirus Response Act (FFCRA or Act)** requires certain employers to provide their employees with paid sick leave and expanded family and medical leave for specified reasons related to COVID-19. These provisions will apply from April 1, 2020 through December 31, 2020.

### ▶ PAID LEAVE ENTITLEMENTS

Generally, employers covered under the Act must provide employees:

Up to two weeks (80 hours, or a part-time employee's two-week equivalent) of paid sick leave based on the higher of their regular rate of pay, or the applicable state or Federal minimum wage, paid at:

- 100% for qualifying reasons #1-3 below, up to \$511 daily and \$5,110 total;
- ⅔ for qualifying reasons #4 and 6 below, up to \$200 daily and \$2,000 total; and
- Up to 12 weeks of paid sick leave and expanded family and medical leave paid at ⅓ for qualifying reason #5 below for up to \$200 daily and \$12,000 total.

A part-time employee is eligible for leave for the number of hours that the employee is normally scheduled to work over that period.

### ▶ ELIGIBLE EMPLOYEES

In general, employees of private sector employers with fewer than 500 employees, and certain public sector employers, are eligible for up to two weeks of fully or partially paid sick leave for COVID-19 related reasons (see below). *Employees who have been employed for at least 30 days* prior to their leave request may be eligible for up to an additional 10 weeks of partially paid expanded family and medical leave for reason #5 below.

### ▶ QUALIFYING REASONS FOR LEAVE RELATED TO COVID-19

An employee is entitled to take leave related to COVID-19 if the employee is unable to work, including unable to telework, because the employee:

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. is subject to a Federal, State, or local quarantine or isolation order related to COVID-19;</li> <li>2. has been advised by a health care provider to self-quarantine related to COVID-19;</li> <li>3. is experiencing COVID-19 symptoms and is seeking a medical diagnosis;</li> <li>4. is caring for an individual subject to an order described in (1) or self-quarantine as described in (2);</li> </ol> | <ol style="list-style-type: none"> <li>5. is caring for his or her child whose school or place of care is closed (or child care provider is unavailable) due to COVID-19 related reasons; or</li> <li>6. is experiencing any other substantially-similar condition specified by the U.S. Department of Health and Human Services.</li> </ol> |
|--|--|

### ▶ ENFORCEMENT

The U.S. Department of Labor's Wage and Hour Division (WHD) has the authority to investigate and enforce compliance with the FFCRA. Employers may not discharge, discipline, or otherwise discriminate against any employee who lawfully takes paid sick leave or expanded family and medical leave under the FFCRA, files a complaint, or institutes a proceeding under or related to this Act. Employers in violation of the provisions of the FFCRA will be subject to penalties and enforcement by WHD.



**WAGE AND HOUR DIVISION**  
UNITED STATES DEPARTMENT OF LABOR

For additional information  
or to file a complaint:  
**1-866-487-9243**  
TTY: 1-877-889-5627  
[dol.gov/agencies/whd](https://dol.gov/agencies/whd)



**Humboldt Bay Municipal Water District**

To: Board of Directors

From: Chris Harris

Date: April 8, 2021

Re: Employee Disability Insurance, Life Insurance, and Accidental Death & Dismemberment Policies

**Background**

As part of our current comprehensive benefits package for employees, the District pays for Long-Term Disability (LTD) Insurance; employee Life Insurance; and Accidental Death and Dismemberment (AD&D) with Unum. The Life Insurance benefit is \$50,000 and the AD&D benefit is \$50,000 for accidental death, and 25% to 100% for dismemberment depending upon body part(s) or function lost.

In 2015 staff initiated a price and coverage comparison through our then current provider Assurant Benefits Group. This led to a switch to Unum with increased benefits and an annual premium decrease of approximately \$13,500.

**Update**

The rates from Unum remained constant for the first 4-years resulting in a cumulative savings to the District of \$54,000 in reduced benefit costs. The premium rates for Long-Term Disability and Life Insurance increased in 2019 and will be increasing again for the 2021 policy term (effective May 2021). The impact of these changes is shown below:

<b>Unum Insurance Rate Savings Since Inception</b>				
<b>PREMIUM YEAR</b>	<b>CHANGE IN PREMIUM</b>	<b>FINANCIAL IMPACT</b>	<b>ANNUAL SAVINGS</b>	<b>ACCUMULATED SAVINGS</b>
2015-2018	0	0	13,500	\$54,000
2019	+5%	+\$1,030 ANNUALLY	\$12,470	\$66,470
2020	0	0	\$12,470	\$78,940
2021	+5%	+\$1,156/ANNUALLY	\$11,314	\$90,254

**Staff Recommendation**

Staff recommends the Board remain with Unum for these employee benefits for the current policy year. Staff will review again in May 2022.

**Attached**

Unum 2021 Policy Rates

## #409220 &amp; 424811 - Humboldt Bay Municipal Water District

	Current rate	Renewal rate	Current premium*	New premium	Effective date	Guaranteed through
<b>Long Term Disability Insurance</b>	0.872	0.916	\$1591.60	\$1671.18	5/1/2021	5/1/2022
<b>Life Insurance</b>	0.242	0.254	\$334.57	\$351.30	5/1/2021	5/1/2022
<b>AD&amp;D Insurance</b>	0.015	0.015	\$20.74	\$20.74	5/1/2021	5/1/2022
<p>*Monthly premium based on current enrollment as of 11/30/2020.  Your Group Voluntary Term Life Insurance will not increase at this time — your current rate is guaranteed for 12 months.</p>						



Memo to: HBMWD Board of Directors  
From: Dale Davidsen, Superintendent  
Date: March 31, 2021  
Subject: Essex/Ruth March 2021 Operational Report

### **Upper Mad River, Ruth Lake, and Hydro Plant**

1. The flow at Mad River above Ruth Reservoir (Zenia Bridge) averaged 219 cfs. The low flow was 125 cfs on March 30<sup>th</sup> and the high flow was 385 cfs on March 19<sup>th</sup>.
2. The conditions at Ruth Lake for March were as follows:

The lake level on March 30<sup>th</sup> was 2653.92 feet which is:

- 0.54 feet lower than February 28<sup>th</sup>, 2021
  - 0.70 feet higher than March 30<sup>th</sup>, 2020
  - 1.40 feet lower than the ten-year average
  - 0.07 feet below the spillway
3. There were 5.46 inches of recorded rainfall for March at Ruth Headquarters.
  4. Ruth Hydro produced 940,800 KWh as of March 30<sup>th</sup>.
  5. The lake discharge averaged 293 cfs with a high of 518 cfs on March 20<sup>th</sup>.

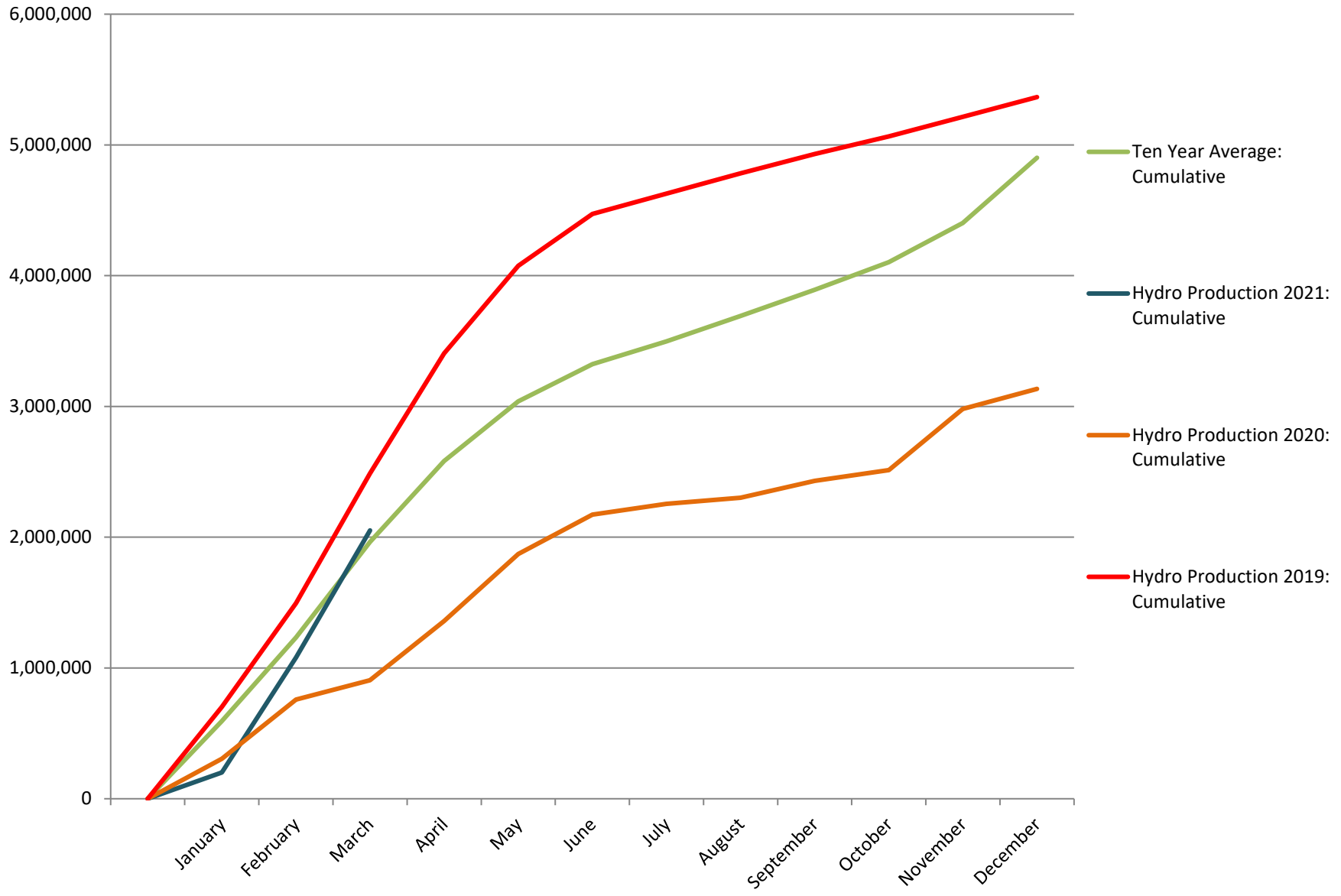
### **Lower Mad River, Winzler Control, and TRF**

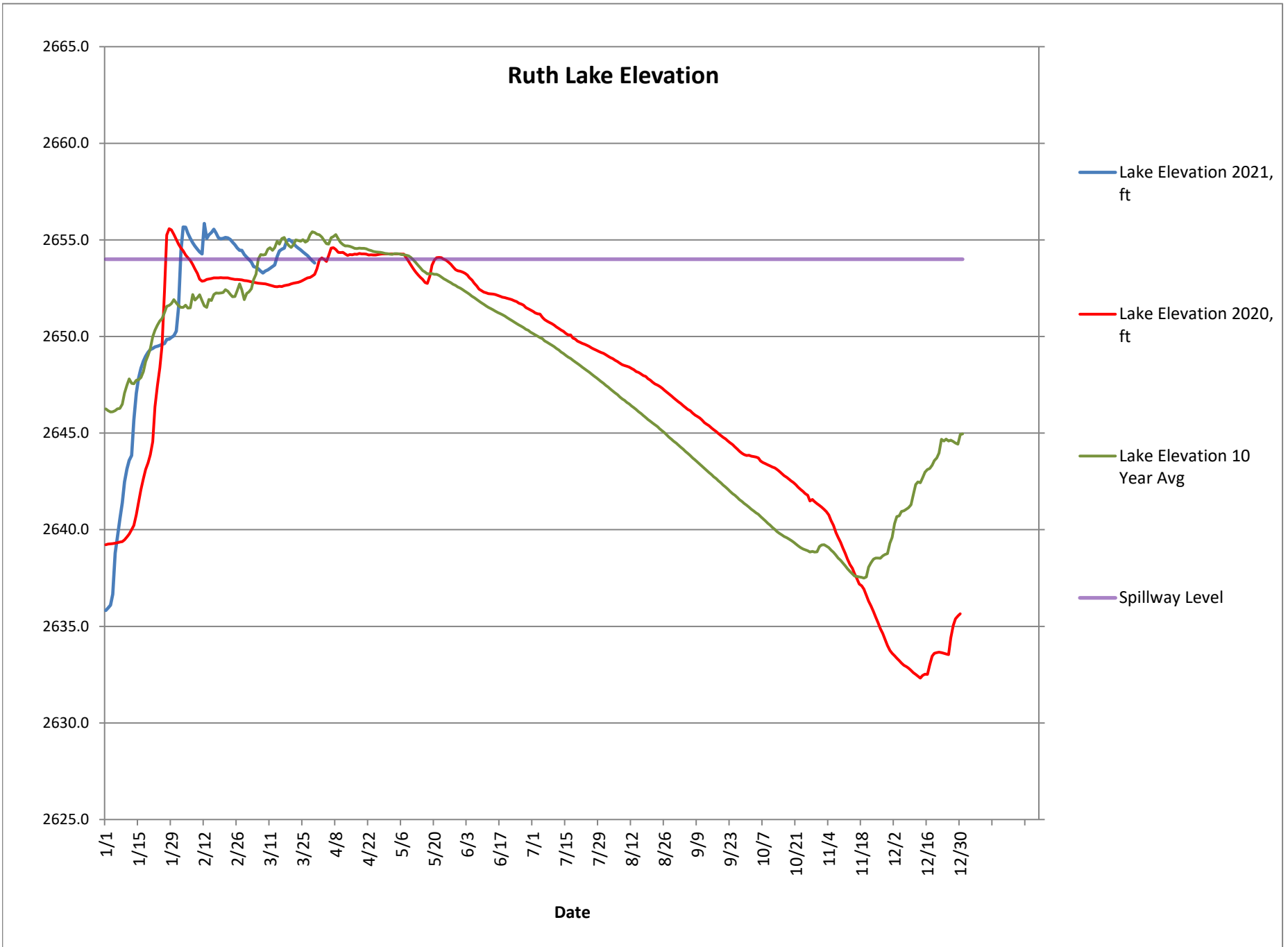
6. The river at Winzler Control Center for March had an average flow of 1624 cfs. The river flow reached a high flow of 2900 cfs on March 6<sup>th</sup>.
7. The domestic water conditions were as follows:
  - The domestic water turbidity average was 0.07 NTU, which meets Public Health Secondary Standards.
  - As of March 30<sup>th</sup>, we pumped 208.886 million gallons at an average of 6.863 MGD.
  - The maximum metered daily municipal use was 7.495 MGD on March 12<sup>th</sup>.
8. The TRF conditions were as follows:
  - There were 60 TRF filter backwashes in March

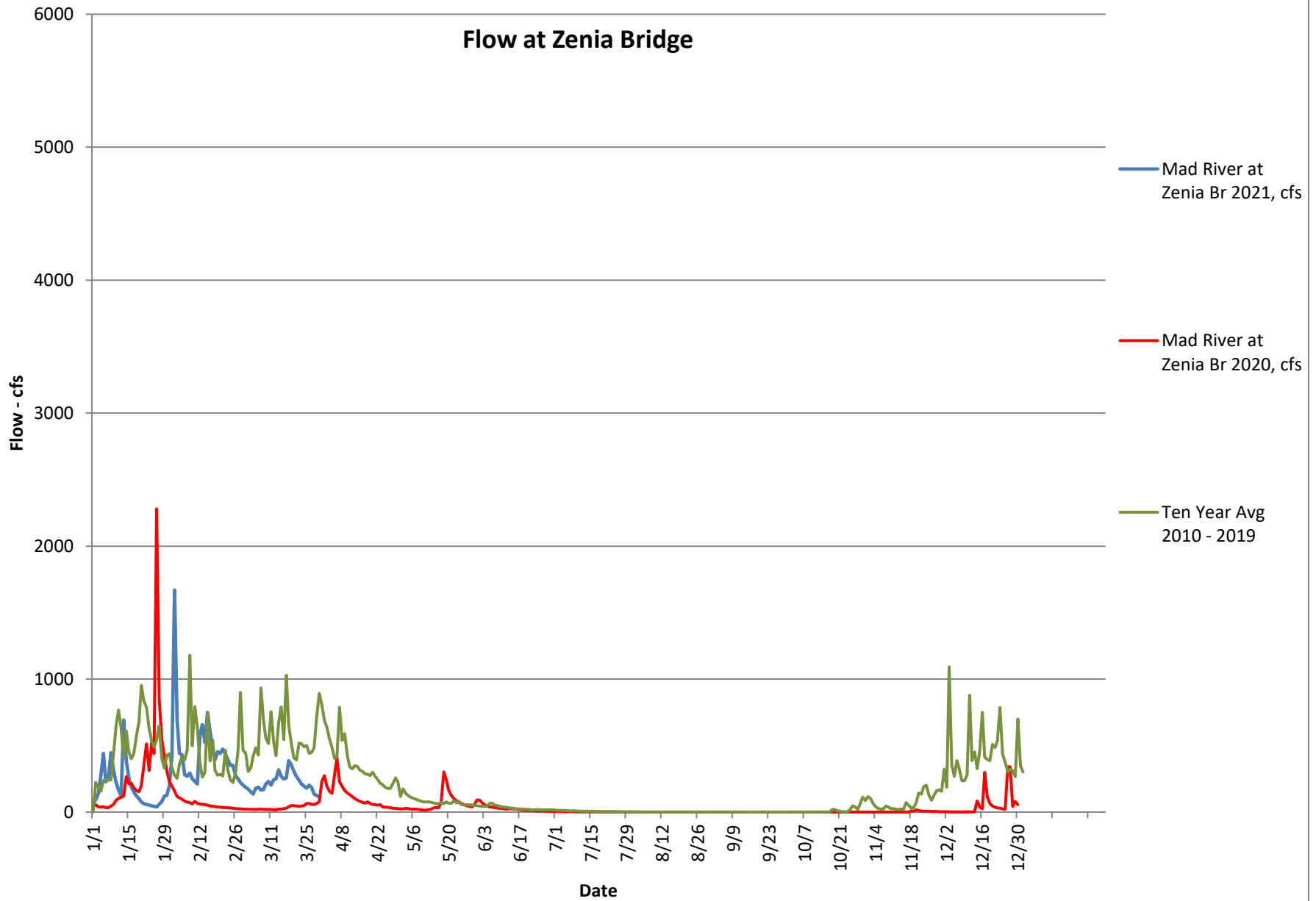


9. March 2<sup>nd</sup> – Maintenance worked on quarterly water quality calibrations.
10. March 3<sup>rd</sup>
  - Maintenance installed the Eureka meter. It was out for routine calibration.
  - Reviewed and discussed 12kV cutover plan with Ryan in prep for tomorrow's meeting.
11. March 4<sup>th</sup> – 12kV cutover plan meeting with GHD.
12. March 8<sup>th</sup> – Commissioned new Eureka office standby generator
13. March 10<sup>th</sup>
  - Electrical started installation of Chlorine building PLC.
  - Maintenance did 6-month CL2 system maintenance.
14. March 15<sup>th</sup> – 19<sup>th</sup>
  - Josiah attended a live virtual Electrical safety training webinar. Class 1 of 3.
  - Mario and Lui attended a live virtual SCADA cyber security architect webinar. Class 1 of 2.
15. March 17<sup>th</sup> – Safety meetings
  - Sight and Sound safety
  - Machine and equipment safety
16. March 22<sup>nd</sup> – 26<sup>th</sup> – Dave attended a live virtual Sub-station maintenance training webinar. Class 2 of 3.
17. Current and Ongoing Projects
  - COVID 19 – Dealing with modified staffing arrangements due to COVID cases as best we can. We continue to elevate the level of disinfecting of shared work spaces. All staff is doing well
  - 12kV project. – Project site winterized for now. IPA/switchgear submittal is now complete. Scheduled for construction.
  - Reservoir Seismic Retrofit project. – Meetings and emails as needed.
  - Working on FY 21/22 Budget.
  - Routine annual equipment maintenance and services.

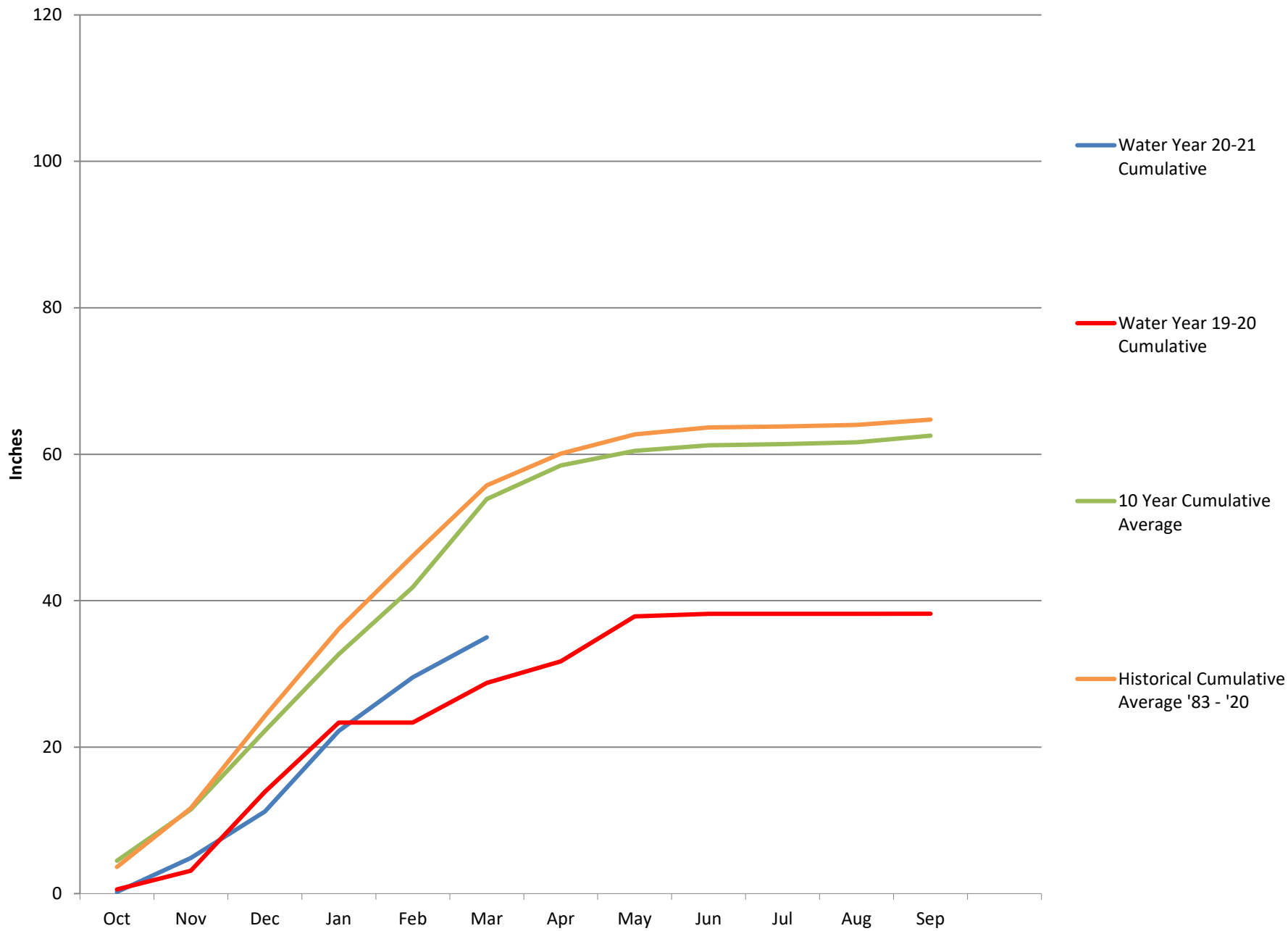
### Ruth Hydro Production: kW per Month

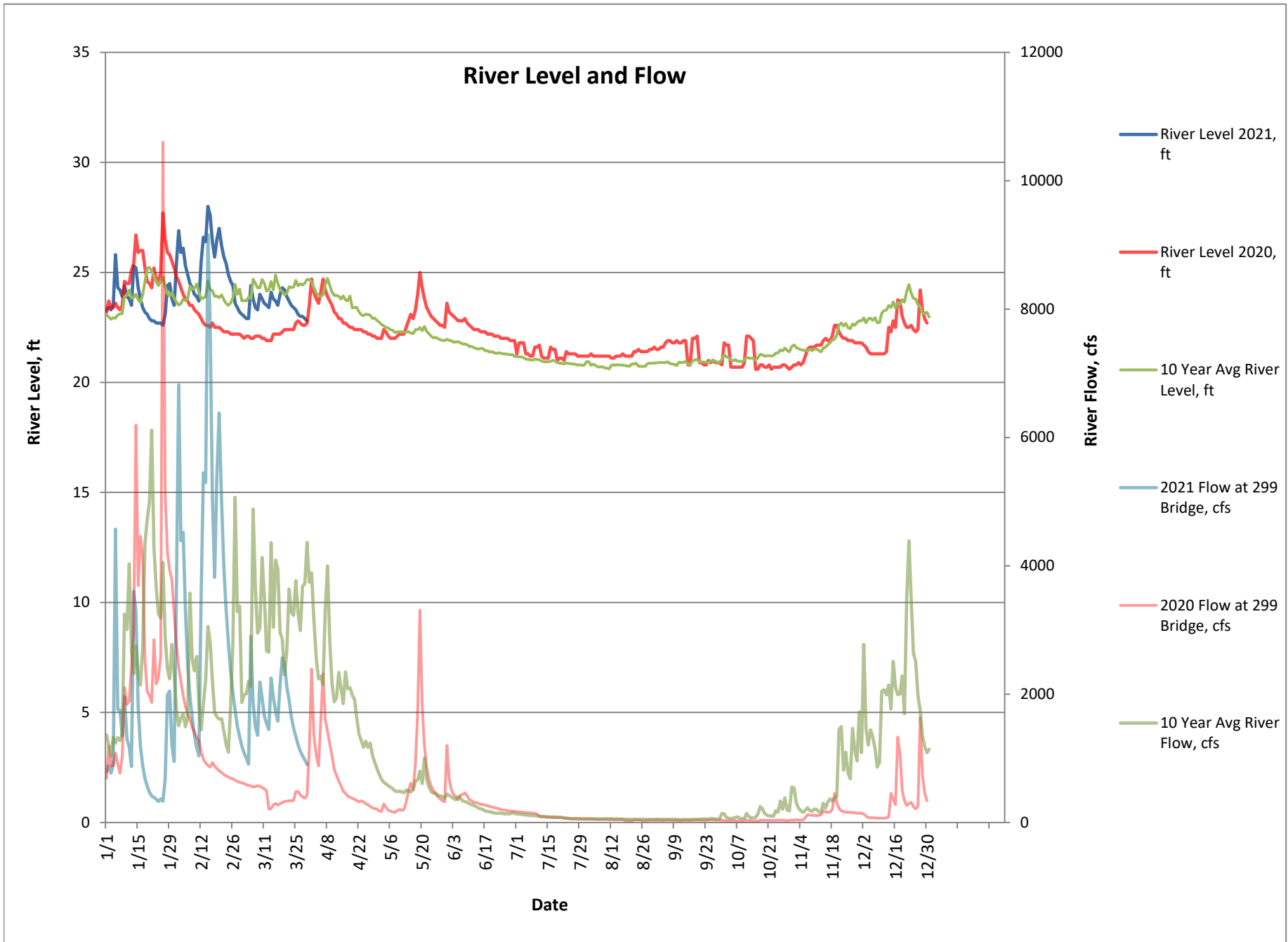






### Ruth Rainfall - Water Year 2020-2021







CSDA  
Humboldt Area Chapter  
welcomes the Special District

Humboldt Bay Municipal Water District

as a  
Member District  
for calendar year

2021



*John Friedbrach*  
Board Member Signature



## Headwaters Conference Call

March 16, 2021

1pm – 2pm (PST)

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### Agenda:

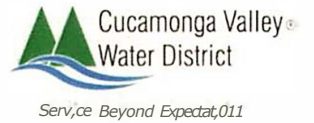
- I. Introductions and Call to Order, *Willie Whittlesey*
- II. CAFWA Update, *David Reynolds*
  - a. Support letters for state legislation
  - b. Draft Federal FY 22 letter
- III. State Legislative Update, *Julia Hall*
  - a. State Bills
  - b. Budget update
- IV. Federal Legislative Update, *David Reynolds*
  - a. FY 22 Appropriations Chart Update
  - b. Range of Light Draft Legislation, Unite the Parks
- V. Newsom Forest Action Plan, *David and Julia*
  - a. Letter Update
  - b. Panel for Spring Conference
- VI. Other items

### Attachments:

Draft Federal FY 22 Letter

State Bills List

Federal FY 21 Appropriations Chart





March 19, 2021

The Honorable Mike McGuire  
 Chair, Senate Committee on Governance and Finance  
 State Capitol, Room 5061  
 Sacramento, CA 95814

**RE: SB 323 (Caballero) - Local government: water and sewer service: legal actions**  
**Position: SUPPORT**

Dear Chair McGuire:

The Association of California Water Agencies (ACWA) and undersigned organizations write to express our strong support for SB 323, which would provide public agency water and sewer rates the same protections already afforded to fees and charges that fund other essential government services.

This bill would authorize a local agency or interested person to bring a validation action in a superior court to determine the validity of a fee or charge for water and sewer service. It would also require an interested party bring a validation action within 120 days after the fee or charge becomes effective.

Reliable long-term financial planning is paramount to providing essential government services, like water and sewer. Public water and sewer utility budgets are largely funded by revenue collected through service rates. These rates provide the funding necessary to improve aging infrastructure, build facilities needed to accommodate new growth, improve delivery systems, and operate effectively. While public water and sewer service providers require financial stability to meet these demands, existing law does not prevent lawsuits that seek refunds or seek to invalidate existing rate structures *years* after rates have been adopted and collected.

The California State Legislature has recognized the need to minimize fiscal uncertainty for public agencies providing essential government services by creating statutes of limitation for legal challenges to certain fees and charges, such as municipal electric rates<sup>1</sup> and connection and capacity fees assessed

<sup>1</sup> See Public Utilities Code § 10004.5.

by water and sewer agencies<sup>2</sup>. However, existing law offers a piecemeal statutory landscape where statutes of limitation are afforded to fees and charges that fund some essential government services but not others. SB 323 would close this gap in existing law by allowing customers to bring legal challenges to water and sewer rates within a reasonable-but limited-period of time. By following precedent established in existing law, this bill strikes a balance between the interests of ratepayers and the need for public agencies to maintain reliable sources of revenue.

The impacts of COVID-19 have exacerbated many challenges facing local agencies. The necessary disruptions to in-person work and Governor Newsom's executive order prohibiting water shutoffs have made water districts' revenue and financial planning more unpredictable. Now is the time to make existing legal protections consistent and increase predictability for utility providers throughout our State.

For the reasons above, we strongly support SB 323 and respectfully request your "AYE" vote when the bill is heard in the Senate Governance and Finance Committee. If you have any questions about our position or this bill, please contact ACWA Legislative Advocate Kristopher Anderson at [KrisA@acwa.com](mailto:KrisA@acwa.com) or (916) 441-4545.

Sincerely,



Kristopher M. Anderson, Esq.  
Legislative Advocate

KA:sn

cc: The Honorable Anna Caballero  
The Honorable Melissa Hurtado  
Honorable Members, Senate Committee on Governance and Finance  
Mr. Anton Favorini-Csorba, Consultant, Senate Committee on Governance and Finance  
Mr. Ryan Eisenberg, Policy Consultant, Senate Republican Caucus

Alameda County Water District	City of Garden Grove
Amador Water Agency	City of La Habra
Aromas Water District	City of Oceanside
Association of California Water Agencies	City of Roseville
Bella Vista Water District	City of Sacramento
Bodega Bay Public Utility District	City of Santa Rosa
Brooktrails Township Community Services District	City of Shasta Lake
California Municipal Utilities Association	City of Watsonville
California Special Districts Association	Cucamonga Valley Water District
Calleguas Municipal Water District	Diablo Water District
Coachella Valley Water District	Eastern Municipal Water District
Corcoran Irrigation District	El Dorado Irrigation District
City of Fountain Valley	El Toro Water District

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<sup>2</sup> See Government Code § 66022.

Elk Grove Water District  
 Elsinore Valley Municipal Water District  
 Foothill Municipal Water District  
 Helix Water District  
 Hidden Valley Lake Community Services, District  
 Humboldt Bay Municipal Water District  
 Humboldt Community Services District  
 Indian Wells Valley Water District  
 Irvine Ranch Water District  
 Kings River Conservation District  
 Las Virgenes Municipal Water District  
 League of California Cities  
 Los Angeles County Sanitation Districts  
 Marin Water  
 Mariana Ranchos County Water District  
 McKinleyville Community Services District  
 Mid-Peninsula Water District  
 Modesto Irrigation District  
 Monte Vista Water District  
 North Coast County Water District  
 North Marin Water District  
 Olivenhain Municipal Water District  
 Otay Water District  
 Pine Grove Community Service District  
 Princeton Codora Glenn Irrigation District  
 Provident Irrigation District  
 Public Water Agencies Group  
 Rainbow Municipal Water District  
 Rancho California Water District  
 Reclamation District #1500  
 Regional Water Authority  
 Root Creek Water District  
 Sacramento Suburban Water District  
 San Bernardino Municipal Water Department  
 San Diego County Water Authority  
 San Francisco Public Utilities Commission  
 San Juan Water District  
 Santa Margarita Water District  
 Scotts Valley Water District  
 Sonoma County Water Agency  
 South San Joaquin Irrigation District  
 South Tahoe Public Utility District  
 Southern California Water Coalition  
 Tuolumne Utilities District  
 United Water Conservation District  
 Valley Center Municipal Water District  
 Vista Irrigation District  
 Walnut Valley Water District  
 West County Wastewater District  
 Western Municipal Water District  
 Westlands Water District



# TSUNAMI WARNING COMMUNICATIONS TEST

## Del Norte, Humboldt, and Mendocino Counties

**WHEN:** Wednesday, March 24, 2021, between 11:00 a.m. & 12:00 Noon

**WHERE:** Del Norte, Humboldt, and Mendocino counties.

**HOW:** Interruptions of TV\* and Radio Stations, and activation of NOAA Weather Radios and Outdoor Sirens.

*\*Not all Cable and Satellite TV Stations may be able to participate*

**WHY:** To test the Tsunami Warning System to ensure it works properly during a real tsunami emergency.

### HOW THIS TEST WILL AFFECT YOU:

If you are watching television between 11:00 a.m. and 12:00 Noon on Wednesday morning, expect to see a crawler at the bottom of the screen indicating that a tsunami warning has been issued, and hear a voice indicating that it is only a test. If you don't hear the TV audio, please remember that this is only a test. If you are listening to the radio, you will hear alerting tones followed by a voice announcing that the test is occurring. If you have a NOAA weather radio with the Public Alert feature, the radio will automatically turn on and you will hear the same message as broadcast on radios. **In some areas, you may also hear the sounding of a tsunami siren, an airplane testing its public address system, or receive other communication tests in some local jurisdictions. The Wireless Emergency Alert (WEA) system that comes across smart phones will NOT be activated for this test.**

Please help us by providing any feedback regarding this test by emailing:

[ryan.aylward@noaa.gov](mailto:ryan.aylward@noaa.gov)

**When you hear or see the warning test on March 24 between 11:00 a.m. & 12:00 Noon:**

- You do NOT need to take any action
  - Do NOT call 911 or local authorities
  - Do NOT evacuate your home or business
- THIS IS ONLY A TEST!!**

**PREPARE:** Find out more about preparing for earthquakes, tsunamis or any other disasters on the North Coast at <https://rctwg.humboldt.edu>. America's PrepareAthon! (<https://www.ready.gov/prepareathon>) the Great California Shakeout (<https://www.shakeout.org/california/>), and The Tsunami Zone (<https://www.TsunamiZone.org>) are also great places to get preparedness information for natural hazards.

*The test is conducted by the National Weather Service, the California Office of Emergency Services, the Offices of Emergency Services for Del Norte, Humboldt, and Mendocino Counties, and Tribal Governments. For more information, contact: National Weather Service (707) 443-6484.*





**Tsunami 1-foot Safe Area**

**Tsunami Zone**

you fe-4 an earthquake, go to wfe area



Sol Price School of Public Policy  
University of Southern California

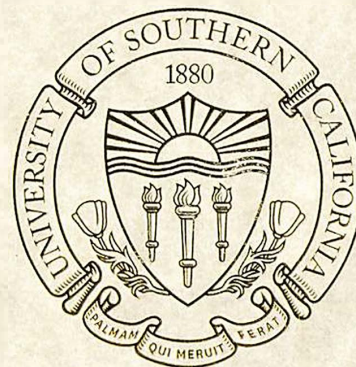
*This is to certify that*

**John Friedenbach**

*has completed*

**Executive Education in Public Policy**

*February 19, 2021 and February 26, 2021*



Frank V. Zerunyan J.D., LL.D. (hc)  
Professor of the Practice of Governance.  
Director of Executive Education Forum.  
Director and University Liaison to ROTC Programs

Dana P. Goldman, Ph.D.,  
Interim Dean, Sol Price School of Public Policy,  
Leonard D. Schaeffer, Director's Chair, Schaeffer Center  
for Health Policy & Economics,  
Distinguished Professor of Public Policy, Pharmacy, and Economics

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<https://www.wsj.com/articles/offshore-wind-farms-big-in-europe-could-boom-in-u-s-under-biden-11612623600>

## BUSINESS

# Offshore Wind Farms, Big in Europe, Could Boom in U.S. Under Biden

Wind project developers are pressing the administration to ease bureaucratic hurdles to building giant turbines off the Atlantic coast

By [Katherine Blunt](#) / Photographs by Philip Keith for *The Wall Street Journal*

Feb. 6, 2021 10:00 am ET

Developers of offshore wind farms, long awaiting their moment in the U.S., are pushing the Biden administration to cut through red tape that has for years stymied the industry's domestic growth.

President Biden signed an executive order last month directing the Interior secretary to identify steps to double offshore wind production by 2030, part of an effort to deploy more renewable energy to combat climate change.

A White House spokesman said that the administration plans to engage with the offshore wind industry in the coming months.

A goal to double production within a decade sounds bold yet sets a fairly low bar: The U.S. currently has two small offshore wind farms in operation, a tiny industry compared with

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# **The National Forest Foundation and Tahoe National Forest Ac- complish 600 Acres of Prescribed Fire**

by **National Forest Foundation**  
March 22, 2021

**NEVADA CITY, Calif. (March 22, 2021) - In the aftermath of a historic fire season that saw 10,062 wildfires burn nearly 4.2 million acres across California, Governor Newsom recently created the Wildfire and Forest Resilience Action Plan. This Plan will address the key drivers of catastrophic fires, significantly increase the pace and scale of forest management, and improve the resilience of increasingly threatened communities.**

**The Plan also outlines a strategy to meet a new target of the state: implement forest resilience projects on 500,000 acres annually by 2025 and expand the use of beneficial prescribed fire.**

The Tahoe National Forest (TNF) and the National Forest Foundation (NFF) are actively collaborating to meet this goal, and successfully implemented 600 acres of prescribed fire in December 2020 and January 2021. Looking to the future, the TNF and NFF have an additional 2,000 acres of prescribed fire areas prepped and ready for immediate implementation when weather conditions permit prescribed fire activities. These future prescribed fires will occur on the **Yuba Project**, a 15,000-acre project in the North Yuba River watershed that is part of the larger North Yuba forest IPartnership-11.

"Implementing an additional 2,000 acres of prescribed fire on the Yuba Project will help improve the long-term ecological health of the entire North Yuba River watershed", said NFF California Associate Bri Tiffany who is working with the TNF to coordinate the prescribed fires. "While high-severity wildfires can scorch seed banks and negatively impact forest regeneration, frequent, low-severity fires are a natural part of the ecosystem and actually encourage new growth of native vegetation."

"Not only does increasing our use of prescribed fire meet both US Forest Service and State of California goals for forest resilience," said Eli Ilano, Tahoe National Forest Supervisor, "but it can be a powerful tool to reduce the risk of catastrophic fire impacting our local communities. Returning frequent, low-intensity fire to the land improves the health and resiliency of the forest and significantly reduces the buildup of hazardous fuels next to neighborhoods, while providing a safer location for firefighters to defend homes and communities during the approach of a large, catastrophic wildfire."

The NFF and TNF have entered into a Master Stewardship Agreement to ensure forest health and resilience projects continue to increase in pace and scale across the Tahoe National Forest. These organizations are also committed to providing the public information about prescribed fire, and the benefits of returning managed fires to the landscape. To see alerts



of Tahoe National Forest prescribed fires, please follow the Forest on [Twitter](#) or [Facebook](#).

**About NFF:** Chartered by Congress, the [National Forest Foundation](#) works to inspire personal and meaningful connections to our national forests-the centerpiece of America's public lands. Working on behalf of the American public, the NFF leads forest conservation efforts and promotes responsible recreation. We believe our national forests are an American treasure and are vital to the health of our communities.

iChoices [G](#)

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## ACWA REGION 1 BOARD MEETING

Wednesday, March 24, 2021 | 12:00 - 1:00 p.m.

**Zoom:**

<https://acwa.zoom.us/j/95059559388?pwd=M00rUDhjZnR2VGNYR0ltTHhCUDIXZz09>

### Agenda

- |      |                                   |               |
|------|-----------------------------------|---------------|
| I.   | Call to Order, Welcome            | Brad Sherwood |
| II.  | Elected Leaders Update            | Board         |
| III. | Pre-ACWA Board Meeting Discussion | Board         |
| IV.  | Additional Discussion Items       | All           |

### ACWA REGION 1 BOARD 2020-2021

**Chair**

**Brad Sherwood,**  
Sonoma Water

**Vice Chair**

**Jennifer Burke,**  
City of Santa Rosa

**Board Members**

**Tamara Alaniz,**  
Brooktrails Township  
Community Services  
District

**Jon L. Foreman,**  
Valley of the Moon Water  
District

**Dennis Mayo,**  
McKinleyville Community  
Services District

**J. Bruce Rupp,**  
Humboldt Bay Municipal  
Water District

**Elizabeth Salomone,**  
Mendocino County  
Russian River Flood  
Control & Water  
Conservation  
Improvement District

**QUESTIONS**

Contact Jennifer Rotz,  
Regional Affairs  
Representative, at  
[JenniferR@acwa.com](mailto:JenniferR@acwa.com) or  
(916) 441-4545

Headwaters	
Meeting Date: March 26, 2021	Item No.: VII.A.3.
Board Action Required: NO	Chairperson: Willie Whittlesey
Fiscal/Budgetary Impact: NO	Prepared By: David Reynolds, Cindy Tuck, Julia Hall

### BACKGROUND

The ACWA Board of Directors has identified this issue as one of ACWA's policy priorities.

### FEDERAL ACTIVITY

The Daines (R-WY)-Feinstein wildfire bill failed to pass during the 116<sup>th</sup> Congress. If the legislation is reintroduced, ACWA will again request amendments to include making cleanup of sediment and debris eligible and including water infrastructure within the legislation.

ACWA's Headwaters Work Group met on March 16, 2021. They discussed legislative strategies for the 117<sup>th</sup> Congress, including possible strategies for including Headwaters provisions in the pending Recovery/Infrastructure legislation. The Work Group also received an update on the ongoing Spotted Owl litigation and expressed interest in sending a supportive letter regarding the Newsom Forest Action Plan.

### STATE ACTIVITY

#### STATE BUDGET - GOVERNOR'S WILDFIRE AND FOREST RESILIENCE EXPENDITURE PLAN

ACWA has submitted a letter to the Legislature in support of the Governor's proposed Wildfire and Forest Resilience Expenditure Plan (Expenditure Plan). The proposed Expenditure Plan includes \$323 million in current year funding, with a total of \$1 billion for wildfire and forest resilience, which is critical to the State's forest health and watershed restoration needs. ACWA staff are monitoring hearings on the issue and expect that while details of the Expenditure Plan may shift with the Legislature's influence, there is likely to be a large influx of funding to address the catastrophic wildfire challenges California and its headwaters face.

ACWA sent a [letter](#) on March 15, 2021 to Secretary for Natural Resources Wade Crowfoot expressing support for Governor Newsom's Wildfire and Forest Resilience Action Plan and Agreement for Shared Stewardship of California's Forest and Rangelands. A key theme in the letter is "another action imperative to promoting more widespread fire resiliency is adapting state funding mechanisms to

accomplish work at the local level. Channeling state funds through regional entities can provide cash-flow resiliency to help manage payment cycles, an important step to realize the business model necessary to achieve the goals of increased pace and scale for fire resiliency projects". Secretary Crowfoot replied immediately with his appreciation for the constructive letter.

#### **CALIFORNIA FOREST WATERSHED ALLIANCE (CAFWA) UPDATE**

CAFWA met on March 1, 2021. Both recent State and Federal legislative activities were discussed. CAFWA approved the organization's Federal Appropriations Request letter with Congress starting work on Fiscal Year 2022.

CAFWA also submitted a letter in support of the Governor's proposed Expenditure Plan. ACWA staff are coordinating with other CAFWA members regarding collectively supporting the Expenditure Plan as it moves through the State Budget process.

March 15, 2021

The Honorable Wade Crowfoot  
Secretary for Natural Resources  
California Natural Resources Agency  
1416 9<sup>th</sup> Street #1311  
Sacramento, CA 95814

**Re: Support for Governor Newsom's Wildfire and Forest Resilience Action Plan and Agreement for Shared Stewardship of California's Forest and Rangelands**

Dear Secretary Crowfoot,

The Association of California Water Agencies (ACWA) represents over 460 public water agencies across the state, many of which are directly engaged in proactive efforts to improve forest health and restore watershed function to achieve greater resiliency in the face of climate change. ACWA member agencies have long been concerned with protecting the state's forested headwaters – the primary source of water supply for California's citizens, agriculture, and businesses.

ACWA has been informing state and federal decision-makers of the critical need to proactively manage our forested headwaters for the last decade. Promoting policy advances on headwaters management continues to be a priority for ACWA and its members, and we recently updated our policy principles on "[Improved Management of California's Headwaters](#)" (Headwaters Principles). These principles fall into four categories:

1. Improved planning, coordination, and implementation;
2. Management of headwater resources;
3. Research; and,
4. Financing of headwater improvements.

It is from this perspective that ACWA offers its enthusiastic support for actions that Governor Newsom's Administration is taking to promote fire resilience for California's communities and natural areas. ACWA's goals are well-aligned with the policies laid out in the Wildfire and Forest Resilience Action Plan (Action Plan) as well as the State's continued progress on collaboration with the federal government through the August 2020 Agreement for Shared Stewardship of California's Forest and Rangelands (Agreement). The Agreement is precisely the vehicle necessary to articulate the goals and direction for a coordinated effort between the State and the USDA Forest Service, the largest headwater resource manager. The Action Plan provides more specific actions that are necessary to accomplish the goal of increased protection of our headwater resources and to help prevent catastrophic wildfire. ACWA offers our support for the Agreement and Plan as well as some observations that we believe will be helpful in the united effort to turn the tide on catastrophic fire in California.

Some of ACWA's member agencies have already taken major steps in planning, funding, and implementing projects that accomplish the visions of the Plan and the Agreement. For example, in Placer and Yuba counties, water agencies have successfully developed partnerships with the USDA

Forest Service, environmental organizations, Tribes, local land managers, and other stakeholders and are currently increasing headwater fire resiliency through the practices of ecological forestry. Funding comes from a combination of federal, state, local government, and private sources.

Primary in our perspective is the understanding that greater, more rapid, efficient, and enduring success in improving fire resiliency can be achieved by utilizing local and regional levels of public organization as a conduit to deliver funds from the state to on-the-ground projects. One of our Headwaters Principles is that strategies should recognize that one size does not fit all, and there is great variability across the state. Actionable strategies should provide for accommodation of local and regional diversity based upon resource conditions, institutional capacity, ongoing projects, and local and regional priorities. This goal is best achieved by empowering local and regional entities to manage funds and collaborate across regions, including water agencies, fire departments, municipalities, fire safe councils, prescribed fire cooperatives, resource conservation districts, and other special districts. They are ideally positioned to: identify projects with the greatest tangible needs and benefits for the areas affected; build and lead local coalitions; successfully permit projects; realize “boots-on-the-ground” management; and achieve effective reporting.

With restoration projects in the Yuba and Placer headwaters, for example, county-level government serves as the accumulator of funds from federal, state, local, and private sources as well as: the lead agency for state environmental processes; the primary partner in master stewardship agreements for federal lands; and the contracting agent for all local private sector watershed management work. The Placer and Yuba projects have developed efficient funding, contract management, and reporting models that can easily be adapted to the needs of other regions of the state for internal capacity building. Local relationships developed by regionally focused organizations such as the Sierra Nevada Conservancy are valuable in coordinating locally managed projects to accomplish regional goals.

ACWA also strongly supports the Action Plan’s identification of the need to increase economic opportunities for use of forest materials. It is widely recognized that a major hurdle to the viability of forest health projects is the limited market for removed fuels. With the Placer project, for example, there are very few places to take removed excess vegetation, thus hampering the effectiveness of fire resiliency objectives. Stimulation of biofuel and other wood product infrastructure is an imperative part of creating a viable fire resiliency business model for the state.

Another action imperative to promoting more widespread fire resiliency is adapting state funding mechanisms to accomplish work at the local level. The Plan recognizes the importance of ecological, economic, and social linkages in creating a fire resilient forest resource culture. To realize the work force necessary to accomplish largescale fuels removal, funding must be provided within local contractors’ billing cycles. Few contractors can afford to wait for quarterly payments, which are common for state funding. Channeling state funds through regional entities can provide cash-flow resiliency to help manage payment cycles, an important step to realize the business model necessary to achieve the goals of increased pace and scale for fire resiliency projects.

In conclusion, ACWA supports the Governor’s January 8, 2021 budget proposal regarding wildfire funding and urges the Administration and Legislature to work together to ensure funding flows to local communities that can put monies to effective and efficient use in projects on the ground. ACWA applauds the efforts of the Newsom Administration to actively address the accelerating crisis posed by catastrophic, high severity forest fires with a changing climate. ACWA is committed to continuing as a partner in creating a culture of fire resilience for California.





Thank you for your consideration of these suggestions. If you have questions or would like to discuss these issues, please contact me at [davee@acwa.com](mailto:davee@acwa.com) or Cindy Tuck, Deputy Executive Director for Government Relations at [cindyt@acwa.com](mailto:cindyt@acwa.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Dave Eggerton", with a long, sweeping horizontal line extending to the right.

Dave Eggerton

cc: Ms. Cindy Tuck, Deputy Executive Director for Government Relations, ACWA  
Ms. Julia Hall, Senior Legislative Advocate, ACWA

## FY 2021 Headwaters Appropriations

Program	2019 Enacted	2020 Enacted	2021 Omnibus
<b>Department of Agriculture, Forest Service</b>			
<b>National Forest System</b>			<b>\$1.78 billion</b>
Hazardous Fuels	\$435 million	\$445 million	\$180 million
Vegetation and Watershed Management	\$180 million	\$182 million	\$28 million
Collaborative Forest Landscape Restoration	\$40 million	\$40 million	\$13.78 million
Capital Improvement and Maintenance (roads)	-	-	\$140 million
<b>State and Private Forestry</b>			<b>\$267 million</b>
State Fire Assistance (National Fire Capacity)	\$81 million	\$82 million	\$73.4 million
Landscape Scale Restoration	\$14 million	\$14 million	not delineated
<b>Department of Interior</b>			
<b>Wild/and Fire Management</b>			<b>\$992 million</b>
Fuels Management	\$189 million	\$194 million	\$219 million
Wildfire Suppression Operations	-	-	\$310 million <i>transferable to USDA</i>

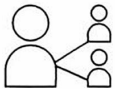


## ATTENDEE & EXHIBITOR REGISTRATION PRICING SHEET



### REGISTER ONLINE

Register online by **May 7, 2021** at [www.acwa.com](http://www.acwa.com) to take advantage of the advance pricing.



### REGISTER ON SOMEONE'S BEHALF

Select from a list of people affiliated with your company in your account. If the registrant is not listed, you will need to create a Portal profile for the registrant before registering.

### REGISTRATION FEES

### ADVANTAGE

### STANDARD

#### PLEASE NOTE

Advantage pricing applies to ACWA public agency members, associates & affiliates.

Standard pricing applies to non-members of ACWA.

<b>Virtual Conference Attendee Registration</b> .....	\$375	\$565
<b>Premium Virtual Exhibit Booth*</b> .....	\$1,000	\$2,000
<b>Standard Virtual Exhibit Booth*</b> .....	\$800	\$1,600
<b>Additional Booth Staff</b> .....	\$250	\$250

\*Exhibit Booth includes 1 booth staff. For more details on Premium vs. Standard booth features, contact Stacey Siqueiros at [StaceyS@acwa.com](mailto:StaceyS@acwa.com)

### VIRTUAL CONFERENCE HIGHLIGHTS

Following the success of ACWA Virtual Conferences in 2020, ACWA's 2021 Spring Virtual Conference will feature notable keynote presentations, statewide issue forums and other diverse programs discussing the latest developments and insights affecting the California water community. Important local, state, and federal information that you and your agency need to know!

**Networking Opportunities** Network with your colleagues in Networking Lounges who you might normally meet at conference.

**Group Savings!** Register 5 individuals from the same organization, receive a 6th registration free! (\*Subject to terms and conditions. Contact Teresa Taylor at [TeresaT@acwa.com](mailto:TeresaT@acwa.com) for more information)

**Virtual interactive Exhibit Hall** - Come visit and learn about innovative products and services that may be just the right solution for your agency! Check out unique Exhibitor presentations and demos!

**Continuing education credits** -Attorney, energy, financial, and drinking water operator qualifying sessions will be available.

Looking for a new way to connect with the California Water Community? Exciting virtual sponsorships and robust virtual Exhibit Hall booths are available! Contact Stacey Siqueiros at [StaceyS@acwa.com](mailto:StaceyS@acwa.com) for more details.

### PAYMENT METHODS

Check payable to ACWA - 980 9th Street, Suite 1000 • Sacramento, CA 95814

Charge credit card: MasterCard or Visa

*For your security, you must call ACWA Accounting at (916) 441-4545 and provide your credit card information over the phone.*

### QUESTIONS?

Contact us at (888) 666-2292

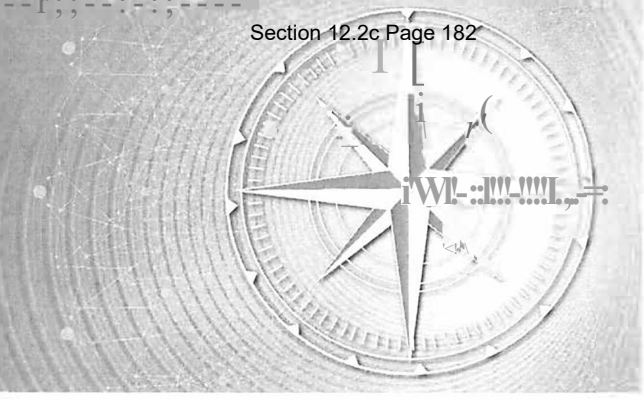
**Registration Cancellation deadline: May 7, 2021 4:30 p.m. (PDT)**

Conference terms and conditions available at [acwa.com](http://acwa.com) in the event section.

**MAY 12 - 13**

2021 SPRING VIRTUAL CONFERENCE & EXHIBITION

# NAVIGATING A NEW FUTURE TOGETHER



**Thursday - May 13, 2021**



*The programs qualify for continuing education credit.*

**8:30AM**



**SIP + STRETCH** *Sponsored by waterTALENT*

Start your morning with wellness and a cup of coffee! Join us for a guided stretch session and if you register now, the first 500 paid conference registrants will receive a Starbucks gift card.

**9:00AM**

**DAY 2 OPENING**

**Opening Remarks**

Pam Tobin, ACWA Vice President

**Keynote**

**BREAKOUT SESSIONS**

**9:30AM**

**Region Issue Forum**

Wildfire Recovery and Managing Public Expectations

Presented by Region 4

**Statewide Issue Forum**

Achieving the Voluntary Agreements



**Water Industry Trends / Energy**

CARB Advanced Clean Fleet Rule Implications for Water Agencies

**10:30 AM**



**Finance Forum**

Utility Operational Reviews - Why Do One and What to Expect?

**Region Issue Forum**

Regional Collaboration Works: MWD's Regional Recycled Water Program

Presented by Region 8



**Statewide Issue Forum**

Reconciling the Regulatory Overlap of Groundwater Programs

**11 :30 AM**

**CONFERENCE CLOSING**

**Closing Keynote**

**Closing Remarks**

Steve LaMar, ACWA President

TO: HUMBOLDT BAY MUNICIPAL WATER DISTRICT (H002)

FROM: David deBernardi, Director of Finance *q)*

DATE: February 1, 2021

RE: Rate Stabilization Fund Report

Enclosed is the Rate Stabilization Fund Report for your agency including backup documentation. For those agencies that have a balance that exceeds the attachment point, a check for the amount over the attachment point is also enclosed. Approximately 195 members are receiving a check with this report. Total refunds approximate \$6.2 million.

The Rate Stabilization Fund was established in 1999 to help stabilize the fluctuating cycle of refunds and billings for prior policy years. In 2001, the Executive Committee authorized expanding the fund to include all pooled programs.

The report has several parts. It starts with the beginning balance, the amount on the books for each member before adjustments. The first adjustment is the Liability Program's 10/1 /18-19 policy year deposit premium for actual payroll vs. estimated payroll. Afterwards, there are adjustments for the Liability, Property and Workers' Compensation programs. These program adjustments are Retrospective Premium Adjustments for prior policy years that still have open claims. Finally, if the resulting balance is negative by more than 40% (or positive by more than 70%) of the attachment point, the district is billed (refunded) for the difference.

Also enclosed in the back of the document is your agency Catastrophic Fund (CAT Fund) statement. This report discloses the activity in the CAT Fund for the both the liability and workers' compensation programs.

It should be noted that each agency's balance is maintained separately for both Rate Stabilization Fund and CAT Fund and not all agencies' balances change at the same rate.

If you have any questions regarding the Rate Stabilization Fund or any of the adjustments, please call (800) 231-5742 or e-mail me at [ddebernardi@acwajpia.com](mailto:ddebernardi@acwajpia.com).

**CONGRATULATIONS!**

**ASSOCIATION OF CALIFORNIA WATER AGENCIES  
 JOINT POWERS INSURANCE AUTHORITY  
 PO BOX 619082  
 ROSEVILLE, CA 95661-9082  
 RPA STABILIZATION FUND REPORT  
 AS OF 09/30/2020**

FOR: HUMBOLDT BAY MUNICIPAL WATER DISTRICT (H002)

BEGINNING BALANCE	\$38,023.00
LIABILITY PREMIUM ADJ. -ACTUAL VS ESTIMATED PAYROLL- PY 10/1/2018-2019	(\$1,883.00)
LIABILITY PREMIUM ADJ. - PY 10/1/1989-1990, 2009-2010 to 2016-2017	\$18,900.00
W/C RETROSPECTIVE PREMIUM ADJ. - PY 7/1/1988-1989, 1992-1993, 1999-2000 to 2016-2017	\$22,506.94
LIABILITY - CATASTROPHIC RESERVES ADJ. - 09/30/2020	\$5,657.02
W/C - CATASTROPHIC RESERVES ADJ. - 09/30/2020	\$22,672.86
FUND BALANCE	\$105,876.82
CURRENT ATTACHMENT POINT ( 70% OF BASIC LIABILITY PREMIUM)	\$53,799.20
AMOUNT OF REFUND DUE TO THE MEMBER DISTRICT	\$52,077.62





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## **BOARD OF DIRECTORS MEETING AGENDA (AMENDED)**

**March 25, 2021 -Thursday, 3:30 p.m.**

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### **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 the Humboldt County Health Officer's March 30, 2020, [Shelter-in-Place Order](#), 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.

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**To listen to the meeting by phone**, call (669) 900-6833 or (253) 215-8782. Enter webinar ID: 819 7236 8051. **Join the Zoom webinar online** at <https://us02web.zoom.us/j/81972368051>.

**You may email public comment** to [PublicComment@redwoodenergy.org](mailto:PublicComment@redwoodenergy.org) before and during the meeting. **Please identify the agenda item number in the subject line.**

**To comment live during the public comment periods**, raise your hand in the online Zoom webinar, or press star (\*) 9 on your phone to raise your hand. When it is your turn to speak, a staff member will unmute your phone or computer. You will have 3 minutes to speak. For assistance participating in the meeting online, please call (707) 269-1700 or email [Ltaketa@redwoodenergy.org](mailto:Ltaketa@redwoodenergy.org) at least 3 business days before the meeting.

While downloading the Zoom application may provide a better meeting experience, you do not need to install Zoom on your computer to participate. After clicking the webinar link above, click "start from your browser."

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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](mailto: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.

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Pursuant to Government Code section 54957.5, all writings or documents relating to any item on this agenda which have been provided to a majority of the Board 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](http://www.redwoodenergy.org).

## **OPEN SESSION** Call to Order

### **1. REPORTS FROM MEMBER ENTITIES**

### **2. 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.

### **3. 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.

**3.1** Approve Minutes of February 25, 2021, Board Meeting.

**3.2** Approve Disbursements Report.

**3.3** Accept Financial Reports.

**3.4** Approve Professional Services Agreement with Calpine Energy Solutions LLC and Authorize the Executive Director to Execute the Agreement and All Associated Documents as Necessary, Contingent on Final Review and Approval by RCEA Legal Counsel.

### **4. REMOVED FROM CONSENT CALENDAR ITEMS**

Items removed from the Consent Calendar will be heard under this section.

## **COMMUNITY CHOICE ENERGY (CCE) BUSINESS (Confirm CCE Quorum)**

Items under this section of the agenda relate to CCE-specific business matters that fall under RCEA's CCE voting provisions, with only CCE-participating jurisdictions voting on these matters with weighted voting as established in the RCEA joint powers agreement.

**5. OLD CCE BUSINESS** - None

**6. NEW CCE BUSINESS** - None

## **END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS**

**7. OLD BUSINESS** - None

### **8. NEW BUSINESS**

**8.1** Biomass Analysis

Accept Biomass Power in Humboldt County report and presentation from consultant Michael J. Furniss.

Accept Alternative Uses of Biomass Material in Humboldt County preliminary report from the Community Advisory Committee.

## 8.2 Board Meeting Duration and Frequency Adjustments

Discuss meeting preferences and vote to call quarterly special meetings, if desired.

## 9. STAFF REPORTS – None.

## 10. FUTURE AGENDA ITEMS

Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

## 11. CLOSED SESSION

11.1. CONFERENCE WITH REAL PROPERTY NEGOTIATIONS Pursuant to Government Code § 54956.8 in re: APNs 001-104-001-000, 001-114-006-000, 003-062-027-000, 001-011-021-000, 002-062-008, 002-062-009, and 002-062-005: RCEA negotiator: Executive Director; Owner's negotiating party: Kramer Investment Corporation, Coldwell Banker Pacific Partners, the City of Eureka, and Ming Tree Realtors; Under negotiation: price and terms.

## 12. RECONVENE TO OPEN SESSION

## 13. CLOSED SESSION REPORT

## 14. ADJOURNMENT

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### NEXT REGULAR MEETING

Thursday, April 22, 2021, 3:30 p.m.

This meeting will be an online teleconference following shelter-in-place orders.



Redwood Region Economic Development Commission  
Prosperity Center 520 E Street, Eureka, California 95501  
Phone 707.445.9651 Fax 707.445.9652 www.rredc.com

**Redwood Region Economic Development Commission  
REGULAR MEETING OF THE BOARD OF DIRECTORS**

Via ZOOM <https://us02web.zoom.us/j/89387324318>

or by phone: call in +1 669 900 6833

Meeting ID: 893 8732 4318

**March 22, 2021 at 6:30 pm PT**

**AGENDA**

- I Call to Order**
- II. Approval of Agenda**
  - A Approval of Agenda for March 22, 2021
- III. Public Input for non-agenda items**
- IV. Consent Calendar**
  - A Approval of Minutes of the Board of Directors Regular Meeting: February 22, 2021
- V. Program - Nordic Aquafarms Humboldt County Project Update presented by**  
Marianne Naess, Executive Vice President Commercial, in charge of the California project  
Scott Thompson, Nordic Aquafarms Project Manager/Engineer  
Lynette Mullen, Nordic's Humboldt County Community Liaison
- VI. New Business**
  - A Discussion and Possible Action: Letter of Support for HSU Transformation into a Polytechnic University - Connie Stewart, Executive Director of Initiatives, HSU
  - B Adoption of Audit for FY 2019-2020 - Mark Wetzels, CPA, David L Moonie & Co.
- VII. Old Business**
  - A Lease Renewal with Ron Pileggi for 520/530 E Street Facility
- VIII. Reports - No Action Required**
  - A Executive Director's Report
- IX. Member Reports**
- X. Agenda/Program Requests for future Board of Directors Meetings**
- XI. Adjourn**

*The Redwood Region Economic Development Commission will, on request, make agendas available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in implementation thereof. Individuals who need this agenda in an alternative format or who need a disability-related modification or accommodation in order to participate in the meeting should contact the Board Secretary at (707) 445-9651. Notification 48 hours prior to the meeting will enable the Commission to make reasonable arrangements for accommodations.*



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Community Services Districts Humboldt · Manila · McKinleyville · Orick · Orleans · Redway · Willow Creek  
Humboldt Bay Harbor, Recreation and Conservation District · Humboldt Bay Municipal Water District  
County of Humboldt · Iloopa Valley Tribe · Redwoods Community College District